2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GREENE COUNTY
ASH POND

January 31, 2023

Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

Alabama Power

CERTIFICATION STATEMENT

This 2022 *Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Greene County Ash Pond* has been prepared in accordance with the United States Environmental Protection Agency's coal combustion residual rule (40 CFR Part 257, Subpart D), ADEM Admin. Code Ch. 335-13-15, and Part E of ADEM Administrative Order No. 18-097-GW, under the supervision of a licensed professional engineer in the State of Alabama. As such, I certify that the information contained herein is true and accurate to the best of my knowledge.

Gregory Budd

1/31/2023

Gregory F. Budd, PG
AL Registered Professional Geologist No. 1455

Date

Greg Whetstone

No. 27885
GREGORY T. WHETSTONE

1/31/2023

Gregory Whetstone, PE
AL Registered Professional Engineer No. 27885

Date

EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) 18-097-GW, this 2022 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2022 semi-annual groundwater monitoring activities at the Alabama Power Company Plant Greene County Ash Pond and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(e), and Part E of AO No. 18-097-GW. Semi-annual monitoring and associated reporting for the Plant Greene County Ash Pond (Site) is performed in accordance with the monitoring requirements § 257.90 through § 257.98 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(9).

The CCR unit began the monitoring period in corrective action pursuant to § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9). Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the first detection monitoring event and assessment monitoring was initiated in January 2018. Statistically significant levels (SSLs) of Appendix IV parameters above groundwater protection standards (GWPS) were identified while in assessment monitoring. Consequently, an assessment of corrective measures (ACM) was initiated on January 13, 2019 and completed on June 12, 2019, according to the requirements of § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No.18-097-GW. The ACM was subsequently submitted to ADEM and posted to the site’s CCR compliance web site. A public meeting to discuss the ACM was held on June 29, 2020.

Since the submittal of the ACM extensive Site investigations have been performed to select effective corrective measures to address SSLs above GWPS. A Groundwater Remedy Selection Report was prepared to meet the requirements of § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.18-097-GW and submitted to ADEM on September 30, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on December 29, 2021, for review.

The Corrective Action Groundwater Monitoring Program was prepared to meet § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9) to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program has been developed to meet the requirements of CFR § 257.98(a)(1) and ADEM Admin. Code r. 335-13-

15-.06(9)(a)(1) and will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site.

SSLs of Appendix IV parameters arsenic, cobalt, and lithium were detected above GWPS during the semi-annual monitoring events of 2022. The following summarizes activities conducted during the semi-annual monitoring periods of 2022:

- Submitted the 2021 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2022.
- Collected soil and groundwater samples for treatability studies using Site aquifer media and impacted groundwater prior to field implementation of an injection treatment pilot study between February 16, 2022, and April 8, 2022. The treatability studies will evaluate the effectiveness of various treatment solutions and doses in removing constituents of interest (COIs) from impacted groundwater.
- Completed the first semi-annual groundwater sampling event between March 21, 2022, and April 8, 2022.
- Submitted the 2022 First Semi-Annual Groundwater Monitoring and Corrective Action Report on July 31, 2022.
- Completed the second semi-annual groundwater sampling event between October 3, 2022, and October 19, 2022.
- Installed multi-parameter monitoring instruments in select wells during October 2022 as a tool for evaluating groundwater conditions during closure and in-between sampling events.
- Completed the Laboratory Treatability Studies Results report and draft Class V Underground Injection Control (UIC) permit application for the geochemical manipulation via injections that was selected as one of the corrective measures as described in the Groundwater Remedy Selection Report and will be included in a Class V UIC permit application.
- Submitted the Phase IV Additional Groundwater Delineation Well Plan for the installation of additional groundwater monitoring wells on-site and off-site of the Site on January 4, 2023. Additional groundwater delineation was requested by ADEM in the June 2022, *Groundwater Remedy Selection Report and Corrective Action Groundwater Monitoring Program* documents review letter.

The CCR unit concluded the monitoring period in corrective action and APC will continue implementing the selected groundwater remedies identified in the Groundwater Remedy Selection Report and as detailed Corrective Action Groundwater Monitoring Program document submitted to ADEM. The following corrective action and monitoring-related activities are planned for the CCR unit:

- Complete the installation, development, and sampling of the Phase IV additional groundwater wells on-site and off-site pending ADEM approval and off-site property owners access agreements approval.
- Submit a Class V UIC permit for geochemical injection pilot studies for the remediation of arsenic, cobalt, and lithium.
- Conduct the first semi-annual monitoring event in the spring of 2023 and submit the semi-annual groundwater monitoring and corrective action report summarizing the findings to ADEM by July 31, 2023.

Pursuant to 40 CFR 257.90(e)(6), an **Monitoring Summary Table** has been prepared to describe the status of groundwater monitoring and corrective action during the monitoring period for this report.

Executive Summary Table.
Monitoring Period Summary
Plant Greene County - Ash Pond

Assessment Monitoring Initiated: January 15, 2018
Monitoring Period: January 1 - December 31, 2022
Beginning Status: Corrective Action
Ending Status: Corrective Action

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25.
Calcium	GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21.
Chloride	GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-31
Fluoride	GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18.
pH	GC-AP-MW-12.
Sulfate	GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15.
TDS	GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25

Appendix IV SSLs

Parameter	Wells
Arsenic	GC-AP-MW-1, GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18.
Cobalt	GC-AP-MW-1, GC-AP-MW-14, GC-AP-MW-15.
Lithium	GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21

* See the attached report for further details regarding statistical exceedances and alternate source demonstrations.

Assessment of Corrective Measures & Groundwater Remedy

Assessment of Corrective Measures

Date Initiated: January 13, 2019
Date Complete: June 12, 2019
Public Meeting Date: June 29, 2020

Groundwater Remedy

Remedy Selection Date: Septmeber 30, 2021
Initiated During Period: Yes
Ongoing During Period: Yes

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

ABBREVATIONS

ACM	Assessment of Corrective Measures
ADEM	Alabama Department of Environmental Management
AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	Alabama Power Company Environmental Laboratory
BGS	below ground surface
CCR	Coal Combustion Residual
CEC	cation exchange capacity
CFR	Code of Federal Regulations
COC	chain of custody
COI	constituents of interest
CSM	conceptual site model
DO	dissolved oxygen
EPA	United States Environmental Protection Agency
ft	feet
GW	groundwater
GWPS	Groundwater Protection Standard(s)
LCL	Lower Confidence Limit(s)
m	meter
mg/L	milligram per liter
MNA	monitored natural attenuation
MSL	mean sea level
MW-	denotes “Monitoring Well”
NCDS	National Coal Data System
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
pCi/L	picocuries per liter
PE	Professional Engineer
PG	Professional Geologist
PL	prediction limits
PQL	practical quantitation limit
PVC	polymerizing vinyl chloride
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SEM	scanning electron microscopy
SM	Standard Method(s)
SSE	selective sequential extraction

SSI	statistically significant increase
SSL	statistically significant level
TAL	Test America, Inc.
TOC	top of casing
TDS	total dissolved solids
USGS	Unites States Geological Survey
UTLs	Upper Tolerance Limits
XRD	X-ray diffraction
XRF	X-ray fluorescence

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-097-GW, this 2022 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2022 semi-annual groundwater monitoring activities at the Plant Greene County Ash Pond and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(e), and Part E of AO 18-097-GW. Semi-annual monitoring and associated reporting for Plant Greene County Ash Pond is performed in accordance with the monitoring requirements § 257.90 through § 257.98 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(9).

Semi-Annual Groundwater Monitoring and Corrective Action Reports include an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018) and corrective action activities completed since the submittal of the Corrective Action Groundwater Monitoring Program (December 29, 2021).

2.0 MONITORING PROGRAM STATUS

The site is currently in corrective action and APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program. In accordance with § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in January 2018. SSLs of Appendix IV parameters were identified at the Ash Pond during assessment sampling events. Pursuant to § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), and in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order AO 18-097-GW, APC completed an ACM on June 12, 2019. The ACM was posted to the ADEM CCR compliance web site and a public meeting was held to discuss the ACM on June 29, 2020.

A Groundwater Remedy Selection Report was prepared to meet the requirements of § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.18-097-GW and submitted to ADEM on September 30, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on December 29, 2021, for review.

The Corrective Action Groundwater Monitoring Program was prepared to meet § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9) to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program has been developed to meet the requirements of CFR § 257.98(a)(1) and ADEM Admin. Code r. 335-13-15-.06(9)(a)(1) and will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site.

In accordance with § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6), APC will continue semi-annual monitoring, including all monitoring wells in the certified groundwater monitoring system and any well installed to characterize the horizontal and vertical extent of SSLs. APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program submitted to ADEM.

3.0 SITE LOCATION AND DESCRIPTION

Plant Greene County is in southeastern Greene County, Alabama. The physical address is 801 Steam Plant Road, Forkland, Alabama 36740. Plant Greene County lies in portions of Sections 21 and 28, Township 19 North, Range 3 East, based on visual inspection of USGS topographic quadrangle maps and GIS maps (USGS, 1980, 1982a, 1982b, 1983). The Ash Pond is located south of the main plant along the Black Warrior River to the south and the barge canal to the east. **Figure 1, Site Location Map**, depicts the location of the Plant and Ash Pond with respect to the surrounding area. The Ash Pond went into service in 1964 and is approximately 474 acres in size.

3.1 PHYSICAL SETTING

Plant Greene County is located in the Alluvial-deltaic Plain district of the East Gulf Coastal Plain physiographic province (Sapp and Emplaincourt, 1975). This province consists primarily of flat to gently rolling sandy uplands dissected by deeply entrenched, south to southwest flowing streams and rivers (Dejarnette and Crownover, 1987). Topography at the site gently dips radially from the plant proper and northern portions of the Ash Pond to the barge canal and Black Warrior River. The lowest elevations are approximately 60 feet above mean sea level (MSL) at the northern and southern boundaries, near the Black Warrior River, and along the eastern boundary near the coal docks (barge canal). Away from the river, in the central upland portion of the property, elevations typically range from approximately 80 to 100 feet MSL. The embankment elevations that form the perimeter of the ash pond are generally between 90 and 95 feet MSL. **Figure 2, Site Topographic Map**, provides the topography of the site.

Plant Greene County is located along a bend of the Black Warrior River. The river flows to the east across the northern property boundary, turns to the southeast of the plant, and then flows to the west across the plant’s southern and southeastern boundary. East of the Ash Pond, a barge access canal was constructed to service the plant. The barge canal trends north to south and connects to the Black Warrior River near the southeastern corner of the Ash Pond.

3.2 SITE GEOLOGY AND HYDROGEOLOGY

The geology of the site is characterized by a sequence of poorly consolidated Mesozoic sedimentary strata unconformably overlying Paleozoic rocks of the Appalachian thrust belt. Mesozoic strata are Cretaceous in age, and in descending stratigraphic order they include the Demopolis Chalk, the Mooreville Chalk, the

Eutaw Formation, the McShan Formation, the Gordo Formation, and the Coker Formation. These Cretaceous strata are generally flat-lying and dip to the southwest at approximately 35 feet per mile (or less than 2 degrees). At Plant Greene County, the Cretaceous sequence is approximately 2,500 feet thick (McIntyre et al., 2010). Quaternary alluvium and low-terrace deposits overlie the Mesozoic strata along stream and river valleys (McIntyre et al., 2010). **Figure 3**, **Site Geologic Map**, illustrates the surface geology at the site and neighboring areas.

Near the site, the geology consists of Quaternary alluvium deposits overlying Cretaceous Demopolis and Mooreville Chalk formations. Alluvial deposits at the site generally consist of reddish brown to reddish yellow, lean clay overlying reddish brown to tan, poorly-graded sands with interbedded lenses of gravel and clay. The alluvial overburden is between 20 to 30 feet thick in the north and 40 to 60 feet thick in the south. The base of the alluvium/top of bedrock occurs between approximately 60 and 80 feet above mean sea level (MSL) on the northern side of the pond, and approximately 40 and 20 feet above MSL towards the southern edge of the pond. Chalk that was encountered during field investigations was described as bluish green to gray clay-like material. The Demopolis Chalk is a fossiliferous chalk. The Mooreville Chalk ranges from a clayey chalk to chalky marl. Both chalk formations are low-permeability strata that retard vertical migration of groundwater in the area (Wahl, 1966). The vertical extent of these formations was not drilled during field investigations, but a search of area well logs stored on the Geological Survey of Alabama website indicates the thickness of the Mooreville and Demopolis Chalk formations are likely around 300 to 400 feet at Plant Greene County. **Figure 4A**, **Geologic Cross-Section A-A'**, **Figure 4B**, **Geologic Cross-Section B-B'**, **Figure 4C**, **Geologic Cross-Section C-C'**, **Figure 4D**, **Geologic Cross-Section D-D'**, **Figure 4E**, **Geologic Cross-Section E-E'**, and **Figure 4F**, **Geologic Cross-Section F-F'**, illustrate the geologic layering beneath the site.

In Greene County, groundwater is available in sand and gravel aquifers of the Cretaceous Eutaw, McShan, Gordo, and Coker formations. These Cretaceous aquifers have a combined thickness of approximately 1,000 feet beneath southern Greene County and exist between depths of approximately 400 to 1,400 feet BGS (Wahl, 1966). Quaternary alluvial and low-terrace deposits also produce sufficient groundwater for domestic or livestock uses. These deposits can be upwards of 80 feet in thickness near present-day streams or rivers and consist of clay, sand, and gravel. Groundwater occurs in the sands and gravels of these alluvial deposits. The Quaternary alluvial and low-terrace deposits are hydraulically separated from deeper Cretaceous aquifers by the low-permeability, confining Mooreville and Demopolis Chalk formations. These units confine underlying aquifers and limit downward percolation of water from the alluvial and low-terrace aquifers (Wahl, 1966). As described above, these formations are believed to be approximately 300 to 400 feet thick at Plant Greene County.

3.2.1 Uppermost Aquifer

The uppermost aquifer beneath the site corresponds to alluvial and low terrace deposits where groundwater occurs in the coarser sand and gravel intervals of Unit 2. At the site, the uppermost aquifer pertains to Unit 2 and is described as a fining upward reddish brown to tan, fine to coarse sand. Unit 2 typically fines upward into more of a clayey sand and near the base coarsens with gravel. Gravel deposits are more prevalent south of the pond and closer to the present-day Black Warrior River. Depth to the uppermost aquifer generally occurs between 10 and 20 feet BGS and is 10 to 15 feet thick near the northern area of the pond and 15 to 30 feet thick near the southern edge of the pond. Aquifer performance testing (slug tests) revealed horizontal hydraulic conductivity values between 1.68 x 10^{-3} cm/sec and 8.29 x 10^{-2} cm/sec with an average of 1.83 x 10^{-2} cm/sec. These equate to a range of 4.76 feet per day to 235 feet per day, with an average of 51.93 feet per day. Horizontal hydraulic values are typically highest to the south in zones where gravels are present (150 to 235 ft/day) and lowest in more clayey intervals (4.76 ft/day). Clean, fine to medium sands at the site generally provide horizontal hydraulic conductivity values between 25 feet per day and 35 feet per day.

The uppermost aquifer can be described as semi-confined at the site. Unit 1 clays, where present, provide an upper confining to semi-confining layer for the uppermost aquifer. Vertical hydraulic conductivity (K_z) values obtained from Shelby tube permeameter testing range from 7.8 x 10^{-6} cm/sec to 8.0 x 10^{-8} cm/sec (2.2 x 10^{-2} ft/d to 2.3 x 10^{-4} ft/d) with an average of 1.7 x 10^{-6} cm/sec (4.9 x 10^{-3} ft/d) for Unit 1 clays. The Demopolis Chalk is encountered beneath the uppermost aquifer and provides a lower confining unit. Vertical hydraulic conductivity (K_z) values obtained from two Shelby tube permeameter tests provide values of 5.0 x 10^{-8} cm/sec and 1.4 x 10^{-8} cm/sec (1.42 x 10^{-4} ft/d to 3.97 x 10^{-5} ft/d) for Unit 3 chalks.

Groundwater recharge to the uppermost aquifer is largely accomplished by infiltration of precipitation and subsequent percolation down to the water table. Recharge rates are estimated at between 9% and 15% of precipitation, or 5 to 6 inches per year of recharge with an overall range 1 to 8 inches. Temporary recharge to the aquifer can occur during high stage or flood events of the Black Warrior River where surface water can infiltrate through hydraulically connected sand beds or infiltration of flooded water. Locally, the uppermost aquifer is hydraulically separated from deeper Cretaceous aquifer systems by 300 to 400 feet of low-permeability chalk exhibiting a permeability in the range of 10^{-8} centimeters/second.

3.2.2 Flow Interpretation

Groundwater flow is accomplished by porous (Darcy) flow mechanics with potential for preferential movement along more conductive sand and gravel lenses. Groundwater flow at the site is a subdued replica of the natural topography where gravity is the dominant force driving flow. Historically, groundwater flows from higher topographic elevations near the northernmost edge of the ash pond towards surface water bodies to the north, east, and south-southeast.

A component of the ash pond closure project includes the construction of a hydraulic barrier wall that encircles the ash consolidation area and is keyed into the underlying chalk formations. The barrier wall system includes the northern portion of the existing dike and the future construction of barrier wall segments east, west, and south to complete the consolidation area. The portion of the barrier wall, along the northern exterior dike, has been installed using the slurry trench method, as a slag-cement-bentonite wall. Slurry wall construction occurred between June 4, 2020, and June 24, 2020 and is a total of approximately 5,353 feet long. The performance requirements for the wall, as identified in the technical specification, are a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second. Compatibility testing and modeling results conducted through February 5, 2021, indicate test samples exceed hydraulic conductivity project requirements (i.e. more impermeable). The installation of the slurry wall has effectively created an engineered groundwater divide impeding historic groundwater flow towards the surface water body to the north. Groundwater elevations measured inside and outside of the barrier wall indicate that flow inside the ash pond is now focused to the south and southeast along higher hydraulic gradients. The CCR unit closure construction contractor installed instrumentation including vibrating wire piezometers for water level monitoring for the purpose of monitoring performance and stability during closure construction activities. Vibrating wire piezometer instrumentation were installed inside and outside of the constructed barrier wall and the data was utilized along with the existing monitoring well network to interpret groundwater flow direction.

A natural topographic high southwest of the pond provides a localized mound where groundwater elevations are higher than neighboring monitoring wells. From this topographic high, groundwater flow may be radial to semi-radial, depending on if conditions develop: (1) northeast flow toward the ash pond or (2) no flow between the topographic high and southwest corner of the ash pond. Potentiometric surface maps are presented in **Section 4.0**.

In general, groundwater elevation data indicate that water levels tend to be higher in the early spring and summer, and lower during fall and winter. Groundwater elevations fluctuate in response to rainfall and changes in the Black Warrior River. Seasonal variations of 2 to 13 feet are typical at the site. Fluctuations are typically greater in magnitude at wells closer to surface water bodies to the southeast and east of the Greene County Ash Pond and lower in magnitude to the north and northwest. Groundwater Monitoring System

3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Greene County has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer. The certified groundwater monitoring system for the Plant Greene County Ash Pond is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. Wells were located to serve as upgradient, or downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps.

Monitoring wells were screened in the Watercourse Aquifer. The Watercourse Aquifer is composed of Quaternary alluvial and low terrace deposits consisting of interbedded sand, gravel, and clay (USGS, 1988). The monitoring systems are designed to monitor water quality as groundwater flows laterally from north to south across the site. All groundwater monitoring wells were designed and constructed using “Design and Installation of Groundwater Monitoring Wells in Aquifers,” ASTM Subcommittee D18.21, as a guideline.

3.3.1 Monitoring Wells

Well locations at the site are designated as upgradient, downgradient, piezometer (water-level only), and horizontal delineation. The following subsections provide a summary of well designations and if applicable, changes or modifications to the well network or designations. As described in the site Groundwater Monitoring Plan, modifications to the well network or designation must first be approved by ADEM.

The location and designation of site wells are presented on **Figure 5, Monitoring Well Location Map** and **Table 1a. Compliance Monitoring Well Network Details, Table 1b. Delineation Monitoring Well Network Details, and Table 1c. Piezometer Well Network Details** summarize the monitoring well construction details and design purpose for the Plant Greene County Ash Pond.

3.3.1.1 Upgradient Wells

Data used to establish background water quality or selection of upgradient wells include (1) review of groundwater elevation data and potentiometric surface contour maps to determine groundwater flow direction and (2) a screening of Appendix III CCR indicator parameters for apparently elevated concentrations.

Monitoring well locations GC-AP-MW-23, GC-AP-MW-24, and GC-AP-MW-26 through GC-AP-MW-30 serve as upgradient locations for the Ash Pond. Upgradient wells are located northeast and east of the Ash Pond as determined by water level monitoring and potentiometric surface maps constructed for the site and are separated hydraulically by no flow zones or the Greene County barge canal. **Table 1a**, summarizes the monitoring well construction details and design purpose.

3.3.1.2 Downgradient Wells

Monitoring well locations GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5 through GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-31, GC-AP-MW-32, and GC-AP-MW-33 are used as downgradient locations for the Ash Pond. Downgradient locations are located north, south, east, and west of the Ash Pond as determined by water level monitoring and potentiometric surface maps constructed for the site. **Table 1a** summarizes the monitoring well construction details and design purpose.

3.3.1.3 Delineation Well Installation

Pursuant to § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-097-GW, additional wells were installed to characterize the horizontal extent of GWPS exceedances identified during assessment monitoring. Phase I was conducted between December 2018 to August 2019. Eleven horizontal delineation wells, GC-AP-MW-34HA and GC-AP-MW-35H through GC-AP-MW-44H, were installed and sampled to assess the lateral extent of groundwater impact in the directions of groundwater flow away from the facility. One existing piezometer, GC-AP-PZ-4, was also used for horizontal delineation. Vertical delineation wells were not needed at the site because the uppermost aquifer is confined at its base by low-permeability chalk exhibiting a permeability in the range of 10^{-8} centimeters/second.

Following a review of data gathered from the Phase I investigation, additional groundwater investigation was proposed to ADEM in a Phase II Delineation Plan submitted August 15, 2019. The purpose of the plan was to further delineate horizontal extent of groundwater impacts. Twelve additional horizontal delineation wells were proposed in a plan submitted to ADEM in August 2019. Seven additional on-site horizontal delineation wells, located adjacent to the north and northwest property boundaries (GC-AP-MW-53H, GC-AP-MW-54H, GC-AP-MW-56H, and GC-AP-MW-57H) and the south and southwest property boundaries (GC-AP-MW-45H, GC-AP-MW-48H, and GC-AP-MW-49H), were installed in December 2019.

Six additional delineation wells were installed off-site, and access agreements with the property owners were required. An off-site access agreement was reached in April 2020 with one adjacent landowner and four additional delineation wells were installed in May 2020. Delineation wells GC-AP-MW-47HO and GC-AP-MW-50HO were installed south and southwest of the property boundary. Delineation wells GC-AP-MW-59HO and GC-AP-MW-55HO were installed west and northwest of the property boundary. Off-site access agreement were reached in June 2020 with the two remaining adjacent landowners to the south and the west of the Site and two additional delineation wells were installed in June 2020. Delineation wells GC-AP-MW-46HO and GC-AP-MW-52HO were installed south and west of the property boundaries, respectively.

Following a review of the March 2021 analytical data, it was determined that additional (Phase III) off-site delineation was necessary to the northwest, west, southwest, and south of the property boundary. Off-site access agreements were reached with the two of the three property owners in May 2021. Delineation wells GC-AP-MW-60HO and GC-AP-MW-61HO were installed northwest of the property boundary and GC-AP-MW-62HO, GC-AP-MW-63HO, and GC-AP-MW-64HO were installed southwest and south of the property boundary in June 2021.

A plan for the installation of additional on-site and off-site delineation wells is pending ADEM approval and off-site access agreements with adjacent property owners. Delineation wells are identified on **Figure 5** and detailed on **Table 1b**. All delineation wells are sampled semi-annually as part of the semi-annual groundwater monitoring program.

3.3.1.4 Piezometers

Locations GC-AP-PZ-19 and GC-AP-PZ-22 are used as water-level only piezometers. The piezometers are used to enhance groundwater potentiometric surfaces and constrain flow direction. Measurable water levels in piezometer GC-AP-PZ-22 fluctuate seasonally and is planned to be abandoned because the piezometer is predominantly dry. **Table 1c** summarizes the water-level only piezometer construction details.

3.3.1.5 Monitoring Well Replacement and Abandonment

No monitoring well replacements and/or abandonments were conducted during the reporting period. **Table 1d Abandoned Well Network Details** provides the monitoring well details for previously abandoned wells.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with §257.94(b), eight independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to October 17, 2017. Background sampling was performed over the period of February 2016 to June 2017. Groundwater sampling for the first detection monitoring event after the background period was performed in August 2017.

Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, APC initiated an assessment monitoring program on January 15, 2018. Pursuant to 40 CFR §257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a), monitoring wells were sampled for all Appendix IV parameters in February 2018, within 90 days of initiating the assessment monitoring program. Semi-annual assessment sampling continued with sampling events in June and November of 2018, March and September 2019, April and August 2020, and March and August 2021.

Statistical evaluations of 2018 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS, and the site entered Assessment of Corrective Measures. Pursuant to § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-097-GW, additional monitoring wells (**Table 1b, Figure 5**) were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring in three phases of groundwater investigations between December 2018 and June 2021. These wells, along with the compliance monitoring well network, are sampled semi-annually. Delineation wells installed at the Site have been sampled concurrently with the compliance monitoring well network. However, additional delineation well installations and data collection have occurred independent of routine compliance sampling events to support continuing assessment activities at the site.

3.4.1 Available Monitoring Data

Laboratory analytical data is available for the groundwater monitoring history outlined in **Section 3.4**. Tabulated results for Appendix III and Appendix IV constituents by monitoring well are included in **Appendix A**, **Analytical Data Summary**.

3.4.2 Historical Groundwater Flow

Historically groundwater elevations and potentiometric surface maps show that groundwater flow patterns have been consistent across monitoring events. However, and as described in **Section 3.2.2**. as ash pond closure activities progress over the years and upon completion of closure, groundwater elevations will likely display variability representative of changing site hydrodynamics and eventually, a new set of equilibrium conditions. The consolidation of CCR material, as well as, the process and installation of a containment berm and slurry wall, will have transient and long-term impacts on groundwater flow directions and velocities away from the CCR unit. As this timeline progresses, groundwater elevations and trends will be qualitatively reviewed against this historical data set. Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix B, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variances

The groundwater monitoring program at the site is operating under a Variance granted by the ADEM on April 15, 2019, to conform State monitoring requirements under the CCR rule to Federal requirements. The variance:

1. Retains boron as an Appendix III detection monitoring parameter and excludes it as an Appendix IV monitoring parameter.
2. Authorizes the use of Federally-published groundwater protection standards (GWPS) of 0.006 milligrams per liter (mg/L) for cobalt; 0.015 mg/L for lead; 0.040 mg/L for lithium; and 0.100 mg/L for molybdenum in lieu of background where those levels are greater than background levels.

3.5 GROUNDWATER SAMPLING AND ANALYSIS

Site compliance wells are sampled semi-annually between: (1) late winter – mid spring and (2) early to late fall. The temporal spacing between sampling events is sufficient to ensure that sampling events yield independent groundwater samples and generally, represent different climatic or meteorological seasons which often foster a degree of natural variability in groundwater quality.

During routine semi-annual monitoring events, all compliance and delineation network wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and anions) are now being collected routinely as well. These non-compliance parameters will be periodically analyzed to explore seasonal or closure-related changes to geochemical facies to site groundwater.

The following subsections summarize the sequential steps and process for the sampling, handling/transport, and analysis of compliance-related groundwater samples at the site.

3.5.1 Groundwater Sample Collection

Prior to recording water levels and collecting samples, each well was opened and allowed to equilibrate to atmospheric pressure. Within a 24-hour period, depths to groundwater were measured to the nearest 0.01 foot with an electronic water level indicator with depth referenced from the top of the inner PVC well casing. Groundwater elevations were calculated by subtracting the depth to groundwater from surveyed top-of-casing (TOC) elevations.

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with § 257.93(a) and ADEM Admin. Code r. 335-13-15-.06(4)(a). All monitoring wells at Plant Greene County are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures. In this procedure, field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) are measured to determine stabilization and groundwater samples are collected when the following stabilization criteria are met:

- 0.2 standard units for pH.
- 5% for specific conductance.
- 0.2 Mg/L or 10% for DO > 0.5 mg/l (whichever is greater).

- Turbidity measurements less than 10 NTU.
- Temperature and ORP – record only, no stabilization criteria.

During purging and sampling, an In-Situ Aqua Troll instrument was used to monitor and record field parameters. Once stabilization was achieved, samples were collected and submitted to the laboratory following standard chain-of-custody (COC) protocol. Field data recorded in support of groundwater sampling activities for the monitoring events are included in **Appendix C, Laboratory and Field Records**.

3.5.2 Sample Preservation and Handling

Groundwater samples were collected within the designated size and type of laboratory-supplied containers required for specific parameters. Sample bottles were pre-preserved by the laboratory. Where temperature control was required, samples were placed in an ice-packed cooler and cooled to less than 6 °C immediately after collection. Blue ice or other cooling packs were not used for cooling samples. An ice-packed cooler was on hand when samples were collected.

3.5.3 Chain of Custody

A chain-of-custody (COC) record was used to track sample possession from the time of collection to the time of receipt at the laboratory. All samples were handled under strict COC procedures beginning in the field. COC records are included with the analytical laboratory reports presented in **Appendix C.**

3.5.4 Laboratory Analysis

Laboratory analyses was performed by the APC Environmental Laboratory (APCEL), and Pace Analytical LLC (Pace). Both APCEL and Pace are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed**. Table 2, Parameters and Reporting Limits**, lists monitoring constituents analyzed from site groundwater samples. Laboratory reports for the monitoring period are presented in **Appendix C**.

3.5.5 Monitoring Period Sampling Events Summary

As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(e), the following describes monitoring-related activities performed during the monitoring period. The first semi-annual monitoring event was conducted between March 22, 2022, and April 8, 2022. Additionally, a re-sampling event was conducted on May 17, 2022, due to the observation of a potential outlier for selenium in the results for well

GC-AP-MW-13. The second semi-annual monitoring event was conducted between October 3, 2022 and October 19, 2022.

Groundwater samples are analyzed for the full list of Appendix III and Appendix IV parameters during each Monitoring event. During the most recent sampling event, additional general chemistry and monitored natural attenuation monitoring parameters were sampled and analyzed. These analytes have been incorporated for continued evaluations of geochemical facies and their evolution over time. These analytes will also support geochemical modeling and evaluations associated with monitored natural attenuation. These parameters include:

- Calcium (filtered)
- Iron (total and dissolved)
- Silicon (total and dissolved)
- Silica (total and dissolved)
- Sodium (total and dissolved)
- Sulfide
- Potassium
- Aluminum (total and dissolved)
- Manganese
- Magnesium (total and filtered)
- Nitrate-Nitrite
- Total Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity
- Total Organic Carbon.

All groundwater sampling activities were conducted by APC Field and Water Services. Pace Analytical Services performed the laboratory analyses of Radium-226 and Radium-228 (reported combined). APCEL performed the remaining Appendix III and Appendix IV analyses. Analytical data from the groundwater monitoring events is included as **Appendix C** in accordance with the requirements of § 257.90(e)(3) and ADEM Admin. Code r. 335-13-15-.06(1)(f)3.

4.0 GROUNDWATER ELEVATIONS AND FLOW

During the March-April 2022 sampling event, depths to water ranged from 4.28 to 30.92 feet below top of casing (ft BTOC) and groundwater elevations ranged from 93.94 to 77.92 feet above mean seal level (ft MSL). **Figure 6A, Potentiometric Surface Contour Map (March 22, 2022)** depicts groundwater elevations and inferred groundwater flow direction during the first semi-annual sampling event of 2022.

During the October 2022 sampling event, depths to water ranged from 8.30 to 35.86 feet below top of casing (ft BTOC) and groundwater elevations ranged from 92.05 to 73.84 feet above mean seal level (ft MSL). **Figure 6B, Potentiometric Surface Contour Map (October 3, 2022)** depicts groundwater elevations and inferred groundwater flow direction during the second semi-annual sampling event of 2022.

As shown on **Figures 6A** and **6B**, groundwater flow is generally towards the south with some flow observed towards the north, west, and east. A previously discussed in section **3.2.2** the installation of the slurry wall has effectively created an engineered groundwater divide impeding historic groundwater flow towards the surface water body to the north. Groundwater elevations measured inside and outside of the barrier wall indicate that flow inside the ash pond is now focused to the south and southeast along higher hydraulic gradients.

Groundwater elevation data from delineation monitor well GC-AP-MW-38H is not included in the potentiometric surface contour maps. The monitor well was installed in an area of perched water located along the barge canal and adjacent to monitor well GC-AP-MW-17. Recent groundwater elevation data has been tabulated and included in **Table 3, Recent Groundwater Elevations Summary**. All available historical groundwater elevation data recorded since 2016 has been tabulated and included in **Appendix B**.

4.1 GROUNDWATER ELEVATION CHANGES

Groundwater elevations in multiple well locations have been identified as potential lower bound outliers based upon historical groundwater elevation data and screening with Interquartile Range (1.5 x IQR) statistics. While no significant groundwater flow pattern changes have been noted, the active de-watering of the ash pond has had a detectable impact in groundwater elevations observed.

Notable changes to groundwater elevations have been noted. The installation of the northern section of the slurry wall, implemented as a key aspect of ash pond closure, dewatering, and source control, appears to have significantly reduced groundwater elevations in wells GN-AP-MW-1, GN-AP-MW-2, GN-AP-MW-3, GN-AP-MW-5, GN-AP-MW-6, and GN-AP-MW-25. A reduction in groundwater elevation has been noted to start in August 2020 and March 2021 – close to the completion date of the slurry wall section (July 2020). Additionally, closure construction dewatering of the former sedimentation basin and old borrow area located along the southern end of the Site, appears to have significantly reduced groundwater elevations in wells GN-AP-MW-10, GN-AP-MW-11, GN-AP-MW-12, GN-AP-MW-13, and GN-AP-MW-21.

In addition, groundwater elevations have decreased in downgradient compliance wells since the cease receipt date and initiation of closure activities. This pattern is chiefly observed immediately north, west, and south of ash pond boundaries. Wells along the eastern waste boundary have shown little change to date. Groundwater elevations are an average of 2.48 feet lower in compliance wells GC-AP-MW-1 through GC-AP-MW-14 when comparing historical data to data gathered after March 2019. Conversely, upgradient wells to the east of the barge canal have shown an increase in average groundwater elevation of around 2.5 to 3-ft between the same time periods. This data indicates that closure activities have lowered groundwater elevations which signifies (1) that groundwater elevations are returning to more normal conditions and (2) some degree of source control.

Well	Lowerbound GW Elevation Threshold (IQR)	GW Elevation 10/3/2022	Distance below Lowerbound GW Elevation
GC-AP-MW-1	89.66	88.89	-0.77
GC-AP-MW-2	97.45	91.89	-5.56
GC-AP-MW-3	97.22	92.05	-5.17
GC-AP-MW-5	91.99	91.14	-0.85
GC-AP-MW-6	91.62	85.87	-5.75
GC-AP-MW-10	80.38	78.83	-1.55
GC-AP-MW-11	82.30	80.42	-1.88
GC-AP-MW-12	83.33	78.84	-4.49
GC-AP-MW-13	78.06	75.79	-2.27
GC-AP-MW-21	82.09	79.62	-2.47
GC-AP-MW-25	94.94	89.42	-5.52

4.2 GROUNDWATER FLOW VELOCITY CALCULATIONS

Groundwater flow rates at the site were calculated based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of the screened horizon. Based on slug test data at the site, hydraulic conductivity ranges from 1.68 x 10^{-3} cm/sec to 8.29 x 10^{-2} cm/sec with an average of 1.83 x 10^{-2} cm/sec. These equate to a range of 4.76 feet per day to 235 feet per day, with an average of 51.93 feet per day, which is used in the flow calculations. An effective porosity of 25% was used based on the default values for effective porosity recommended by EPA for a silty sand-type soil (U.S. USEPA, 1996). The hydraulic gradient was calculated between well pairs shown in **Appendix D, Horizontal Groundwater Flow Velocity Calculations**.

Horizontal flow velocity was calculated using the commonly-used derivative of Darcy's Law:

$$V = \frac{K * i}{n_e}$$

Where:

V = Groundwater flow velocity $\left(\frac{feet}{day}\right)$

K = Average permeability of the aquifer $\left(\frac{feet}{day}\right)$

i = Horizontal hydraulic gradient

n_e= Effective porosity

Appendix D presents the estimated horizontal flow velocity calculated using groundwater elevation data from the 2022 semi-annual sampling events.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of one sample per every group of 10 well samples. These QA/QC samples include well duplicates, equipment blanks, and field blanks. Routine analyses of field QA/QC samples are a method for evaluating whether artificial bias could have been introduced into lab results by ways of sampling activities or equipment.

5.1 DATA VALIDATION – QUALITY ASSURANCE/QUALITY CONTROL

Analytical precision is measured through the calculation of the relative percent difference (RPD) of two data sets generated from a similar source. Here, a comparison of results between samples and field duplicate samples are used as measure of laboratory precision. Where field duplicates are collected, the RPD between the sample and duplicate sample is calculated as:

$$RPD = \frac{Conc1 - Conc2}{(Conc1 + Conc2)/2}$$

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where RPD is below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference Calculations,** provides the relative percent differences for sample and sample duplicates during the first and second semi-annual monitoring events of 2022. All RPDs were below 20% for the first 2022 semi-annual sampling event, with the exception of fluoride, in parent-duplicate pair GC-AP-MW-45H/GC-AP-MW-45H DUP. A qualifier was not needed because the results were less than five times the RL and the difference between the parent and duplicate results was less than the RL value. All RPDs were below 20% for the second 2022 semi-annual sampling event, with the exception of chloride, in parent-duplicate pair GC-AP-MW-57H/GC-AP-

MW-57H DUP. A qualifier (+) J, (ND) UJ was needed because one of the results was greater than five times the RL and the difference between the parent and duplicate results was greater than the RL value.

Analytical data reviewed provided low-level or trace detections in field and/or equipment blanks during the monitoring period sampling events. **Table 4b, Field QC: Blank Detections** provides a summary of low-level detections observed during the first and second semi-annual monitoring events. Each of these detections were estimated concentrations, above the MDL but below the RL, and qualified in the laboratory analytical reports with "J flags." However, if concentrations are detected above the MDL in field QC samples, original results on the (1) date of a blank detection and (2) with a value less than 5 times the field QC detection are flagged with a (+) U* and MDL/RL values modified based upon the blank concentration.

Validated flags do not have an impact on possible statistical analyses due to: (1) low-level concentrations flagged during validation and/or (2) constituents flagged are not Site COI. The extent of trace chromium detections in blanks can be explained by a low MDL value of 0.000203 mg/L.

5.2 STATISTICAL METHODOLOGY AND TESTS

The Sanitas groundwater statistical software is used to perform the statistical analyses. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by EPA regulations. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

5.2.1 Appendix III Evaluation

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, fluoride, pH, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter. If the most recent sample exceeds its respective background statistical limit, an initial statistically significant increase (SSI) is identified.

Groundwater Stats Consulting demonstrated that these test methods were appropriate in the October 2017 Statistical Analysis Plan, which was updated in the September 2019 data screening evaluation and also, included in the revised Statistical Analysis Plan (August 2020). Time series plots were used to screen proposed background data for suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective. Suspected outliers at all wells for Appendix III parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database.

The following adjustments were made:

- No statistical analyses are required on wells and analytes containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in the background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data
- Non-parametric prediction limits are used on data containing greater than 50% non-detects.

5.2.2 Appendix IV Evaluation

When in corrective action monitoring, Appendix IV constituents are sampled semi-annually, and concentrations are compared to GWPS. Following the Unified Guidance, spatial variation for Appendix III parameters is tested using the ANOVA; this test is not prescribed for Appendix IV constituents. Unlike the statistical evaluation of Appendix III constituents (where single-sample results are compared to the statistical limit), Appendix IV analysis uses the pooled results from each downgradient well to develop a well-specific Confidence Interval that is compared to the statistical limit. The statistical limit is either the Interwell Tolerance Limit (i.e. background) calculated using the pool of all available upgradient well data (see Chapter 7 of the Unified Guidance), or an applicable groundwater protection standard such as the MCL. Appendix IV background data are screened for outliers and extreme trending patterns that would lead to artificially elevated statistical limits.

Parametric tolerance limits (i.e. UTLs) were calculated using pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent on the number of background samples. The UTLs were then used as the GWPS.

As described in 40 CFR § 257.95(h)(1)-(3) and the ADEM Variance, the GWPS is:

(1) The maximum contaminant level (MCL) established under 40 CFR § 141.62 and 141.66.
(2) Where an MCL has not been established:
    (i) Cobalt 0.006 mg/L.
    (ii) Lead 0.015 mg/L.
    (iii) Lithium 0.040 mg/L.

(iv) Molybdenum 0.100 mg/L.

(3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

In corrective action monitoring, when the Lower Confidence Limit (LCL), or the entire confidence interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL. Data from upgradient wells collected in between updates may still be used to support ASDs if merited.

5.3 STATISTICAL EXCEEDANCES

Analytical data from semi-annual monitoring events in March-April 2022 and October 2022 were statistically analyzed in accordance with the professional engineer (PE)-certified Statistical Analysis Plan (October 2017 and revised in August 2020) by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents had returned to background levels. Appendix IV monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

5.3.1 Appendix III Constituents

Based on review of the Appendix III statistical analyses presented in **Appendix E, Statistical Analyses** Appendix III constituents have not returned to background levels.

5.3.2 Appendix IV Constituents

Table 5, Summary of Background Levels and Groundwater Protection Standards, summarizes the background limit established at each monitoring well and the GWPS. A summary table of the statistical limits accompanies the prediction limits in **Appendix E.**

5.3.2.1 First Semi-Annual Groundwater Monitoring Event

Statistical analysis of Appendix IV data identified the following SSLs over GWPS at the listed wells during the first semi-annual monitoring event of 2022:

- GC-AP-MW-1: Arsenic, Cobalt.
- GC-AP-MW-5: Arsenic, Lithium.
- GC-AP-MW-10: Arsenic, Lithium.
- GC-AP-MW-11: Lithium.

- GC-AP-MW-12: Lithium.
- GC-AP-MW-13: Lithium.
- GC-AP-MW-14: Arsenic, Cobalt, Lithium.
- GC-AP-MW-15: Cobalt, Lithium.
- GC-AP-MW-16: Arsenic, Lithium.
- GC-AP-MW-17: Arsenic, Lithium.
- GC-AP-MW-18: Arsenic, Lithium.
- GC-AP-MW-21: Lithium.

Table 6, First Semi-Annual Monitoring Event Analytical Results Summary provides a summary of all detected constituents for the first semi-annual sampling event.

The analytical result for selenium in well GC-AP-MW-13 on April 6, 2022, provided a result of 0.111 mg/L. This result exceeds the GWPS, and upon an initial review of historical data, was notably different than the historical concentration range (0.004 – 0.07 mg/L) and no previous upward trend was observed. The well was re-sampled on May 17, 2022, and the result provided was 0.045 mg/L which is below GWPS and more in line with the historical concentration range.

5.3.2.2 Delineation Wells

Analytical data derived from delineation wells are not statistically analyzed. A review of analytical data from delineation wells identified concentrations over GWPS for the following well and analyte pairs during the first semi-annual sampling event of 2022:

- GC-AP-MW-37H: Arsenic, Cobalt.
- GC-AP-MW-39H: Arsenic, Cobalt, Lithium.
- GC-AP-MW-40H: Lithium.
- GC-AP-MW-41H: Cobalt, Lithium.
- GC-AP-MW-42H: Cobalt.
- GC-AP-MW-43H: Arsenic, Cobalt, Lithium.
- GC-AP-MW-44H: Cobalt.
- GC-AP-MW-45H: Lithium.
- GC-AP-MW-46HO: Lithium.
- GC-AP-MW-47HO: Lithium.
- GC-AP-MW-48H: Lithium.

- GC-AP-MW-49H: Lithium.
- GC-AP-MW-50HO: Lithium.
- GC-AP-MW-53H: Arsenic.
- GC-AP-MW-54H: Arsenic, Cobalt, Lithium.
- GC-AP-MW-57H: Cobalt.
- GC-AP-MW-59HO: Cobalt.
- GC-AP-MW-64HO: Lithium
- GC-AP-PZ-4: Cobalt.

5.3.2.3 Second Semi-Annual Groundwater Monitoring Event

Statistical analysis of Appendix IV data identified the following SSLs over GWPS at the listed wells during the second semi-annual monitoring event of 2022:

- GC-AP-MW-1: Arsenic, Cobalt.
- GC-AP-MW-5: Arsenic, Lithium.
- GC-AP-MW-10: Arsenic, Lithium.
- GC-AP-MW-11: Lithium.
- GC-AP-MW-12: Lithium.
- GC-AP-MW-13: Lithium.
- GC-AP-MW-14: Arsenic, Cobalt, Lithium.
- GC-AP-MW-15: Cobalt, Lithium.
- GC-AP-MW-16: Arsenic, Lithium.
- GC-AP-MW-17: Arsenic, Lithium.
- GC-AP-MW-18: Arsenic, Lithium.
- GC-AP-MW-21: Lithium.

5.3.2.4 Delineation Wells

A review of analytical data from delineation wells identified concentrations over GWPS for the following well and analyte pairs during the second semi-annual sampling event of 2022:

- GC-AP-MW-39H: Arsenic, Lithium.
- GC-AP-MW-40H: Lithium.
- GC-AP-MW-41H: Lithium.

- GC-AP-MW-42H: Cobalt.
- GC-AP-MW-43H: Arsenic, Cobalt, Lithium.
- GC-AP-MW-44H: Cobalt.
- GC-AP-MW-45H: Lithium.
- GC-AP-MW-46HO: Lithium.
- GC-AP-MW-47HO: Lithium.
- GC-AP-MW-48H: Lithium.
- GC-AP-MW-49H: Lithium.
- GC-AP-MW-50HO: Lithium.
- GC-AP-MW-53H: Arsenic.
- GC-AP-MW-54H: Arsenic, Cobalt, Lithium.
- GC-AP-MW-57H: Arsenic, Cobalt.
- GC-AP-MW-59HO: Cobalt.
- GC-AP-MW-64HO: Lithium
- GC-AP-PZ-4: Cobalt.

To address SSLs at the site, an ACM was prepared to evaluate potential groundwater corrective measures for the occurrence of arsenic, cobalt, and lithium in groundwater at the site in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order No. 18-097-GW. The ACM was submitted to the Department and placed in the operating record on June 12, 2019. A Groundwater Remedy Selection Report was prepared and submitted to ADEM on September 30, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on December 29, 2021 for review.

6.0 GROUNDWATER ASSESSMENT AND CORRECTIVE ACTION

As required by Part E of the Order (AO 18-097-GW) and correspondence from ADEM (March 2021), this report includes an update of groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018). The primary purpose of this plan and subsequent phases of work were to identify the horizontal extent of groundwater impacts defined by EPA Appendix IV groundwater protection standards.

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in September 2020. The conclusions and results presented indicated that groundwater delineation had been completed to a sufficient degree to define spatial extent of groundwater impacts and to inform a groundwater remedy selection plan. However, following a review of the March 2021 groundwater sampling event analytical data, it was determined that additional off-site delineation (Phase III) was necessary to further delineate the horizontal extent of groundwater impacts northwest, west, southwest, and south of the property boundary. Additional groundwater delineation was requested by ADEM in the June 2022 *Groundwater Remedy Selection Report and Corrective Action Groundwater Monitoring Program* documents review letter. APC submitted the Phase IV Additional Groundwater Delineation Well Plan for the installation of additional groundwater monitoring wells on-site and off-site of the Site on January 4, 2023.

6.1 CHRONOLOGY OF DELINEATION ACTIVITIES

Beginning in 2019, Semi-Annual Progress Reports have routinely been provided to ADEM in March and September, annually. APC requested approval to combine information typically provided in the Semi-Annual Progress Reports with Semi-Annual Groundwater Monitoring and Corrective Action Reports on March 15, 2021. ADEM approved this approach and revised timeline for submittals on March 16, 2021. APC will now provide the Department with a discussion of delineation results and corrective action activities in each semi-annual groundwater monitoring and corrective action report (July; January) until released in writing.

6.1.1 Delineation Wells

Part B of the Order required the installation of additional wells as necessary to define the extent of groundwater impacts. The follow sections describe monitoring wells installed to delineate impacts to groundwater.

Phase I – Groundwater Investigation (December 2018 – August 2019)

Phase I was conducted between the dates of December 2018 to January 2020. **Table 1b** and **Figure 5,** present details, and locations of delineation wells. The following summarizes all activities that were completed during Phase I of groundwater delineation at the Site:

- Installation of 11 horizontal delineation wells (GC-AP-MW-34HA, GC-AP-MW-35H through GC-AP-MW-44H) proximal to the property boundary installed in the Unit 2 Aquifer and in the direction of groundwater flow away from the facility between December 17, 2018 and January 10, 2019.
- Collected eight ash samples for waste characterization analyses.
- Successfully developed all 11 delineation wells between December 27, 2018 and January 13, 2019.
- Sampled the 11 delineation wells and three pre-existing ash pond piezometers between January 14, 2019 and March 28, 2019.
- Evaluation of wells that suggest additional investigation of adjacent property is necessary to determine whether a plume of Appendix IV constituents may statistically exceed groundwater protection standards on that property.
- Submitted a semi-annual progress report to the department on March 29, 2019.
- Submitted a Groundwater Investigation Report to the Department on May 13, 2019. This report recommended a second phase of groundwater investigation to complete delineation of groundwater impacts as required by Part B of the Order.
- Submitted an Assessment of Corrective Measures to the Department on July 11, 2019 as required by Part C of the Order.
- Submitted a Phase II – Groundwater Delineation Plan to the Department on August 15, 2019. This plan documented planned activities associated with proposed Phase II delineation efforts.

Phase II – Groundwater Investigation (September 2019 – August 2020)

Following a review of data gathered from the Phase I Investigation, additional groundwater investigation was proposed to the Department in a Phase II Delineation Plan submitted August 15, 2019. The purpose of the plan was to further delineate horizontal extent of groundwater impacts. Phase II was conducted between the dates of September 2019 to March 2020. **Table 1b** and **Figure 5,** present details, and locations of delineation wells. The following summarizes all activities that were completed during Phase II of groundwater delineation at the Site:

- Completed semi-annual assessment groundwater sampling event between September 9, 2019 and September 13, 2019.
- Submitted a semi-annual progress report to the department on September 30, 2019.
- Installed 7 additional on-site horizontal delineation wells located adjacent to the north and northwest property boundaries (GC-AP-MW-53H, GC-AP-MW-54H, GC-AP-MW-56H, and GN-AP-MW-57H) and the south and southwest property boundaries (GC-AP-MW-45H, GC-AP-MW-48H, and GC-AP-MW-49H) between December 5, 2019 and December 17, 2019.
- Developed all 7 additional on-site horizontal delineation wells between December 10, 2019 and December 11, 2019.
- Sampled the 7 additional on-site horizontal delineation wells between December 16, 2019 and December 17, 2019.
- Provided the Department with a response on December 30, 2019 to the ADEM letter of November 14, 2019, Responding to CCR Documents Submitted to the Department.
- Submitted the 2019 Annual Groundwater Monitoring and Corrective Action Report to the Department on January 31, 2020. The report identified wells that suggested additional investigation of adjacent properties was necessary to determine whether a plume of Appendix IV constituents may statistically exceed groundwater protection standards on that property.
- Submitted a semi-annual progress report to the department on March 30, 2020.
- Completed semi-annual assessment groundwater sampling event between April 20, 2020 and May 1, 2020.
- Installed four additional off-site horizontal delineation wells between May 12, 2020 and May 17, 2020. Horizontal delineation wells GC-AP-MW-47HO and GC-AP-MW-50HO were installed south and southwest of the property boundary. Horizonal delineation wells GC-AP-MW-59HO and GC-AP-MW-55HO were installed west and northwest of the property boundary.
- Developed and sampled off-site delineation wells, GC-AP-MW-47HO, GC-AP-MW-50HO GC-AP-MW-55HO, and GC-AP-MW-59HO between May 26, 2020 and May 28, 2020.
- Installed two additional off-site horizontal delineation wells between June 9, 2020 and June 15, 2020. Horizontal delineation wells GC-AP-MW-46HO and GC-AP-MW-52HO were installed south and west of the property boundaries respectively.

- Developed and sampled off-site delineation wells, GC-AP-MW-46HO and GC-AP-MW-52HO were successfully between June 25, 2020 and July 6, 2020. Analytical data is included in **Appendix B.**
- Submitted the 2020 Semi-Annual Groundwater Monitoring and Corrective Action Report to the Department on July 31, 2020.
- Completed semi-annual assessment groundwater sampling event between August 10, 2020 and August 21, 2020 and submitted data in 2020 Annual Groundwater Monitoring and Corrective Action Report to the Department on January 31, 2021.

Phase III – Groundwater Investigation (January 2021 – July 2021)

Following a review of the March 2021 groundwater sampling event analytical data, it was determined that additional (Phase III) off-site delineation was necessary to further delineate the horizontal extent of groundwater impacts northwest, west, southwest, and south of the property boundary. Off-site access agreements were reached with the two of the three property owners in May 2021. Delineation wells GC-AP-MW-60HO and GC-AP-MW-61HO were installed northwest of the property boundary and GC-AP-MW-62HO, GC-AP-MW-63HO, and GC-AP-MW-64HO were installed southwest and south of the property boundary. The installation of two additional off-site delineation wells located west of the property boundary is pending an off-site access agreement with a third property owner. Phase III was conducted between the dates of June 9, 2021 and June 30, 2021. **Table 1b** and **Figure 5,** present details, and locations of delineation wells.

The following summarizes activities completed to date during Phase III of groundwater delineation at the Site:

- Submitted the 2020 Annual Groundwater Monitoring and Corrective Action Report to the Department on January 31, 2021.
- Completed the first semi-annual assessment groundwater sampling event between March 8, 2021 and March 18, 2021.
- Installed five additional Phase III off-site horizontal delineation between June 1, 2021 and June 9, 2021. Horizontal delineation wells GC-AP-MW-60HO and GC-AP-MW-61HO were installed northwest of the property boundary and horizonal delineation wells GC-AP-MW-62HO, GC-AP-MW-63HO and GC-AP-MW-64HO were installed southwest and south of the property boundary.
- Submitted the Semi-Annual Remedy Selection and Design Progress Report on June 14, 2021.

- Completed the development, and sampling of five Phase III off-site delineation wells to further characterize spatial extent of potential impacts to groundwater from the CCR Unit on June 30, 2021.

6.2 NATURE AND ESTIMATED QUANTITY OF RELEASE

Part B of the Order requires collecting data on the nature and estimated quantity of material released. To collect data regarding the nature of the source and estimated quantity of material released leachability testing of 8 ash samples and sampling of ash pore-water at 3 locations was conducted. Leachability testing was conducted for EPA Resource and Recovery Act (RCRA) heavy metals, while ash pore-water was sampled for all EPA Appendix III and IV constituents. Groundwater quality data is compared to source water and leachate composition to provide a basis for evaluating the degree to which the source area has contributed constituents to groundwater.

6.3 DISCUSSION OF DELINEATION RESULTS

Analytical results identified concentrations above GWPS of EPA Appendix IV constituents: arsenic, cobalt, and lithium from onsite horizontal delineation wells and cobalt and lithium from offsite horizontal delineation wells during the first and second semi-annual monitoring events of 2022.

Arsenic concentrations above GWPS were not detected in any of the off-site horizontal delineation wells during the 2022 monitoring period. Arsenic concentrations above GWPS were detected in five onsite horizontal delineation wells; GC-AP-MW-37H, GC-AP-MW-39H, GC-AP-MW-43H, GC-AP-MW-53H, and GC-AP-MW-54H during the first semi-annual monitoring event and five onsite horizontal delineation wells; GC-AP-MW-39H, GC-AP-MW-43H, GC-AP-MW-53H, GC-AP-MW-54H and GC-AP-MW-57H during the second semi-annual monitoring event . **Figure 7A, Arsenic Isoconcentration Map (March – April 2022)** and **Figure 8A, Arsenic Isoconcentration Map (October 2022)** illustrate the horizontal extent of arsenic impacts to groundwater.

Cobalt concentrations above GWPS were detected in nine onsite horizontal delineation wells; GC-AP-PZ-4, GC-AP-MW-37H, GC-AP-MW-39H, GC-AP-MW-41H, GC-AP-MW-42H, GC-AP-MW-43H, GC-AP-MW-44H, GC-AP-MW-54H, and GC-AP-MW-57H and one off-site horizontal delineation well GC-AP-MW-59HO during the first semi-annual monitoring event and six onsite horizontal delineation wells; GC-AP-PZ-4, GC-AP-MW-42H, GC-AP-MW-43H, GC-AP-MW-44H, GC-AP-MW-54H, and GC-AP-MW-57H and one off-site horizontal delineation well GC-AP-MW-59HO during the second semi-annual monitoring event. **Figure 7B, Cobalt Isoconcentration Map (March – April 2022)** and **Figure 8B,**

Cobalt Isoconcentration Map (October 2022) illustrate the horizontal extent of cobalt impacts to groundwater.

Lithium concentrations above GWPS were detected in eight onsite horizontal delineation wells; GC-AP-MW-39H, GC-AP-MW-40H, GC-AP-MW-41H, GC-AP-MW-43H, GC-AP-MW-45H, GC-AP-MW-48H, GC-AP-MW-49H, and GC-AP-MW-54H and four off-site horizontal delineation wells GC-AP-MW-46HO, GC-AP-MW-47HO, GC-AP-MW-50HO, and GC-AP-MW-64HO during both 2022 semi-annual monitoring events. **Figure 7C, Lithium Isoconcentration Map (March – April 2022)** and **Figure 8C, Lithium Isoconcentration Map (October 2022)** illustrate the horizontal extent of lithium impacts to groundwater.

Wells configured specifically for vertical delineation are not required at the site as the uppermost aquifer is confined at its base by 250 feet of low permeability chalk (10^{-8} cm/s) and the thickness of the aquifer is thin (10 to 30 feet). The Demopolis Chalk is encountered beneath the uppermost aquifer and provides a lower confining unit. Vertical hydraulic conductivity (K_z) values obtained from two Shelby tube permeameter tests provide values of 5.0×10^{-8} cm/sec and 1.4×10^{-8} cm/sec (1.42×10^{-4} ft/d to 3.97×10^{-5} ft/d) for Unit 3 chalks.

Isoconcentration lines shown on **Figures 7A - 7C** and **Figures 8A - 8C** are data-driven contours derived from the spatial distribution of constituent concentrations in the well network. When spatially distributed objects are correlated (i.e., objects close together with similar characteristics are compared), mathematical interpolation can be used to predict quantities between the objects. In this case, the Geostatistical Analyst tool within ArcGIS was utilized to interpolate constituent concentrations between well locations within the area where concentrations were above laboratory method detection limits.

In cases where concentrations decrease below the GWPS in between well pairs, the extent of groundwater impacts are interpreted from the interpolated (predicted) data set. This takes into account the spatial pattern of decreasing concentrations observed in nearby wells.

The location and spacing of delineation wells are largely based upon the following goals and site factors:

1. Determine if impacts to groundwater could extend off-site in the direction of groundwater flow away from the facility.
2. Evaluate potential for vertical migration adjacent to compliance wells with SSLs and within the context of site hydrogeology.
3. Address key data gaps between phases – working in from property line or off-site depending on gaps.

4. Ability to safely access locations with drill rig and supporting equipment.
5. Occurrence of groundwater and sufficient groundwater yield/recharge at locations.
6. Delineate extent of impacts and capture additional hydrogeologic data necessary to evaluate the feasibility of groundwater remediation technologies.

As shown on **Table 1b,** 28 delineation wells have been installed at the site to assess potential impacts and one previously existing piezometer (GC-AP-PZ-4) redesignated for delineation. Additionally, one delineation well (GC-AP-MW-56H) was installed but did not produce sufficient groundwater yield to sample and was abandoned (**Table 1d**).

6.3.1 Arsenic Delineation

As shown on **Figures 7A** and **8A**, arsenic impacts to groundwater can be divided into two spatial zones: (1) a northern zone and (2) a central zone. The northern zone encompasses wells GC-AP-MW-1, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-53H, GC-AP-MW-54H, and GC-AP-MW-57H. Arsenic is delineated onsite to the north as defined by delineation wells GC-AP-MW-44H, GC-AP-PZ-4, GC-AP-MW-34HA, and GC-AP-MW-55HO and to the north/northeast as defined by delineation wells GC-AP-MW-35H and GC-AP-MW-36H and upgradient wells GC-AP-MW-23 and GC-AP-MW-24. Arsenic is delineated to the west by delineation well GC-AP-MW-57H (April 2022 event only), off-site delineation wells GC-AP-MW-59HO, GC-AP-MW-60HO and GC-AP-MW-61HO, and downgradient wells GC-AP-MW-31, GC-AP-MW-32, and GC-AP-MW-33.

Arsenic in delineation well GC-AP-MW-57H was below the GWPS during the April 2022 event but above during the October 2022 event. Arsenic concentrations in GC-AP-MW-57H are sensitive to redox conditions – where oxic/oxidizing conditions result in relative decreases and shifts to reducing conditions drive concentrations upward. This likely indicates reductive dissolution of iron oxides as a mechanism for arsenic mobilization under reducing conditions.

The central zone includes two wells GC-AP-MW-10 and GC-AP-MW-43H to the west, one well GC-AP-MW-14 to the southeast and four wells GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, and GC-AP-MW-39H to the east. Arsenic is delineated to the west as defined by delineation wells GC-AP-MW-42H, GC-AP-MW-52HO and GC-AP-MW-50HO. The installation of two additional off-site delineation wells to confirm delineation west of the property boundary is pending an access agreement with the landowner.

Additionally, compliance well GC-AP-MW-9 exhibited arsenic concentrations below GWPS during the three most recent sampling events in October 2022, March 2022, and August 2021. This reduction in arsenic is paralleled with a general increase in ORP and move away from strongly reducing conditions. Arsenic is delineated to the southeast as defined by delineation wells GC-AP-MW-40H and GC-AP-MW-41H and downgradient well GC-AP-MW-15. In these areas ORP moves from reducing to neutral/oxidizing conditions. Arsenic is delineated to the east as defined by the upgradient wells (GC-AP-MW-26 through GC-AP-MW-30) located on the other side of the barge canal as determined by the potentiometric surface contour maps (**Figures 6A and 6B**).

6.3.2 Cobalt Delineation

As shown of **Figures 7B** and **8B**, cobalt concentrations display significant variations from well to well. The cobalt exceedances can be grouped into three spatial zones: northern, west central, and east/southeast. Only one off-site delineation well located northwest of the property boundary (GC-AP-MW-59HO) exhibited a concentration above GWPS. Phase III off-site delineation wells GC-AP-MW-60HO and GC-AP-MW-61HO were installed to further characterize spatial extent of potential impacts to groundwater from the CCR Unit to the northwest. Cobalt concentrations continue to be below GWPS in delineation wells GC-AP-MW-60HO and GC-AP-MW-61HO.

The northern zone includes compliance wells GC-AP-MW-1 and GC-AP-MW-2 and delineation well GC-AP-PZ-4. Only one compliance well in this area (GC-AP-MW-1) was recorded as an SSL. However, compliance well GC-AP-MW-2 has exhibited cobalt concentrations above the GWPS during recent sampling events but has not been recorded as an SSL. The remaining wells with cobalt exceedances above GWPS are located to the northwest and include horizontal delineation wells GC-AP-MW-44H, GC-AP-MW-54H, and GC-AP-MW-57H and off-site delineation well GC-AP-MW-59HO.

Cobalt is delineated to the north/northeast as defined by delineation wells GC-AP-MW-35H and GC-AP-MW-36H, and upgradient wells GC-AP-MW-23 and GC-AP-MW-24. Cobalt is delineated to the north and west as defined by delineation wells GC-AP-MW-34HA, GC-AP-MW-55HO, GC-AP-MW-60HO, and GC-AP-MW-61HO, and downgradient wells GC-AP-MW-31, GC-AP-MW-32, and GC-AP-MW-33. Additional delineation wells are proposed north of compliance wells GC-AP-MW-1 and GC-AP-PZ-4 and the Black Warrior River to continue delineation to the north pending ADEM approval.

The west central zone of cobalt exceedances include compliance wells GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, and delineation wells GC-AP-MW-42H and GC-AP-MW-43H. The east central zone of cobalt exceedances includes compliance well GC-AP-MW-18. The southeast zone of cobalt exceedances include compliance wells GC-AP-MW-14 and GC-AP-MW-15. Compliance wells GC-AP-MW-14 and

GC-AP-MW-15 have been recorded as SSLs. The cobalt concentrations in compliance well GC-AP-MW-11 was below GWPS during the first 2022 semi-annual sampling event but exceeded GWPS during the second 2022 semi-annual sampling event. Compliance wells GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, and GC-AP-MW-18 have exhibited cobalt concentrations above the GWPS during the second 2022 semi-annual sampling event but were not recorded as SSLs.

Cobalt concentrations in off-site delineation wells GC-AP-MW-52HO and GC-AP-MW-50HO to the west are below GWPS. Two additional delineation wells located to the west of the property boundary and between delineation wells GC-AP-MW-52HO and GC-AP-MW-50HO are pending access agreements with the landowner. Cobalt is delineated to the southeast as defined by delineation wells GC-AP-MW-40H and GC-AP-MW-45H. Cobalt is delineated to the east along the barge canal as defined by delineation wells GC-AP-MW-38 and the upgradient wells located other side of the barge canal as determined by potentiometric surface contour maps (**Figures 6A and 6B**).

6.3.3 Lithium Delineation

As shown of **Figures 7C** and **8C**, lithium concentrations exceeding the GWPS are mainly concentrated to the central and southern areas of the pond and adjacent areas. To the northwest, lithium was detected above the GWPS in two wells GC-AP-MW-5 and GC-AP-MW-54H. Lithium is delineated to the northwest on-site by compliance wells BY-AP-MW-6 and GC-AP-MW-7, and delineation wells GC-AP-MW-57H and GC-AP-MW-44H and off-site by delineation wells GC-AP-MW-59HO, GC-AP-MW-60HO and GC-AP-MW-61HO, and downgradient wells GC-AP-MW-31, GC-AP-MW-32, and GC-AP-MW-33.

To the west, lithium was detected above the GWPS in wells GC-AP-MW-10 and GC-AP-MW-43H. Lithium is delineated to the west as defined by onsite compliance wells GC-AP-MW-7, GC-AP-MW-8, and GC-AP-MW-9, and delineation well GC-AP-MW-42H and off-site delineation well GC-AP-MW-52HO. Two additional off-site delineation wells located to the west of the property boundary and delineation well GC-AP-MW-43H are pending access agreements with the landowner.

To the south/southwest, lithium was detected onsite above the GWPS in wells GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-21, GC-AP-MW-48H, and GC-AP-MW-49H. Lithium was detected above GWPS in off-site delineation wells GC-AP-MW-46HO, GC-AP-MW-47HO, GC-AP-MW-50HO, and GC-AP-MW-64HO. Lithium has been delineated to the southwest with the installation of two additional Phase III delineation wells GC-AP-MW-62HO and GC-AP-MW-63HO in June of 2021. A review of analytical data from delineation wells GC-AP-MW-62HO and GC-AP-MW-63HO indicated lithium concentrations have been non-detect during the 2021 and 2022 sampling events. Phase III off-site delineation well, GC-AO-MW-64HO, was installed south of the property boundary along the Black Warrior River. Lithium was detected above the GWPS in Phase III delineation well GC-AP-MW-64HO during the 2021 and 2022 sampling events. Two additional off-site delineation locations are proposed to laterally delineate impacts to groundwater west/southwest and south of the Site property boundary pending property owner approval and drilling equipment access. One additional delineation location will be used to define groundwater impacts west of delineation well GC-AP-MW-50HO and one additional delineation location will be used to define groundwater impacts southeast of delineation well GC-AP-MW-47HO, between the well and the and the Black Warrior River.

To the east/southeast, lithium was detected onsite above the GWPS in compliance wells GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, and GC-AP-MW-18 and delineation wells GC-AP-MW-39H, GC-AP-MW-40H, GC-AP-MW-41H, and GC-AP-MW-45H. Delineation wells GC-AP-MW-37H, GC-AP-MW-38H, GC-AP-MW-39H, GC-AP-MW-40H, were installed to laterally delineate groundwater impacts to the barge canal boundary and to the southeast GC-AP-MW-41H and GC-AP-MW-45H were installed downgradient proximal to the property boundary, the Black Warrior River. Lithium is below GWPS in delineation wells GC-AP-MW-37H and GC-AP-MW-38H along the northern end of the barge canal. Lithium exceedances extend to the southern end of the barge canal and to the southeast of the property boundary with the Black Warrior River. However, delineation has been completed to the extent feasible as locations on the other side of the barge canal are upgradient of the Site as determined by potentiometric surface contour maps (**Figures 6A and 6B**). Lithium concentrations in delineation wells GC-AP-MW-41H and GC-AP-MW-45H exceeded the GWPS, the assumption is that this extends in the direction of prevailing groundwater flow for assessment of corrective measures.

6.4 STATUS OF DELINEATION

A plan was executed to investigate potential impacts to groundwater at Plant Greene County. Horizontal delineation wells were installed over the course of three phases of field work and data was collected on CCR contained within the Plant Greene County Ash Pond to characterize the nature of saturated CCR as a potential source. Vertical delineation wells were not required at the site as the Demopolis Chalk, an estimated 250-ft thick low permeability chalk (10^{-8} cm/s) is present beneath the uppermost aquifer and provides a lower confining unit.

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in September 2020. The conclusions and results presented indicated that groundwater delineation had been completed to a sufficient degree to define spatial extent of groundwater impacts and to inform a groundwater remedy selection plan. However, following a review of the March 2021 groundwater sampling event analytical data, it was determined that additional off-site delineation (Phase III) was necessary to further delineate the horizontal extent of groundwater impacts northwest, west, southwest, and south of the property boundary. Off-site access agreements were reached with two of the adjacent landowners and five additional delineation wells were installed and sampled between June 9, 2021 and June 30, 2021. An off-site access agreement with the third adjacent landowner is pending and two additional delineation wells are proposed to complete delineation to the west of the property boundary. Additional groundwater delineation was requested by ADEM in the June 2022 *Groundwater Remedy Selection Report and Corrective Action Groundwater Monitoring Program* documents review letter, and a Phase IV Additional Groundwater Delineation Well Plan for the installation of additional groundwater monitoring wells on-site and off-site of the Site was submitted to ADEM for approval.

6.5 GROUNDWATER REMEDY AND CORRECTIVE ACTION

An Assessment of Corrective Measures (ACM) for groundwater impacts was conducted and formally submitted to ADEM in June 2019. Additional data analyses and investigations conducted since the ACM culminated with a more detailed Groundwater Remedy Selection Report, submitted in September 2021, and a Corrective Action Groundwater Monitoring Program document submitted in December 2021.

Submittal	Submittal Date	Purpose
Assessment of Corrective Measures	06/2019	Initial evaluation of the feasibility, performance, and implementation of known and emerging groundwater remediation technologies against site conditions and factors.
Groundwater Remedy Selection Report	09/2021	Formal selection and detailed description of groundwater remedies selected for implementation at the site.
Corrective Action Groundwater Monitoring Program	12/2021	Plan document to describe process and program for implementation and monitoring of groundwater remedies selected at the site.

6.5.1 Groundwater Remedy Selection

The Groundwater Remedy Selection Report described the selected remedies for groundwater corrective actions at the Site:

- Source control to include dewatering, consolidation, capping of the Site, and the installation of a subsurface barrier (slurry) wall completely around the consolidated perimeter keyed into the relatively impermeable chalk aquitard.
- Geochemical manipulation via injections in areas of relatively high concentrations of constituents of interest (COI) to remove them from groundwater and immobilize them in situ.
- Monitored natural attenuation (MNA) over the entire Site.

Closure of the CCR Unit — including dewatering, consolidation, capping, and the perimeter barrier wall will effectively eliminate source contributions to groundwater. Geochemical manipulation was selected because of its effectiveness, ease of implementation, versatility (ability to treat more than one COI with the same treatment solution), ability to implement in areas with limited working space, and no byproducts that would require further treatment or disposal. MNA was selected because substantial evidence indicates that it is currently occurring at the Site.

6.5.2 Corrective Action – Groundwater Monitoring Program

The Corrective Action Groundwater Monitoring Program describes early plans for implementation and monitoring of groundwater remedies described above. The Corrective Action Groundwater Monitoring Program will be performed at the Site in two stages.

- Stage 1 will include ongoing compliance monitoring, remedial effectiveness monitoring for geochemical manipulation (injection treatment), MNA performance monitoring, sentinel/clean-line monitoring (including surface water monitoring), and demonstration that Site conditions remain protective of potential human and ecological receptors. Prompt action will be taken should data or data trends indicate such actions are warranted.

- Stage 2 monitoring will be implemented upon Site closure, with the first 2 years of Stage 2 monitoring consisting of background data collection to serve as a baseline. Stage 2 monitoring will be composed of ongoing compliance monitoring, additional wells or sampling locations as needed to evaluate remedy effectiveness, additional MNA parameters as needed, mass and mass flux calculations, additional monitoring associated with permeation grouting (if implemented), re-evaluation of natural attenuation processes and efficacy every 10 years, and demonstration that Site conditions remain protective of potential human and ecological receptors.

Stage 1

The initial phase of Stage 1 has implementation tasks associated with each selected groundwater remedy that serve as a foundation for the remainder of Stage 1 and Stage 2:

Selected Remedy	Implementation Task(s)
Monitored Natural Attenuation	1. Implementation of expanded MNA sampling parameters. 2. Further assessment of MNA monitoring network.
Geochemical Injection	1. Complete laboratory treatability studies to evaluate reagent composition, dosing, effectiveness, and sequencing for in situ groundwater treatment of constituents of interest (COIs) via injection. Results from the treatability studies would be incorporated into an Underground Injection Control (UIC) permit application for the Site. 2. Implementation of geochemical injection pilot tests using data collected from the laboratory treatability studies and issuance of an UIC permit.
Source Control/Closure Activities	1. Evaluation of geochemical changes in groundwater with respect to transient closure activities (excavation, de-watering, etc.). 2. Implementation of field data collection instruments/telemetry within key monitoring wells to further understand the nature of geochemical changes over time and with respect to closure activities and MNA/geochemical modelling.

Implementation of Monitored Natural Attenuation

MNA sampling parameters were added to the sampling plans and analyzed in the laboratory during the 2022 sampling events (**Tables 6 and 7**). These parameters, in addition to field parameters, Appendix III, and Appendix IV parameters, are utilized to study the processes that govern or facilitate MNA as well as changes in geochemical conditions. Parameters will be included into the site geochemical model.

Geochemical Injection Pilot Testing Program

Laboratory treatability studies using Site aquifer media and impacted groundwater to evaluate reagent composition, dosing, effectiveness, and sequencing (if applicable) for in situ groundwater treatment of COIs via injection has been completed. The Laboratory Treatability Study Results report is presented in **Appendix F**. Treatability tests include the following tasks and procedures prior to field implementation of an injection treatment pilot study.

- Sampling and characterization (analysis) of aquifer soil and groundwater.
- Batch tests (screening batch tests, followed by optimization batch tests) to identify and rank reagents and reagent mixtures for removal of COIs from Site groundwater.
- Selection of the two best-performing reagents for column testing to:
    - Assess COI removal effectiveness.
    - Determine COI uptake capacity of reagent-treated aquifer soil to support pilot test design
- Confirm the selected reagents will not inadvertently increase concentrations of other Appendix III/IV constituents above the groundwater protection standard (GWPS) due to, for example, release from the aquifer matrix.
- Determine the stability of each treatment by:
    - Selective sequential extraction (SSE) of post-column-treated soil to provide information on the mechanisms and stability of COI sequestration.
    - Running Site background groundwater through treated soils in the columns to assess potential for rerelease of COIs.
- Results from the treatability studies would be incorporated into an Underground Injection Control permit application to be submitted to ADEM for approval prior to field implementation of an injection treatment pilot study.

The tentative schedule for this initial foundation phase is outlined as:

- Aquifer solids (soils) and groundwater sample collection from the selected pilot test areas – First and Second quarters of 2022 (completed).
- Laboratory batch and column testing, and selective sequential extraction of treated soil – Third and Fourth quarters of 2022 (completed).
- Underground Injection Permit application – First or Second quarter 2023.
- Geochemical Injection Pilot Program – TBD, pending requisite documents and approvals supporting the injection program.

To facilitate further understanding of trends and correlating relationships, AquaTROLL instrumentation is being installed at select key monitoring well locations for the near continuous monitoring of field parameters. This additional data will allow for a better understanding of the degree of changes driven by different types of closure activities, the response of site flow systems, and possible correlations/changes noted in semi-annual monitoring data.

AquaTROLL instrumentation are currently being installed at the following monitoring locations:

- GC-AP-MW-1
- GC-AP-MW-10
- GC-AP-MW-11
- GC-AP-MW-14
- GC-AP-MW-16
- GC-AP-MW-39H
- GC-AP-MW-44H
- GC-AP-PZ-4

6.5.3 Groundwater Quality Changes and Trends

As described in **Section 4.0**, groundwater elevations west of a line from GC-AP-MW-1 through GC-AP-MW-14 have declined (~2.5-ft on average) in response to ash pond closure activities and with greater declines shown in select wells downgradient of the installed northern section of the slurry wall. This likely indicates that groundwater conditions are beginning to reflect change to more natural conditions.

During this period, pH values should decrease to a range more reflective of meteoric waters. In general, this trend may be occurring as pH values have shown a small decreasing trend since 2018. Average pH values from compliance boundary wells fluctuate seasonally but have decreased from 6.35 SU (2018) to 6.12 SU during the first sampling event of 2022 and 6.21 SU during the second semi-annual sampling event. The exception appears to be wells GC-AP-MW-16, GC-AP-MW-17, and GC-AP-MW-18 which depict higher average pH values (6.36 SU to 6.73 SU) – which agrees with observations of little or no changes in groundwater elevations.

Changes in pH, and other field parameters, can be drivers for changing concentrations in parameters such as cobalt and arsenic. Important groundwater quality changes or trends have been noted in **Section 6.3.** The key findings include:

- Compliance well GN-AP-MW-1 exhibited an arsenic concentration above GWPS during the 2022 second semi-annual sampling event but have steadily decreased over the last five sampling events from 0.0265 mg/l (August 17, 2020) to 0.0152 mg/L (October 5, 2022). Here the decreasing arsenic trend correlates with overall decreasing pH, ORP/DO, iron, sulfate, and conductivity trends.
- Compliance well GN-AP-MW-9 exhibited arsenic concentrations below GWPS during the three most recent sampling events (October 2022, March 2022, and August 2021) and have exhibited a downward trend since August 2020. This overlaps with overall increasing ORP, conductivity, and sulfate values since August 2020, and decreasing pH values, and iron concentrations trends.
- Compliance well GN-AP-MW-3 exhibited an arsenic concentration at the GWPS (0.01 mg/L) during the first 2022 semi-annual sampling event and slightly above (0.0119 mg/L) during the second 2022 semi-annual sampling event. Arsenic concentrations were above GWPS for the first time during the 2021 sampling events in March and August. Here arsenic correlates with increasing iron, increasing sulfate, fluctuating conductivity values, and initiated with a decreasing pH trend.
- Delineation well GC-AP-MW-57H exhibited an arsenic concentration below GWPS (0.00687 mg/L) for the first time during the March 2022 semi-annual sampling event and slightly exceeded the GWPS (0.0177 mg/L) during the October 2022 semi-annual sampling event. Here the decreasing arsenic trend correlates with decreasing pH, iron, sulfate, and conductivity values. Arsenic concentrations in GC-AP-MW-57H are sensitive to redox conditions – where oxic/oxidizing conditions result in relative decreases and shifts to reducing conditions drive concentrations upward. This likely indicates reductive dissolution of iron oxides as a mechanism for arsenic mobilization under reducing conditions.

- There are no exceedances of arsenic concentrations above the GWPS in any of the offsite delineation well locations and only one delineation well (BY-AP MW-39H) along the east side of the ash pond and the barge canal during the October 2022 sampling event.
- Compliance well GN-AP-MW-2 has exhibited cobalt concentrations above GWPS during the 2020, 2021, and 2022 semi-annual sampling events but has not been recorded as an SSL. This increase correlates with an increase in DO/ORP, iron, conductivity and sulfate as well as fluctuating to slightly downward pH. Conversely, during this period, arsenic concentrations decreased from an average of 0.0103 (2020) to 0.0036 mg/L (2022). Increasing ORP/DO are the likely driver for arsenic decreasing.
- Compliance well GC-AP-MW-11 exhibited a cobalt concentration below GWPS during the March 2022 semi-annual sampling event and is no longer a recorded SSL. However, cobalt concentrations exceeded GWPS during the October 2022 sampling event. Cobalt concentrations in well GC-AP-MW-11 appear related to fluctuating pH, ORP, and iron. Variability from event to event in well GC-AP-MW-11 shows greater range than many other Site wells. Here fluctuations to decreasing pH and increasing ORP drive increases in cobalt concentration.
- Compliance well GC-AP-MW-15 exhibited a cobalt concentration above GWPS during the March and October 2022 semi-annual sampling events and has been recorded as an SSL for the first time. The fluctuating cobalt concentrations at this location appear to correlate with fluctuating iron, sulfate, conductivity and DO. These trends began in late 2018 and 2019.
- Delineation well GC-AP-MW-37H exhibited a cobalt concentration below GWPS (0.00563 mg/L) for the first time during the October 2022 semi-annual sampling event and has exhibited a decreasing trend since January 2019. Here the decreasing cobalt trend correlates with overall decreasing DO, ORP, iron, sulfate, and conductivity trends.
- Delineation well GC-AP-MW-39H exhibited a cobalt concentration below GWPS (0.0151 mg/L) for the first time during the October 2022 semi-annual sampling event and has exhibited a decreasing trend since September 2019. Here the decreasing cobalt trend correlates with overall decreasing ORP, sulfate, and fluctuating conductivity trends.
- Delineation well GC-AP-MW-53H exhibited a cobalt concentration below GWPS for the first time during the March and October 2022 semi-annual sampling events. This observation was noted as part of a decreasing trend starting with the April 2020 sampling event. Initially elevated cobalt at this location may have been influenced by temporary geochemical disequilibrium caused by the well installation process.

- Compliance well BY-AP-MW-6 exhibited a lithium concentration below the GWPS during the five most recent sampling events since exceeding GWPS in April 2020. Historically, lithium concentrations in GC-AP-MW-6 have been below GWPS only exceeding GWPS three of seventeen sampling events.
- Compliance well GN-AP-MW-9 exhibited lithium concentrations below the GWPS during the 2022 sampling events as part of a downward trend that began in September 2019. This is similar to decreasing arsenic trend also observed at this well.
- Lithium concentrations exceeding GWPS are concentrated to the south, southeast, and southwest sides of the ash pond with only two wells (GC-AP-MW-5 and GC-AP-MW-54H) that are above GWPS north of the ash pond.

Groundwater quality changes and/or trends are related to closure construction activities and will continue to be observed throughout the closure process. Many of the trends appear to be associated with the ash pond closure activities - namely the halt to sluicing, ash dewatering, and installation of the northern section of the slurry wall. Trends and groundwater quality changes will continue to be monitored throughout closure to evaluate assessment needs and to better inform groundwater remedy plans.

7.0 SUMMARY AND CONCLUSIONS

Semi-annual monitoring events were conducted in March and April 2022 and October 2022. Statistical evaluations of the monitoring data identified SSLs of Appendix IV constituents above the GWPS. To address previously identified SSLs, a Groundwater Remedy Selection Report was prepared and submitted to ADEM on September 30, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on December 29, 2021, for review.

The Corrective Action Groundwater Monitoring Program was prepared to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site.

The following future actions will be taken or are recommended for the site:

- Complete the installation, development, and sampling of the Phase IV additional groundwater wells on-site and off-site pending ADEM approval and off-site property owners access agreements approval.
- Submit a Class V UIC permit for geochemical injection pilot studies for the remediation of arsenic, cobalt, and lithium.
- Conduct the first semi-annual monitoring event in the spring of 2023 and submit the semi-annual groundwater monitoring and corrective action report summarizing the findings to ADEM by July 31, 2023.

8.0 REFERENCES

Alabama Department of Environmental Management (ADEM), 2017, Solid Waste Program, Division 13, ADEM Admin. Code r. 335-13-4.

Anchor QEA, June 2019, Assessment of Corrective Measures Plant Greene County Ash Pond.

Anchor QEA, June 2021, Semi-Annual Remedy Selection and Design Progress Report Plant Greene County Ash Pond.

APC (Alabama Power Company), April 2020, Amended Closure Plan for Ash Pond Plant Greene County.

Anchor QEA, September 2021, Remedy Selection Report Plant Greene County Ash Pond.

Anchor QEA, December 2021, Corrective Action Groundwater Monitoring Program Plant Greene County Ash Pond.

Anchor QEA, April 2022, Laboratory Treatability Study Work Plan Plant Greene County.

Anchor QEA, January 2023, Laboratory Treatability Study Results Plant Greene County.

ASTM Standard D5092, 2004(2010)e1, Standard Practice for Design and Installation of Groundwater Monitoring Wells, ASTM International, West Conshohocken, PA, DOI 10.1520/D5092-04R10E01, www.astm.org.

ASTM Standard D5092, 2004(2010)e1, Standard Practice for Design and Installation of Groundwater Monitoring Wells, ASTM International, West Conshohocken, PA, DOI 10.1520/D5092-04R10E01, www.astm.org.

Dejarnette, S.S., Crownover, J.E., 1987, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 6, USGS Water-Resources Investigations Report 87-4113.

McIntyre, M.R., Pashin, J.C., McKinney III, G.M., 2010, Report on Plant Geology prepared for SCS by the Geological Survey of Alabama.

Sapp, D.C., Emplaincourt, J., 1975, Physiographic Regions of Alabama, Geological Survey of Alabama, Map 168.

Wahl, K.D., 1966, Geology and Ground-Water Resources of Greene County, Alabama: Alabama Geol. Survey Bulletin 86.

U.S. Environmental Protection Agency (EPA Waste Management Division, Office of Solid Waste, 1989, EPA 530/SW-89-031 Interim Final RCRA Investigation (RFI) Guidance, Volumes I and II.

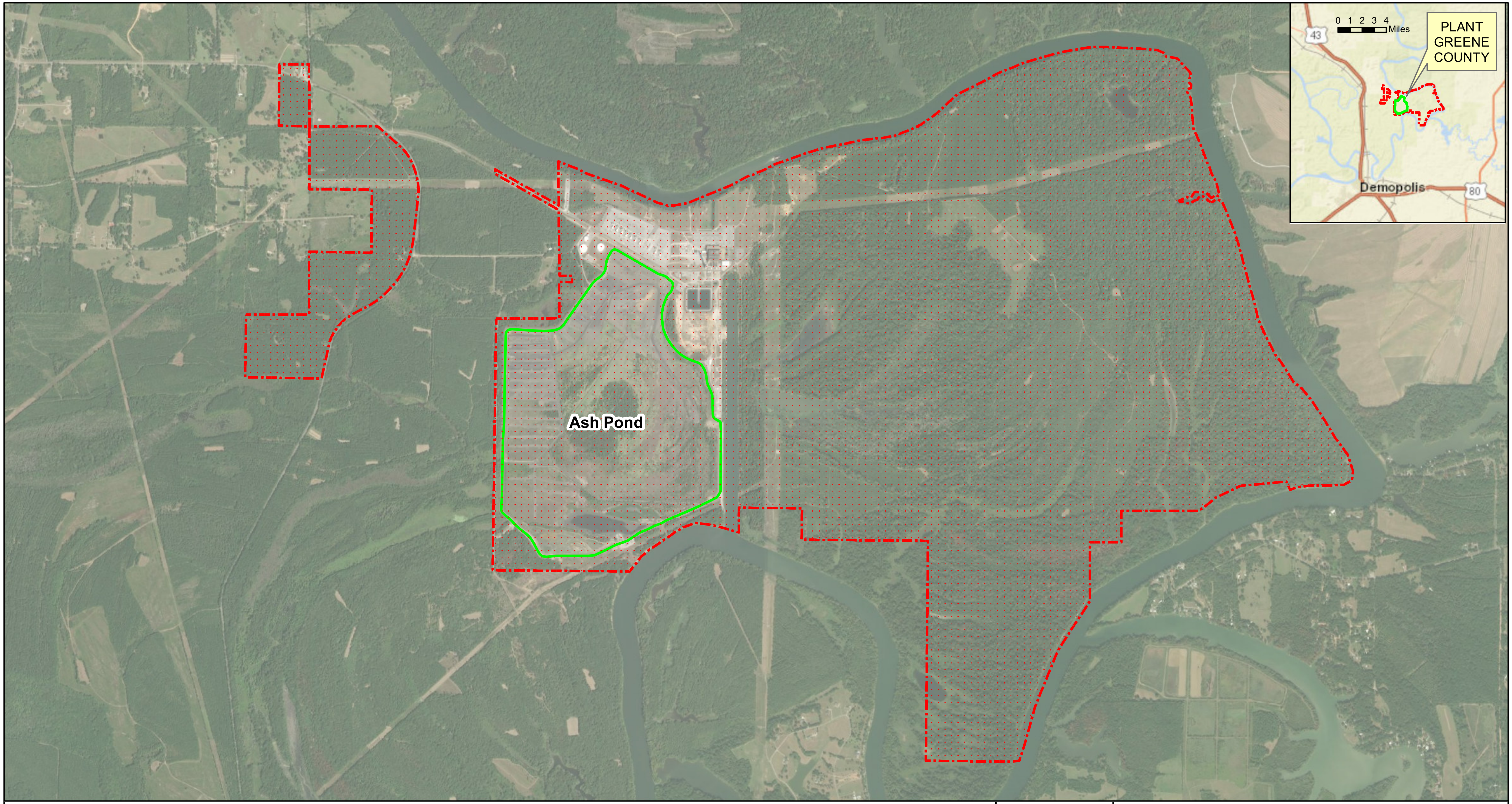
U.S. Environmental Protection Agency (EPA), 2004, Evaluation of Sampling and Field-Filtration Methods for the Analysis of Trace Metals In Groundwater Project Summary, EPA/600/SR-94/119.

U.S. Environmental Protection Agency (EPA), 2009, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, EPA 530/R-09-007.

USEPA. 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. 40 CFR Parts 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. [EPA-HQ-RCRA–2009–0640; FRL–9919–44–OSWER]. RIN–2050–AE81. April.

U.S. Environmental Protection Agency (EPA), 2004, Evaluation of Sampling and Field-Filtration Methods for the Analysis of Trace Metals In Groundwater Project Summary, EPA/600/SR-94/119.

Figures



Legend

🟥 Property Boundary (Approximate)

🟩 Ash Pond Boundary

N

0 1,000 2,000 4,000 6,000 8,000 Feet

SCALE	1:24000
DATE	10/28/2020
DRAWN BY	KWR
CHECKED BY	GBD

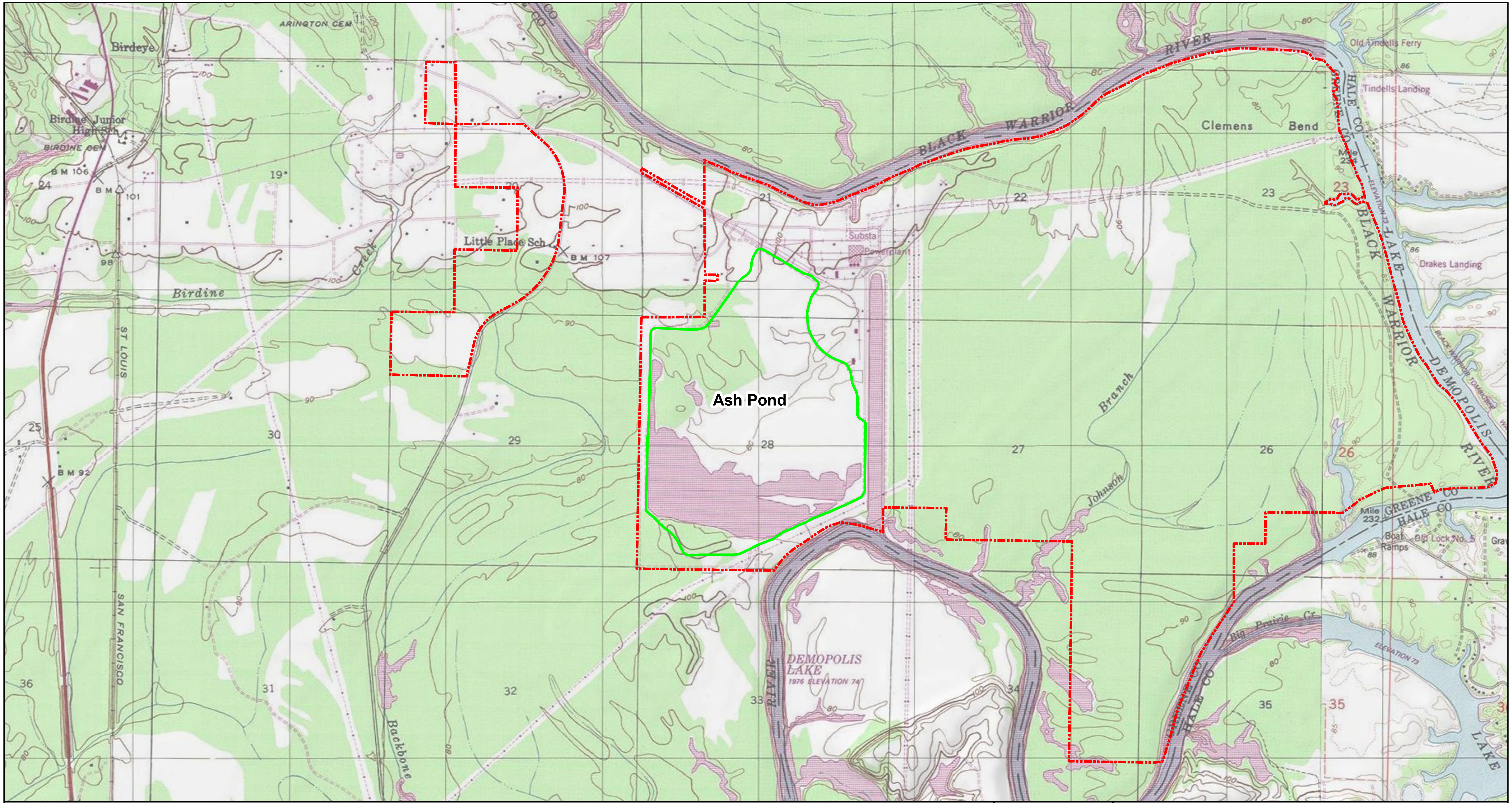
DRAWING TITLE

SITE LOCATION MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 1

Southern Company



Legend

🟥 Property Boundary (Approximate)

🟩 Ash Pond Boundary

N

0 1,000 2,000 4,000 6,000 8,000 Feet

SCALE	1:24000
DATE	12/19/2019
DRAWN BY	KAR
CHECKED BY	GBD

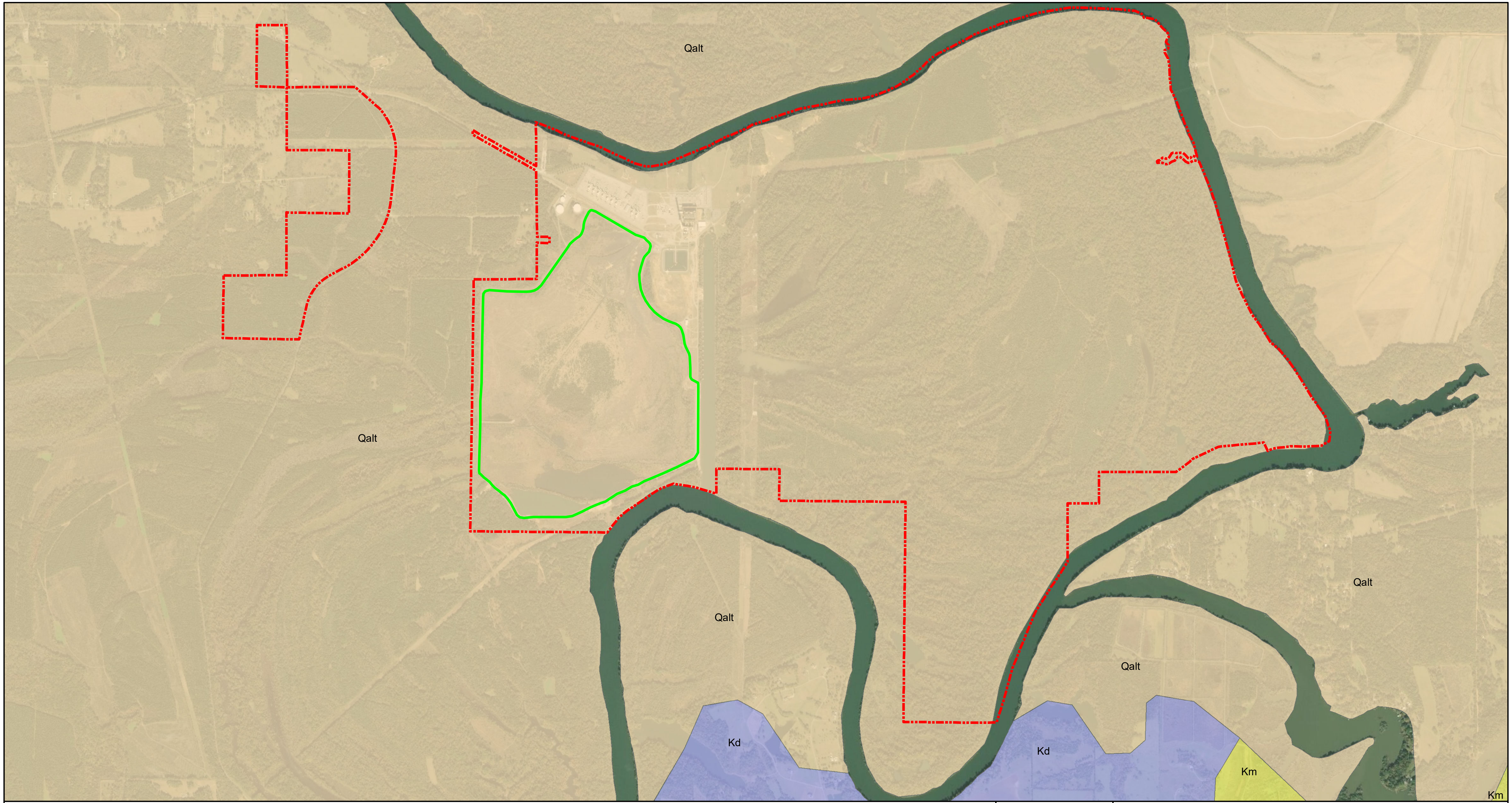
DRAWING TITLE

SITE TOPOGRAPHIC MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 2

Southern Company



Legend

🟩 Ash Pond Boundary

🟥 Property Boundary (Approximate)

Geologic Unit

⬜ Alluvial, coastal, and low terrace deposits (Qalt)

🟦 Demopolis Chalk (Kd)

🟨 Mooreville Chalk (Km)

N

0 1,000 2,000 4,000 6,000 8,000 Feet

SCALE	1:24000
DATE	12/19/2019
DRAWN BY	KWR
CHECKED BY	GBD

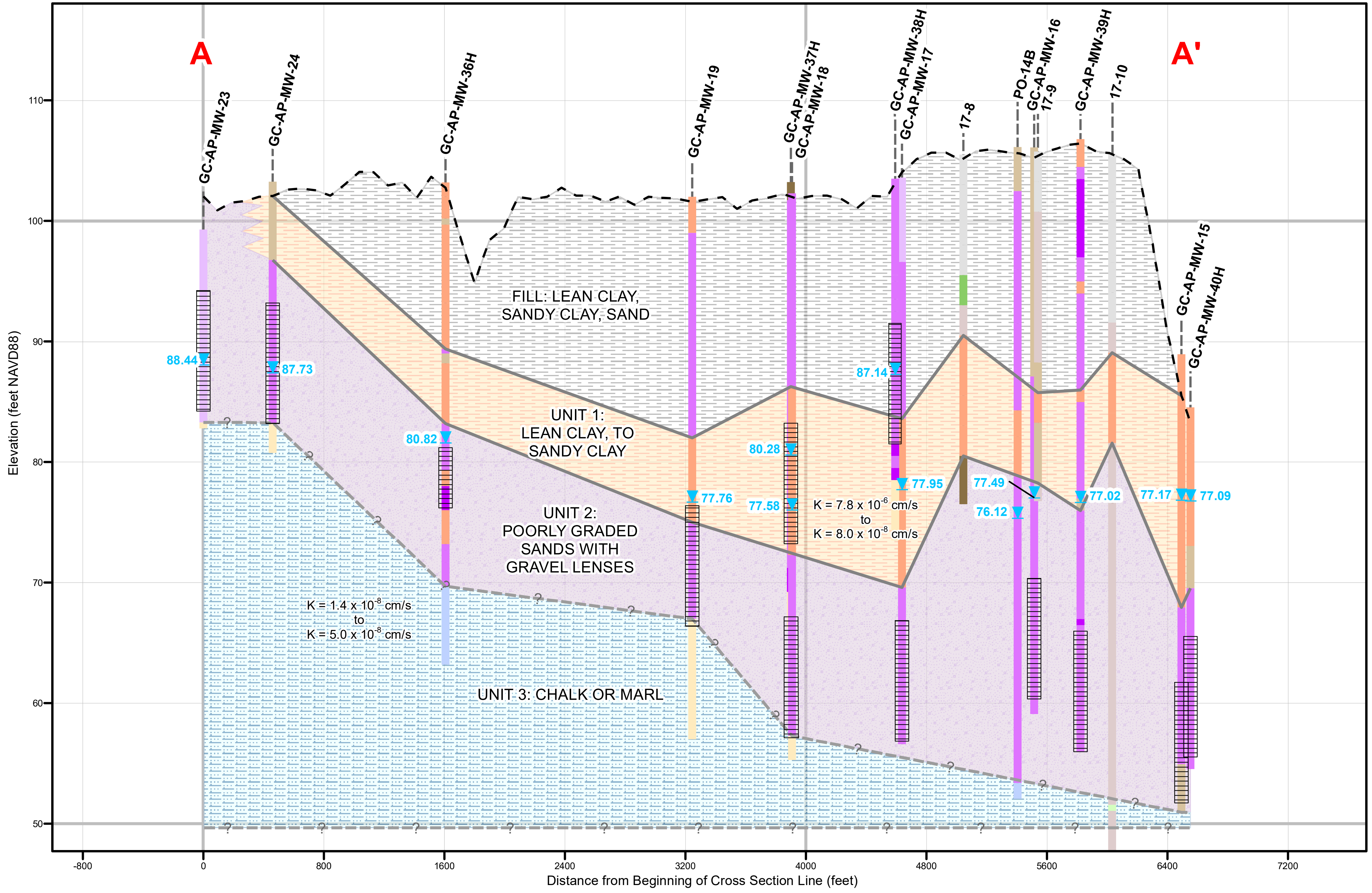
DRAWING TITLE

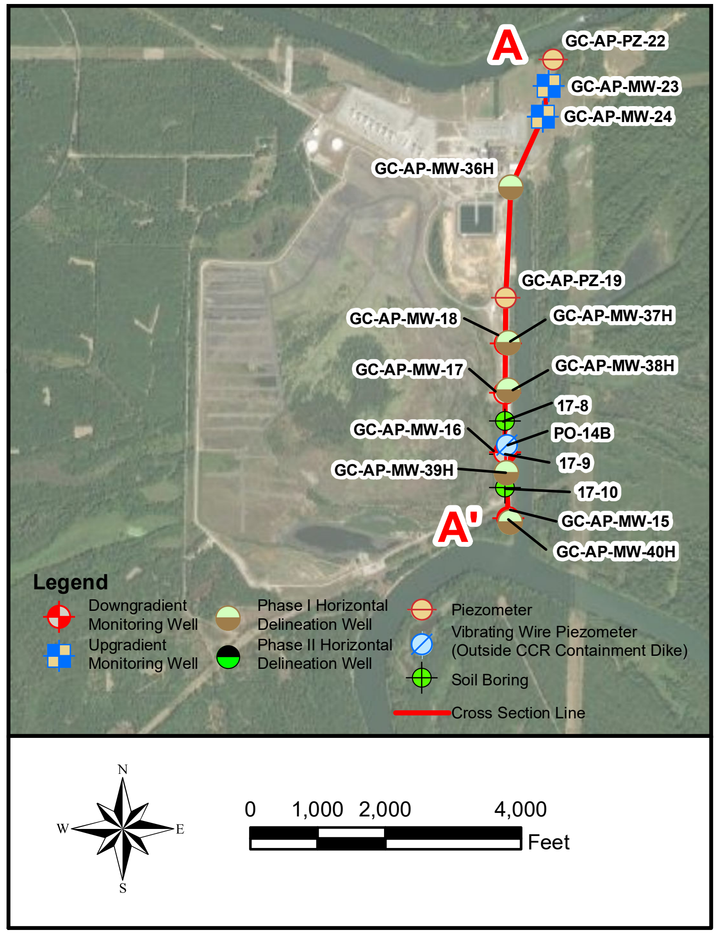
SITE GEOLOGIC MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 3

Southern Company





Notes:
1. Source of ground surface elevation data: June 2020 Lidar and 2019 USGS 3DEP.
2. NAVD88 indicates North American Vertical Datum of 1988.
3. Groundwater elevations were measured on March 8, 2021.
4. K = Hydraulic Conductivity.
5. Vertical exaggeration = 80.
6. Soil borings 17-8, 17-9, and 17-10 are utilized for soil characterization and were drilled on July 18, 2017 (17-10) and July 20, 2017 (17-8 and 17-9).
7. Boring data from Vibrating Wire Piezometer (VWP) PO-14B were recorded on May 21, 2020, and the VWP was installed on September 24, 2020.

Legend

▼ Groundwater Elevation
Well Location
Ground Surface Elevation
Screen Interval
▼ Vibrating Wire Piezometer Tip Elevation
Unit Boundary (inferred)
Unit Boundary

Borehole Description

Fill
Fat Clay
Lean Clay
Silt
Sandy Silt
Clayey Sand
Silty Sand
Sand
Well-graded Sand
Poorly-graded Sand
Poorly-graded Sand with Clay
Chalk

Geologic Units

Fill:
Lean Clay, Sandy Clay, Sand
Unit 1:
Lean Clay to Sandy Clay
Unit 2:
Poorly Graded Sands with Gravel Lenses
Unit 3:
Chalk or Marl

SCALE
As Shown

DATE
7/19/2021

DRAWN BY
KWR

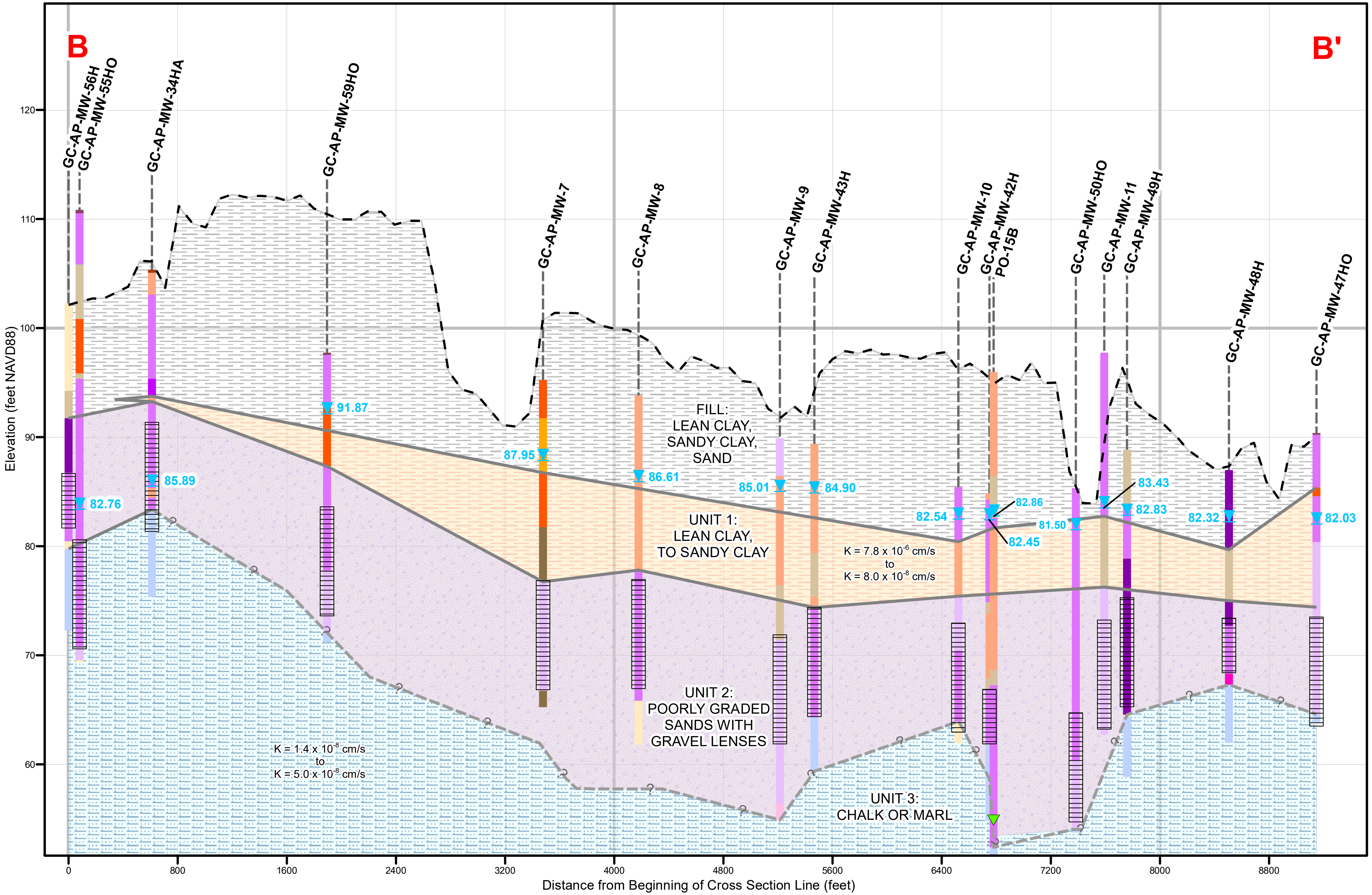
CHECKED BY
GBD

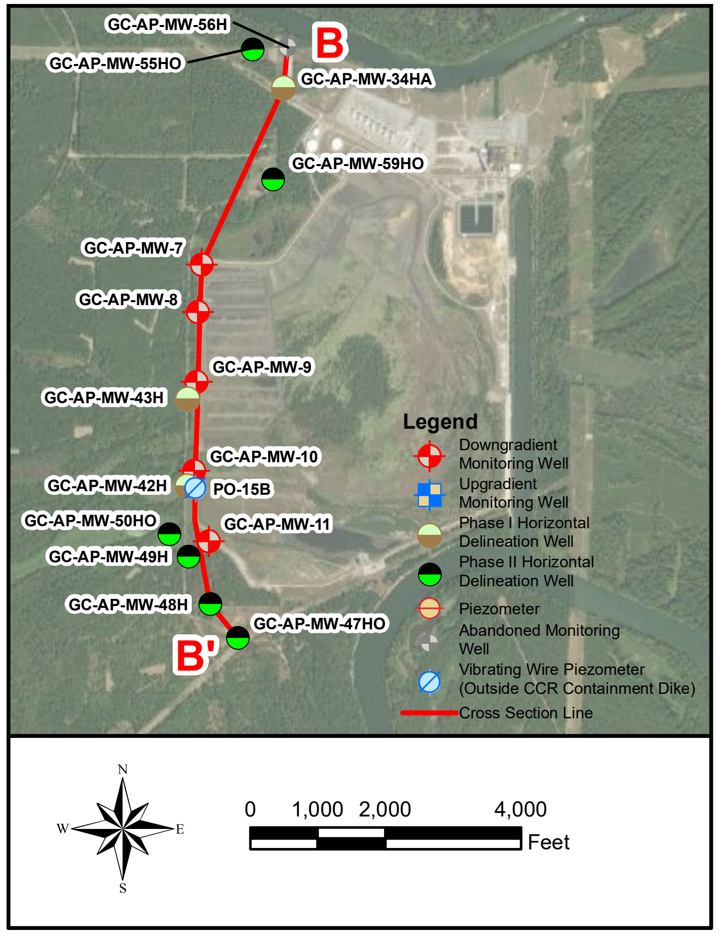
DRAWING TITLE

GEOLOGIC CROSS SECTION A - A'
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 4A

Southern Company





Notes:
1. Source of ground surface elevation data: June 2020 Lidar and 2019 USGS 3DEP.
2. NAVD88 indicates North American Vertical Datum of 1988.
3. Groundwater elevation data were measured on March 8, 2021.
4. The ground surface shown on the cross section was derived from a digital elevation model raster along the cross section line drawn as shown in the inset map. In addition to boring data from wells located directly on the cross section line, boring data from wells location near but not directly on the cross section line were also utilized for lithologic correlation. These well's boring data are projected onto the cross section line, and, as such, the ground surface shown on the cross section is higher in elevation than what the ground surface actually is at those locations.
5. K = Hydraulic Conductivity.
6. MW-56H was abandoned on May 16, 2020.
7. Vertical exaggeration = 80.
8. Boring data from Vibrating Wire Piezometer (VWP) PO-15B were recorded on May 20, 2020, and the VWP was installed on September 25, 2020

Legend

▼ Groundwater Elevation
▼ Vibrating Wire Piezometer Tip Elevation
Ground Surface Elevation
▤ Screen Interval
Unit Boundary (Inferred)
Unit Boundary

- ▬ Topsoil
- ▬ Fat Clay
- ▬ Lean Clay
- ▬ Silty Clay
- ▬ Sandy Lean Clay
- ▬ Sandy Silt
- ▬ Clayey Sand
- ▬ Silty Sand

Borehole Description

- ▬ Well-graded Sand
- ▬ Poorly-graded Sand
- ▬ Poorly-graded Sand with Clay
- ▬ Poorly-graded Sand with Silt
- ▬ Well-graded Gravel
- ▬ Poorly-graded Gravel
- ▬ Chalk
- Well Location

Geologic Units

▨ Fill:
Lean Clay, Sandy Clay, Sand
▨ Unit 1:
Lean Clay to Sandy Clay
▨ Unit 2:
Poorly Graded Sands with Gravel Lenses
▨ Unit 3:
Chalk or Marl

SCALE
As Shown

DATE
7/19/2021

DRAWN BY
KWR

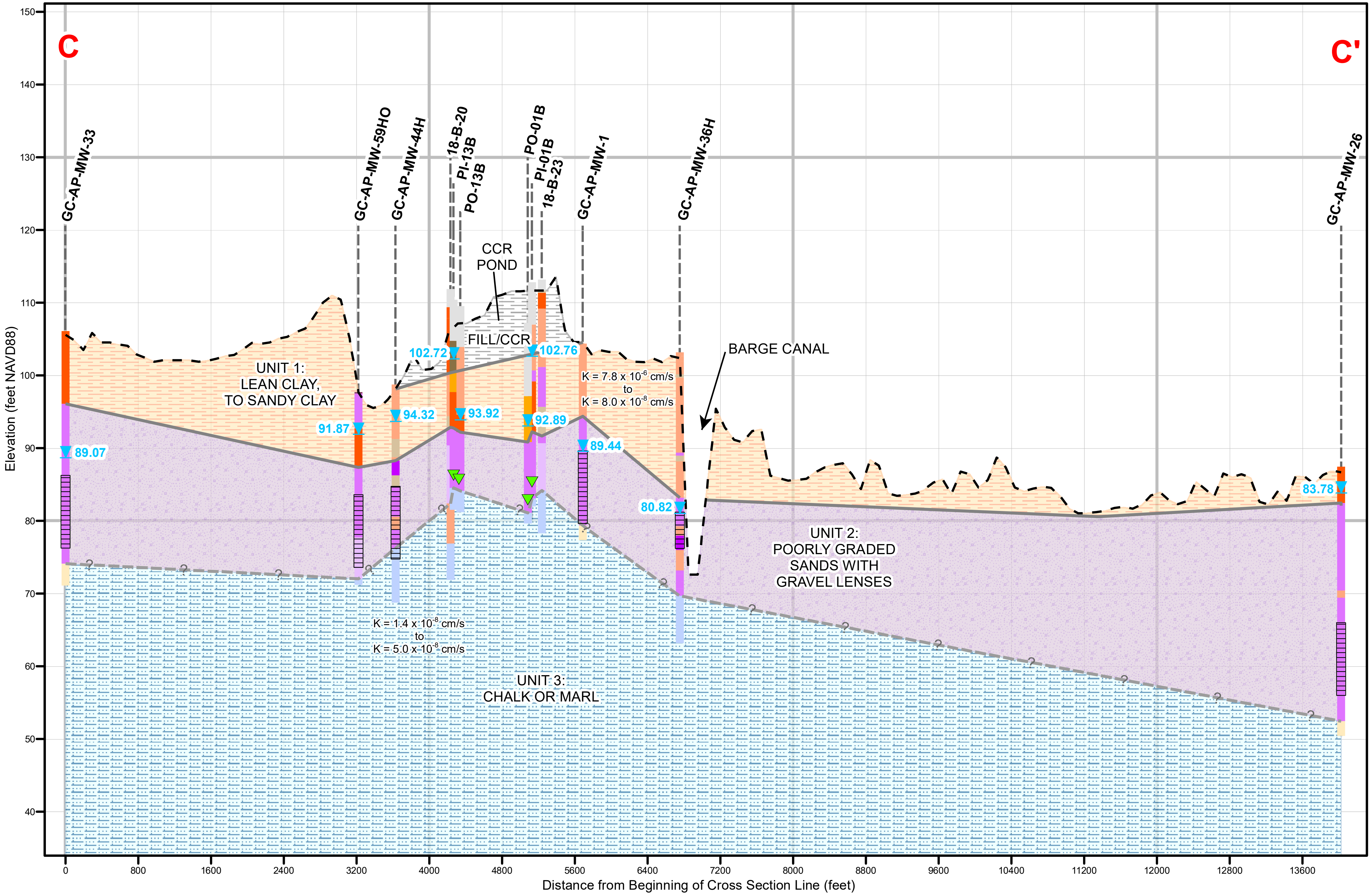
CHECKED BY
GFB

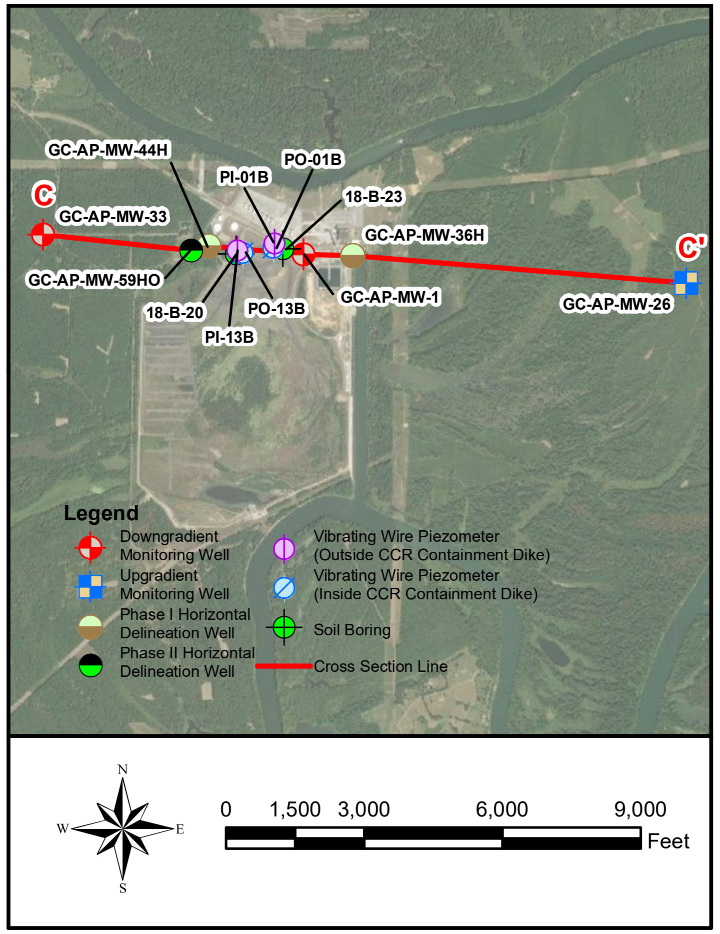
DRAWING TITLE

GEOLOGIC CROSS SECTION B - B'
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 4B

Southern Company





Notes:
1. Source of ground surface elevation data: June 2020 Lidar and 2019 USGS 3DEP.
2. NAVD88 indicates North American Vertical Datum of 1988.
3. Groundwater elevation data were measured on March 8, 2021.
4. The ground surface shown on the cross section was derived from a digital elevation model raster along the cross section line drawn as shown in the inset map. In addition to boring data from wells located directly on the cross section line, boring data from wells location near but not directly on the cross section line were also utilized for lithologic correlation. These well's boring data are projected onto the cross section line, and, as such, the ground surface shown on the cross section is higher in elevation than what the ground surface actually is at those locations.
5. K = Hydraulic Conductivity.
6. Vertical exaggeration = 80.
7. Boring data from Vibrating Wire Piezometers (VWP) PO-01B, PI-01B, PO-13B, and PI-13B were recorded on May 19 and 21, 2020, and the VWPs were installed between September 22 and October 1, 2020.

Legend

- ▼ Groundwater Elevation
- ▼ Vibrating Wire Piezometer Tip Elevation
- Ground Elevation
- ▤ Screen Interval
- Unit Boundary (Inferred)
- Unit Boundary
- Well Location

Borehole Description

- ■ Fill
- ■ Topsoil
- ■ Fat Clay
- ■ Lean Clay
- ■ Silty Clay
- ■ Sandy Lean Clay
- ■ Sandy Silt
- ■ Clayey Sand
- ■ Silty Sand
- ■ Well-graded Sand
- ■ Poorly-graded Sand
- ■ Poorly-graded Sand with Clay
- ■ Poorly-graded Sand with Silt
- ■ Well-graded Gravel
- ■ Poorly-graded Gravel
- ■ Chalk

Geologic Units

- ▨ Fill/CCR
- ▨ Unit 1: Lean Clay to Sandy Clay
- ▨ Unit 2: Poorly-Graded Sands with Gravel Lenses
- ▨ Unit 3: Chalk or Marl

SCALE
As Shown

DATE
7/19/2021

DRAWN BY
KWR

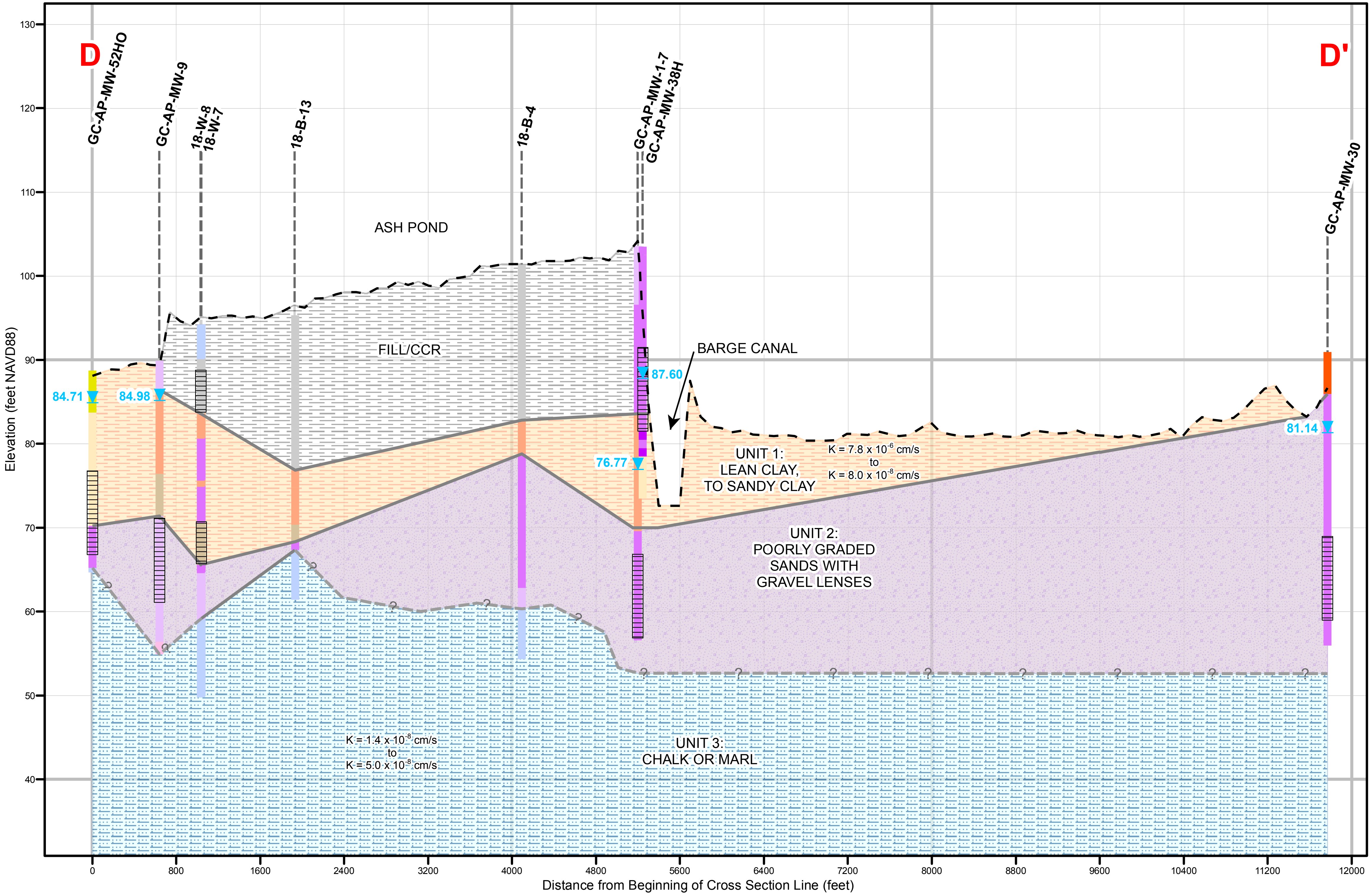
CHECKED BY
GFB

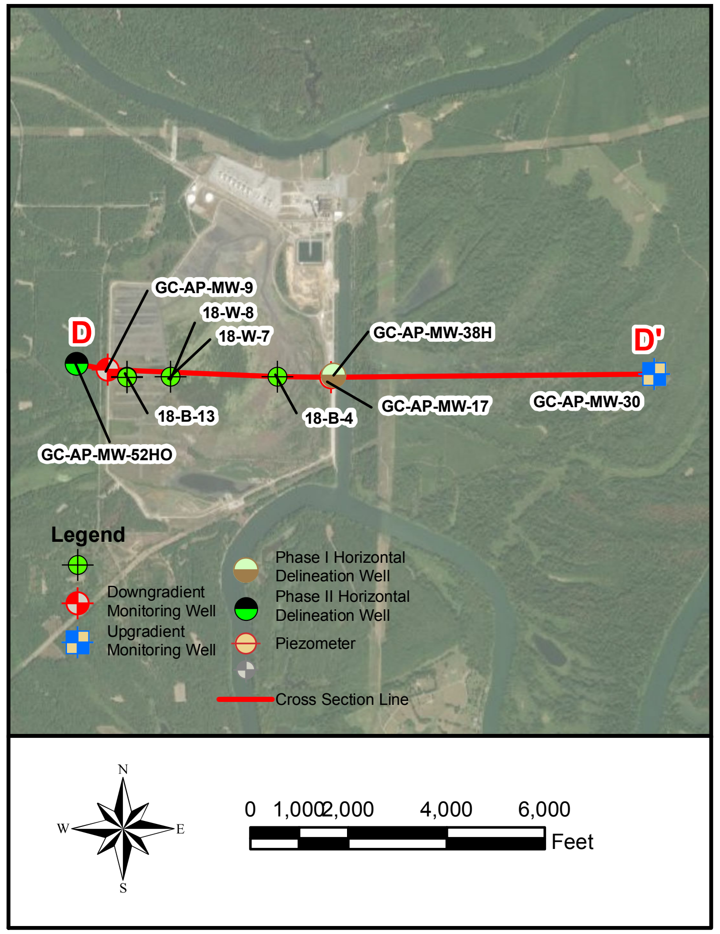
DRAWING TITLE

GEOLOGIC CROSS SECTION C - C'
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 4C

Southern Company





Notes:
1. Source of ground surface elevation data: 2016 Lidar.
2. NAVD88 indicates North American Vertical Datum of 1988.
3. Groundwater elevation data were measured on June 30, 2020.
4. The ground surface shown on the cross section was derived from a digital elevation model raster along the cross section line drawn as shown in the inset map. In addition to boring data from wells located directly on the cross section line, boring data from wells location near but not directly on the cross section line were also utilized for lithologic correlation. These well's boring data are projected onto the cross section line, and, as such, the ground surface shown on the cross section is higher in elevation than what the ground surface actually is at those locations.
5. K = Hydraulic Conductivity.
6. Vertical exaggeration = 80.

Legend

▼ Groundwater Elevation
Ground Elevation
Screen Interval
Unit Boundary (Inferred)
Unit Boundary
Well Location

Borehole Description

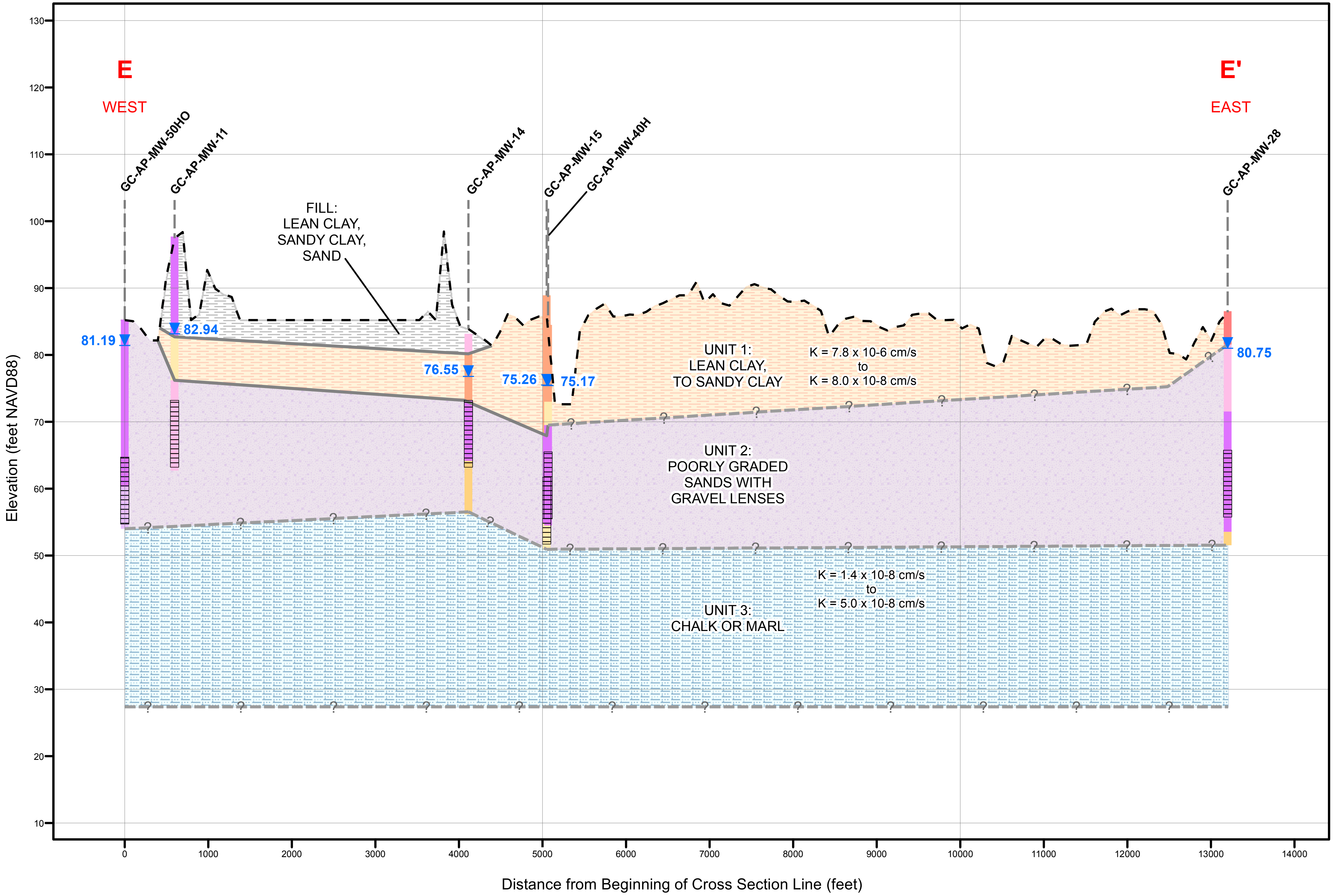
Auger
CCR Fill
Topsoil
Fat Clay
Lean Clay
Silty Clay
Sandy Lean Clay
Sandy Silt
Clayey Silt
Clayey Sand
Silty Sand
Well-graded Sand
Poorly-graded Sand
Poorly-graded Sand with Clay
Poorly-graded Sand with Silt
Well-graded Gravel
Poorly-graded Gravel
Chalk

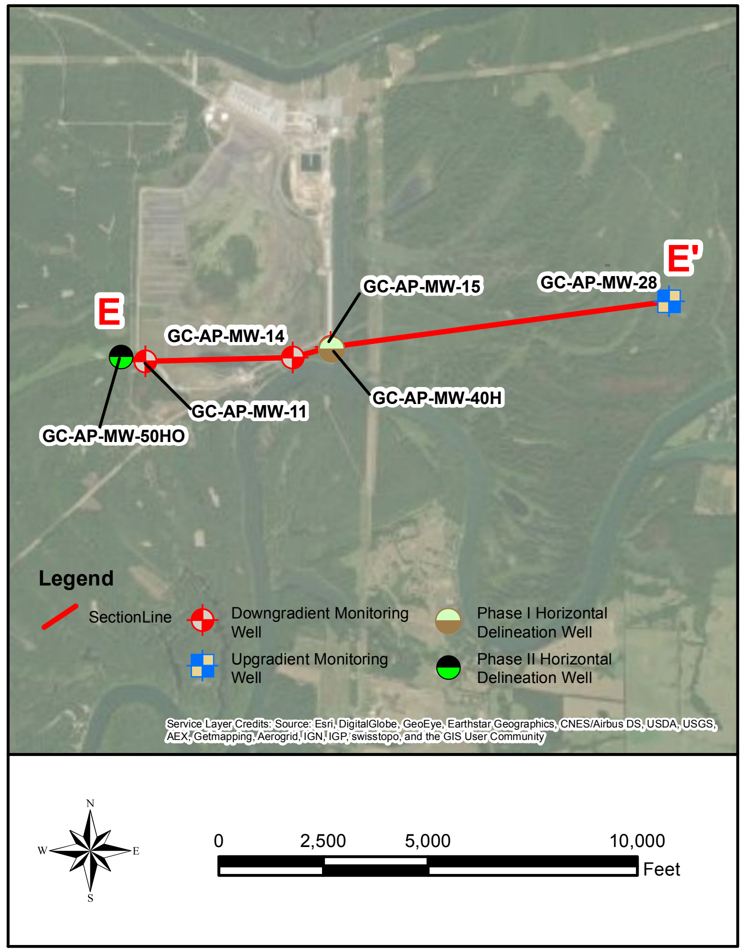
Geologic Units

Fill/CCR
Unit 1: Lean Clay to Sandy Clay
Unit 2: Poorly-Graded Sands with Gravel Lenses
Unit 3: Chalk or Marl

SCALE As Shown	DRAWING TITLE GEOLOGIC CROSS SECTION D - D' PLANT GREENE COUNTY ASH POND
DATE 9/17/2020	
DRAWN BY KWR	
CHECKED BY GFB	FIGURE NO FIGURE 4D

Southern Company





Notes:
1. Source of ground surface elevation data: 2020 Lidar and 2019 USGS 3DEP
2. NAVD88 indicates North American Vertical Datum of 1988
3. Groundwater elevations measured on June 30, 2020.
4. Vertical exaggeration = 80.
5. K = Hydraulic Conductivity.

Legend

- Ground Surface Elevation
- Screen Interval
- Groundwater Elevation
- Unit Boundary (Inferred)
- Unit Boundary

Borehole Description

- Top Soil
- Poorly Graded Sand
- Well Graded Sand
- Poorly Graded Sand with Clay
- Poorly Graded Sand with Silt
- Well graded sand
- Poorly-graded Gravel
- Fat Clay
- Lean Clay
- Clayey Sand
- Sandy Lean Clay
- Chalk with Traces of Fat CClay
- Chalk

Geologic Units

- Fill: Lean Clay, Sandy Clay, Sand
- Unit 1: Lean Clay to Sandy Clay
- Unit 2: Poorly Graded Sands with Gravel Lenses
- Unit 3: Chalk or Marl

SCALE
As Shown

DATE
8/19/2020

DRAWN BY
KAR

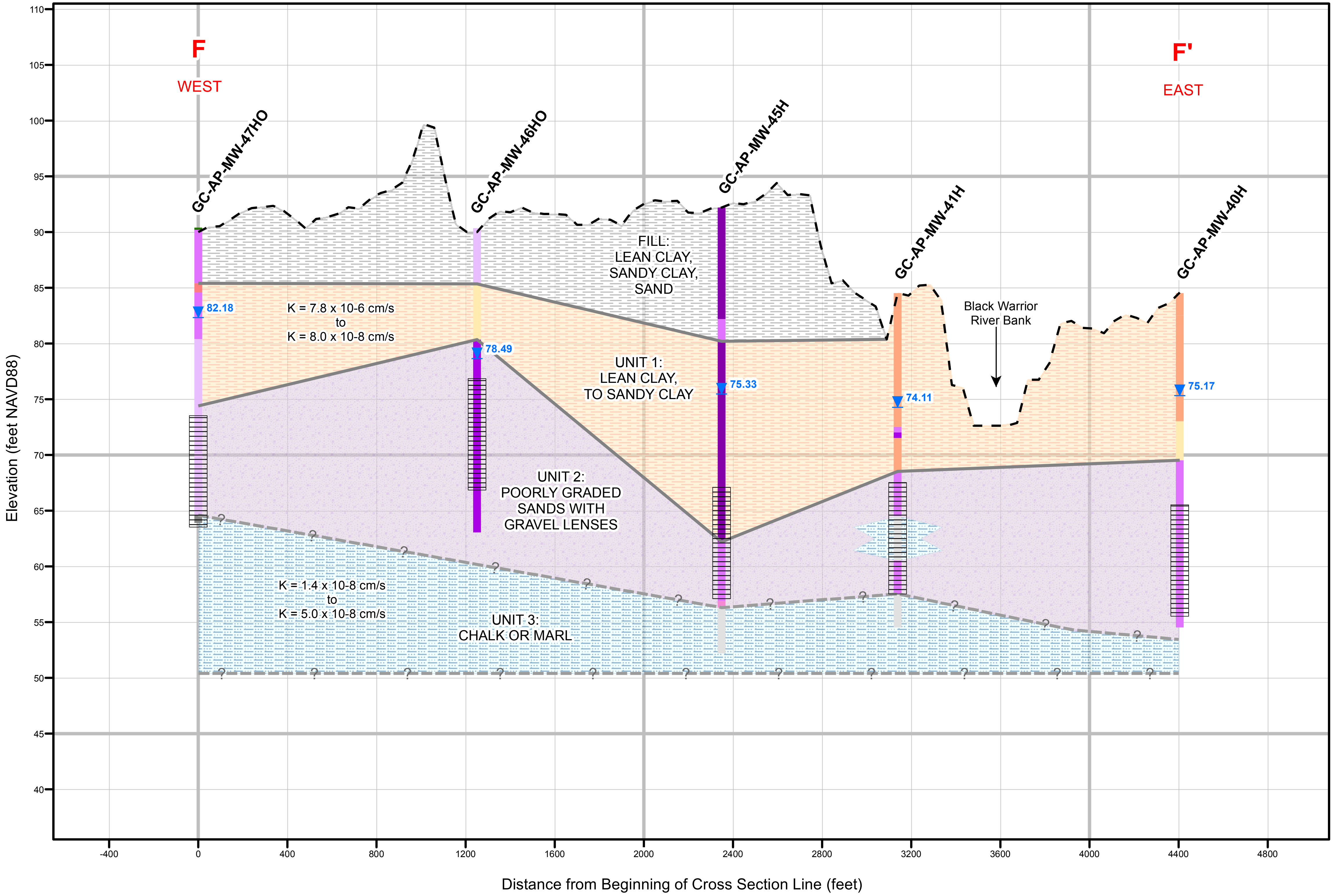
CHECKED BY
GBD

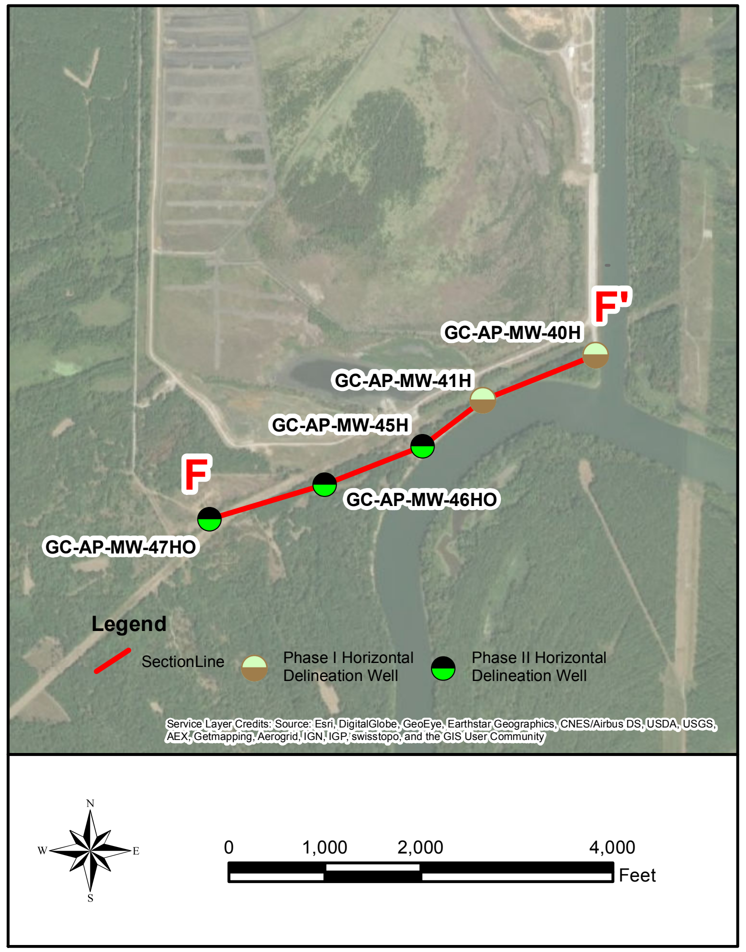
DRAWING TITLE

GEOLOGIC CROSS SECTION E - E'
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 4E

Southern Company





Notes:
1. Source of ground surface elevation data: 2020 Lidar and 2019 USGS 3DEP.
2. NAVD88 indicates North American Vertical Datum of 1988
3. Groundwater elevations measured on June 30, 2020.
4. Vertical exaggeration = 50.
5. K = Hydraulic Conductivity.

Legend

- Ground Surface Elevation
- Groundwater Elevation
- Screen Interval
- Unit Boundary (Inferred)
- Unit Boundary

Borehole Description

- 🟩 Top Soil
- 🟪 Poorly Graded Sand
- 🟪 Well Graded Sand
- 🟪 Poorly Graded Sand with Clay
- 🟪 Poorly Graded Sand with Silt
- 🟪 Well graded sand
- 🟪 Poorly-graded Gravel
- 🟨 Fat Clay
- 🟧 Lean Clay
- 🟨 Clayey Sand
- 🟥 Sandy Lean Clay
- ⬛ Chalk with Traces of Fat CClay
- ⬜ Chalk

Geologic Units

- Fill:
  Lean Clay, Sandy Clay, Sand
- Unit 1:
  Lean Clay to Sandy Clay
- Unit 2:
  Poorly Graded Sands with Gravel Lenses
- Unit 3:
  Chalk or Marl

SCALE
As Shown

DATE
8/20/2020

DRAWN BY
KAR

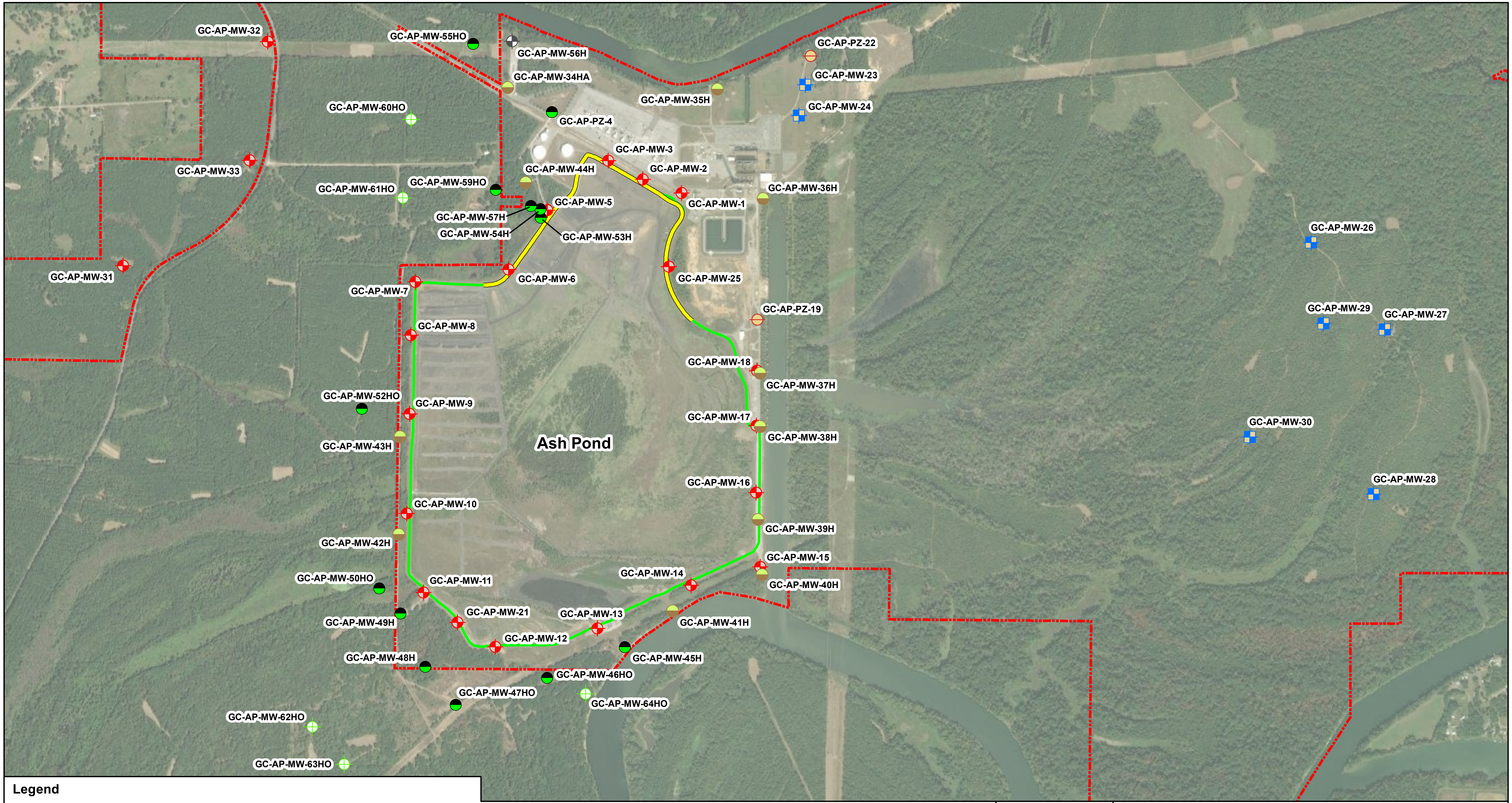
CHECKED BY
GBD

DRAWING TITLE

GEOLOGIC CROSS SECTION F - F'
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 4F

Southern Company



Legend

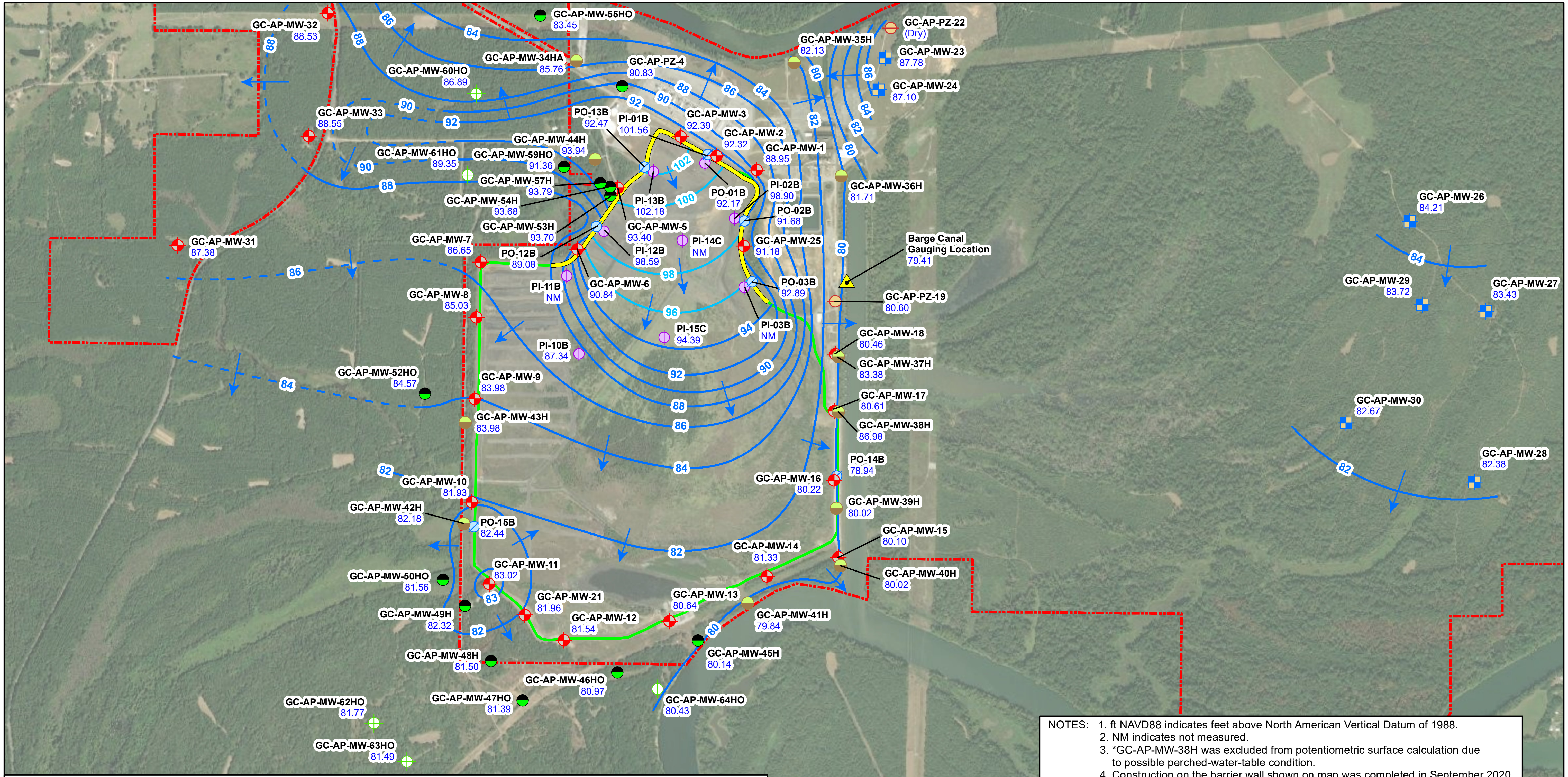
- ⊕ Downgradient Monitoring Well
- ▣ Upgradient Monitoring Well
- ⊖ Piezometer
- ● Phase I Horizontal Delineation Well
- ● Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation Well
- ⊕ Abandoned Monitoring Well
- ━ Slurry Wall Alignment
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

N

0 1,000 2,000 4,000 Feet

NOTES: 1. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.
2. Off-site Phase II Horizontal Delineation Wells MW-46HO, MW-47HO, MW-50HO, MW-52HO, MW-55HO, and MW-59HO were installed on 5/13/2020, 5/14/2020, and 6/15/2020.

SCALE 1:15000	DRAWING TITLE MONITORING WELL LOCATION MAP PLANT GREENE COUNTY ASH POND
DATE 1/19/2022	
DRAWN BY KWR	FIGURE NO **FIGURE 5**
CHECKED BY GFB	Southern Company



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. NM indicates not measured.
3. *GC-AP-MW-38H was excluded from potentiometric surface calculation due to possible perched-water-table condition.
4. Construction on the barrier wall shown on map was completed in September 2020, resulting in south/southeastward flow of groundwater within the confines of the barrier wall.

Legend

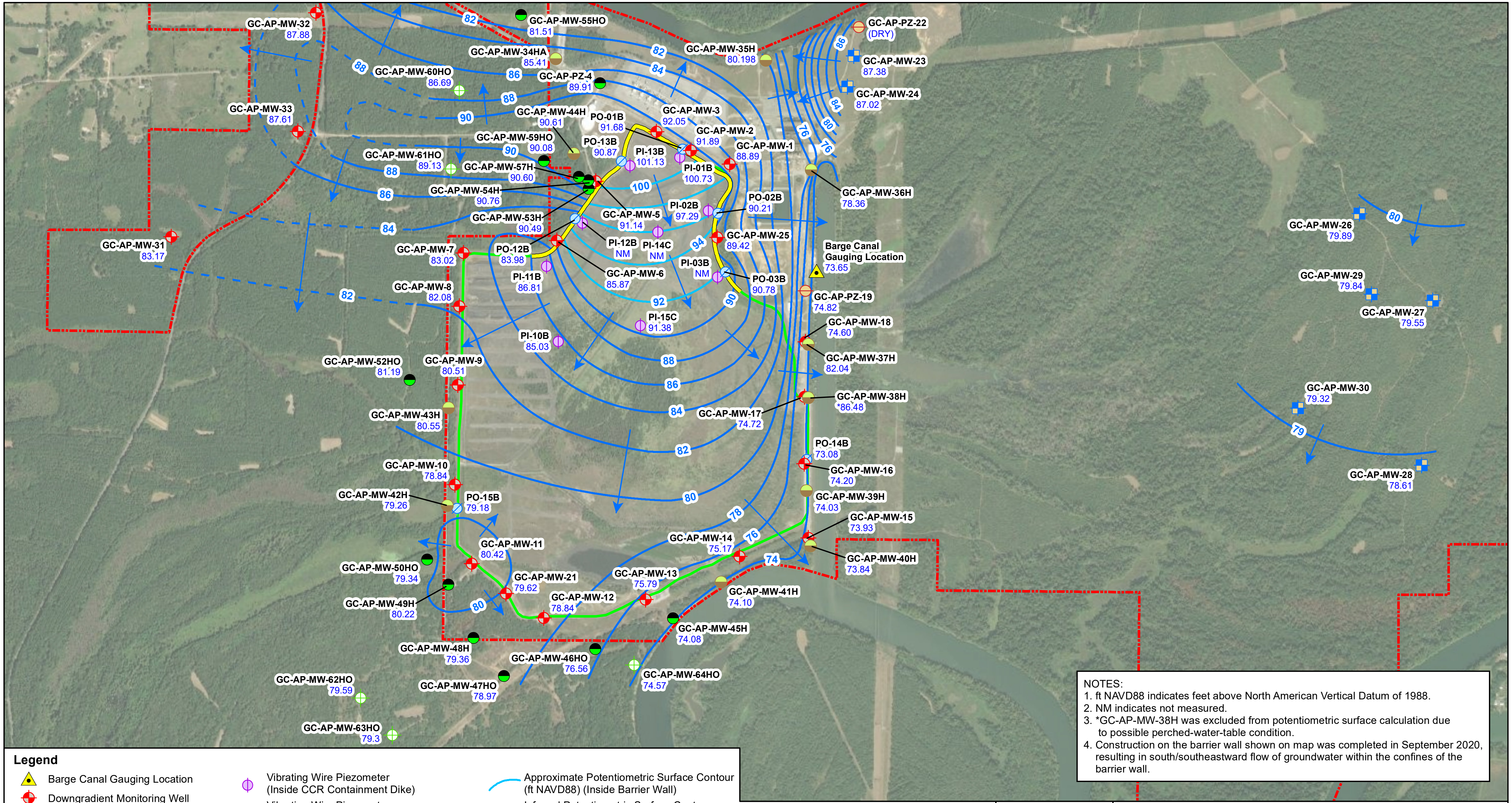
- ▲ Barge Canal Gauging Location
- ⊕ Downgradient Monitoring Well
- ⊞ Upgradient Monitoring Well
- ⊖ Piezometer
- ◓ Phase I Horizontal Delineation Well
- ◓ Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation Well
- ⊕ Abandoned Monitoring Well
- ⦶ Vibrating Wire Piezometer (Inside CCR Containment Dike)
- ⊘ Vibrating Wire Piezometer (Outside CCR Containment Dike)
- 〰 Slurry Wall Alignment
- ⌒ Approximate Potentiometric Surface Contour (ft NAVD88) (Outside Barrier Wall)
- ⌒ Approximate Potentiometric Surface Contour (ft NAVD88) (Inside Barrier Wall)
- ╌ Inferred Potentiometric Surface Contour (ft NAVD88) (Outside Barrier Wall)
- ↗ Approximate Groundwater Flow Direction
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

GC-AP-MW-7 Well ID
86.65 Groundwater Elevation (ft NAVD88)

N

0 500 1,000 2,000
Feet

SCALE 1:15000	DRAWING TITLE POTENTIOMETRIC SURFACE CONTOUR MAP MARCH 22, 2022 PLANT GREENE COUNTY ASH POND
DATE 11/11/2022	
DRAWN BY KWR	FIGURE NO **FIGURE 6A**
CHECKED BY GFB	Southern Company



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. NM indicates not measured.
3. *GC-AP-MW-38H was excluded from potentiometric surface calculation due to possible perched-water-table condition.
4. Construction on the barrier wall shown on map was completed in September 2020, resulting in south/southeastward flow of groundwater within the confines of the barrier wall.

Legend

▲	Barge Canal Gauging Location
⊕	Downgradient Monitoring Well
▣	Upgradient Monitoring Well
⊖	Piezometer
◒	Phase I Horizontal Delineation Well
◒	Phase II Horizontal Delineation Well
⊕	Phase III Horizontal Delineation Well
⊕	Abandoned Monitoring Well
⦶	Vibrating Wire Piezometer (Inside CCR Containment Dike)
⊘	Vibrating Wire Piezometer (Outside CCR Containment Dike)
〰	Slurry Wall Alignment
⁀	Approximate Potentiometric Surface Contour (ft NAVD88) (Outside Barrier Wall)
⁀	Approximate Potentiometric Surface Contour (ft NAVD88) (Inside Barrier Wall)
- -	Inferred Potentiometric Surface Contour (ft NAVD88) (Outside Barrier Wall)
↗	Approximate Groundwater Flow Direction
🟩	Ash Pond Boundary
🟥	Property Boundary

GC-AP-MW-17 Well ID
74.72 Groundwater Elevation (ft NAVD88)

N

0 500 1,000 2,000
Feet

SCALE	1:15000
DATE	11/17/2022
DRAWN BY	KAR
CHECKED BY	GFB

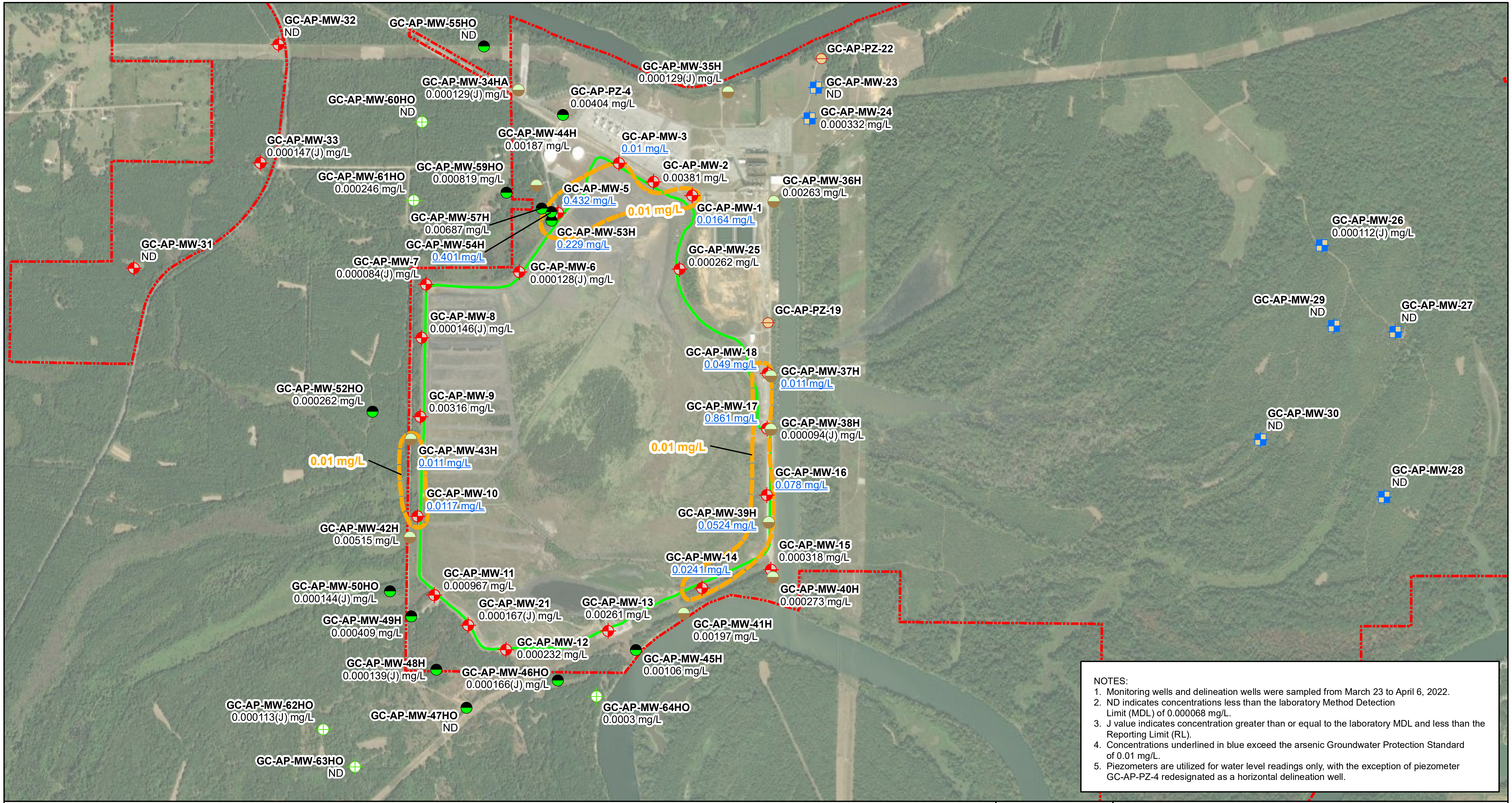
DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP
OCTOBER 3, 2022
PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 6B

Southern Company



NOTES:
1. Monitoring wells and delineation wells were sampled from March 23 to April 6, 2022.
2. ND indicates concentrations less than the laboratory Method Detection Limit (MDL) of 0.000068 mg/L.
3. J value indicates concentration greater than or equal to the laboratory MDL and less than the Reporting Limit (RL).
4. Concentrations underlined in blue exceed the arsenic Groundwater Protection Standard of 0.01 mg/L.
5. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.

Legend

- ⊕ Downgradient Monitoring Well
- ⊞ Upgradient Monitoring Well
- ⊖ Piezometer
- ◐ Phase I Horizontal Delineation Well
- ● Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation
- Arsenic GWPS Isoconcentration Contour (mg/L)
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

N

0 1,000 2,000 4,000 Feet

SCALE	1:15000
DATE	7/11/2022
DRAWN BY	KWR
CHECKED BY	GFB

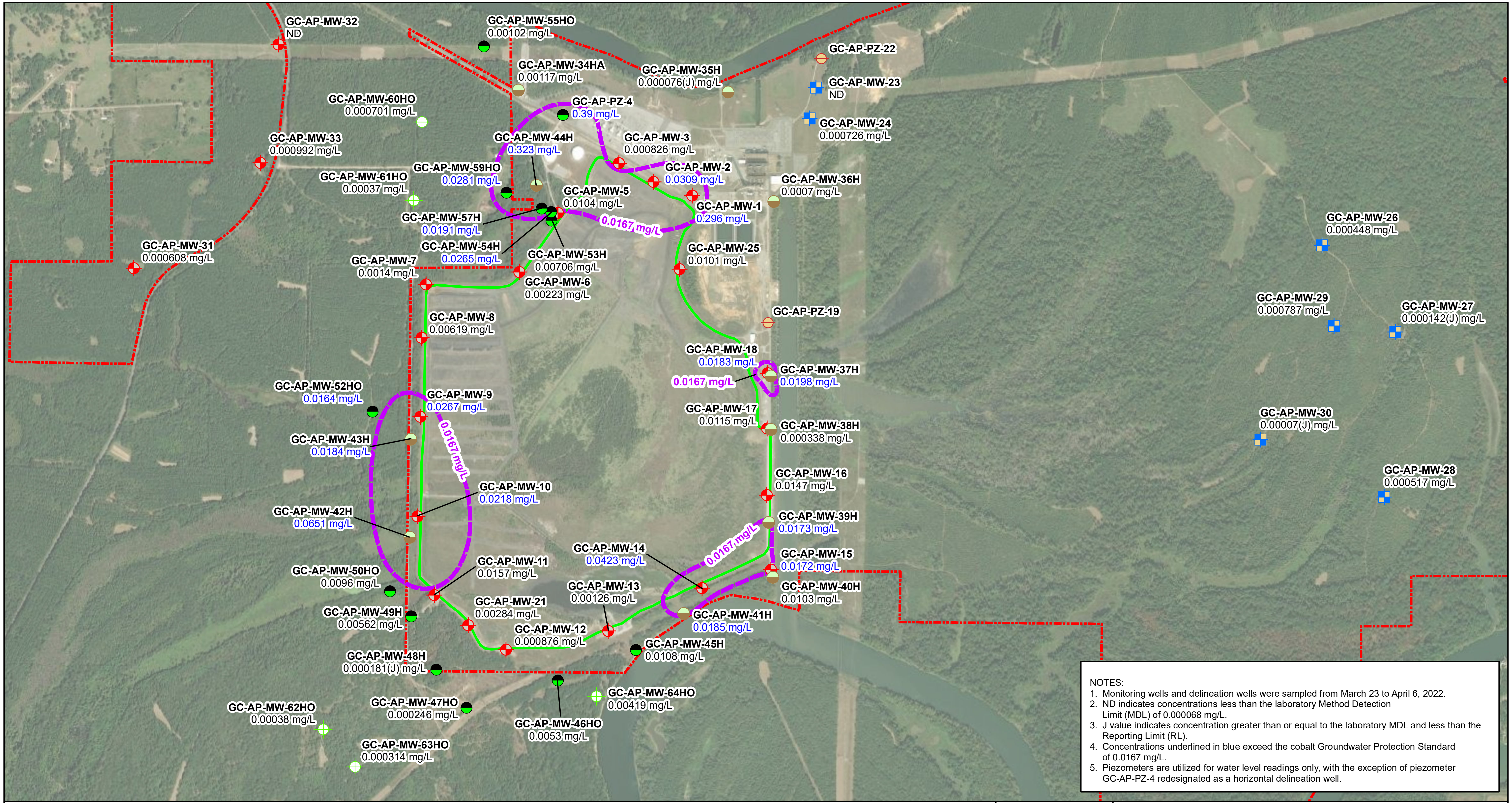
DRAWING TITLE

ARSENIC ISOCONCENTRATION MAP PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 7A

Southern Company



NOTES:

1. Monitoring wells and delineation wells were sampled from March 23 to April 6, 2022.
2. ND indicates concentrations less than the laboratory Method Detection Limit (MDL) of 0.000068 mg/L.
3. J value indicates concentration greater than or equal to the laboratory MDL and less than the Reporting Limit (RL).
4. Concentrations underlined in blue exceed the cobalt Groundwater Protection Standard of 0.0167 mg/L.
5. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.

Legend

- ⊕ Downgradient Monitoring Well
- ⊞ Upgradient Monitoring Well
- ⊖ Piezometer
- ◒ Phase I Horizontal Delineation Well
- ● Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation Well
- ⌒ Cobalt GWPS Isoconcentration Contour (mg/L)
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

SCALE	1:15000
DATE	7/28/2022
DRAWN BY	KWR
CHECKED BY	GFB

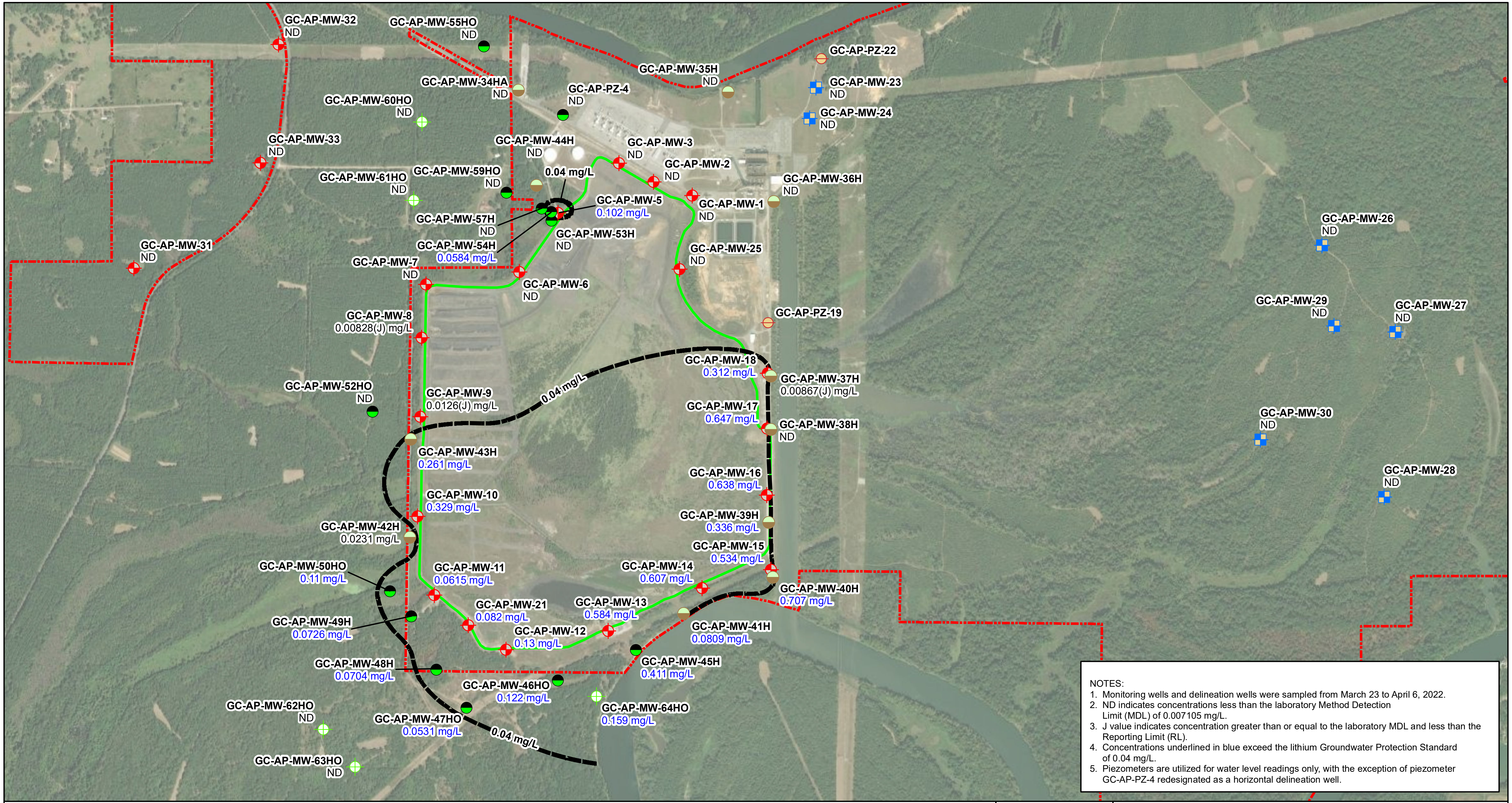
DRAWING TITLE

COBALT ISOCONCENTRATION MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 7B

Southern Company



NOTES:
1. Monitoring wells and delineation wells were sampled from March 23 to April 6, 2022.
2. ND indicates concentrations less than the laboratory Method Detection Limit (MDL) of 0.007105 mg/L.
3. J value indicates concentration greater than or equal to the laboratory MDL and less than the Reporting Limit (RL).
4. Concentrations underlined in blue exceed the lithium Groundwater Protection Standard of 0.04 mg/L.
5. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.

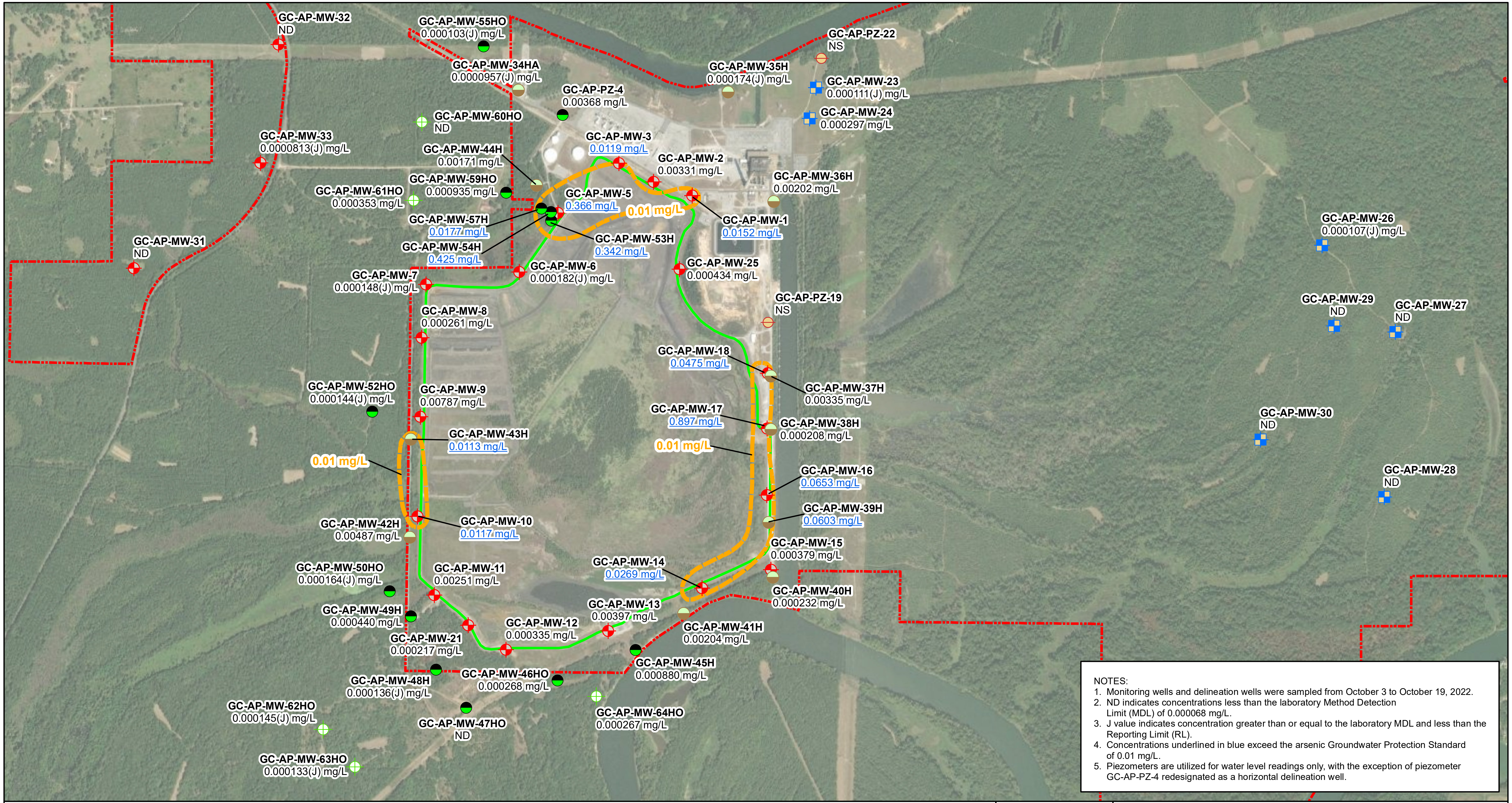
Legend

⊕ Downgradient Monitoring Well
⊞ Upgradient Monitoring Well
⊖ Piezometer
◐ Phase I Horizontal Delineation Well
● Phase II Horizontal Delineation Well
⊕ Phase III Horizontal Delineation Well
━ Lithium GWPS Isoconcentration Contour (mg/L)
🟩 Ash Pond Boundary
🟥 Property Boundary

N

0 1,000 2,000 4,000 Feet

SCALE 1:15000	DRAWING TITLE LITHIUM ISOCONCENTRATION MAP PLANT GREENE COUNTY ASH POND
DATE 7/11/2022	
DRAWN BY KWR	FIGURE NO **FIGURE 7C**
CHECKED BY GFB	Southern Company



NOTES:
1. Monitoring wells and delineation wells were sampled from October 3 to October 19, 2022.
2. ND indicates concentrations less than the laboratory Method Detection Limit (MDL) of 0.000068 mg/L.
3. J value indicates concentration greater than or equal to the laboratory MDL and less than the Reporting Limit (RL).
4. Concentrations underlined in blue exceed the arsenic Groundwater Protection Standard of 0.01 mg/L.
5. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.

Legend

- ⊕ Downgradient Monitoring Well
- ▦ Upgradient Monitoring Well
- ⊖ Piezometer
- ◒ Phase I Horizontal Delineation Well
- ◒ Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation
- 🟧 Arsenic GWPS Isoconcentration Contour (mg/L)
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

N

0 1,000 2,000 4,000
Feet

SCALE
1:15000

DATE
12/16/2022

DRAWN BY
KAR

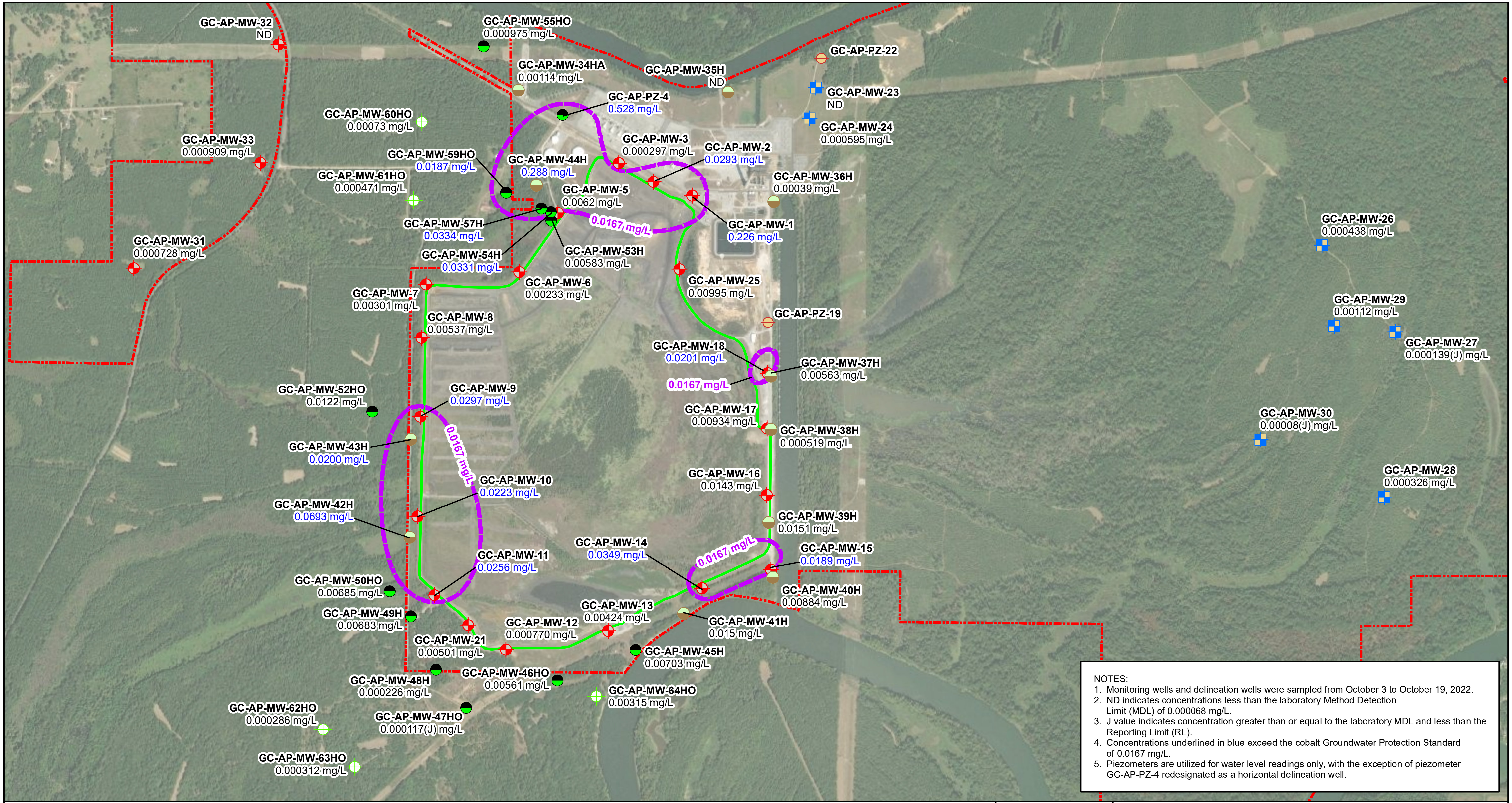
CHECKED BY
GFB

DRAWING TITLE

ARSENIC ISOCONCENTRATION MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 8A

Southern Company



NOTES:
1. Monitoring wells and delineation wells were sampled from October 3 to October 19, 2022.
2. ND indicates concentrations less than the laboratory Method Detection Limit (MDL) of 0.000068 mg/L.
3. J value indicates concentration greater than or equal to the laboratory MDL and less than the Reporting Limit (RL).
4. Concentrations underlined in blue exceed the cobalt Groundwater Protection Standard of 0.0167 mg/L.
5. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.

Legend

- ⊕ Downgradient Monitoring Well
- ▦ Upgradient Monitoring Well
- ⊖ Piezometer
- ◒ Phase I Horizontal Delineation Well
- ● Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation Well
- Cobalt GWPS Isoconcentration Contour (mg/L)
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

N

0 1,000 2,000 4,000
Feet

SCALE	1:15000
DATE	12/16/2022
DRAWN BY	KAR
CHECKED BY	GFB

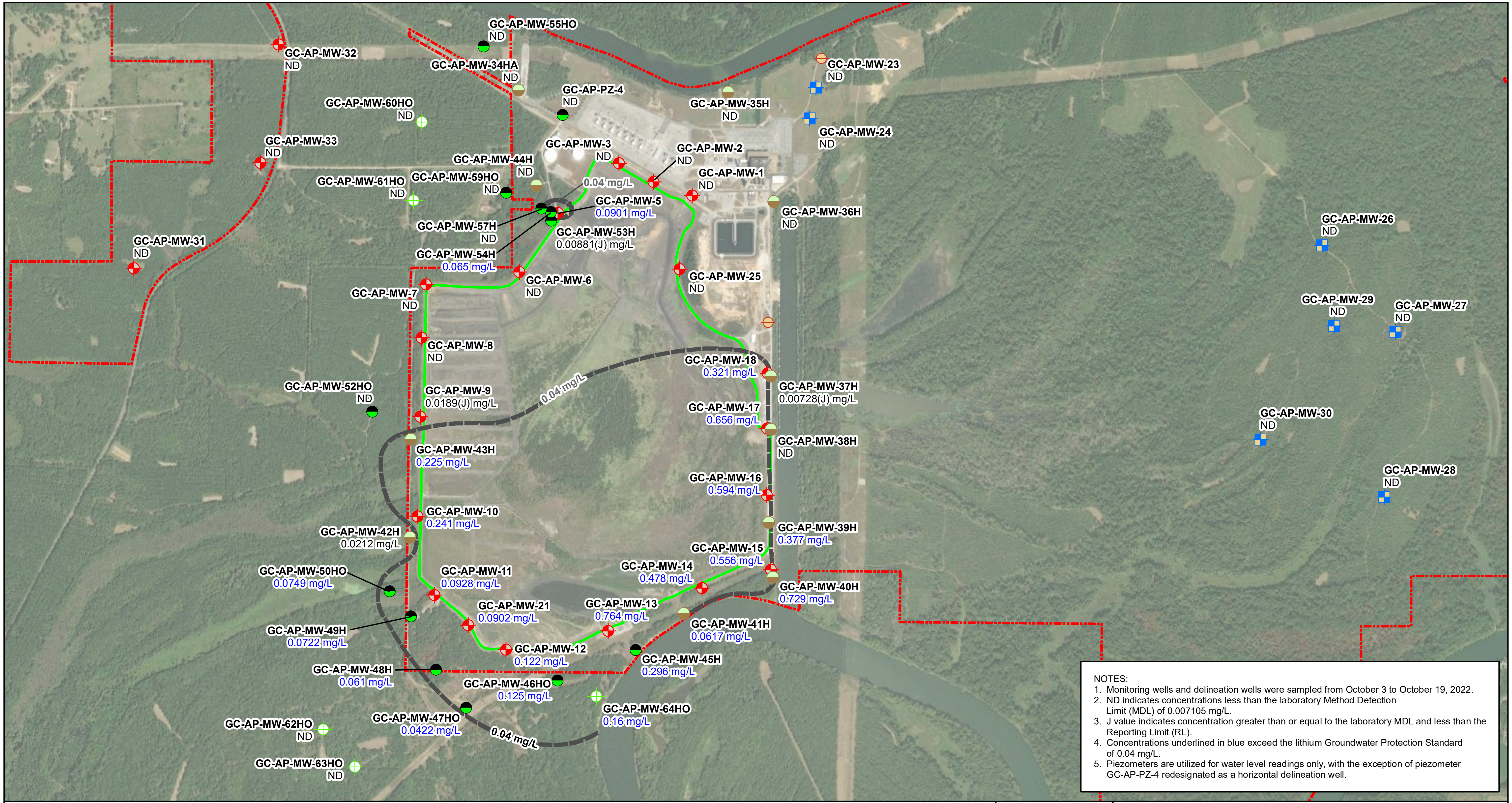
DRAWING TITLE

COBALT ISOCONCENTRATION MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO

FIGURE 8B

Southern Company



NOTES:
1. Monitoring wells and delineation wells were sampled from October 3 to October 19, 2022.
2. ND indicates concentrations less than the laboratory Method Detection Limit (MDL) of 0.007105 mg/L.
3. J value indicates concentration greater than or equal to the laboratory MDL and less than the Reporting Limit (RL).
4. Concentrations underlined in blue exceed the lithium Groundwater Protection Standard of 0.04 mg/L.
5. Piezometers are utilized for water level readings only, with the exception of piezometer GC-AP-PZ-4 redesignated as a horizontal delineation well.

Legend

- ⊕ Downgradient Monitoring Well
- ⊞ Upgradient Monitoring Well
- ⊖ Piezometer
- ◓ Phase I Horizontal Delineation Well
- ◒ Phase II Horizontal Delineation Well
- ⊕ Phase III Horizontal Delineation Well
- ⌒ Lithium GWPS Isoconcentration Contour (mg/L)
- 🟩 Ash Pond Boundary
- 🟥 Property Boundary

N

0 1,000 2,000 4,000
Feet

SCALE
1:15000

DATE
12/17/2022

DRAWN BY
KWR

CHECKED BY
GFB

DRAWING TITLE

LITHIUM ISOCONCENTRATION MAP
PLANT GREENE COUNTY ASH POND

FIGURE NO
FIGURE 8C

Southern Company

Tables

Table 1a. - Compliance Monitoring Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-MW-23	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.60477	-87.77933	99.50	102.64	18.5	94.54	84.54	10	12/16/2015
GC-AP-MW-24	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.60365	-87.77959	102.94	106.05	23.2	93.25	83.25	10	5/6/2013
GC-AP-MW-26	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.59912	-87.75774	86.14	89.25	34.6	65.10	55.10	10	6/28/2016
GC-AP-MW-27	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.59599	-87.75459	87.82	90.68	37.9	63.22	53.22	10	6/29/2016
GC-AP-MW-28	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.59004	-87.75505	85.66	89.36	33.5	66.31	56.31	10	6/29/2016
GC-AP-MW-29	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.59621	-87.75721	86.63	89.32	34.7	65.04	55.04	10	6/29/2016
GC-AP-MW-30	Upgradient	Unit 2: Poorly Graded Sands with Gravel	32.5921	-87.76035	87.31	89.87	35.2	65.09	55.09	10	7/8/2016
GC-AP-MW-1	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.60085	-87.78459	104.22	107.79	29.1	89.05	79.05	10	8/26/2015
GC-AP-MW-2	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.60134	-87.78625	103.16	106.14	23.7	92.86	82.86	10	8/26/2015
GC-AP-MW-3	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.60201	-87.78773	103.51	106.39	27.0	89.79	79.79	10	5/7/2013
GC-AP-MW-5	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.60022	-87.79031	105.71	108.43	27.1	91.75	81.75	10	8/25/2015
GC-AP-MW-6	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59808	-87.79196	98.42	102.05	30.3	82.15	72.15	10	8/25/2015
GC-AP-MW-7	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59762	-87.79594	95.51	98.56	32.1	76.84	66.84	10	5/7/2013

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Southern Company

Table 1a. - Compliance Monitoring Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-MW-8	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.5957	-87.79611	93.75	97.11	30.6	76.96	66.96	10	8/24/2015
GC-AP-MW-9	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59285	-87.79617	90.23	93.19	32.4	71.17	61.17	10	5/8/2013
GC-AP-MW-10	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.58925	-87.79627	85.51	87.84	25.8	72.49	62.49	10	9/2/2015
GC-AP-MW-11	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.5864	-87.79555	97.51	101.18	38.4	73.20	63.20	10	4/23/2013
GC-AP-MW-12	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.58445	-87.79248	100.09	103.26	36.9	76.76	66.76	10	8/24/2015
GC-AP-MW-13	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.58513	-87.78813	97.43	101.18	28.7	82.87	72.87	10	4/24/2013
GC-AP-MW-14	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.58669	-87.78413	83.31	85.61	22.9	73.16	63.16	10	8/24/2015
GC-AP-MW-15	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.58736	-87.7812	89.49	91.69	41.0	61.06	51.06	10	8/27/2015
GC-AP-MW-16	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59005	-87.78138	106.16	108.79	48.8	70.38	60.38	10	8/21/2015
GC-AP-MW-17	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59246	-87.78138	103.60	106.40	49.8	66.96	56.96	10	8/27/2015
GC-AP-MW-18	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59444	-87.78135	102.02	105.04	48.1	67.31	57.31	10	8/21/2015
GC-AP-MW-21	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.58533	-87.79409	102.10	105.72	40.5	75.60	65.60	10	12/14/2015
GC-AP-MW-25	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59819	-87.78512	101.94	104.98	37.2	78.20	68.20	10	6/28/2016

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Table 1a. - Compliance Monitoring Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-MW-31	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.59817	-87.8084	90.93	94.19	32.0	72.63	62.63	10	7/8/2016
GC-AP-MW-32	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.60627	-87.80226	102.90	105.85	37.5	78.74	68.74	10	7/8/2016
GC-AP-MW-33	Downgradient	Unit 2: Poorly Graded Sands with Gravel	32.60199	-87.80302	106.23	108.99	33.1	86.29	76.29	10	7/8/2016
Barge Canal	Downgradient										--

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Table 1b. - Delineation Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-PZ-4	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60376	-87.79013	100.47	103.53	27.6	86.33	76.33	10	5/7/2013
GC-AP-MW-34HA	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60464	-87.79202	105.35	108.38	25.6	93.22	83.22	10	1/9/2019
GC-AP-MW-35H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60459	-87.78307	99.54	102.64	23.9	84.14	79.14	5	12/21/2018
GC-AP-MW-36H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60065	-87.78112	103.18	105.17	30.3	80.24	75.24	10	1/10/2019
GC-AP-MW-37H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.59435	-87.78122	103.22	106.04	30.4	86.04	76.04	10	12/17/2018
GC-AP-MW-38H	Horizontal Delineation	Fill/Unit 1 Transition	32.59243	-87.78122	103.49	106.58	25.4	91.58	81.58	10	12/18/2018
GC-AP-MW-39H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58907	-87.7813	106.97	109.89	53.6	66.74	56.74	10	12/18/2018
GC-AP-MW-40H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58708	-87.78111	84.52	87.53	32.3	65.67	55.67	10	12/19/2018
GC-AP-MW-41H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58577	-87.78492	82.92	86.57	30.4	60.90	56.57	10	12/19/2018
GC-AP-MW-42H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.5885	-87.7966	84.86	87.56	24.9	73.06	63.06	10	12/20/2018
GC-AP-MW-43H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.59203	-87.79656	89.35	91.76	28.4	73.76	63.76	10	12/20/2018
GC-AP-MW-44H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60121	-87.79124	98.76	101.13	27.4	84.15	74.15	10	1/10/2019
GC-AP-MW-45H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58445	-87.78696	92.20	95.14	37.5	68.04	58.04	10	12/7/2019
GC-AP-MW-46HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58334	-87.79027	90.34	93.35	26.1	77.65	67.65	10	6/15/2020

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Southern Company

Table 1b. - Delineation Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-MW-47HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58235	-87.79416	90.39	93.86	27.4	76.91	66.91	10	5/13/2020
GC-AP-MW-48H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58372	-87.79546	86.99	90.11	22.2	73.27	68.27	5	12/6/2019
GC-AP-MW-49H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58564	-87.79653	88.86	91.71	27.2	74.91	64.91	10	12/6/2019
GC-AP-MW-50HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58655	-87.79744	85.31	88.92	33.9	65.42	55.42	10	5/13/2020
GC-AP-MW-52HO	Horizontal Delineation	Unit 1/Unit 2 Transition	32.59303	-87.79821	88.72	91.77	24.6	77.57	67.57	10	6/15/2020
GC-AP-MW-53H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.59994	-87.7906	99.45	102.31	17.5	90.18	85.18	5	12/5/2019
GC-AP-MW-54H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60025	-87.79062	99.81	102.94	16.9	91.42	86.42	5	12/5/2019
GC-AP-MW-55HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60621	-87.79351	110.83	114.37	43.5	81.27	71.27	10	5/15/2020
GC-AP-MW-57H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60037	-87.79102	97.65	100.43	15.6	90.28	85.28	5	12/9/2019
GC-AP-MW-59HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60094	-87.79252	97.72	101.69	27.8	84.29	74.29	10	5/14/2020
GC-AP-MW-60HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60349	-87.79613	105.31	108.47	32.3	86.62	76.62	10	6/1/2021
GC-AP-MW-61HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.60065	-87.79649	106.64	109.69	31.5	88.63	78.63	10	6/2/2021
GC-AP-MW-62HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58155	-87.80027	86.94	89.89	28.9	71.39	61.39	10	6/3/2021

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Table 1b. - Delineation Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-MW-63HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.5802	-87.7989	87.67	91.08	27.4	74.05	64.05	10	6/2/2021
GC-AP-MW-64HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	32.58277	-87.78861	92.55	95.65	46.9	59.14	49.14	10	6/3/2021

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Table 1c. - Piezometer Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-PZ-19	Piezometer	Unit 2: Poorly Graded Sands with Gravel	32.59628	-87.78135	101.70	104.91	39.4	75.91	65.91	10	8/20/2015
GC-AP-PZ-22	Piezometer	Unit 2: Poorly Graded Sands with Gravel	32.60581	-87.77911	101.40	104.64	15.0	95.04	90.04	5	12/15/2015

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Table 1d. - Abandoned Well Network Details
Plant Greene County Ash Pond

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GC-AP-MW-56H	Abandoned	Unit 2: Poorly Graded Sands with Gravel	32.60631	-87.79184	102.25	105.24	24.5	86.19	81.19	5	12/8/2019

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.

Table 2. Parameters And Reporting Limits

Plant Greene County Ash Pond
03/21/2022 - 10/19/2022

Appendix III Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	0.406-20.299999	mg/L
Chloride	SM4500Cl E	1-25	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	2-80	mg/L
TDS	NA	NA	mg/L
Appendix IV Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.000203	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	Total Radium Calculation	NA	pCi/L

Notes:
1. Reporting Limit values can display range depending upon matrix interferences and dilution factors
2. pH is a field acquired parameter and does not have a laboratory method or reporting limit
3. Combined Radium 226 + 228 – product of radium-226 + radium-228; reporting limits presented are sum of radium 226, radium 228 reporting limits
4. EPA 200.7 – EPA methodology for the "Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Atomic Emission Spectrometry"
5. EPA 200.8 - EPA methodology for the "Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)"
6. SM 2320, 2540, 4500 – Standard Methods for Examination of Water and Wastewater.
7. Total Radium Calculation – Term used herein for EPA 9315 + EPA 9320
8. EPA 9315 – Used for Radium-226; SW-846: Alpha-Emitting Radium Isotopes, part of Test Methods for Evaluation Solid Waste, Physical/Chemical Methods
9. EPA 9320 – Used for Radium-228; SW-846: Alpha-Emitting Radium Isotopes, part of Test Methods for Evaluation Solid Waste, Physical/Chemical Methods

Table 3.
Recent Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft.)									
		9/9/2019	4/20/2020	5/28/2020	6/30/2020	8/10/2020	3/8/2021	6/28/2021	8/16/2021	3/22/2022	10/3/2022
GC-AP-MW-1	107.79	90.65	92.01	91.76	90.85	91.15	89.44	90.35	90.01	88.95	88.89
GC-AP-MW-2	106.14	97.66	99.01	98.35	97.40	94.66	92.74	93.33	92.69	92.32	91.89
GC-AP-MW-3	106.39	97.70	98.80	98.14	97.13	94.16	92.78	93.43	92.80	92.39	92.05
GC-AP-PZ-4	103.53	92.34	94.70	93.63	92.55	91.74	91.58	92.25	91.37	90.83	89.91
GC-AP-MW-5	108.43	96.17	98.25	96.78	96.27	93.68	94.31	94.24	93.04	93.40	91.14
GC-AP-MW-6	102.05	95.50	96.95	96.24	95.41	90.37	91.63	91.16	90.31	90.84	85.87
GC-AP-MW-7	98.56	89.00	90.46	88.94	87.77	86.56	87.95	87.54	86.54	86.65	83.02
GC-AP-MW-8	97.11	87.58	89.00	87.59	86.47	85.64	86.61	86.14	85.13	85.03	82.08
GC-AP-MW-9	93.19	86.24	87.57	86.10	84.98	83.71	85.01	84.51	83.43	83.98	80.51
GC-AP-MW-10	87.84	81.58	83.99	83.19	81.90	80.62	82.54	82.04	80.78	81.93	78.84
GC-AP-MW-11	101.18	82.34	85.33	84.13	82.94	82.13	83.43	83.33	82.01	83.02	80.42
GC-AP-MW-12	103.26	81.18	85.40	81.87	81.05	81.21	82.96	81.85	81.26	81.54	78.84
GC-AP-MW-13	101.18	77.68	83.68	78.31	Dry	76.97	80.98	80.67	77.67	80.64	75.79
GC-AP-MW-14	85.61	75.82	83.81	77.88	76.55	75.28	78.61	79.30	76.57	81.33	75.17
GC-AP-MW-15	91.69	74.16	82.89	76.01	75.26	74.10	77.17	77.25	75.49	80.10	73.93
GC-AP-MW-16	108.79	74.54	83.18	76.41	75.74	74.59	77.49	77.62	75.77	80.22	74.20
GC-AP-MW-17	106.40	74.07	84.31	77.73	76.77	75.54	77.95	77.99	76.91	80.61	74.72
GC-AP-MW-18	105.04	75.43	83.94	77.19	75.48	75.08	77.58	77.48	76.56	80.46	74.59
GC-AP-PZ-19	104.91	75.16	83.09	76.51	104.91	75.22	77.76	77.82	76.10	80.60	74.82
GC-AP-MW-21	105.72	78.33	85.68	82.42	81.66	81.08	83.27	82.16	81.56	81.96	79.62
GC-AP-PZ-22	104.64	--	90.29	90.31	Dry	88.92	Dry	Dry	88.66	Dry	Dry
GC-AP-MW-23	102.64	91.86	89.99	89.78	89.51	89.04	88.44	89.16	88.66	87.78	87.38
GC-AP-MW-24	106.05	86.86	89.58	89.29	89.09	88.65	87.73	88.47	88.14	87.10	87.02
GC-AP-MW-25	104.98	82.29	99.30	97.88	97.12	96.38	92.08	92.81	91.67	91.18	89.42
GC-AP-MW-26	89.25	79.48	86.10	85.13	82.09	80.80	83.78	83.16	82.59	84.21	79.89
GC-AP-MW-27	90.68	77.74	84.59	83.55	81.91	80.57	83.09	82.86	82.25	83.43	79.55
GC-AP-MW-28	89.36	79.11	84.01	82.56	80.75	79.54	81.71	81.80	80.77	82.38	78.61
GC-AP-MW-29	89.32	84.20	85.75	84.42	81.95	80.77	83.29	82.91	82.18	83.72	79.84
GC-AP-MW-30	89.87	95.41	83.58	82.76	81.14	80.14	82.11	82.08	81.20	82.67	79.32
GC-AP-MW-31	94.19	99.15	90.34	86.81	86.02	84.56	87.86	87.11	85.59	87.38	83.17
GC-AP-MW-32	105.85	91.41	90.18	90.05	89.41	89.27	88.67	89.41	86.09	88.53	87.88
GC-AP-MW-33	108.99	84.38	90.84	90.45	89.93	89.40	89.07	89.80	92.12	88.55	87.61

Notes:

1. ft. AMSL - feet above mean sea level

2. -- Not Measured

Table 3.
Recent Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft.)									
		9/9/2019	4/20/2020	5/28/2020	6/30/2020	8/10/2020	3/8/2021	6/28/2021	8/16/2021	3/22/2022	10/3/2022
GC-AP-MW-34HA	108.38	86.26	88.38	88.32	87.92	87.41	85.89	87.03	86.63	85.76	85.41
GC-AP-MW-35H	102.64	80.56	84.17	81.38	Dry	80.70	81.10	82.05	80.68	82.13	80.20
GC-AP-MW-36H	105.17	78.64	83.84	79.42	79.08	78.81	80.82	80.74	79.12	81.71	78.36
GC-AP-MW-37H	106.04	76.95	84.94	79.91	79.32	77.07	80.28	82.63	80.96	83.38	82.04
GC-AP-MW-38H	106.58	86.98	87.48	87.26	87.60	86.84	87.14	87.39	86.79	86.98	86.48
GC-AP-MW-39H	109.89	74.41	82.94	76.08	75.43	74.29	77.02	77.11	75.56	80.02	74.03
GC-AP-MW-40H	87.53	74.08	82.77	75.90	75.17	74.00	77.09	77.16	75.40	80.02	73.84
GC-AP-MW-41H	86.57	74.09	82.94	76.10	74.11	73.98	76.61	76.33	75.77	79.84	74.10
GC-AP-MW-42H	87.56	81.15	84.01	83.03	82.00	80.78	82.45	82.07	80.92	82.18	79.26
GC-AP-MW-43H	91.76	85.86	87.17	85.86	84.60	83.50	84.90	84.37	83.32	83.98	80.55
GC-AP-MW-44H	101.13	93.79	97.30	96.63	94.17	92.70	94.32	93.79	92.38	93.94	90.61
GC-AP-MW-45H	95.14	--	82.62	75.87	75.33	74.32	82.64	77.73	75.53	80.14	74.08
GC-AP-MW-46HO	93.35	--	--	--	75.48	74.76	78.16	78.24	75.56	77.96	76.56
GC-AP-MW-47HO	93.86	--	--	80.54	78.71	77.48	78.56	79.22	77.78	77.92	78.97
GC-AP-MW-48H	90.11	--	86.55	84.11	82.43	81.35	82.32	82.65	81.45	81.50	79.36
GC-AP-MW-49H	91.71	--	85.33	84.08	82.79	82.08	82.83	83.07	81.95	82.32	80.22
GC-AP-MW-50HO	88.92	--	--	81.98	81.19	80.51	81.50	81.36	80.58	81.56	79.34
GC-AP-MW-52HO	91.77	--	--		84.71	83.65	85.36	84.90	83.75	84.57	81.19
GC-AP-MW-53H	102.31	--	97.04	96.29	95.07	93.12	94.25	93.78	92.82	93.70	90.49
GC-AP-MW-54H	102.94	--	97.48	96.31	95.01	93.20	94.54	93.96	92.75	93.68	90.76
GC-AP-MW-55H0	114.37	--	--	84.31	83.58	83.03	82.76	81.31	82.69	83.45	81.51
GC-AP-MW-57H	100.43	--	97.08	96.02	92.50	92.91	94.23	93.74	92.63	93.79	90.60
GC-AP-MW-59HO	101.69	--	--	93.61	93.05	92.36	91.87	92.47	91.86	91.36	90.08
GC-AP-MW-60HO	108.47	--	--	--	--	--	--	88.31	88.05	86.89	86.69
GC-AP-MW-61HO	109.69	--	--	--	--	--	--	91.40	90.93	89.35	89.13
GC-AP-MW-62HO	89.89	--	--	--	--	--	--	83.31	81.39	81.77	79.59
GC-AP-MW-63HO	91.08	--	--	--	--	--	--	83.33	81.74	81.49	79.30
GC-AP-MW-64HO	95.65	--	--	--	--	--	--	78.44	76.10	80.43	74.57

Notes:

1. ft. AMSL - feet above mean sea level
2. -- Not Measured

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Greene County Ash Pond
03/23/2022 - 10/19/2022

GC-AP-MW-27

Sample Date = 10/19/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	1.02	1	1.98%
Chloride	mg/L	2.01	2.08	3.42%
Sulfate	mg/L	3.95	4.06	2.75%
Barium	mg/L	0.0608	0.0604	0.66%

GC-AP-MW-48H

Sample Date = 10/18/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	13.2	13.8	4.44%
Chloride	mg/L	4.34	4.3	0.93%
Sulfate	mg/L	36.2	35.7	1.39%
Barium	mg/L	0.0269	0.0284	5.43%
Cobalt	mg/L	0.00023	0.00023	0.00%
Lithium	mg/L	0.061	0.0597	2.15%

GC-AP-MW-6

Sample Date = 10/18/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	1.16	1.16	0.00%
Calcium	mg/L	159	147	7.84%
Chloride	mg/L	45	45	0.00%
Fluoride	mg/L	0.154	0.182	16.67%
Sulfate	mg/L	179	194	8.04%
Barium	mg/L	0.0619	0.0613	0.97%
Cobalt	mg/L	0.00233	0.00234	0.43%
Molybdenum	mg/L	0.00149	0.00137	8.39%

GC-AP-MW-31

Sample Date = 10/5/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	6.69	6.55	2.12%
Chloride	mg/L	7.1	7.06	0.57%
Sulfate	mg/L	4.08	3.73	8.96%
Barium	mg/L	0.0283	0.0297	4.83%
Cobalt	mg/L	0.00073	0.00071	2.50%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Greene County Ash Pond
03/23/2022 - 10/19/2022

GC-AP-MW-57H				
Sample Date = 10/5/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.151	0.151	0.00%
Calcium	mg/L	34.9	34.5	1.15%
Chloride	mg/L	5.31	4.03	27.41%
Fluoride	mg/L	0.165	0.191	14.61%
Sulfate	mg/L	54.8	53.2	2.96%
Arsenic	mg/L	0.0177	0.0178	0.56%
Barium	mg/L	0.0719	0.0724	0.69%
Cobalt	mg/L	0.0334	0.0335	0.30%
Molybdenum	mg/L	0.00076	0.00073	4.18%
GC-AP-MW-64HO				
Sample Date = 10/4/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.419	0.419	0.00%
Calcium	mg/L	69.8	70.7	1.28%
Chloride	mg/L	9.9	9.86	0.41%
Fluoride	mg/L	0.212	0.211	0.47%
Sulfate	mg/L	146	141	3.48%
Arsenic	mg/L	0.00027	0.00031	14.58%
Barium	mg/L	0.0681	0.0677	0.59%
Cobalt	mg/L	0.00315	0.0031	1.60%
Lithium	mg/L	0.16	0.161	0.62%
Molybdenum	mg/L	0.0686	0.0678	1.17%
GC-AP-MW-13				
Sample Date = 5/17/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Selenium	mg/L	0.0452	0.0457	1.10%
GC-AP-MW-11				
Sample Date = 3/30/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.472	0.465	1.49%
Calcium	mg/L	39.6	40.2	1.50%
Chloride	mg/L	12.7	13.2	3.86%
Sulfate	mg/L	125	141	12.03%
Arsenic	mg/L	0.00097	0.00096	0.83%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Greene County Ash Pond
03/23/2022 - 10/19/2022

GC-AP-MW-11

Sample Date = 3/30/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Barium	mg/L	0.0485	0.0503	3.64%
Cobalt	mg/L	0.0157	0.0155	1.28%
Lithium	mg/L	0.0615	0.0619	0.65%
Molybdenum	mg/L	0.00425	0.00403	5.31%

GC-AP-MW-45H

Sample Date = 3/29/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.567	0.57	0.53%
Calcium	mg/L	110	104	5.61%
Chloride	mg/L	9.58	9.44	1.47%
Fluoride	mg/L	0.162	0.13	21.92%
Sulfate	mg/L	337	361	6.88%
Arsenic	mg/L	0.00106	0.00095	10.74%
Barium	mg/L	0.0534	0.0558	4.40%
Cobalt	mg/L	0.0108	0.0113	4.53%
Lithium	mg/L	0.411	0.407	0.98%
Molybdenum	mg/L	0.0652	0.069	5.66%

GC-AP-MW-9

Sample Date = 3/29/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.71	0.72	1.40%
Calcium	mg/L	72.1	69.7	3.39%
Chloride	mg/L	225	239	6.03%
Sulfate	mg/L	193	187	3.16%
Arsenic	mg/L	0.00316	0.00331	4.64%
Barium	mg/L	0.139	0.139	0.00%
Cobalt	mg/L	0.0267	0.0266	0.38%

GC-AP-MW-2

Sample Date = 3/28/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.125	0.127	1.59%
Calcium	mg/L	157	164	4.36%
Chloride	mg/L	11.5	11.5	0.00%
Sulfate	mg/L	563	553	1.79%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Greene County Ash Pond
03/23/2022 - 10/19/2022

GC-AP-MW-2

Sample Date = 3/28/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Arsenic	mg/L	0.00381	0.00326	15.56%
Barium	mg/L	0.0301	0.031	2.95%
Cobalt	mg/L	0.0309	0.0324	4.74%
Lead	mg/L	0.00066	0.00059	12.29%

GC-AP-MW-29

Sample Date = 3/28/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Chloride	mg/L	1.24	1.24	0.00%
Barium	mg/L	0.0337	0.032	5.18%
Cobalt	mg/L	0.00079	0.00069	13.28%

GC-AP-MW-46HO

Sample Date = 3/23/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.355	0.355	0.00%
Calcium	mg/L	53.1	49.6	6.82%
Chloride	mg/L	7.84	7.95	1.39%
Fluoride	mg/L	0.158	0.166	4.94%
Sulfate	mg/L	131	131	0.00%
Barium	mg/L	0.0595	0.0584	1.87%
Cobalt	mg/L	0.0053	0.00516	2.68%
Lithium	mg/L	0.122	0.123	0.82%
Molybdenum	mg/L	0.0489	0.0484	1.03%

GC-AP-MW-47HO

Sample Date = 3/23/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.159	0.158	0.63%
Calcium	mg/L	21.1	20.7	1.91%
Chloride	mg/L	8.8	8.82	0.23%
Sulfate	mg/L	61.1	61.6	0.82%
Barium	mg/L	0.0332	0.0343	3.26%
Cobalt	mg/L	0.00025	0.00024	3.31%
Lithium	mg/L	0.0531	0.0521	1.90%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Greene County Ash Pond
03/23/2022 - 10/19/2022

GC-AP-MW-47HO

Sample Date = 10/4/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.115	0.115	0.00%
Calcium	mg/L	13	13.2	1.53%
Chloride	mg/L	3.86	3.87	0.26%
Sulfate	mg/L	42.8	43.5	1.62%
Barium	mg/L	0.0238	0.0246	3.31%
Lithium	mg/L	0.0422	0.0422	0.00%

GC-AP-MW-52HO

Sample Date = 3/23/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	1.33	1.32	0.76%
Calcium	mg/L	66	63.2	4.33%
Chloride	mg/L	123	119	3.31%
Sulfate	mg/L	38.9	38.4	1.29%
Arsenic	mg/L	0.00026	0.00024	10.44%
Barium	mg/L	0.149	0.153	2.65%
Cobalt	mg/L	0.0164	0.0167	1.81%

Sample Date = 10/3/2022

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	1.39	1.4	0.72%
Calcium	mg/L	91.4	88	3.79%
Chloride	mg/L	62.4	68.3	9.03%
Sulfate	mg/L	37.8	37.4	1.06%
Barium	mg/L	0.165	0.17	2.99%
Cobalt	mg/L	0.0122	0.0121	0.82%

Notes:
1. The RPD calculations presented are for analyte pairs where original and duplicate results are valid, unqualified detections.
2. RPD calculation results less than or equal to 20% are considered acceptable.
3. Results greater than 20% are given data validation flags to indicate RPD criteria failure. Communication to sampling team and lab may be necessary to explore nature of RPD failure(s).

Table 4b. - Field QC: Blank Detections

Plant Greene County Ash Pond
03/23/2022 - 10/19/2022

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
03/23/2022	FB-1	Barium	0.00023 v	mg/L	0.0001
10/19/2022	FB-5	Chromium	0.0002 J	mg/L	0.0002
10/03/2022	EB-1	Chromium	0.0003 J	mg/L	0.0002
10/03/2022	FB-1	Chromium	0.00026 J	mg/L	0.0002
04/06/2022	EB-1	Chromium	0.00032 J	mg/L	0.0002
04/06/2022	FB-5	Chromium	0.00029 J	mg/L	0.0002
04/04/2022	FB-4	Chromium	0.00022 J	mg/L	0.0002
03/29/2022	FB-2	Chromium	0.00025 J	mg/L	0.0002
03/29/2022	FB-3	Chromium	0.00025 J	mg/L	0.0002
03/28/2022	FB-1	Chromium	0.00025 J	mg/L	0.0002
03/23/2022	EB-1	Chromium	0.00021 J	mg/L	0.0002
03/23/2022	FB-1	Chromium	0.00035 J	mg/L	0.0002
03/23/2022	EB-1	Chromium	0.00027 J	mg/L	0.0002
03/23/2022	EB-1	Chromium	0.00033 J	mg/L	0.0002
03/23/2022	FB-1	Chromium	0.00031 J	mg/L	0.0002
03/23/2022	FB-1	Chromium	0.0003 J	mg/L	0.0002

Notes:
1. Lab qualifiers have been appended to result when applicable
2. MDL = Method Detection Limit
3. Only Appendix 4 Constituents were compared and validated. Radium data was not validated.
4. mg/L = milligrams per liter

Table 5. Summary of Background Levels and Groundwater Protection Standards

Plant Greene County Ash Pond

Appendix III Analytes			
Analyte	**Units**	**Background**	**GWPS**
Fluoride	mg/L	0.31	4
Appendix IV Analytes			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.347	2
Beryllium	mg/L	0.003	0.004
Cadmium	mg/L	0.001	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0167	0.0167
Lead	mg/L	0.005	0.015
Lithium	mg/L	0.05	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.01	0.05
Thallium	mg/L	0.001	0.002
Combined Radium 226 + 228	pCi/L	3.88	5

Notes:
1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. Background concentrations/limits are used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and ADEM Rule 335-13-15-.06(h).
4. GWPS are generally updated on a 2 year basis which began in the Fall of 2019 (Fall 2019, Fall 2021, etc).

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Upgradient	GC-AP-MW-23	03/28/2022	5.9	154.79	1.04	17.73	6.08	144.72
Upgradient	GC-AP-MW-24	04/04/2022	4.18	152.36	1.22	19.36	4.4	233.12
Upgradient	GC-AP-MW-26	04/04/2022	2.51	129.49	1.04	18.43	5.2	61.7
Upgradient	GC-AP-MW-27	03/28/2022	6.88	241.1	0.78	18.72	4.73	33.75
Upgradient	GC-AP-MW-28	03/28/2022	7.7	235.31	0.59	18.26	4.69	44.28
Upgradient	GC-AP-MW-29	03/28/2022	9.13	203.25	1.34	17.65	4.67	12.5
Upgradient	GC-AP-MW-30	03/28/2022	4.36	226.73	0.61	17.81	4.93	26.46
Downgradient	GC-AP-MW-1	04/04/2022	1.06	53.31	4.22	20.06	5.17	1465.42
Downgradient	GC-AP-MW-10	04/04/2022	0.19	-71.76	0.4	25.5	6.21	627.33
Downgradient	GC-AP-MW-11	03/30/2022	0.95	58.23	0.42	19.61	6.02	462.47
Downgradient	GC-AP-MW-12	03/29/2022	1.2	123.61	0.69	19.81	6.44	474.84
Downgradient	GC-AP-MW-13	04/06/2022	0.93	60.05	0.68	26.7	6.24	423.79
Downgradient	GC-AP-MW-14	04/04/2022	0.23	-81.39	0.96	23.4	6.39	891.38
Downgradient	GC-AP-MW-15	03/29/2022	0.33	55.92	0.97	23.13	5.81	595.79
Downgradient	GC-AP-MW-16	04/06/2022	0.06	-48.49	4.33	26.29	6.42	746.84
Downgradient	GC-AP-MW-17	04/04/2022	0.13	-120.55	2.05	26.47	6.71	773.09
Downgradient	GC-AP-MW-18	04/06/2022	0.11	-26.21	2.48	27.48	6.29	636.34
Downgradient	GC-AP-MW-2	03/28/2022	0.93	86.36	2.91	19.67	5.32	1136.48
Downgradient	GC-AP-MW-21	03/30/2022	0.03	79.82	0.33	21.1	6.09	527.48
Downgradient	GC-AP-MW-25	03/29/2022	0.97	124.93	2.92	20.56	5.26	398.3
Downgradient	GC-AP-MW-3	04/05/2022	0.45	-53.4	1.8	26.33	6.27	532.06

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Downgradient	GC-AP-MW-31	03/28/2022	3.5	136.06	3.36	17.18	5.05	66.43
Downgradient	GC-AP-MW-32	03/28/2022	4.28	175.87	0.41	20.08	5.01	73.1
Downgradient	GC-AP-MW-33	03/28/2022	5.94	170.7	0.23	18.2	4.29	91.81
Downgradient	GC-AP-MW-5	04/04/2022	0.43	-86.8	4.78	25.49	6.42	508.59
Downgradient	GC-AP-MW-6	03/29/2022	0.92	101.76	1.15	20.48	5.99	1178.36
Downgradient	GC-AP-MW-7	03/29/2022	0.95	104.42	0.71	18.93	6.62	1399.3
Downgradient	GC-AP-MW-8	03/29/2022	0.71	101.3	1.12	19.67	6.21	1211.2
Downgradient	GC-AP-MW-9	03/29/2022	0.82	93.15	0.62	19.59	5.61	1442.55
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	2.14	190.27	1.92	20.96	4.44	139.06
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	7.61	108.5	1.06	19.54	5.24	150.13
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	0.18	73.03	6.4	26.48	7.81	282.76
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	0.71	-64.32	2.74	19.77	6.36	846.53
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	2.99	128.45	0.95	23.34	6.62	479.43
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	0.49	-33.75	2.32	19.59	6.31	805.88
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	0.13	124.28	0.3	22.37	5.69	670.34
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	0.25	-3.37	8.36	18.6	6.16	723.95
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	0.14	-24.33	3.33	24.82	6.1	577.97
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	0.12	-40.63	4.25	25.25	6.43	839.57
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	0.31	73.11	4.89	17.32	5.56	870.22
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	0.27	-18.32	3.62	24.72	6.83	841.42
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	0.18	70.74	2.24	19.2	6.55	464

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	0.23	163.87	2.98	19.03	5.3	235.66
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	0.42	119.38	0.33	17.78	5.4	134.45
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	0.1	103.85	1.21	18.99	5.72	313.62
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	0.08	144.36	4.51	20.47	6.17	392.31
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	0.23	41.73	4.36	17.45	6.14	850.17
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	0.38	-60.82	4.15	16.97	6.23	715.12
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	0.32	-82.01	4.62	16.8	6.59	693.2
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	6.15	250.88	4.37	18.3	5.2	57.34
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	0.32	78.5	4.92	16.57	5.41	251.21
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	0.05	162.27	4.69	19.88	5.88	531.35
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	5.38	294.21	2.57	21.05	5.22	55.19
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	6.06	194.79	3.48	20.7	6.38	119.36
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	6.45	195.63	6	17.93	5.82	72.9
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	8.25	135.08	1.08	17.04	5.34	58.17
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	0.2	43.44	4.84	19.49	6.92	581.15
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	0.23	-21.08	4.61	27.79	5.95	1260.99

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	GC-AP-MW-23	03/28/2022	<0.03	26	1.09	<0.06	6.08	11.8
Upgradient	GC-AP-MW-24	04/04/2022	<0.03	37	3.09	<0.06	4.4	90.2
Upgradient	GC-AP-MW-26	04/04/2022	<0.03	6.7	2.93	<0.06	5.2	12.5
Upgradient	GC-AP-MW-27	03/28/2022	<0.03	1.37	1.96	<0.06	4.73	6.24
Upgradient	GC-AP-MW-28	03/28/2022	<0.03	1.94	1.35	<0.06	4.69	11.2
Upgradient	GC-AP-MW-29	03/28/2022	<0.03	0.172 J	1.24	<0.06	4.67	1.29 J
Upgradient	GC-AP-MW-30	03/28/2022	<0.03	0.542	4.12	<0.06	4.93	0.951 J
Downgradient	GC-AP-MW-1	04/04/2022	0.269	106	41.2	0.087 J	5.17	824
Downgradient	GC-AP-MW-10	04/04/2022	1.92	93.7	16.8	0.281	6.21	122
Downgradient	GC-AP-MW-11	03/30/2022	0.472	40.2	12.7	0.0814 J	6.02	125
Downgradient	GC-AP-MW-12	03/29/2022	0.416	52	11.8	0.107 J	6.44	108
Downgradient	GC-AP-MW-13	04/06/2022	0.26	55.5	3.71	<0.06	6.2	157
Downgradient	GC-AP-MW-14	04/04/2022	1.89	117	10	0.207	6.39	199
Downgradient	GC-AP-MW-15	03/29/2022	0.848	75.7	10.3	0.117 J	5.81	165
Downgradient	GC-AP-MW-16	04/06/2022	2.17	101	12	0.213	6.42	45.3
Downgradient	GC-AP-MW-17	04/04/2022	2.32	104	8.06	0.607	6.71	72.3
Downgradient	GC-AP-MW-18	04/06/2022	1.6	96.1	24.7	0.115 J	6.29	15.8
Downgradient	GC-AP-MW-2	03/28/2022	0.125	164	11.5	<0.06	5.32	563
Downgradient	GC-AP-MW-21	03/30/2022	0.696	51	12.1	<0.06	6.09	115
Downgradient	GC-AP-MW-25	03/29/2022	0.122	31.9	29.6	0.0724 J	5.26	68.6
Downgradient	GC-AP-MW-3	04/05/2022	0.0453 J	67.4	21.3	0.107 J	6.27	14.7

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Downgradient	GC-AP-MW-31	03/28/2022	<0.03	5.95	6	<0.06	5.05	3.34
Downgradient	GC-AP-MW-32	03/28/2022	<0.03	9.61	3.98	<0.06	5.01	2.55
Downgradient	GC-AP-MW-33	03/28/2022	<0.03	2.21	5.47	<0.06	4.29	11.8
Downgradient	GC-AP-MW-5	04/04/2022	0.615	98.8	9.63	0.216	6.42	160
Downgradient	GC-AP-MW-6	03/29/2022	1.39	128	45.3	0.193	5.99	190
Downgradient	GC-AP-MW-7	03/29/2022	0.0842 J	126	94.7	0.104 J	6.62	187
Downgradient	GC-AP-MW-8	03/29/2022	1.08	92.8	95.4	0.108 J	6.21	75.3
Downgradient	GC-AP-MW-9	03/29/2022	0.71	72.1	225	<0.06	5.61	193
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	<0.03	10.8	3.52	<0.06	4.44	27
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	<0.03	22.5	1.48	<0.06	5.24	32.3
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	0.145	1.01	3.04	0.301	7.81	10.3
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	0.157	118	5.57	0.189	6.36	303
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	0.102	93.5	3.8	0.0661 J	6.62	51.9
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	2.21	119	8.43	0.39	6.31	34.9
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	0.506	96	5.72	<0.06	5.69	290
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	0.607	110	13.6	<0.06	6.16	236
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	1.46	69.6	15.9	<0.06	6.1	94.3
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	1.29	110	37.1	0.0977 J	6.43	105
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	0.202	137	13.7	<0.06	5.56	390
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	0.567	110	9.58	0.162	6.83	337
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	0.355	53.1	7.84	0.158	6.55	131
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	0.159	21.1	8.8	<0.06	5.3	61.1

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	0.0985 J	13.4	3.44	<0.06	5.4	36.4
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	0.33	27.8	8.12	0.0724 J	5.72	106
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	0.508	38.7	17.7	0.16	6.17	60.4
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	1.33	66	123	0.0894 J	6.14	38.9
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	0.329	78.5	8.07	0.101 J	6.23	117
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	0.462	95.6	8.13	0.246	6.59	114
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	0.0337 J	2.26	4.56	<0.06	5.2	8.46
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	0.104	17.8	20	<0.06	5.41	49.5
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	0.197	63.2	9.19	0.0775 J	5.88	225
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	<0.03	2.95	4.08	<0.06	5.22	6.73
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	<0.03	22.4	2.07	0.0871 J	6.38	10.1
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	0.0339 J	8.23	3.19	<0.06	5.82	15.9
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	0.0339 J	6.43	2.42	<0.06	5.34	18.5
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	0.567	63.2	16.1	0.251	6.92	156
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	0.351	209	7.86	0.0841 J	5.95	812

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	GC-AP-MW-23	03/28/2022	<0.000508	<8.1e-005	0.0264	<0.000406	<6.8e-005	0.000337 J	<6.8e-005	<0.06
Upgradient	GC-AP-MW-24	04/04/2022	<0.000508	0.000332	0.0635	<0.000406	<6.8e-005	0.000371 J	0.000726	<0.06
Upgradient	GC-AP-MW-26	04/04/2022	<0.000508	0.000112 J	0.0335	<0.000406	<6.8e-005	0.000295 J	0.000448	<0.06
Upgradient	GC-AP-MW-27	03/28/2022	<0.000508	<8.1e-005	0.0625	<0.000406	0.000182 J	0.000306 J	0.000142 J	<0.06
Upgradient	GC-AP-MW-28	03/28/2022	<0.000508	<8.1e-005	0.186	<0.000406	0.000429	0.000723 J	0.000517	<0.06
Upgradient	GC-AP-MW-29	03/28/2022	<0.000508	<8.1e-005	0.0337	<0.000406	0.000162 J	0.000351 J	0.000787	<0.06
Upgradient	GC-AP-MW-30	03/28/2022	<0.000508	<8.1e-005	0.0286	<0.000406	<6.8e-005	0.000396 J	7e-005 J	<0.06
Downgradient	GC-AP-MW-1	04/04/2022	<0.000508	0.0164	0.0235	<0.000406	<6.8e-005	0.000449 J	0.296	0.161
Downgradient	GC-AP-MW-10	04/04/2022	<0.000508	0.0117	0.26	<0.000406	<6.8e-005	<0.000203	0.0218	0.276
Downgradient	GC-AP-MW-11	03/30/2022	<0.000508	0.000967	0.0485	<0.000406	<6.8e-005	0.000226 J	0.0157	<0.06
Downgradient	GC-AP-MW-12	03/29/2022	<0.000508	0.000232	0.0355	<0.000406	<6.8e-005	0.000433 J	0.000876	0.107 J
Downgradient	GC-AP-MW-13	04/06/2022	0.002	0.00261	0.0701	<0.000406	7.92e-005 J	0.000299 J	0.00126	<0.06
Downgradient	GC-AP-MW-14	04/04/2022	<0.000508	0.0241	0.103	<0.000406	<6.8e-005	0.000248 J	0.0423	0.245
Downgradient	GC-AP-MW-15	03/29/2022	<0.000508	0.000318	0.0381	<0.000406	0.000459	<0.000203	0.0172	0.117 J
Downgradient	GC-AP-MW-16	04/06/2022	<0.000508	0.078	0.103	<0.000406	<6.8e-005	0.00034 J	0.0147	0.266
Downgradient	GC-AP-MW-17	04/04/2022	<0.000508	0.861	0.27	<0.000406	<6.8e-005	0.000224 J	0.0115	0.564
Downgradient	GC-AP-MW-18	04/06/2022	<0.000508	0.049	0.0769	<0.000406	<6.8e-005	0.000313 J	0.0183	0.162
Downgradient	GC-AP-MW-2	03/28/2022	<0.000508	0.00381	0.0301	<0.000406	0.000115 J	0.000304 J	0.0309	0.105 J
Downgradient	GC-AP-MW-21	03/30/2022	<0.000508	0.000167 J	0.112	<0.000406	6.83e-005 J	0.000217 J	0.00284	<0.06
Downgradient	GC-AP-MW-25	03/29/2022	<0.000508	0.000262	0.0717	<0.000406	6.91e-005 J	0.000415 J	0.0101	0.0724 J
Downgradient	GC-AP-MW-3	04/05/2022	<0.000508	0.01	0.145	<0.000406	<6.8e-005	0.00039 J	0.000826	0.185

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Upgradient	GC-AP-MW-23	03/28/2022	<6.8e-005	<0.007105	<0.0003	0.000124 J	0.000989 J	<6.8e-005
Upgradient	GC-AP-MW-24	04/04/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000931 J	<6.8e-005
Upgradient	GC-AP-MW-26	04/04/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-27	03/28/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-28	03/28/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-29	03/28/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-30	03/28/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-1	04/04/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00221	0.000155 J
Downgradient	GC-AP-MW-10	04/04/2022	<6.8e-005	0.329	<0.0003	0.0117	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-11	03/30/2022	<6.8e-005	0.0615	<0.0003	0.00403	<0.000508	8.03e-005 J
Downgradient	GC-AP-MW-12	03/29/2022	<6.8e-005	0.13	<0.0003	0.0514	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-13	04/06/2022	<6.8e-005	0.584	<0.0003	0.0201	0.0452	0.00169
Downgradient	GC-AP-MW-14	04/04/2022	<6.8e-005	0.607	<0.0003	0.0166	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-15	03/29/2022	<6.8e-005	0.534	<0.0003	<0.000102	<0.000508	0.000115 J
Downgradient	GC-AP-MW-16	04/06/2022	8.65e-005 J	0.638	<0.0003	0.000149 J	<0.000508	0.000353
Downgradient	GC-AP-MW-17	04/04/2022	<6.8e-005	0.647	<0.0003	0.054	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-18	04/06/2022	<6.8e-005	0.312	<0.0003	0.000321	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-2	03/28/2022	0.000588	<0.007105	<0.0003	<0.000102	0.000585 J	0.000158 J
Downgradient	GC-AP-MW-21	03/30/2022	<6.8e-005	0.082	<0.0003	0.00682	<0.000508	0.000107 J
Downgradient	GC-AP-MW-25	03/29/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-3	04/05/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000744 J	<6.8e-005

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Downgradient	GC-AP-MW-31	03/28/2022	<0.000508	<8.1e-005	0.0325	<0.000406	<6.8e-005	0.000392 J	0.000608	<0.06
Downgradient	GC-AP-MW-32	03/28/2022	<0.000508	<8.1e-005	0.0132	<0.000406	<6.8e-005	0.00042 J	<6.8e-005	<0.06
Downgradient	GC-AP-MW-33	03/28/2022	<0.000508	0.000147 J	0.0773	<0.000406	<6.8e-005	0.000436 J	0.000992	<0.06
Downgradient	GC-AP-MW-5	04/04/2022	<0.000508	0.432	0.131	<0.000406	<6.8e-005	0.000249 J	0.0104	0.216
Downgradient	GC-AP-MW-6	03/29/2022	<0.000508	0.000128 J	0.0614	<0.000406	0.000497	<0.000203	0.00223	0.193
Downgradient	GC-AP-MW-7	03/29/2022	0.000659 J	8.41e-005 J	0.0639	<0.000406	<6.8e-005	0.000239 J	0.0014	0.104 J
Downgradient	GC-AP-MW-8	03/29/2022	<0.000508	0.000146 J	0.104	<0.000406	<6.8e-005	0.000267 J	0.00619	0.108 J
Downgradient	GC-AP-MW-9	03/29/2022	<0.000508	0.00316	0.139	<0.000406	<6.8e-005	0.00027 J	0.0267	<0.06
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	<0.000508	0.000129 J	0.0481	<0.000406	<6.8e-005	0.000354 J	0.00117	<0.06
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	<0.000508	0.000129 J	0.0385	<0.000406	<6.8e-005	0.000514 J	7.55e-005 J	<0.06
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	<0.000508	0.00263	0.00372	<0.000406	<6.8e-005	0.00108	0.0007	0.301
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	<0.000508	0.011	0.0235	<0.000406	<6.8e-005	0.000366 J	0.0198	0.189
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	<0.000508	9.44e-005 J	0.0702	<0.000406	<6.8e-005	0.000372 J	0.000338	0.0661 J
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	<0.000508	0.0524	0.178	<0.000406	<6.8e-005	0.000286 J	0.0173	0.39
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	<0.000508	0.000273	0.0277	<0.000406	0.00018 J	0.000304 J	0.0103	<0.06
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	<0.000508	0.00197	0.145	<0.000406	<6.8e-005	0.000525 J	0.0185	<0.06
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	<0.000508	0.00515	0.147	<0.000406	0.000241	0.000278 J	0.0651	0.0664 J
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	<0.000508	0.011	0.168	<0.000406	<6.8e-005	0.000264 J	0.0184	0.133
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	<0.000508	0.00187	0.0482	<0.000406	0.000301	0.000225 J	0.323	<0.06
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	<0.000508	0.000952	0.0534	<0.000406	<6.8e-005	0.00028 J	0.0108	0.13
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	<0.000508	0.000164 J	0.0595	<0.000406	<6.8e-005	0.000282 J	0.0053	0.158
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	<0.000508	<8.1e-005	0.0332	<0.000406	<6.8e-005	0.000307 J	0.000246	<0.06

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Downgradient	GC-AP-MW-31	03/28/2022	0.000146 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-32	03/28/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-33	03/28/2022	0.000154 J	<0.007105	<0.0003	<0.000102	0.000715 J	<6.8e-005
Downgradient	GC-AP-MW-5	04/04/2022	<6.8e-005	0.102	<0.0003	0.00354	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-6	03/29/2022	<6.8e-005	<0.007105	<0.0003	0.00142	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-7	03/29/2022	<6.8e-005	<0.007105	<0.0003	0.000161 J	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-8	03/29/2022	<6.8e-005	0.00828 J	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-9	03/29/2022	<6.8e-005	0.0126 J	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.0006 J	<6.8e-005
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00364	<6.8e-005
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	0.000368	<0.007105	<0.0003	0.000175 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	<6.8e-005	0.00867 J	<0.0003	0.00079	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	<6.8e-005	<0.007105	<0.0003	0.000759	0.00902	<6.8e-005
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	<6.8e-005	0.336	<0.0003	0.00174	<0.000508	0.000594
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	<6.8e-005	0.707	<0.0003	<0.000102	<0.000508	0.000168 J
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	7.51e-005 J	0.0809	<0.0003	0.000131 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	<6.8e-005	0.0231	<0.0003	0.000233	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	<6.8e-005	0.261	<0.0003	0.00264	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	<6.8e-005	0.411	<0.0003	0.069	<0.000508	0.000127 J
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	<6.8e-005	0.122	<0.0003	0.0484	<0.000508	6.96e-005 J
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	<6.8e-005	0.0521	<0.0003	<0.000102	<0.000508	<6.8e-005

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	<0.000508	0.000139 J	0.0253	<0.000406	<6.8e-005	0.000237 J	0.000181 J	<0.06
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	<0.000508	0.000409	0.0642	<0.000406	0.000286	0.000211 J	0.00562	0.0724 J
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	<0.000508	0.000144 J	0.0762	<0.000406	0.000372	0.00051 J	0.0096	0.16
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	<0.000508	0.000262	0.149	<0.000406	0.000141 J	0.000352 J	0.0164	0.0894 J
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	<0.000508	0.229	0.382	<0.000406	<6.8e-005	0.000467 J	0.00706	0.101 J
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	<0.000508	0.401	0.18	<0.000406	<6.8e-005	0.000304 J	0.0265	0.246
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	<0.000508	<8.1e-005	0.0352	<0.000406	<6.8e-005	0.00107	0.00102	<0.06
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	<0.000508	0.00687	0.088	<0.000406	<6.8e-005	0.000416 J	0.0191	<0.06
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	<0.000508	0.000819	0.0627	<0.000406	0.000116 J	0.000309 J	0.0281	0.0775 J
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	<0.000508	<8.1e-005	0.0338	<0.000406	<6.8e-005	0.00111	0.000701	<0.06
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	<0.000508	0.000246	0.0411	<0.000406	<6.8e-005	0.000654 J	0.00037	0.0871 J
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	<0.000508	0.000113 J	0.0807	<0.000406	7.13e-005 J	0.000723 J	0.00038	<0.06
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	<0.000508	<8.1e-005	0.0498	<0.000406	0.000104 J	0.000448 J	0.000314	<0.06
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	<0.000508	0.0003	0.094	<0.000406	0.000131 J	0.000614 J	0.00419	0.251
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	<0.000508	0.00404	0.0665	<0.000406	7.92e-005 J	0.000468 J	0.39	0.158

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	<6.8e-005	0.0704	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	<6.8e-005	0.0726	<0.0003	0.000187 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	0.00013 J	0.11	<0.0003	<0.000102	<0.000508	0.000108 J
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	8.39e-005 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	8.2e-005 J	<0.007105	<0.0003	0.000823	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	<6.8e-005	0.0584	<0.0003	0.00291	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	0.000102 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	0.000314	<0.007105	<0.0003	0.000396	0.00059 J	<6.8e-005
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	<6.8e-005	<0.007105	<0.0003	0.000116 J	0.00097 J	0.000126 J
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00122	<6.8e-005
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	<6.8e-005	<0.007105	<0.0003	0.000524	0.000711 J	<6.8e-005
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	0.000159 J	<0.007105	<0.0003	0.000126 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	0.000157 J	0.159	<0.0003	0.0639	<0.000508	9.41e-005 J
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	0.0002 J	<0.007105	<0.0003	<0.000102	0.00192	9.45e-005 J

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Upgradient	GC-AP-MW-23	03/28/2022	0	0.0159 J	2.12	3.51	2.33	26	7.51	0.0118
Upgradient	GC-AP-MW-24	04/04/2022	0	0.359	4.39	5.49	2.48	37	11.7	0.0321
Upgradient	GC-AP-MW-26	04/04/2022	0	<0.00812	0.899	5.88	4.35	6.7	12.6	0.0677
Upgradient	GC-AP-MW-27	03/28/2022	0	<0.00812	0.586	4.86	3.56	1.37	10.4	0.0131
Upgradient	GC-AP-MW-28	03/28/2022	0	<0.00812	1.74	3.72	1.36	1.94	7.96	0.0607
Upgradient	GC-AP-MW-29	03/28/2022	0	0.0137 J	0.257 J	3.9	0.897	0.172 J	8.35	0.0331
Upgradient	GC-AP-MW-30	03/28/2022	0	<0.00812	0.164 J	4.94	4.76	0.542	10.6	0.00974 J
Downgradient	GC-AP-MW-1	04/04/2022	0	210	36.6	5.42	55.4	106	11.6	0.0471
Downgradient	GC-AP-MW-10	04/04/2022	0	19.4	20.2	4.49	28.6	93.7	9.61	<0.00609
Downgradient	GC-AP-MW-11	03/30/2022	0	0.319	13.1	2.6	30.7	39.6	5.56	<0.00609
Downgradient	GC-AP-MW-12	03/29/2022	0	<0.00812	16.1	2.8	21.9	52	5.99	<0.00609
Downgradient	GC-AP-MW-13	04/06/2022	0	0.312	13.9	3.49	9.98	55.5	7.47	<0.00609
Downgradient	GC-AP-MW-14	04/04/2022	0	51.1	27.7	6.02	33.6	117	12.9	<0.00609
Downgradient	GC-AP-MW-15	03/29/2022	0	1.25	18.6	5.69	30	75.7	12.2	<0.00609
Downgradient	GC-AP-MW-16	04/06/2022	0	13.3	25.8	5.94	39.3	101	12.7	<0.00609
Downgradient	GC-AP-MW-17	04/04/2022	0	26.6	29	9.15	42.8	104	19.6	<0.00609
Downgradient	GC-AP-MW-18	04/06/2022	0	12.7	15.6	7.83	49.2	96.1	16.8	<0.00609
Downgradient	GC-AP-MW-2	03/28/2022	0	48.5	23.3	4.96	33	157	10.6	0.0398
Downgradient	GC-AP-MW-21	03/30/2022	0	0.0331 J	16.5	3.99	32.6	51	8.54	<0.00609
Downgradient	GC-AP-MW-25	03/29/2022	0	0.903	7.3	10.7	34.4	31.9	22.9	0.0155

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Upgradient	GC-AP-MW-23	03/28/2022	0.000308	0.65	0.219 J	78.8	-10000	78.3	<1	1.09
Upgradient	GC-AP-MW-24	04/04/2022	0.18	1.36	0.399	15.2	-10000	15.2	<1	3.09
Upgradient	GC-AP-MW-26	04/04/2022	0.0443	0.462 J	<0.2	12.8	-10000	12.8	<1	2.93
Upgradient	GC-AP-MW-27	03/28/2022	0.0135	0.812	1.05	3.24	-10000	3.24	<1	1.96
Upgradient	GC-AP-MW-28	03/28/2022	0.0719	1.7	0.945	0.56	-10000	-10000	<1	1.35
Upgradient	GC-AP-MW-29	03/28/2022	0.0126	0.735	0.307	0.84	-10000	-10000	<1	1.24
Upgradient	GC-AP-MW-30	03/28/2022	0.00447	0.662	0.625	3.96	-10000	3.95	<1	4.12
Downgradient	GC-AP-MW-1	04/04/2022	15.3	3.54	0.36	47.6	-10000	47.6	2.86	41.2
Downgradient	GC-AP-MW-10	04/04/2022	3.27	6.35	<0.2	267	1.44	266	2.64	16.8
Downgradient	GC-AP-MW-11	03/30/2022	4.5	7.52	<0.2	118	0.579	117	1.27 J	12.7
Downgradient	GC-AP-MW-12	03/29/2022	2.29	6.17	<0.2	126	-10000	126	1.07 J	11.8
Downgradient	GC-AP-MW-13	04/06/2022	2.05	6.61	0.746	66.8	-10000	66.8	1.84 J	3.71
Downgradient	GC-AP-MW-14	04/04/2022	4.91	10.4	0.263 J	405	0.741	404	2.77	9.75
Downgradient	GC-AP-MW-15	03/29/2022	2.25	10.3	<0.2	183	-10000	183	1.41 J	10.3
Downgradient	GC-AP-MW-16	04/06/2022	3.32	12.6	<0.2	449	0.61	448	2.05	12
Downgradient	GC-AP-MW-17	04/04/2022	2.42	12.5	<0.2	505	6.18	499	2.06	8.06
Downgradient	GC-AP-MW-18	04/06/2022	3.57	6.15	<0.2	371	-10000	371	2.32	24.7
Downgradient	GC-AP-MW-2	03/28/2022	6.02	5.82	<0.2	26.2	-10000	26.2	1.79 J	11.5
Downgradient	GC-AP-MW-21	03/30/2022	1.94	8.06	<0.2	190	-10000	190	1.26 J	12.1
Downgradient	GC-AP-MW-25	03/29/2022	0.286	1.02	<0.2	70.3	-10000	69.8	1 J	29.6

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfate mg/L
Upgradient	GC-AP-MW-23	03/28/2022	11.8
Upgradient	GC-AP-MW-24	04/04/2022	90.2
Upgradient	GC-AP-MW-26	04/04/2022	12.5
Upgradient	GC-AP-MW-27	03/28/2022	6.24
Upgradient	GC-AP-MW-28	03/28/2022	11.2
Upgradient	GC-AP-MW-29	03/28/2022	1.29 J
Upgradient	GC-AP-MW-30	03/28/2022	0.951 J
Downgradient	GC-AP-MW-1	04/04/2022	801
Downgradient	GC-AP-MW-10	04/04/2022	111
Downgradient	GC-AP-MW-11	03/30/2022	125
Downgradient	GC-AP-MW-12	03/29/2022	108
Downgradient	GC-AP-MW-13	04/06/2022	157
Downgradient	GC-AP-MW-14	04/04/2022	192
Downgradient	GC-AP-MW-15	03/29/2022	165
Downgradient	GC-AP-MW-16	04/06/2022	45.3
Downgradient	GC-AP-MW-17	04/04/2022	65.5
Downgradient	GC-AP-MW-18	04/06/2022	16.3
Downgradient	GC-AP-MW-2	03/28/2022	563
Downgradient	GC-AP-MW-21	03/30/2022	115
Downgradient	GC-AP-MW-25	03/29/2022	68.6

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Downgradient	GC-AP-MW-3	04/05/2022	0	45.2	4.51	4.4	29.6	67.4	9.42	<0.00609
Downgradient	GC-AP-MW-31	03/28/2022	0	0.116	1.23	4.63	6.17	5.95	9.91	0.0347
Downgradient	GC-AP-MW-32	03/28/2022	0	<0.00812	0.709	5.46	3.92	9.61	11.7	0.00656 J
Downgradient	GC-AP-MW-33	03/28/2022	0	0.00821 J	2.92	3.35	5.32	2.21	7.17	0.151
Downgradient	GC-AP-MW-5	04/04/2022	0	34	20.2	8.43	21.5	98.8	18	<0.00609
Downgradient	GC-AP-MW-6	03/29/2022	0	0.504	26.1	9.59	115	128	20.5	<0.00609
Downgradient	GC-AP-MW-7	03/29/2022	0	0.0181 J	15.7	7.91	192	126	16.9	<0.00609
Downgradient	GC-AP-MW-8	03/29/2022	0	0.0273 J	18.2	6.99	168	92.8	15	<0.00609
Downgradient	GC-AP-MW-9	03/29/2022	0	5.27	30.1	4.08	171	72.1	8.73	<0.00609
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	0	<0.00812	1.9	4.7	14	10.8	10.1	0.0131
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	0	<0.00812	2.95	3.3	2.05	22.5	7.06	<0.00609
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	0	0.25	0.093 J	6.06	68.5	1.01	13	0.715
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	0	43.4	19.9	7.05	21.2	118	15.1	<0.00609
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	0	0.021 J	7.55	4.5	3.63	93.5	9.63	0.00814 J
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	0	27.4	22.8	4.78	30.5	119	10.2	<0.00609
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	0	0.39	24.9	2.97	19.4	96	6.36	<0.00609
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	0	9.97	14.1	4.22	30	110	9.03	0.0471
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	0	17.6	13.4	4.77	36.8	69.6	10.2	0.0104
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	0	11.9	31.7	4.28	49.9	110	9.16	0.0061 J
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	0	6.24	19.7	4.36	28.3	137	9.33	0.00863 J

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Downgradient	GC-AP-MW-3	04/05/2022	0.356	0.817	0.207 J	287	-10000	287	9.87	21.3
Downgradient	GC-AP-MW-31	03/28/2022	0.00643	1.07	0.854	24.7	-10000	24.7	<1	6
Downgradient	GC-AP-MW-32	03/28/2022	<0.000152	0.712	0.385	29.2	-10000	29.2	<1	3.98
Downgradient	GC-AP-MW-33	03/28/2022	0.0176	3.87	3.6	1.92	-10000	1.92	<1	5.47
Downgradient	GC-AP-MW-5	04/04/2022	1.99	6.46	0.224 J	234	0.551	233	1.69 J	9.63
Downgradient	GC-AP-MW-6	03/29/2022	0.743	0.797	<0.2	436	-10000	436	1.35 J	45.3
Downgradient	GC-AP-MW-7	03/29/2022	0.59	0.942	<0.2	493	2.59	490	1.22 J	94.7
Downgradient	GC-AP-MW-8	03/29/2022	1.53	0.741	<0.2	473	0.672	472	1.71 J	95.4
Downgradient	GC-AP-MW-9	03/29/2022	5.83	5.57	<0.2	227	1.31	226	1.9 J	225
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	0.00627	0.844	1.54	32.9	-10000	32.9	1.28 J	3.52
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	0.00197	1.46	0.878	40.9	-10000	40.9	<1	1.48
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	0.0035	0.628	<0.2	139	2.18	137	<1	3.04
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	4.06	1.79	<0.2	182	-10000	182	2.88	5.57
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	0.0272	2.1	0.386	222	-10000	222	1.25 J	3.8
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	4.23	11.2	<0.2	369	-10000	369	1.78 J	8.43
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	3.33	10.1	<0.2	96.2	-10000	96.2	1.28 J	5.72
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	4.07	6.27	<0.2	148	-10000	148	1.62 J	13.6
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	6.7	4.25	<0.2	221	-10000	221	2.63	15.9
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	9.68	8.8	<0.2	370	-10000	370	2.1	37.1
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	9.81	2.72	<0.2	91.1	-10000	91	1.27 J	13.7

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfate mg/L
Downgradient	GC-AP-MW-3	04/05/2022	15.2
Downgradient	GC-AP-MW-31	03/28/2022	3.34
Downgradient	GC-AP-MW-32	03/28/2022	2.55
Downgradient	GC-AP-MW-33	03/28/2022	11.8
Downgradient	GC-AP-MW-5	04/04/2022	160
Downgradient	GC-AP-MW-6	03/29/2022	190
Downgradient	GC-AP-MW-7	03/29/2022	187
Downgradient	GC-AP-MW-8	03/29/2022	75.3
Downgradient	GC-AP-MW-9	03/29/2022	193
Horiz. Delineation	GC-AP-MW-34HA	03/28/2022	27
Horiz. Delineation	GC-AP-MW-35H	04/06/2022	32.3
Horiz. Delineation	GC-AP-MW-36H	03/30/2022	10.3
Horiz. Delineation	GC-AP-MW-37H	03/29/2022	303
Horiz. Delineation	GC-AP-MW-38H	03/30/2022	51.9
Horiz. Delineation	GC-AP-MW-39H	04/06/2022	34.9
Horiz. Delineation	GC-AP-MW-40H	03/30/2022	290
Horiz. Delineation	GC-AP-MW-41H	04/06/2022	236
Horiz. Delineation	GC-AP-MW-42H	04/06/2022	95.9
Horiz. Delineation	GC-AP-MW-43H	04/06/2022	106
Horiz. Delineation	GC-AP-MW-44H	04/04/2022	390

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	0	0.516	38.1	2.54	25.9	110	5.44	0.0199
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	--	0.0155 J	19.5	2.3	15.1	53.1	4.92	0.0164
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	--	0.0147 J	5.45	3.37	16.4	21.1	7.21	0.0132
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	0	<0.00812	3.64	4.02	6.31	13.4	8.6	<0.00609
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	0	0.154	7.85	2.97	18.5	27.8	6.36	0.0667
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	--	0.118	7.34	3.96	31.4	38.7	8.47	0.0679
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	--	0.57	23.7	4.46	71.6	66	9.54	0.0218
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	0	65.8	11.3	6.54	22.1	78.5	14	0.0512
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	0	38.9	19.5	7.1	20	95.6	15.2	0.041
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	--	0.132	1.73	4.97	5.78	2.26	10.6	0.0871
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	0	8.59	5.06	5.24	22.1	17.8	11.2	0.165
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	--	0.353	16.6	3.16	27.7	63.2	6.76	0.0335
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	--	0.0117 J	0.857	4.77	6.25	2.95	10.2	0.0343
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	--	0.0281 J	1.33	3.48	1.6	22.4	7.45	0.0619
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	--	0.192	1.26	3.16	3.28	8.23	6.76	0.157
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	--	0.015 J	1.28	3.05	2.92	6.43	6.53	0.03
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	--	0.142	22.4	3.06	24.6	63.2	6.55	0.0956
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	0	73.3	43.4	5.02	24.6	209	10.7	0.233

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	6.27	7.63	<0.2	133	1.27	132	1.38 J	9.58
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	5.17	5.5	<0.2	103	0.58	102	1.06 J	7.84
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	0.127	3.48	<0.2	42.9	-10000	42.6	<1	8.8
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	0.0906	2.65	<0.2	30.5	-10000	30.5	<1	3.44
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	1.9	4.72	<0.2	45.3	-10000	45.3	<1	8.12
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	7.15	5.56	<0.2	138	1.02	137	1.08 J	17.7
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	10.7	4.16	<0.2	265	0.768	264	1.66 J	123
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	2.65	4.57	0.32	225	-10000	225	5.42	8.07
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	1.86	5.86	0.217 J	285	-10000	285	2.09	8.13
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	0.00971	1.85	0.283 J	10	-10000	10	<1	4.56
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	0.493	3.1	0.445	55.1	-10000	55.1	5.11	20
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	10.3	3.94	<0.2	63.3	-10000	62.9	1.07 J	9.19
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	0.0149	1.07	<0.2	12.4	-10000	12.4	<1	4.08
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	0.0117	1.2	<0.2	60.2	-10000	60.1	<1	2.07
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	0.0309	0.836	<0.2	13.5	-10000	13.5	<1	3.19
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	0.0193	0.824	0.211 J	4.04	-10000	4.03	<1	2.42
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	5.42	5.66	<0.2	142	0.78	141	1.07 J	16.1
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	13.3	6.97	0.382	66	-10000	66	1.44 J	7.86

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
03/23/2022 - 05/17/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfate mg/L
Horiz. Delineation	GC-AP-MW-45H	03/29/2022	337
Horiz. Delineation	GC-AP-MW-46HO	03/23/2022	131
Horiz. Delineation	GC-AP-MW-47HO	03/23/2022	61.1
Horiz. Delineation	GC-AP-MW-48H	03/30/2022	36.4
Horiz. Delineation	GC-AP-MW-49H	03/30/2022	106
Horiz. Delineation	GC-AP-MW-50HO	03/23/2022	60.4
Horiz. Delineation	GC-AP-MW-52HO	03/23/2022	38.9
Horiz. Delineation	GC-AP-MW-53H	04/06/2022	117
Horiz. Delineation	GC-AP-MW-54H	04/05/2022	114
Horiz. Delineation	GC-AP-MW-55HO	03/23/2022	8.46
Horiz. Delineation	GC-AP-MW-57H	04/05/2022	52
Horiz. Delineation	GC-AP-MW-59HO	03/23/2022	225
Horiz. Delineation	GC-AP-MW-60HO	03/23/2022	6.73
Horiz. Delineation	GC-AP-MW-61HO	03/23/2022	10.1
Horiz. Delineation	GC-AP-MW-62HO	03/23/2022	15.9
Horiz. Delineation	GC-AP-MW-63HO	03/23/2022	18.5
Horiz. Delineation	GC-AP-MW-64HO	03/23/2022	156
Horiz. Delineation	GC-AP-PZ-4	04/05/2022	833

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Upgradient	GC-AP-MW-23	10/17/2022	5.51	199.87	2.86	22.6	6.22	137.05
Upgradient	GC-AP-MW-24	10/17/2022	4.23	261.09	1.39	22.02	5.22	212.05
Upgradient	GC-AP-MW-26	10/19/2022	2.17	166.58	1.01	18.82	5.55	67.42
Upgradient	GC-AP-MW-27	10/19/2022	5.09	180.18	1.4	19.11	5.02	29.65
Upgradient	GC-AP-MW-28	10/19/2022	8.09	235.28	0.95	18.97	4.87	40.67
Upgradient	GC-AP-MW-29	10/19/2022	8.72	233.69	1.18	18.65	5.01	12.96
Upgradient	GC-AP-MW-30	10/19/2022	4.28	231.26	0.95	18.69	5.29	27.58
Downgradient	GC-AP-MW-1	10/05/2022	0.99	16.76	1.04	22.02	5.59	1546.48
Downgradient	GC-AP-MW-10	10/18/2022	0.41	-61.01	1.23	18.35	6.62	705.85
Downgradient	GC-AP-MW-11	10/17/2022	1.05	10.33	0.21	21.4	6.28	550.76
Downgradient	GC-AP-MW-12	10/17/2022	1.37	49.77	0.16	21.77	6.88	492.95
Downgradient	GC-AP-MW-13	10/17/2022	1.04	53.04	0.32	23.49	6.22	1035.56
Downgradient	GC-AP-MW-14	10/18/2022	0.32	-61.69	1.47	19.48	6.46	1010.33
Downgradient	GC-AP-MW-15	10/18/2022	0.9	30.21	1.39	18.56	6.29	606.39
Downgradient	GC-AP-MW-16	10/18/2022	0.09	-27.98	4.8	19.49	6.53	785.75
Downgradient	GC-AP-MW-17	10/18/2022	0.11	-101.46	1.05	19.62	6.77	946.01
Downgradient	GC-AP-MW-18	10/17/2022	0.11	-14.99	0.56	20.61	6.49	653.3
Downgradient	GC-AP-MW-2	10/05/2022	0.88	-17.52	2.67	23.62	6.01	1337.66
Downgradient	GC-AP-MW-21	10/17/2022	0.33	67.81	0.26	21.81	6.21	583.72
Downgradient	GC-AP-MW-25	10/18/2022	0.54	53.14	1.71	20.06	5.88	405.24

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Downgradient	GC-AP-MW-3	10/05/2022	0.99	-44.34	1.06	22.21	5.89	690.16
Downgradient	GC-AP-MW-31	10/05/2022	2.04	95.18	0.83	18.48	5.49	75.95
Downgradient	GC-AP-MW-32	10/05/2022	4.27	203.81	0.87	20.66	5.84	69.24
Downgradient	GC-AP-MW-33	10/05/2022	4.21	273.29	0.75	19.21	4.55	96.77
Downgradient	GC-AP-MW-5	10/17/2022	1.01	-80.19	3.27	21.83	6.71	781.99
Downgradient	GC-AP-MW-6	10/18/2022	0.58	47.92	1.44	19.78	6.38	1192.42
Downgradient	GC-AP-MW-7	10/18/2022	0.41	71.58	1.07	19.45	6.37	1689.93
Downgradient	GC-AP-MW-8	10/18/2022	0.45	-58.45	0.82	19.1	6.45	1169.69
Downgradient	GC-AP-MW-9	10/18/2022	0.34	-27.72	0.93	19.2	6.27	1124.35
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	2.09	182	2.35	21.66	5.42	136.77
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	7.06	170.63	1	22.01	6.19	157.02
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	0.31	106.96	9.66	23.51	7.92	253.7
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	0.5	-83.22	1.84	22.79	6.23	1052.97
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	5.29	75.19	1.44	22.07	6.7	450.37
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	0.14	-50.53	1.6	19.12	6.59	784.1
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	0.09	117.95	1.64	19.53	5.77	674.54
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	0.16	-33.74	2.15	20.15	6.39	2561.04
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	0.26	-15.73	1.04	19.95	6.27	623.56
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	0.88	-21.42	3.36	19.42	6.53	877.68
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	0.17	18.31	2.16	20.19	6.06	973.85

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	0.15	37.3	4.45	20.79	6.38	2256.94
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	0.09	217.34	4.28	19.78	6.27	439.19
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	1.33	218.2	1.96	22.71	5.87	265.11
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	0.15	244.28	0.08	19.68	5.14	1994.48
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	0.15	169.92	0.39	19.69	5.6	343.52
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	0.12	111.71	1.9	19.26	6.27	387.79
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	0.08	22.05	3.17	18.91	5.84	766.72
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	0.1	-93.56	8.19	22.69	6.43	855.19
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	0.14	-93.8	9.28	21.71	6.41	857.59
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	6.23	322.52	4.16	18.58	5.03	158.32
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	0.09	-18.84	3.97	21.22	5.99	461.49
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	0.06	30.56	5.99	19.04	6.06	589.55
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	5.35	325.99	4.56	18.59	4.83	146.51
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	6.34	264.96	4.57	19.48	5.51	176.11
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	6.62	202.15	3.87	20.3	5.82	75.23
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	7.31	293.36	2.84	19.19	5.38	202.37
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	0.05	19.45	4.66	19.53	6.87	504.61
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	0.41	91.5	1.43	23.94	5.42	1305.52

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	GC-AP-MW-23	10/17/2022	<0.03	23.1	0.973 J	<0.06	6.22	9.72
Upgradient	GC-AP-MW-24	10/17/2022	<0.03	31.6	3.19	<0.06	5.22	79.6
Upgradient	GC-AP-MW-26	10/19/2022	<0.03	7.91	2.84	<0.06	5.55	12.5
Upgradient	GC-AP-MW-27	10/19/2022	<0.03	1.02	2.01	<0.06	5.02	3.95
Upgradient	GC-AP-MW-28	10/19/2022	<0.03	1.83	1.23	0.0698 J	4.87	8.96
Upgradient	GC-AP-MW-29	10/19/2022	<0.03	0.158 J	1.08	<0.06	5.01	1.37 J
Upgradient	GC-AP-MW-30	10/19/2022	<0.03	0.602	3.7	<0.06	5.29	1.27 J
Downgradient	GC-AP-MW-1	10/05/2022	0.202	113	7.1	0.125	5.59	737
Downgradient	GC-AP-MW-10	10/18/2022	2.13	105	17.2	0.248	6.62	104
Downgradient	GC-AP-MW-11	10/17/2022	0.63	60.6	22.4	0.118 J	6.28	144
Downgradient	GC-AP-MW-12	10/17/2022	0.272	49.8	12.9	0.197	6.88	96.2
Downgradient	GC-AP-MW-13	10/17/2022	0.499	158	12	<0.06	6.22	467
Downgradient	GC-AP-MW-14	10/18/2022	1.91	125	10.4	0.211	6.46	185
Downgradient	GC-AP-MW-15	10/18/2022	0.874	89.4	8.54	0.139	6.29	152
Downgradient	GC-AP-MW-16	10/18/2022	2.14	128	10.1	0.27	6.53	42.4
Downgradient	GC-AP-MW-17	10/18/2022	2.28	150	10.7	0.544	6.77	64.9
Downgradient	GC-AP-MW-18	10/17/2022	1.46	99.9	26	0.176	6.49	23.3
Downgradient	GC-AP-MW-2	10/05/2022	0.132	179	12.3	0.124 J	6.01	590
Downgradient	GC-AP-MW-21	10/17/2022	0.59	57	13	0.0988 J	6.21	103
Downgradient	GC-AP-MW-25	10/18/2022	0.124	38.2	32.3	0.0955 J	5.88	70.6
Downgradient	GC-AP-MW-3	10/05/2022	0.0404 J	54.5	23.1	0.12 J	5.89	5.11

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Downgradient	GC-AP-MW-31	10/05/2022	<0.03	6.69	7.1	0.0671 J	5.49	4.08
Downgradient	GC-AP-MW-32	10/05/2022	<0.03	9.18	4.04	<0.06	5.84	2.71
Downgradient	GC-AP-MW-33	10/05/2022	<0.03	2.01	5.32	<0.06	4.55	12.2
Downgradient	GC-AP-MW-5	10/17/2022	0.599	119	10.8	0.192	6.71	154
Downgradient	GC-AP-MW-6	10/18/2022	1.16	159	45	0.154	6.38	179
Downgradient	GC-AP-MW-7	10/18/2022	0.0589 J	158	196	0.0649 J	6.37	256
Downgradient	GC-AP-MW-8	10/18/2022	0.815	93.8	96.1	0.0981 J	6.45	84.8
Downgradient	GC-AP-MW-9	10/18/2022	1.15	111	106	0.156	6.27	171
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	<0.03	12.1	3.71	<0.06	5.42	22.6
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	<0.03	23.7	2.97	<0.06	6.19	25.6
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	0.143	0.791	2.36	0.347	7.92	9.18
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	0.159	148	13.2	0.138	6.23	306
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	0.097 J	117	3.6	0.151	6.7	40.6
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	2.07	131	6.02	0.423	6.59	25
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	0.541	106	7.05	0.133	5.77	264
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	0.585	130	13.8	<0.06	6.39	236
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	1.95	91.4	17.6	<0.06	6.27	168
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	1.22	119	33.9	0.134	6.53	109
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	0.194	137	7.16	0.104 J	6.06	376
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	0.489	83.4	9.25	0.147	6.38	219
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	0.302	61.5	5.71	0.151	6.27	82.2

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	0.115	13	3.86	0.0647 J	5.87	42.8
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	0.0976 J	13.2	4.34	<0.06	5.14	36.2
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	0.437	32.4	9.04	0.0628 J	5.6	109
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	0.328	37.2	12.8	0.157	6.27	79.4
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	1.39	91.4	62.4	0.102 J	5.84	37.8
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	0.555	74.6	16.2	0.136	6.43	32.1
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	0.398	78.8	<0.5	0.261	6.41	101
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	0.0305 J	2.52	4.27	<0.06	5.03	9
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	0.151	34.9	5.31	0.165	5.99	54.8
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	0.206	71.6	9.72	0.0929 J	6.06	193
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	<0.03	2.98	3.66	<0.06	4.83	6.49
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	<0.03	16.6	1.75	0.0748 J	5.51	8.6
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	<0.03	9.58	2.99	<0.06	5.82	14.9
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	0.036 J	7.09	2.58	<0.06	5.38	19.5
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	0.419	69.8	9.9	0.212	6.87	146
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	0.272	198	6.54	0.192	5.42	782

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	GC-AP-MW-23	10/17/2022	<0.000508	0.000111 J	0.0286	<0.000406	<6.8e-005	0.000347 J	<6.8e-005	<0.06
Upgradient	GC-AP-MW-24	10/17/2022	<0.000508	0.000297	0.0511	<0.000406	<6.8e-005	0.000301 J	0.000595	<0.06
Upgradient	GC-AP-MW-26	10/19/2022	<0.000508	0.000107 J	0.034	<0.000406	<6.8e-005	0.00024 J	0.000438	<0.06
Upgradient	GC-AP-MW-27	10/19/2022	<0.000508	<8.1e-005	0.0608	<0.000406	0.000193 J	0.00029 J	0.000139 J	<0.06
Upgradient	GC-AP-MW-28	10/19/2022	<0.000508	<8.1e-005	0.183	<0.000406	0.0004	0.000678 J	0.000326	0.0698 J
Upgradient	GC-AP-MW-29	10/19/2022	<0.000508	<8.1e-005	0.0379	<0.000406	0.00011 J	0.000354 J	0.00112	<0.06
Upgradient	GC-AP-MW-30	10/19/2022	<0.000508	<8.1e-005	0.0246	<0.000406	0.000108 J	0.000423 J	7.98e-005 J	<0.06
Downgradient	GC-AP-MW-1	10/05/2022	<0.000508	0.0152	0.0256	<0.000406	9.17e-005 J	0.000287 J	0.226	0.125
Downgradient	GC-AP-MW-10	10/18/2022	<0.000508	0.0117	0.248	<0.000406	<6.8e-005	0.000217 J	0.0223	0.248
Downgradient	GC-AP-MW-11	10/17/2022	<0.000508	0.00251	0.0611	<0.000406	<6.8e-005	0.000286 J	0.0256	0.118 J
Downgradient	GC-AP-MW-12	10/17/2022	<0.000508	0.000335	0.0301	<0.000406	<6.8e-005	0.000332 J	0.00077	0.197
Downgradient	GC-AP-MW-13	10/17/2022	0.002	0.00397	0.119	<0.000406	0.000145 J	0.000237 J	0.00424	<0.06
Downgradient	GC-AP-MW-14	10/18/2022	<0.000508	0.0269	0.103	<0.000406	<6.8e-005	<0.000203	0.0349	0.211
Downgradient	GC-AP-MW-15	10/18/2022	<0.000508	0.000379	0.036	<0.000406	0.000135 J	<0.000203	0.0189	0.139
Downgradient	GC-AP-MW-16	10/18/2022	<0.000508	0.0653	0.103	<0.000406	6.92e-005 J	0.000267 J	0.0143	0.27
Downgradient	GC-AP-MW-17	10/18/2022	<0.000508	0.897	0.253	<0.000406	<6.8e-005	0.000211 J	0.00934	0.544
Downgradient	GC-AP-MW-18	10/17/2022	<0.000508	0.0475	0.07	<0.000406	<6.8e-005	0.000294 J	0.0201	0.176
Downgradient	GC-AP-MW-2	10/05/2022	<0.000508	0.00331	0.0344	<0.000406	<6.8e-005	0.000256 J	0.0293	0.124 J
Downgradient	GC-AP-MW-21	10/17/2022	<0.000508	0.000217	0.0774	<0.000406	0.000102 J	0.00026 J	0.00501	0.0988 J
Downgradient	GC-AP-MW-25	10/18/2022	<0.000508	0.000434	0.0704	<0.000406	8.34e-005 J	<0.000203	0.00995	0.0955 J
Downgradient	GC-AP-MW-3	10/05/2022	<0.000508	0.0119	0.138	<0.000406	<6.8e-005	0.000286 J	0.000297	0.12 J

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Upgradient	GC-AP-MW-23	10/17/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000864 J	<6.8e-005
Upgradient	GC-AP-MW-24	10/17/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000816 J	<6.8e-005
Upgradient	GC-AP-MW-26	10/19/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-27	10/19/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-28	10/19/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-29	10/19/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GC-AP-MW-30	10/19/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-1	10/05/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000737 J	0.000149 J
Downgradient	GC-AP-MW-10	10/18/2022	<6.8e-005	0.241	<0.0003	0.0075	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-11	10/17/2022	<6.8e-005	0.0928	<0.0003	0.0119	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-12	10/17/2022	<6.8e-005	0.122	<0.0003	0.0568	0.00081 J	<6.8e-005
Downgradient	GC-AP-MW-13	10/17/2022	<6.8e-005	0.764	<0.0003	0.0197	0.0103	0.00238
Downgradient	GC-AP-MW-14	10/18/2022	<6.8e-005	0.478	<0.0003	0.0181	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-15	10/18/2022	<6.8e-005	0.556	<0.0003	<0.000102	<0.000508	8.43e-005 J
Downgradient	GC-AP-MW-16	10/18/2022	8.94e-005 J	0.594	<0.0003	0.000194 J	<0.000508	0.000337
Downgradient	GC-AP-MW-17	10/18/2022	<6.8e-005	0.656	<0.0003	0.0513	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-18	10/17/2022	<6.8e-005	0.321	<0.0003	0.000305	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-2	10/05/2022	0.000453	<0.007105	<0.0003	<0.000102	<0.000508	0.000158 J
Downgradient	GC-AP-MW-21	10/17/2022	<6.8e-005	0.0902	<0.0003	0.00666	<0.000508	0.00012 J
Downgradient	GC-AP-MW-25	10/18/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-3	10/05/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000612 J	<6.8e-005

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Downgradient	GC-AP-MW-31	10/05/2022	<0.000508	<8.1e-005	0.0283	<0.000406	<6.8e-005	0.000268 J	0.000728	0.0671 J
Downgradient	GC-AP-MW-32	10/05/2022	<0.000508	<8.1e-005	0.0133	<0.000406	<6.8e-005	0.000301 J	<6.8e-005	<0.06
Downgradient	GC-AP-MW-33	10/05/2022	<0.000508	8.13e-005 J	0.0665	<0.000406	<6.8e-005	0.000311 J	0.000909	<0.06
Downgradient	GC-AP-MW-5	10/17/2022	<0.000508	0.366	0.134	<0.000406	<6.8e-005	0.000348 J	0.0062	0.192
Downgradient	GC-AP-MW-6	10/18/2022	<0.000508	0.000182 J	0.0619	<0.000406	<6.8e-005	0.000228 J	0.00233	0.154
Downgradient	GC-AP-MW-7	10/18/2022	<0.000508	0.000148 J	0.084	<0.000406	<6.8e-005	0.000297 J	0.00301	0.0649 J
Downgradient	GC-AP-MW-8	10/18/2022	<0.000508	0.000261	0.107	<0.000406	<6.8e-005	0.000217 J	0.00537	0.0981 J
Downgradient	GC-AP-MW-9	10/18/2022	<0.000508	0.00787	0.147	<0.000406	<6.8e-005	0.000238 J	0.0297	0.156
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	<0.000508	9.57e-005 J	0.0444	<0.000406	<6.8e-005	0.000255 J	0.00114	<0.06
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	<0.000508	0.000174 J	0.0386	<0.000406	<6.8e-005	0.000588 J	<6.8e-005	<0.06
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	<0.000508	0.00202	0.00282	<0.000406	<6.8e-005	0.00115	0.00039	0.347
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	<0.000508	0.00335	0.106	<0.000406	<6.8e-005	0.000624 J	0.00563	0.138
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	<0.000508	0.000208	0.0956	<0.000406	<6.8e-005	0.00022 J	0.000519	0.151
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	<0.000508	0.0603	0.21	<0.000406	<6.8e-005	<0.000203	0.0151	0.423
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	<0.000508	0.000232	0.0241	<0.000406	9.58e-005 J	<0.000203	0.00884	0.133
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	<0.000508	0.00204	0.119	<0.000406	<6.8e-005	0.000486 J	0.015	<0.06
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	<0.000508	0.00487	0.154	<0.000406	0.000187 J	<0.000203	0.0693	<0.06
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	<0.000508	0.0113	0.164	<0.000406	<6.8e-005	0.000235 J	0.02	0.134
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	<0.000508	0.00171	0.0475	<0.000406	0.000302	<0.000203	0.288	0.104 J
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	<0.000508	0.00088	0.0372	<0.000406	<6.8e-005	0.00023 J	0.00703	0.147
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	<0.000508	0.000268	0.0574	<0.000406	9.56e-005 J	0.000215 J	0.00561	0.151

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Downgradient	GC-AP-MW-31	10/05/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-32	10/05/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-33	10/05/2022	0.000115 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-5	10/17/2022	<6.8e-005	0.0901	<0.0003	0.00287	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-6	10/18/2022	<6.8e-005	<0.007105	<0.0003	0.00149	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-7	10/18/2022	<6.8e-005	<0.007105	<0.0003	0.00012 J	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-8	10/18/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GC-AP-MW-9	10/18/2022	<6.8e-005	0.0189 J	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000622 J	<6.8e-005
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00352	<6.8e-005
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	0.000349	<0.007105	<0.0003	0.000144 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	<6.8e-005	0.00728 J	<0.0003	0.000164 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	<6.8e-005	<0.007105	<0.0003	0.00031	0.0197	<6.8e-005
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	<6.8e-005	0.377	<0.0003	0.00284	<0.000508	0.000636
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	<6.8e-005	0.729	<0.0003	<0.000102	<0.000508	0.000188 J
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	<6.8e-005	0.0617	<0.0003	0.000147 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	<6.8e-005	0.0212	<0.0003	0.000531	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	<6.8e-005	0.225	<0.0003	0.00283	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	<6.8e-005	<0.007105	<0.0003	0.000228	<0.000508	8.68e-005 J
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	<6.8e-005	0.296	<0.0003	0.066	<0.000508	0.000159 J
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	<6.8e-005	0.125	<0.0003	0.0442	<0.000508	<6.8e-005

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	<0.000508	<8.1e-005	0.0238	<0.000406	<6.8e-005	<0.000203	0.000117 J	0.0647 J
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	<0.000508	0.000136 J	0.0269	<0.000406	8.76e-005 J	0.000309 J	0.000226	<0.06
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	<0.000508	0.00044	0.0545	<0.000406	0.000463	0.000244 J	0.00683	0.0628 J
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	<0.000508	0.000164 J	0.0696	<0.000406	0.000218	<0.000203	0.00685	0.157
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	<0.000508	0.000144 J	0.165	<0.000406	9.79e-005 J	0.000213 J	0.0122	0.102 J
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	<0.000508	0.342	0.318	<0.000406	<6.8e-005	0.000567 J	0.00583	0.136
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	<0.000508	0.425	0.182	<0.000406	<6.8e-005	0.000414 J	0.0331	0.261
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	<0.000508	0.000103 J	0.0351	<0.000406	<6.8e-005	0.000584 J	0.000975	<0.06
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	<0.000508	0.0177	0.0719	<0.000406	<6.8e-005	<0.000203	0.0334	0.165
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	<0.000508	0.000935	0.0602	<0.000406	<6.8e-005	<0.000203	0.0187	0.0929 J
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	<0.000508	<8.1e-005	0.04	<0.000406	<6.8e-005	0.000421 J	0.00073	<0.06
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	<0.000508	0.000353	0.0413	<0.000406	<6.8e-005	0.000587 J	0.000471	0.0748 J
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	<0.000508	0.000145 J	0.0737	<0.000406	<6.8e-005	0.000435 J	0.000286	<0.06
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	<0.000508	0.000133 J	0.0548	<0.000406	8.38e-005 J	0.000384 J	0.000312	<0.06
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	<0.000508	0.000267	0.0681	<0.000406	0.000167 J	0.000348 J	0.00315	0.212
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	<0.000508	0.00368	0.0698	<0.000406	0.000168 J	0.000226 J	0.528	0.192

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	<6.8e-005	0.0422	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	<6.8e-005	0.061	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	<6.8e-005	0.0722	<0.0003	0.000541	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	<6.8e-005	0.0749	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	0.00012 J	0.00881 J	<0.0003	0.00197	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	0.000194 J	0.065	<0.0003	0.00277	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	8.01e-005 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	<6.8e-005	<0.007105	<0.0003	0.000757	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	9.45e-005 J	<0.007105	<0.0003	0.000225	<0.000508	8.76e-005 J
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00118	<6.8e-005
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	8e-005 J	<0.007105	<0.0003	0.000323	0.000631 J	<6.8e-005
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	8.32e-005 J	<0.007105	<0.0003	0.000145 J	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	0.000134 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	0.000109 J	0.16	<0.0003	0.0686	<0.000508	<6.8e-005
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	0.000298	<0.007105	<0.0003	<0.000102	0.00692	0.000158 J

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Upgradient	GC-AP-MW-23	10/17/2022	0	0.0246 J	1.84	3.84	2.04	23.1	8.22	0.0302
Upgradient	GC-AP-MW-24	10/17/2022	0	<0.00812	3.33	5.1	2.36	31.6	10.9	0.0261
Upgradient	GC-AP-MW-26	10/19/2022	0	0.0213 J	0.984	5.75	3.97	7.91	12.3	0.0757
Upgradient	GC-AP-MW-27	10/19/2022	0	<0.00812	0.519	4.84	2.82	1.02	10.4	0.0169
Upgradient	GC-AP-MW-28	10/19/2022	0	<0.00812	1.56	3.71	1.19	1.83	7.94	0.0545
Upgradient	GC-AP-MW-29	10/19/2022	0	<0.00812	0.274 J	3.94	0.935	0.158 J	8.43	0.0217
Upgradient	GC-AP-MW-30	10/19/2022	0	<0.00812	0.155 J	4.93	4.52	0.602	10.6	0.00777 J
Downgradient	GC-AP-MW-1	10/05/2022	0	233	29.9	5.06	53.3	113	10.8	0.0144
Downgradient	GC-AP-MW-10	10/18/2022	0	28.1	17.3	4.92	28.7	105	10.5	<0.00609
Downgradient	GC-AP-MW-11	10/17/2022	0	1.41	14	2.23	32.9	60.6	4.77	<0.00609
Downgradient	GC-AP-MW-12	10/17/2022	0	<0.00812	14.1	2.54	18.1	49.8	5.44	<0.00609
Downgradient	GC-AP-MW-13	10/17/2022	0	1.26	31.2	4.29	25.2	158	9.18	<0.00609
Downgradient	GC-AP-MW-14	10/18/2022	0	69.8	26.2	6.36	31.8	125	13.6	0.00794 J
Downgradient	GC-AP-MW-15	10/18/2022	0	1.42	18.6	5.6	27.8	89.4	12	<0.00609
Downgradient	GC-AP-MW-16	10/18/2022	0	19.8	24.4	6.11	37.2	128	13.1	<0.00609
Downgradient	GC-AP-MW-17	10/18/2022	0	37	28.5	8.6	61.9	150	18.4	<0.00609
Downgradient	GC-AP-MW-18	10/17/2022	0	18	14.2	7.61	62.5	99.9	16.3	<0.00609
Downgradient	GC-AP-MW-2	10/05/2022	0	64.8	22.4	5.28	31.8	179	11.3	0.00629 J
Downgradient	GC-AP-MW-21	10/17/2022	0	0.0994	15.8	3.77	29.4	57	8.07	<0.00609
Downgradient	GC-AP-MW-25	10/18/2022	0	1.89	7.29	10.5	33.1	38.2	22.5	0.025

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Carbon, Total Organic mg/L	Chloride mg/L
Upgradient	GC-AP-MW-23	10/17/2022	0.000563 J	0.799	0.245 J	60.7	NC	60.6	<1	0.973 J
Upgradient	GC-AP-MW-24	10/17/2022	0.138	1.29	0.662	14.6	NC	14.6	<1	3.19
Upgradient	GC-AP-MW-26	10/19/2022	0.0403	0.48 J	<0.2	14.3	NC	14.3	<1	2.84
Upgradient	GC-AP-MW-27	10/19/2022	0.0156	0.805	0.599	2.66	NC	2.66	<1	2.01
Upgradient	GC-AP-MW-28	10/19/2022	0.062	1.65	0.894	0.36	NC	NC	<1	1.23
Upgradient	GC-AP-MW-29	10/19/2022	0.0142	0.834	0.464	0.7	NC	NC	<1	1.08
Upgradient	GC-AP-MW-30	10/19/2022	0.00342	0.621	0.73	4.08	NC	4.08	<1	3.7
Downgradient	GC-AP-MW-1	10/05/2022	12.9	3.42	0.459	35	0.00185	35	2.56	7.1
Downgradient	GC-AP-MW-10	10/18/2022	3.27	5.95	<0.2	227	1.89	225	2.82	17.2
Downgradient	GC-AP-MW-11	10/17/2022	7.75	6.25	<0.2	91.9	NC	91.8	1.13 J	22.4
Downgradient	GC-AP-MW-12	10/17/2022	1.44	5.4	<0.2	113	NC	113	1.07 J	12.9
Downgradient	GC-AP-MW-13	10/17/2022	5.76	11.3	0.328	89.4	NC	89.3	2.29	12
Downgradient	GC-AP-MW-14	10/18/2022	5.14	10.7	0.25 J	312	2.42	310	2.51	10.4
Downgradient	GC-AP-MW-15	10/18/2022	2.41	10.1	<0.2	191	1.1	190	1.4 J	8.54
Downgradient	GC-AP-MW-16	10/18/2022	3.72	12.9	<0.2	411	5.9	405	2.08	10.1
Downgradient	GC-AP-MW-17	10/18/2022	2.05	12.8	0.205 J	453	0.829	452	1.8 J	10.7
Downgradient	GC-AP-MW-18	10/17/2022	3.86	5.98	<0.2	323	NC	323	1.78 J	26
Downgradient	GC-AP-MW-2	10/05/2022	5.87	5.93	0.329	50.5	NC	50.5	1.95 J	12.3
Downgradient	GC-AP-MW-21	10/17/2022	3.73	6.9	<0.2	145	NC	145	1.12 J	13
Downgradient	GC-AP-MW-25	10/18/2022	0.29	0.893	<0.2	90.2	NC	89.7	1.02 J	32.3

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfate mg/L
Upgradient	GC-AP-MW-23	10/17/2022	9.72
Upgradient	GC-AP-MW-24	10/17/2022	79.6
Upgradient	GC-AP-MW-26	10/19/2022	12.5
Upgradient	GC-AP-MW-27	10/19/2022	3.95
Upgradient	GC-AP-MW-28	10/19/2022	8.96
Upgradient	GC-AP-MW-29	10/19/2022	1.37 J
Upgradient	GC-AP-MW-30	10/19/2022	1.27 J
Downgradient	GC-AP-MW-1	10/05/2022	737
Downgradient	GC-AP-MW-10	10/18/2022	104
Downgradient	GC-AP-MW-11	10/17/2022	144
Downgradient	GC-AP-MW-12	10/17/2022	96.2
Downgradient	GC-AP-MW-13	10/17/2022	467
Downgradient	GC-AP-MW-14	10/18/2022	185
Downgradient	GC-AP-MW-15	10/18/2022	152
Downgradient	GC-AP-MW-16	10/18/2022	42.4
Downgradient	GC-AP-MW-17	10/18/2022	64.9
Downgradient	GC-AP-MW-18	10/17/2022	23.3
Downgradient	GC-AP-MW-2	10/05/2022	590
Downgradient	GC-AP-MW-21	10/17/2022	103
Downgradient	GC-AP-MW-25	10/18/2022	70.6

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Downgradient	GC-AP-MW-3	10/05/2022	0	59.3	3.89	4.32	30.2	54.5	9.24	<0.00609
Downgradient	GC-AP-MW-31	10/05/2022	0	0.0529	1.32	4.41	6.12	6.69	9.44	0.0073 J
Downgradient	GC-AP-MW-32	10/05/2022	0	<0.00812	0.693	5.3	3.73	9.18	11.3	<0.00609
Downgradient	GC-AP-MW-33	10/05/2022	0	<0.00812	2.51	2.99	8.85	2.01	6.4	0.128
Downgradient	GC-AP-MW-5	10/17/2022	0	33.9	17.6	8.06	21.7	119	17.2	0.0246
Downgradient	GC-AP-MW-6	10/18/2022	0	0.498	23.3	9.48	157	159	20.3	<0.00609
Downgradient	GC-AP-MW-7	10/18/2022	0	0.148	17.1	8.54	259	158	18.3	<0.00609
Downgradient	GC-AP-MW-8	10/18/2022	0	0.0321 J	15.7	6.54	214	93.8	14	<0.00609
Downgradient	GC-AP-MW-9	10/18/2022	0	12.4	26.3	4.3	127	111	9.2	<0.00609
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	0	0.0376 J	1.67	4.55	13.4	12.1	9.74	0.012
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	0	<0.00812	3.23	3.96	2.03	23.7	8.47	<0.00609
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	0	0.244	0.0838 J	5.79	82.3	0.791	12.4	0.773
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	0	61.5	23.1	9.1	28.4	148	19.5	0.0128
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	0	0.0206 J	6.6	4.11	2.52	117	8.8	0.0158
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	0	34.9	23.4	5.12	28.1	131	11	<0.00609
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	0	0.714	23.7	2.92	19	106	6.25	<0.00609
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	0	12	12.9	4.12	27.4	130	8.82	0.0456
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	0	24.5	13.2	4.65	33.3	91.4	9.95	<0.00609
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	0	14.3	30.2	4.37	58.2	119	9.35	0.00784 J
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	0	7.66	17.4	4.63	25.4	137	9.91	<0.00609

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Carbon, Total Organic mg/L	Chloride mg/L
Downgradient	GC-AP-MW-3	10/05/2022	0.305	0.623	0.326	228	NC	228	11.9	23.1
Downgradient	GC-AP-MW-31	10/05/2022	0.00732	1.08	0.708	23.8	NC	23.8	<1	7.1
Downgradient	GC-AP-MW-32	10/05/2022	<0.000152	0.635	0.455	27.3	NC	27.3	<1	4.04
Downgradient	GC-AP-MW-33	10/05/2022	0.0162	3.44	4.5	1.4	NC	1.4	<1	5.32
Downgradient	GC-AP-MW-5	10/17/2022	1.8	6.08	<0.2	199	NC	199	1.5 J	10.8
Downgradient	GC-AP-MW-6	10/18/2022	0.827	0.632	<0.2	427	0.505	426	1.22 J	45
Downgradient	GC-AP-MW-7	10/18/2022	0.875	1.11	<0.2	353	NC	353	1.34 J	196
Downgradient	GC-AP-MW-8	10/18/2022	0.991	0.703	<0.2	409	2.9	406	1.81 J	96.1
Downgradient	GC-AP-MW-9	10/18/2022	8.27	6.32	<0.2	253	1.53	251	1.99 J	106
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	0.00282	0.777	1.01	34.1	NC	34.1	1.29 J	3.71
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	0.000217 J	1.43	1.28	45.4	NC	45.4	<1	2.97
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	0.00348	0.594	<0.2	137	1.4	136	<1	2.36
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	4.59	3.34	0.256 J	240	NC	240	10	13.2
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	0.0851	2.08	0.378	212	NC	212	1.22 J	3.6
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	3.78	12.1	<0.2	412	2.49	409	2.03	6.02
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	3.3	8.72	<0.2	96.2	NC	96.1	1.13 J	7.05
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	3.9	5.82	<0.2	128	NC	128	1.52 J	13.8
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	6.07	4.02	0.226 J	135	NC	135	2.34	17.6
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	9.8	8.63	<0.2	353	NC	353	1.94 J	33.9
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	8.06	2.66	<0.2	90.3	NC	90.3	1.2 J	7.16

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfate mg/L
Downgradient	GC-AP-MW-3	10/05/2022	5.11
Downgradient	GC-AP-MW-31	10/05/2022	4.08
Downgradient	GC-AP-MW-32	10/05/2022	2.71
Downgradient	GC-AP-MW-33	10/05/2022	12.2
Downgradient	GC-AP-MW-5	10/17/2022	154
Downgradient	GC-AP-MW-6	10/18/2022	179
Downgradient	GC-AP-MW-7	10/18/2022	256
Downgradient	GC-AP-MW-8	10/18/2022	84.8
Downgradient	GC-AP-MW-9	10/18/2022	171
Horiz. Delineation	GC-AP-MW-34HA	10/19/2022	22.6
Horiz. Delineation	GC-AP-MW-35H	10/17/2022	25.6
Horiz. Delineation	GC-AP-MW-36H	10/17/2022	9.18
Horiz. Delineation	GC-AP-MW-37H	10/17/2022	306
Horiz. Delineation	GC-AP-MW-38H	10/18/2022	40.6
Horiz. Delineation	GC-AP-MW-39H	10/18/2022	25
Horiz. Delineation	GC-AP-MW-40H	10/05/2022	264
Horiz. Delineation	GC-AP-MW-41H	10/18/2022	236
Horiz. Delineation	GC-AP-MW-42H	10/19/2022	168
Horiz. Delineation	GC-AP-MW-43H	10/19/2022	109
Horiz. Delineation	GC-AP-MW-44H	10/05/2022	376

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	0	0.367	20.1	2.37	20.9	83.4	5.07	0.0149
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	--	0.0603	16.7	2.62	14	61.5	5.61	0.0979
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	0	<0.00812	3.73	3.17	11.1	13	6.78	<0.00609
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	0	0.0166 J	3.54	3.8	7	13.2	8.13	<0.00609
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	0	0.169	8.83	2.98	19.9	32.4	6.38	0.084
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	0	0.0509	6.93	3.18	23.6	37.2	6.81	0.0426
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	0	0.195	21.2	3.81	76	91.4	8.15	0.0307
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	0	78.7	9.38	6.5	23.5	74.6	13.9	0.188
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	0	44.3	18.8	7.77	14.9	78.8	16.6	0.164
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	0	0.0313 J	1.73	4.8	5.03	2.52	10.3	0.0762
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	0	25.5	9.44	4.66	8.74	34.9	9.97	0.00934 J
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	0	0.457	14.5	3.28	24.2	71.6	7.02	0.0408
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	0	0.0205 J	0.903	4.5	5.5	2.98	9.63	0.0452
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	0	0.0498	1.24	3.4	1.3	16.6	7.28	0.0846
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	0	0.0774	1.22	2.95	2.55	9.58	6.31	0.0964
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	0	0.114	1.38	2.91	3.05	7.09	6.23	0.115
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	--	0.0755	17.8	2.77	20.3	69.8	5.93	0.137
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	0	114	37.7	4.83	18.2	198	10.3	0.444

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Carbon, Total Organic mg/L	Chloride mg/L
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	4.33	7.37	<0.2	80.6	NC	80.4	1.33 J	9.25
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	4.21	5.82	1.94	125	NC	125	1.5 J	5.71
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	0.0377	3.14	0.287 J	23.3	NC	23.3	<1	3.86
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	0.123	2.6	<0.2	25.4	NC	25.4	<1	4.34
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	2.14	4.89	<0.2	35.5	NC	35.5	<1	9.04
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	4.83	5.42	<0.2	86	0.0826	85.9	<1	12.8
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	11.3	4.42	<0.2	274	NC	274	1.85 J	62.4
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	2.73	4.36	0.294 J	266	NC	266	4.23	16.2
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	1.75	6.21	0.306	218	NC	218	2.48	<0.5
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	0.0105	1.96	0.321	9.94	NC	9.94	<1	4.27
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	1.68	3.43	<0.2	98.4	NC	98.3	2.42	5.31
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	11.3	3.73	<0.2	83.8	NC	83.7	1.47 J	9.72
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	0.0144	1.12	0.204 J	12.1	NC	12.1	<1	3.66
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	0.0135	1.28	<0.2	40.1	NC	40.1	<1	1.75
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	0.0264	0.83	0.244 J	13.9	NC	13.9	<1	2.99
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	0.0185	0.906	<0.2	4.66	NC	4.66	<1	2.58
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	4.8	5	<0.2	97.1	NC	96.8	1.13 J	9.9
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	11.8	5.89	0.596	30.4	NC	30.4	1.37 J	6.54

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Greene County Ash Pond
10/03/2022 - 10/19/2022

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfate mg/L
Horiz. Delineation	GC-AP-MW-45H	10/18/2022	219
Horiz. Delineation	GC-AP-MW-46HO	10/04/2022	82.2
Horiz. Delineation	GC-AP-MW-47HO	10/04/2022	42.8
Horiz. Delineation	GC-AP-MW-48H	10/18/2022	36.2
Horiz. Delineation	GC-AP-MW-49H	10/19/2022	109
Horiz. Delineation	GC-AP-MW-50HO	10/04/2022	79.4
Horiz. Delineation	GC-AP-MW-52HO	10/03/2022	37.8
Horiz. Delineation	GC-AP-MW-53H	10/17/2022	32.1
Horiz. Delineation	GC-AP-MW-54H	10/05/2022	101
Horiz. Delineation	GC-AP-MW-55HO	10/04/2022	9
Horiz. Delineation	GC-AP-MW-57H	10/05/2022	54.8
Horiz. Delineation	GC-AP-MW-59HO	10/04/2022	193
Horiz. Delineation	GC-AP-MW-60HO	10/04/2022	6.49
Horiz. Delineation	GC-AP-MW-61HO	10/04/2022	8.6
Horiz. Delineation	GC-AP-MW-62HO	10/04/2022	14.9
Horiz. Delineation	GC-AP-MW-63HO	10/04/2022	19.5
Horiz. Delineation	GC-AP-MW-64HO	10/04/2022	146
Horiz. Delineation	GC-AP-PZ-4	10/05/2022	782

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Appendix A

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-23										
		02/17/2016	04/12/2016	06/01/2016	08/16/2016	10/11/2016	11/02/2016	01/24/2017	03/14/2017	05/09/2017	06/27/2017	08/29/2017
Appendix III												
Boron	mg/L	0.0271 J	<0.02	<0.02	<0.02	0.024 J	--	0.0333 J	--	<0.02	<0.02	<0.02
Calcium	mg/L	38.7	42.7	41.8	40.9	38.1	--	27.7	--	29.3	28.6	32.3
Chloride	mg/L	1.54	1.51	1.46	1.5	1.52	--	1.38	--	2.4	2.1	2.4
Fluoride	mg/L	0.08 J	0.077 J	0.101 J	0.093 J	0.059 J	--	--	0.07 J	0.08 J	0.08 J	0.1
pH_Field	SU	6.8	6.54	6.49	6.57	6.54	--	6.42	--	6.42	6.44	6.43
Sulfate	mg/L	14.7	20	20.1	19.1	18.4	--	15	--	14	14	16
TDS	mg/L	142	155	148	132	--	115	107	--	80.7	96.7	120
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	0.000886 J	--	<0.0006	<0.0006	--
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--
Barium	mg/L	0.0285	0.035	0.0328	0.033	0.0352	--	0.0286	--	0.0257	0.0246	--
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006	<0.0006	--
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--
Combined Radium	pCi/L	1 U	1 U	0.044 U	0.213 U	0.184 U	--	0.251 U	--	0.631	0.145 U	--
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	<0.01	--
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	--	<0.00025	<0.00025	--
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-23										
		02/27/2018	06/05/2018	09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/12/2020	03/10/2021	08/24/2021	03/28/2022
Appendix III												
Boron	mg/L	--	<0.02	--	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	--	34.5	32	30.3	31.3	30.7	30.8	28	26.6	26.3	26.3
Chloride	mg/L	--	1.7 J	1.5 J	1.4 J	1.23	1.38	1.08	1.28	1.3	1.19	1.09
Fluoride	mg/L	0.08 J	0.09 J	--	0.08 J	0.123	0.0914 J	0.095 J	0.0867 J	0.085 J	0.0713 J	<0.06
pH_Field	SU	6.49	6.43	6.35	6.37	6.46	5.85	6.26	6.03	6.17	6.09	6.08
Sulfate	mg/L	--	14	13	14	12.3	12.4	10.2	10.2	11.8	11.6	11.8
TDS	mg/L	--	113	108	96.7	103	107	107	96	105	96.7	96
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	7.36e-005 J	<8.1e-005
Barium	mg/L	0.0287	0.0279	--	0.0281	0.0295	0.0338	0.0296	0.0311	0.0305	0.0311	0.0292
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000432 J	0.000426 J	0.000337 J
Cobalt	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium	pCi/L	0.402 U	0.313 U	--	0.496 U	0.315 U	0.219 U	0.166 U	0.986	1.01 U	0.735 U	0.99 U
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000179 J	0.000167 J	0.000124 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-	GC-AP-MW-24									
		10/17/2022	02/17/2016	04/12/2016	06/01/2016	08/16/2016	10/11/2016	11/02/2016	01/24/2017	03/14/2017	05/10/2017	06/28/2017
Appendix III												
Boron	mg/L	<0.03	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	--	<0.02	<0.02
Calcium	mg/L	23.1	6.54	6.15	5.7	6.77	8.84	--	12.8	--	12.4	17.9
Chloride	mg/L	0.973 J	3.3	3.25	3.55	3.45	3.78	--	4.61	--	5.9	5.7
Fluoride	mg/L	<0.06	0.02 J	0.026 J	0.057 J	0.046 J	<0.01	--	--	<0.032	<0.032	<0.032
pH_Field	SU	6.22	5.39	5.29	5.39	5.51	5.44	--	5.44	--	5.43	5.49
Sulfate	mg/L	9.72	10.4	11.3	10.4	12.2	19.8	--	30.7	--	33	56
TDS	mg/L	83.3	53	38.7	46	48	--	66.7	78.7	--	92.7	118
Appendix IV												
Antimony	mg/L	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	0.000858 J	--	<0.0006	<0.0006
Arsenic	mg/L	8.6e-005 J	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	<0.001	<0.001
Barium	mg/L	0.0286	0.0305	0.0312	0.0298	0.0308	0.042	--	0.0446	--	0.0568	0.0663
Beryllium	mg/L	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002
Chromium	mg/L	0.000347 J	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<6.8e-005	0.00219 J	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	0.72 U	1 U	1 U	0.407	0.547 U	0.845	--	0.403 U	--	0.645	0.93
Lead	mg/L	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.000102	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-24										
		08/29/2017	02/27/2018	06/05/2018	09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/22/2020	08/12/2020	03/10/2021	08/24/2021
Appendix III												
Boron	mg/L	<0.02	--	<0.02	--	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	19	--	30	28.7	30.7	32.3	32.8	31.4	35.8	42.8	36.2
Chloride	mg/L	6.8	--	7.9	6.1	5.2	6.92	4.39	2.75	4.14	3.51	3.45
Fluoride	mg/L	0.04 J	<0.032	0.04 J	--	<0.032	<0.05	0.0545 J	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	5.46	5.48	5.31	5.36	5.34	5.32	4.9	5.3	5.04	5.14	5.16
Sulfate	mg/L	61	--	97	83	91	103	83.4	84.7	82.2	99.9	83.3
TDS	mg/L	128	--	171	170	163	174	167	162	165	179	168
Appendix IV												
Antimony	mg/L	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.00045	0.000223
Barium	mg/L	--	0.101	0.108	--	0.1	0.0978	0.0967	0.0738	0.0788	0.0873	0.07
Beryllium	mg/L	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000433 J	0.000339 J
Cobalt	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000676	0.000731
Combined Radium	pCi/L	--	1.88	1.13	--	1.72	1.21	1.21	0.791	0.919	2.15	1.23
Lead	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-24		GC-AP-MW-26								
		04/04/2022	10/17/2022	08/17/2016	09/20/2016	10/12/2016	11/15/2016	11/29/2016	01/04/2017	01/23/2017	03/13/2017	05/09/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.02	<0.02	<0.02	<0.02	--	<0.02	0.0217 J	--	<0.02
Calcium	mg/L	38.3	33.1	5.88	5.95	6.1	6.28	--	4.97	5.17	--	15.7
Chloride	mg/L	3.09	3.19	2.44	2.54	2.67	2.94	--	2.92	3.21	--	2.5
Fluoride	mg/L	<0.06	<0.06	0.159 J	0.126 J	0.1 J	0.016 J	--	<0.01	--	0.31	0.25
pH_Field	SU	4.4	5.22	5.85	5.82	5.76	5.79	--	5.69	5.45	--	4.82
Sulfate	mg/L	90.2	79.6	16.2	14.9	12.4	8.6	--	12.2	16	--	55
TDS	mg/L	155	134	64	60	54.7	--	42	56	50.7	--	126
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	0.001 J	--	<0.0006
Arsenic	mg/L	0.000297	0.000254	0.0017 J	0.00283 J	0.00218 J	0.00124 J	--	0.0028 J	0.00257 J	--	0.00138 J
Barium	mg/L	0.0635	0.0517	0.0476	0.0436	0.0397	0.0369	--	0.0518	0.0662	--	0.0691
Beryllium	mg/L	<0.000406	<0.000406	0.00161 J	0.00155 J	0.00138 J	0.00109 J	--	0.00141 J	0.00171 J	--	0.00226 J
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	0.000706 J
Chromium	mg/L	0.000371 J	0.000296 J	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002
Cobalt	mg/L	0.000686	0.000595	0.0167	0.0122	0.00839 J	0.00562 J	--	0.00655 J	0.0116	--	0.0167
Combined Radium	pCi/L	1.43	1.28	0.66	0.582	-0.183 U	0.262 U	--	0.255 U	0.871	--	0.575
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	<0.000102	<0.000102	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-26										
		06/27/2017	08/29/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/11/2019	04/21/2020	08/18/2020	03/15/2021
Appendix III												
Boron	mg/L	<0.02	<0.02	--	<0.02	--	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	14.2	11.1	--	3.93	3.76	4.81	3.18	3.98	3.83	4.58	4.67
Chloride	mg/L	3	3.6	--	2.2	1.5 J	2.5	2	2.34	2.04	2.16	2.83
Fluoride	mg/L	0.22	0.22	0.08 J	0.07 J	--	0.07 J	<0.05	0.0716 J	<0.06	<0.06	<0.06
pH_Field	SU	5.27	5.28	5.11	5.24	5.28	5.54	5.4	5.53	5.3	4.79	5.32
Sulfate	mg/L	45	37	--	9.3	7.8	6	6.86	5.29	6.28	9.57	7.66
TDS	mg/L	93.3	84	--	38.7	35.3	40.7	36.7	40.7	39.3	42	42.7
Appendix IV												
Antimony	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000125 J
Barium	mg/L	0.0603	--	0.0386	0.0356	--	0.0387	0.0419	0.0468	0.0439	0.0409	0.0351
Beryllium	mg/L	0.0017 J	--	0.00147 J	0.000821 J	--	0.000757 J	0.00092 J	<0.0006	0.000756 J	0.000828 J	0.000453 J
Cadmium	mg/L	0.000429 J	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000474 J
Cobalt	mg/L	0.0109	--	0.00278 J	0.00223 J	--	0.00202 J	<0.002	<0.002	<0.002	0.00279 J	0.000606
Combined Radium	pCi/L	0.459	--	1.3	0.269 U	--	0.328 U	0.571	0.561	0.215 U	2.3	0.347 U
Lead	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	6.99e-005 J
Lithium	mg/L	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-26			GC-AP-MW-27							
		08/18/2021	04/04/2022	10/19/2022	08/17/2016	09/20/2016	10/12/2016	11/15/2016	11/29/2016	01/04/2017	01/23/2017	03/14/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.02	<0.02	0.02 J	<0.02	--	<0.02	0.0287 J	--
Calcium	mg/L	4.84	7.04	7.91	1.1	0.771	0.711	0.641	--	0.797	0.655	--
Chloride	mg/L	2.97	2.93	2.84	1.78	1.61	1.51	1.5	--	1.53	1.62	--
Fluoride	mg/L	<0.06	<0.06	<0.06	0.039 J	0.01 J	<0.01	<0.01	--	<0.01	--	<0.032
pH_Field	SU	5.25	5.2	5.55	5.47	5.22	5.1	5.07	--	5.3	5.12	--
Sulfate	mg/L	7.07	12.5	12.5	0.928 J	0.478 J	0.727 J	0.448 J	--	0.627 J	1.34	--
TDS	mg/L	43.3	40.7	54	36.7	25.3	--	--	--	27.3	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	0.00083 J	--
Arsenic	mg/L	0.000157 J	0.000112 J	0.000107 J	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--
Barium	mg/L	0.0311	0.0335	0.034	0.0803	0.0679	0.0644	0.0628	--	0.0477	0.0482	--
Beryllium	mg/L	0.000409 J	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	0.000211 J	<0.0002	<0.0002	0.000216 J	--	<0.0002	0.000231 J	--
Chromium	mg/L	0.000225 J	0.000295 J	0.000234 J	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--
Cobalt	mg/L	0.000669	0.000447	0.000438	0.00692 J	0.00232 J	<0.002	<0.002	--	<0.002	0.00203 J	--
Combined Radium	pCi/L	0.327 U	0.55 U	0.298 U	0.386 U	0.794	0.81	0.366 U	--	0.356 U	0.429 U	--
Lead	mg/L	6.96e-005 J	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--
Molybdenum	mg/L	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-27										
		05/09/2017	06/27/2017	08/29/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/11/2019	04/21/2020	08/18/2020
Appendix III												
Boron	mg/L	<0.02	<0.02	<0.02	--	<0.02	--	<0.02	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	0.538	0.413 J	0.504	--	0.339 J	0.776	0.746	0.526	0.638	1.15	0.884
Chloride	mg/L	2.2	1.9 J	2	--	1.9 J	<1.4	1.9 J	2.18	1.7	1.9	1.63
Fluoride	mg/L	<0.032	<0.032	<0.032	<0.032	<0.032	--	<0.032	<0.05	<0.05	<0.06	<0.06
pH_Field	SU	4.83	4.87	4.71	4.96	5	4.94	4.9	4.96	4.85	4.29	4.75
Sulfate	mg/L	<1.4	<1.4	<1.4	--	2.1 J	<1.4	<1.4	1.66	1.29	2.21	1.57
TDS	mg/L	28.7	27.3	30.7	--	26	--	26	--	27.3	30.7	27.3
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	0.00137 J	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0611	0.0492	--	0.0463	0.0298	--	0.0582	0.0499	0.0574	0.0827	0.0734
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.62	0.319 U	--	0.271 U	0.391	--	0.646	0.498	0.368 U	0.55	0.504 U
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-27				GC-AP-MW-28						
		03/15/2021	08/18/2021	03/28/2022	10/19/2022	08/17/2016	09/20/2016	10/12/2016	10/31/2016	11/15/2016	11/29/2016	01/04/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	<0.02	--	<0.02	--	<0.02
Calcium	mg/L	0.745	1.11	1.37	1.02	7.74	2.43	2.46	--	2.28	--	2.7
Chloride	mg/L	2.46	2.45	1.96	2.01	1.77	1.56	1.54	--	1.53	--	1.58
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	0.055 J	0.021 J	<0.01	--	<0.01	--	<0.01
pH_Field	SU	4.73	4.52	4.73	5.02	6.15	4.99	4.88	--	4.81	--	4.88
Sulfate	mg/L	2.5	3.18	6.24	3.95	6.46	8.3	8.36	--	8.75	--	7.85
TDS	mg/L	30.7	28.7	32.7	30	65.3	44	--	38.7	--	34	42
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006
Arsenic	mg/L	<6.8e-005	<6.8e-005	<8.1e-005	<8.1e-005	<0.001	<0.001	<0.001	--	<0.001	--	<0.001
Barium	mg/L	0.069	0.0607	0.0625	0.0608	0.336	0.341	0.347	--	0.332	--	0.299
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006
Cadmium	mg/L	0.0001 J	0.000184 J	0.000182 J	0.000193 J	0.000742 J	0.000857 J	0.000912 J	--	0.000821 J	--	0.000718 J
Chromium	mg/L	0.000541 J	0.000321 J	0.000306 J	0.000208 J	<0.002	<0.002	<0.002	--	<0.002	--	<0.002
Cobalt	mg/L	0.000139 J	0.00016 J	0.00016 J	0.000142 J	0.00599 J	0.00466 J	0.00394 J	--	0.00296 J	--	0.00448 J
Combined Radium	pCi/L	0.578 U	0.941 U	0.733 U	0.654 U	1.47	1.24	0.899	--	0.933	--	1.54
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	--	<0.001	--	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	--	<0.01	--	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	--	<0.00025	--	<0.00025
Molybdenum	mg/L	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002	<0.002	--	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-28										
		01/24/2017	03/14/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/11/2019
Appendix III												
Boron	mg/L	0.0331 J	--	<0.02	<0.02	<0.02	--	<0.02	--	<0.02	<0.03	<0.03
Calcium	mg/L	4.19	--	3.28	3.76	2.31	--	2.76	2.04	2	2.13	1.98
Chloride	mg/L	1.71	--	2.1	2	1.5 J	--	1.2 J	<1.4	<1.4	1.2	1.26
Fluoride	mg/L	--	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	--	<0.032	<0.05	0.0649 J
pH_Field	SU	5.4	--	4.96	5.34	4.69	4.91	4.87	4.65	4.67	4.92	4.33
Sulfate	mg/L	6.62	--	5.6	5.3	8.2	--	8.3	8.9	8.6	10.1	10.6
TDS	mg/L	45.3	--	49.3	46	38.7	--	34.7	34.7	36	30	40
Appendix IV												
Antimony	mg/L	0.00096 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	0.000975 J	<0.0008
Arsenic	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001
Barium	mg/L	0.264	--	0.322	0.278	--	0.312	0.243	--	0.249	0.232	0.246
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	0.000716 J	--	0.000746 J	0.00065 J	--	0.000752 J	0.000731 J	--	0.000646 J	0.000582 J	0.000573 J
Chromium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002
Cobalt	mg/L	0.00259 J	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.868	--	1.22	0.925	--	0.0271 U	0.792	--	0.926	1.08	0.995
Lead	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-28						GC-AP-MW-29				
		04/21/2020	08/18/2020	03/15/2021	08/18/2021	03/28/2022	10/19/2022	08/16/2016	09/20/2016	10/11/2016	10/31/2016	11/15/2016
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	<0.02	--	0.0229 J
Calcium	mg/L	2.41	2.23	1.73	1.94	1.94	1.83	2.02	1.22	1.48	--	1.36
Chloride	mg/L	1.32	1.38	1.27	1.42	1.35	1.23	2.21	2.12	2.24	--	6.65
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	0.0698 J	0.05 J	0.015 J	<0.01	--	<0.01
pH_Field	SU	4.07	4.59	4.45	3.78	4.69	4.87	6.21	6.05	6.2	--	6.64
Sulfate	mg/L	9.4	10.3	10.4	10.1	11.2	8.96	0.894 J	<0.3	<0.3	--	1.19
TDS	mg/L	36	35.3	30	32	38.7	28.7	41.3	42.7	--	140	--
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	--	<0.0006
Arsenic	mg/L	<0.001	<0.001	<6.8e-005	9.03e-005 J	<8.1e-005	<8.1e-005	0.00199 J	0.00155 J	0.00231 J	--	0.0044 J
Barium	mg/L	0.219	0.211	0.222	0.198	0.186	0.183	0.0527	0.0698	0.0799	--	0.0479
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	0.00052 J	0.000476 J	0.000536	0.000421	0.000429	0.00043	<0.0002	<0.0002	<0.0002	--	<0.0002
Chromium	mg/L	<0.002	<0.002	0.000995 J	0.000708 J	0.000634 J	0.000678 J	<0.002	<0.002	<0.002	--	<0.002
Cobalt	mg/L	<0.002	<0.002	0.000452	0.000362	0.000508	0.000326	0.0122	0.012	0.0135	--	0.00938 J
Combined Radium	pCi/L	0.307 U	0.797	1.5	0.779 U	0.554 U	1.51	0.522	0.746	0.819	--	0.516
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	0.000114 J	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002	<0.002	--	0.00308 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-29										
		11/29/2016	01/04/2017	01/26/2017	03/13/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018
Appendix III												
Boron	mg/L	--	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	--	<0.02
Calcium	mg/L	--	1.11	1.03	--	0.289 J	0.292 J	0.336 J	--	0.2 J	0.171 J	0.193 J
Chloride	mg/L	--	2.15	2.31	--	2.3	2.1	2.8	--	1.8 J	<1.4	<1.4
Fluoride	mg/L	--	<0.01	--	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	--	<0.032
pH_Field	SU	--	6.06	6.02	--	5.05	4.9	4.73	4.87	4.89	4.88	4.86
Sulfate	mg/L	--	<0.3	0.6 J	--	<1.4	<1.4	<1.4	--	1.4 J	<1.4	<1.4
TDS	mg/L	78	34	32.7	--	--	30.7	25.3	--	--	--	--
Appendix IV												
Antimony	mg/L	--	<0.0006	0.00092 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008
Arsenic	mg/L	--	0.00123 J	0.00169 J	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001
Barium	mg/L	--	0.0513	0.0674	--	0.0836	0.0661	--	0.05	0.0433	--	0.0379
Beryllium	mg/L	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	--	<0.0002	0.000228 J	--	0.000277 J	<0.0002	--	<0.0003	<0.0003	--	<0.0003
Chromium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002
Cobalt	mg/L	--	0.00859 J	0.0104	--	0.0119	0.0106	--	0.0027 J	0.00317 J	--	0.00367 J
Combined Radium	pCi/L	--	0.648 U	0.852	--	0.148 U	0.393	--	0.695	0.145 U	--	0.513 U
Lead	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001
Lithium	mg/L	--	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	--	<0.01
Mercury	mg/L	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern
Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-29								GC-AP-MW-30		
		03/26/2019	09/11/2019	04/21/2020	08/18/2020	03/15/2021	08/18/2021	03/28/2022	10/19/2022	08/16/2016	09/20/2016	10/11/2016
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	<0.02
Calcium	mg/L	0.223 J	0.158 J	0.287 J	0.231 J	0.239 J	0.283 J	0.172 J	0.202 J	1.24	1.11	1.22
Chloride	mg/L	1.07	1.19	1.09	1.05	1.25	1.42	1.24	1.08	2.54	2.51	2.34
Fluoride	mg/L	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.036 J	<0.01	<0.01
pH_Field	SU	4.97	3.96	3.9	4.22	4.79	3.94	4.67	5.01	5.39	5.37	5.39
Sulfate	mg/L	0.594 J	<0.5	0.694 J	0.608 J	<0.5	0.86 J	1.29 J	1.37 J	0.702 J	<0.3	<0.3
TDS	mg/L	--	--	--	--	--	--	--	--	--	26.7	--
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	9.45e-005 J	<8.1e-005	<8.1e-005	<0.001	<0.001	<0.001
Barium	mg/L	0.0348	0.0404	0.0542	0.0442	0.0545	0.0554	0.0312	0.0394	0.0376	0.0348	0.0396
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	0.000204	0.000193 J	0.000121 J	9.57e-005 J	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000393 J	0.000256 J	0.000351 J	0.000354 J	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	0.00265 J	<0.002	0.00224 J	0.00145	0.0019	0.00092	0.00112	0.00548 J	0.0026 J	0.00214 J
Combined Radium	pCi/L	0.598	0.237 U	0.201 U	3.88	0.618 U	0.937 U	0.529 U	0.629 U	0.434 U	0.51	0.166 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-30										
		10/31/2016	11/15/2016	11/29/2016	01/04/2017	01/23/2017	03/14/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	--	<0.02	--	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02
Calcium	mg/L	--	1.34	--	2.39	1.83	--	0.823	0.956	1.04	--	1.18
Chloride	mg/L	--	2.1	--	2.44	2.37	--	2.8	2.1	3	--	2.3
Fluoride	mg/L	--	<0.01	--	<0.01	--	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
pH_Field	SU	--	5.33	--	5.49	5.48	--	5.11	5.29	5.09	5.25	5.12
Sulfate	mg/L	--	<0.3	--	<0.3	0.493 J	--	<1.4	<1.4	<1.4	--	<1.4
TDS	mg/L	25.3	--	--	34.7	33.3	--	--	--	28	--	28.7
Appendix IV												
Antimony	mg/L	--	<0.0006	--	<0.0006	0.000701 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	--	0.0359	--	0.0238	0.029	--	0.0409	0.0303	--	0.0383	0.0633
Beryllium	mg/L	--	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	--	0.589	--	0.659	0.227 U	--	0.436 U	0.197 U	--	0.896	0.342 U
Lead	mg/L	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	--	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	--	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-30										GC-AP-MW-
		09/11/2018	11/06/2018	03/26/2019	09/11/2019	04/21/2020	08/18/2020	03/15/2021	08/18/2021	03/28/2022	10/19/2022	02/17/2016
Appendix III												
Boron	mg/L	--	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.219
Calcium	mg/L	1.5	1.64	1.3	0.925	0.864	0.926	0.646	0.716	0.532	0.602	204
Chloride	mg/L	1.5 J	1.4 J	2.28	3.72	3.89	3.8	4.38	4.46	4.12	3.7	16
Fluoride	mg/L	--	<0.032	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.05 J
pH_Field	SU	5.19	5.12	5.16	4.11	4.44	4.76	5.02	4.01	4.93	5.29	5.8
Sulfate	mg/L	<1.4	<1.4	<0.5	<0.5	<0.5	<0.5	<0.5	0.754 J	0.951 J	1.27 J	785
TDS	mg/L	29.3	--	27.3	34	26.7	30	30	28.7	27.3	28	1540
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005	<8.1e-005	0.0181
Barium	mg/L	--	0.0463	0.104	0.0855	0.0485	0.0529	0.0462	0.0329	0.0286	0.026	0.0364
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	8.19e-005 J	8.39e-005 J	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000502 J	0.000326 J	0.000389 J	0.000423 J	<0.002
Cobalt	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000137 J	0.000112 J	7.26e-005 J	9.33e-005 J	0.0395
Combined Radium	pCi/L	--	0.928	1.3	0.995	0.00976 U	3.33	0.601 U	1.22 U	0.714 U	0.481 U	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-1										
		04/13/2016	06/01/2016	08/15/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/04/2018
Appendix III												
Boron	mg/L	0.211	0.2	0.211	0.23	0.218	--	0.235	0.206	0.138	--	0.242
Calcium	mg/L	152	183	197	186	193	--	184	184	182	--	157
Chloride	mg/L	21.5	52.5	33.3	22.2	18.4	--	30	29	23	--	22
Fluoride	mg/L	0.061 J	0.079 J	0.081 J	0.049 J	--	0.04 J	0.05 J	0.04 J	0.04 J	0.07 J	0.07 J
pH_Field	SU	5.85	5.92	5.99	6.02	5.92	5.96	5.93	5.86	5.88	5.92	5.89
Sulfate	mg/L	715	832	862	888	906	--	810	830	910	--	850
TDS	mg/L	1200	1440	1420	1420	1350	--	1540	1470	1530	--	1370
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000799 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.0178	0.016	0.0182	0.0186	0.0173	--	0.0176	0.0165	--	0.0201	0.0195
Barium	mg/L	0.0344	0.0353	0.0395	0.0455	0.0428	--	0.0399	0.0348	--	0.0398	0.0314
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0452	0.0576	0.0573	0.0531	0.0539	--	0.057	0.0664	--	0.0652	0.0758
Combined Radium	pCi/L	1.0468 U	1.43	1.42	1.6	1.3	--	0.844	1.32	--	0.815	1.01
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	0.0194 J	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-1										GC-AP-MW-
		09/10/2018	11/06/2018	03/27/2019	09/10/2019	04/21/2020	08/17/2020	03/16/2021	08/17/2021	04/04/2022	10/05/2022	02/17/2016
Appendix III												
Boron	mg/L	--	0.247	0.488	0.398	0.347	0.496	0.313	0.281	0.297	0.248	0.146
Calcium	mg/L	219	186	73.8	147	90.5	81.5	109	103	106	99.8	75
Chloride	mg/L	22	17	18	18.1	19.5	23.2	16.6	34.4	42.3	7.1	14.7
Fluoride	mg/L	--	0.04 J	0.192	0.179	0.12	0.115	0.129	0.158	0.087 J	0.125	0.09 J
pH_Field	SU	5.89	5.95	5.8	5.88	5.72	5.54	5.67	5.49	5.17	5.59	6.01
Sulfate	mg/L	920	880	1090	992	874	919	933	745	824	737	304
TDS	mg/L	1380	1450	1910	1740	1530	1590	1620	1340	1340	1190	516
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	0.0189	0.0267	0.0226	0.0219	0.0265	0.0238	0.0206	0.0164	0.0155	0.0142
Barium	mg/L	--	0.0348	0.0286	0.0283	0.0206	0.0218	0.024	0.0211	0.0235	0.0256	0.0311
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	9.17e-005 J	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000341 J	0.000336 J	0.000449 J	0.000235 J	<0.002
Cobalt	mg/L	--	0.0898	0.176	0.104	0.206	0.195	0.257	0.24	0.298	0.226	0.00989 J
Combined Radium	pCi/L	--	0.938	1.17	1.39	0.712	1.46	1.45	1.36	0.899	1.12	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000117 J	<6.8e-005	<0.000102	<0.000102	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-2										
		04/13/2016	06/01/2016	08/15/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/30/2017	02/27/2018	06/04/2018
Appendix III												
Boron	mg/L	0.125	0.114	0.128	0.129	0.124	--	0.121	0.111	0.0915 J	--	0.134
Calcium	mg/L	70.2	71.2	72.2	73.8	72.2	--	66.4	65.4	67.8	--	68.3
Chloride	mg/L	14.3	14.6	14.7	14.8	15	--	16	15	15	--	16
Fluoride	mg/L	0.092 J	0.108 J	0.105 J	0.062 J	--	<0.032	0.07 J	0.09 J	0.07 J	0.08 J	0.09 J
pH_Field	SU	6.17	6.18	6.12	6.09	6.04	6.11	6.1	6.09	6.07	6.09	6.07
Sulfate	mg/L	307	273	275	284	302	--	250	230	250	--	260
TDS	mg/L	508	494	476	508	510	--	510	480	478	--	528
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.00084 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.0145	0.0112	0.0154	0.0113	0.0115	--	0.00989	0.00848	--	0.0106	0.0124
Barium	mg/L	0.0334	0.029	0.0317	0.0339	0.0276	--	0.0285	0.0273	--	0.0292	0.0298
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0106	0.011	0.0117	0.0117	0.00863 J	--	0.00975 J	0.0102	--	0.00924 J	0.00866 J
Combined Radium	pCi/L	1 U	0.758	0.638	0.701	0.515 U	--	0.393 U	0.374	--	0.334 U	0.64
Lead	mg/L	<0.001	<0.001	0.00104 J	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-2										GC-AP-MW-
		09/10/2018	11/06/2018	03/27/2019	09/09/2019	04/21/2020	08/17/2020	03/16/2021	08/17/2021	03/28/2022	10/05/2022	02/17/2016
Appendix III												
Boron	mg/L	--	0.131	0.138	0.157	0.14	0.152	0.134	0.131	0.0991 J	0.141	0.0288 J
Calcium	mg/L	73.9	75.1	96.1	111	133	156	145	143	148	179	106
Chloride	mg/L	17	17	14.8	14	12.3	13.1	11.6	12.7	11.5	12.3	25.2
Fluoride	mg/L	--	0.07 J	0.089 J	0.163	0.126	0.0753 J	0.185	0.0974 J	<0.06	0.124 J	0.08 J
pH_Field	SU	6	6.04	6.06	6.13	5.99	5.91	5.87	5.99	5.32	6.01	6.29
Sulfate	mg/L	280	280	375	385	522	497	548	502	563	590	<0.3
TDS	mg/L	472	522	562	666	878	818	890	808	868	864	358
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	0.0085	0.0101	0.022	0.013	0.00768	0.0045	0.00514	0.00323	0.00331	0.00668
Barium	mg/L	--	0.0286	0.0311	0.035	0.0335	0.0376	0.033	0.0347	0.0309	0.0344	0.0896
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00013 J	<6.8e-005	0.000115 J	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.0004 J	0.00267	0.000304 J	0.000302 J	<0.002
Cobalt	mg/L	--	0.0101	0.0131	0.0154	0.0194	0.0249	0.0272	0.0296	0.0324	0.0297	0.00507 J
Combined Radium	pCi/L	--	0.803	0.77	0.3 U	0.663 U	0.817	1.05 U	2.01	0.745 U	1.89	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000736	0.000591	0.000665	0.000453	<0.001
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	8.04e-005 J	0.00017 J	<0.000102	<0.000102	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-3										
		04/12/2016	06/01/2016	08/15/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/30/2017	02/27/2018	06/04/2018
Appendix III												
Boron	mg/L	0.0293 J	0.0279 J	0.0332 J	0.0328 J	0.0262 J	--	0.0298 J	0.0226 J	<0.02	--	0.0296 J
Calcium	mg/L	95.2	86.1	89.7	90.6	94.2	--	90.3	80.7	84	--	98.8
Chloride	mg/L	24.6	24.5	24.2	24.4	24.6	--	27	26	26	--	27
Fluoride	mg/L	0.083 J	0.118 J	0.109 J	0.066 J	--	0.07 J	0.09 J	0.1	0.12	0.09 J	0.1
pH_Field	SU	6.33	6.4	6.36	6.38	6.34	6.42	6.35	6.32	6.32	6.39	6.4
Sulfate	mg/L	0.49 J	0.544 J	0.332 J	<0.3	<0.3	--	2.1 J	<1.4	<1.4	--	1.4 J
TDS	mg/L	393	381	348	379	354	--	368	368	370	--	369
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000906 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.00827	0.00768	0.00798	0.008	0.00722	--	0.00766	0.00745	--	0.00699	0.00731
Barium	mg/L	0.0994	0.104	0.102	0.11	0.0942	--	0.105	0.104	--	0.0989	0.0936
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0047 J	0.00372 J	0.0039 J	0.00415 J	0.00383 J	--	0.00396 J	0.00336 J	--	0.00442 J	0.0038 J
Combined Radium	pCi/L	1 U	1.06	0.972	0.802	1.1	--	0.74	0.867	--	0.905	0.954
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-3										GC-AP-MW-
		09/12/2018	11/06/2018	03/27/2019	09/09/2019	04/20/2020	08/17/2020	03/16/2021	08/17/2021	04/05/2022	10/05/2022	02/17/2016
Appendix III												
Boron	mg/L	--	0.0268 J	0.0316 J	0.035 J	<0.03	0.0636 J	0.0445 J	0.0518 J	0.0453 J	0.0404 J	0.478
Calcium	mg/L	109	110	111	98.5	91.2	78.9	66.6	55.4	69.9	52.8	59.8
Chloride	mg/L	26	26	24.8	23.8	24.5	24.6	24.4	21.3	20.9	23.1	16.4
Fluoride	mg/L	--	0.1	0.13	0.121	0.112	0.148	0.23	0.184	0.185	0.12 J	0.22 J
pH_Field	SU	6.35	6.34	6.44	6.22	6.4	5.85	6.23	6.13	6.27	5.89	6.63
Sulfate	mg/L	<1.4	<1.4	6.64	6.56	10.5	17.3	7.62	12	15.2	5.11	<0.3
TDS	mg/L	354	354	362	371	371	361	340	297	337	319	238
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	0.00685	0.00596	0.00806	0.00751	0.00909	0.0112	0.0119	0.0103	0.0128	0.353
Barium	mg/L	--	0.0936	0.0951	0.111	0.109	0.139	0.159	0.15	0.145	0.138	0.397
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000347 J	0.000324 J	0.00039 J	0.000286 J	<0.002
Cobalt	mg/L	--	0.00439 J	0.00463 J	0.00413 J	0.00396 J	<0.002	0.00076	0.000388	0.00087	0.00033	0.0216
Combined Radium	pCi/L	--	1.27	1.47	1.12	0.899	0.738	0.553 U	1.09	0.532 U	0.688 U	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	0.0883
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	0.00347 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-5										
		04/12/2016	05/31/2016	08/17/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/30/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	0.467	0.443	0.477	0.489	0.475	--	0.479	0.448	0.407	--	0.489
Calcium	mg/L	56.1	56.6	61	61.3	61	--	61.7	66.1	78.9	--	64.8
Chloride	mg/L	16.6	16.8	16.4	15.2	15.1	--	17	17	17	--	15
Fluoride	mg/L	0.214 J	0.232 J	0.225 J	0.19 J	--	0.22	0.21	0.21	0.25	0.23	0.24
pH_Field	SU	6.59	6.57	6.72	6.69	6.61	6.55	6.65	6.66	6.66	6.73	6.63
Sulfate	mg/L	0.483 J	0.518 J	3.63	15.6	28.9	--	25	45	96	--	36
TDS	mg/L	316	320	325	333	336	--	317	373	432	--	347
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000728 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.402	0.33	0.369	0.378	0.386	--	0.406	0.353	--	0.425	0.454
Barium	mg/L	0.434	0.354	0.397	0.485	0.472	--	0.512	0.48	--	0.269	0.27
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0205	0.0196	0.0169	0.0157	0.00858 J	--	0.00755 J	0.0069 J	--	0.00471 J	0.00481 J
Combined Radium	pCi/L	1.01205 U	2.11	2.28	1.83	1.92	--	3.05	2.24	--	1.01	1.39
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.0862	0.085	0.093	0.0928	0.094	--	0.0865	0.0879	--	0.113	0.101
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	0.00297 J	0.00261 J	0.0033 J	0.0041 J	0.00336 J	--	0.0031 J	0.00356 J	--	0.0042 J	0.00293 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-5										GC-AP-MW-
		09/11/2018	11/06/2018	03/27/2019	09/11/2019	04/21/2020	08/12/2020	03/16/2021	08/23/2021	04/04/2022	10/17/2022	02/17/2016
Appendix III												
Boron	mg/L	--	0.508	0.502	0.595	0.72	0.695	0.694	0.628	0.614	0.599	2.12
Calcium	mg/L	72.2	78.9	69.1	90.8	93	92.2	99.7	87.6	95.6	105	128
Chloride	mg/L	14	13	16.1	11.6	12.3	13	10.9	11.6	9.63	10.8	31.8
Fluoride	mg/L	--	0.22	0.208	0.2	0.224	0.221	0.282	0.322	0.216	0.192	0.17 J
pH_Field	SU	6.65	6.65	6.59	6.36	6.5	6.36	6.64	6.5	6.42	6.71	6.46
Sulfate	mg/L	48	93	33.4	149	163	132	167	155	160	154	132
TDS	mg/L	370	409	328	455	494	433	510	481	488	483	640
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	0.432	0.455	0.406	0.42	0.415	0.473	0.368	0.432	0.354	<0.001
Barium	mg/L	--	0.306	0.251	0.323	0.138	0.134	0.143	0.139	0.131	0.134	0.0455
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000285 J	0.000272 J	<0.000203	0.000256 J	<0.002
Cobalt	mg/L	--	0.00545	0.00614	0.00767	0.00601	0.00678	0.00857	0.00645	0.0102	0.0062	<0.002
Combined Radium	pCi/L	--	1.72	1.56	1.46	0.882	2.08	1.71	2.11	1.13	1.93	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.116	0.0988	0.117	0.13	0.132	0.149	0.116	0.111	0.0901	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	0.00318 J	0.00284 J	0.00328 J	0.00255 J	0.00292 J	0.00358	0.0031	0.00354	0.0033	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-6										
		04/12/2016	05/31/2016	08/17/2016	10/11/2016	01/24/2017	03/14/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	2.06	1.97	2.01	1.91	1.62	--	1.62	1.71	1.7	--	1.56
Calcium	mg/L	115	118	120	119	110	--	104	98	108	--	121
Chloride	mg/L	28.9	28.7	32.2	34.2	38.1	--	41	36	35	--	32
Fluoride	mg/L	0.203 J	0.212 J	0.19 J	0.15 J	--	0.18	0.19	0.18	0.22	0.22	0.23
pH_Field	SU	6.45	6.51	6.54	6.53	6.44	6.4	6.4	6.46	6.47	6.53	6.49
Sulfate	mg/L	130	111	95.8	101	129	--	120	100	95	--	98
TDS	mg/L	610	626	628	636	696	--	687	622	616	--	582
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000792 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.0455	0.0407	0.0434	0.0514	0.0476	--	0.0543	0.0402	--	0.0463	0.051
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<0.002	0.00389 J	0.00234 J	0.00202 J	<0.002	--	<0.002	<0.002	--	<0.002	0.00237 J
Combined Radium	pCi/L	1 U	0.453 U	0.381 U	0.139 U	0.496	--	0.278 U	0.724	--	0.214 U	0.176 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	0.0591	--	0.0519	0.0403 J	--	0.0201 J	0.0218 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-6										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/19/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/17/2016
Appendix III												
Boron	mg/L	--	1.6	1.63	1.83	1.77	1.86	1.49	1.36	1.39	1.16	0.503
Calcium	mg/L	119	124	148	164	142	162	119	129	134	129	158
Chloride	mg/L	36	30	31.9	27.3	37.4	39.6	47.5	56.6	45.3	45	62.7
Fluoride	mg/L	--	0.22	0.253	0.227	0.218	0.223	0.17	0.161	0.193	0.182	0.07 J
pH_Field	SU	6.48	6.48	6.54	6.55	6.54	6.49	6.43	6.22	5.99	6.38	6.45
Sulfate	mg/L	100	97	120	140	153	163	187	210	190	179	311
TDS	mg/L	616	576	682	744	742	788	716	792	722	752	892
Appendix IV												
Antimony	mg/L	--	<0.0008	0.00141 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000303	0.000279	0.000127 J	0.000255	<0.001
Barium	mg/L	--	0.0527	0.0682	0.0789	0.0728	0.0784	0.0664	0.0737	0.0614	0.0577	0.0772
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00278	0.000181 J	0.000497	7.67e-005 J	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000347 J	0.000262 J	<0.000203	0.000273 J	<0.002
Cobalt	mg/L	--	0.00258 J	0.00223 J	0.00306 J	0.00228 J	0.00278 J	0.00367	0.00419	0.00228	0.00235	<0.002
Combined Radium	pCi/L	--	1.39	0.904	1.14	0.679 U	0.96	1.12 U	0.645 U	0.394 U	1.02	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.0141 J	0.0192 J	0.0267	0.0518	0.0197 J	0.013 J	0.00951 J	<0.007105	<0.007105	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.0024	0.00211	0.00142	0.00149	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-7										
		04/13/2016	05/31/2016	08/17/2016	10/12/2016	01/25/2017	03/14/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	0.478	0.452	0.492	0.487	0.529	--	0.533	0.501	0.51	--	0.605
Calcium	mg/L	151	158	152	150	137	--	111	108	113	--	186
Chloride	mg/L	57.8	55.6	53.3	51.2	44.8	--	44	45	43	--	49
Fluoride	mg/L	0.081 J	0.103 J	0.078 J	0.041 J	--	0.07 J	0.09 J	0.08 J	0.09 J	0.08 J	0.08 J
pH_Field	SU	6.49	6.43	6.43	6.46	6.43	6.41	6.41	6.46	6.46	6.45	6.36
Sulfate	mg/L	330	324	306	296	243	--	210	210	220	--	390
TDS	mg/L	1010	1100	1070	1040	972	--	740	914	924	--	1060
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000839 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.0886	0.0823	0.0789	0.0883	0.067	--	0.0644	0.0582	--	0.0669	0.0672
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.00218 J	0.00328 J	0.00217 J	0.00225 J	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	1 U	0.658	0.936	0.668	0.718	--	0.56	0.526	--	0.803	0.577
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-7										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/19/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/16/2016
Appendix III												
Boron	mg/L	--	0.677	0.727	0.764	0.793	0.561	0.397	0.216	0.0842 J	0.0589 J	1.54
Calcium	mg/L	209	175	193	188	155	147	160	123	129	146	75.9
Chloride	mg/L	52	58	71	67	66.2	123	80.7	91.7	94.7	196	67.9
Fluoride	mg/L	--	0.08 J	0.106	0.086 J	0.0951 J	0.103	0.0949 J	0.1	0.104 J	0.0649 J	0.08 J
pH_Field	SU	6.38	6.37	6.39	6.39	6.39	6.14	6.45	6.4	6.62	6.37	6.16
Sulfate	mg/L	360	390	430	409	318	296	347	234	187	256	49.4
TDS	mg/L	1020	1050	1100	1100	1010	1050	1090	930	894	1040	656
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	0.000747 J	0.000659 J	<0.000508	<0.0006
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.00015 J	9.91e-005 J	8.41e-005 J	0.000112 J	<0.001
Barium	mg/L	--	0.0739	0.0796	0.0887	0.0762	0.0816	0.083	0.0782	0.0639	0.084	0.117
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000351 J	0.000363 J	<0.000203	0.000297 J	<0.002
Cobalt	mg/L	--	0.00277 J	0.0024 J	0.0034 J	0.00206 J	0.0046 J	0.00181	0.00333	0.00136	0.00301	0.0129
Combined Radium	pCi/L	--	1.51	0.841	0.569 U	0.549 U	1.04	0.545 U	0.865 U	0.575 U	1.19	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000156 J	0.000128 J	0.000161 J	<0.000102	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-8										
		04/13/2016	06/01/2016	08/17/2016	10/12/2016	01/25/2017	03/15/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	1.56	1.49	1.57	1.65	1.89	--	1.94	1.72	1.63	--	1.73
Calcium	mg/L	74.1	76.4	74.2	75.7	76.1	--	78.6	76.4	74.1	--	58
Chloride	mg/L	64.1	66.3	56.7	56.1	53.6	--	48	49	52	--	38
Fluoride	mg/L	0.088 J	0.109 J	0.089 J	0.048 J	--	0.08 J	0.1	0.09 J	0.11	0.11	0.11
pH_Field	SU	6.29	6.33	6.27	6.3	6.27	6.27	6.25	6.25	6.32	6.36	6.3
Sulfate	mg/L	51.7	51.2	42.9	39.5	31.3	--	30	35	40	--	25
TDS	mg/L	634	672	624	586	596	--	576	612	640	--	474
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000833 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.113	0.105	0.105	0.111	0.0963	--	0.103	0.0935	--	0.0808	0.0789
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0139	0.0139	0.0138	0.0138	0.0115	--	0.0125	0.0137	--	0.00698 J	0.00478 J
Combined Radium	pCi/L	1.08755 U	0.884	1.06	0.269 U	1.12	--	0.887	0.908	--	0.131 U	0.564
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	0.0101 J	0.0143 J	0.0166 J	0.0272 J	--	0.0436 J	0.0401 J	--	0.0309 J	0.0286 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-8										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/19/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/16/2016
Appendix III												
Boron	mg/L	--	1.8	1.81	1.82	1.89	1.94	1.57	1.23	1.1	0.815	0.412
Calcium	mg/L	64.9	68.1	72	91	84.8	98.6	100	86.4	93.1	79.5	33.9
Chloride	mg/L	37	41	39.7	56.1	69.5	70.5	106	90.8	95.4	96.1	15.6
Fluoride	mg/L	--	0.11	0.162	0.113	0.114	0.116	0.109	0.141	0.108 J	0.0981 J	0.16 J
pH_Field	SU	6.36	6.31	6.32	6.31	6.06	6.06	6.31	6.16	6.21	6.45	6.5
Sulfate	mg/L	23	30	21.6	37.4	43.3	44.5	71.7	71.4	75.3	84.8	45.2
TDS	mg/L	496	514	546	602	638	658	746	690	730	700	226
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000248	0.000271	0.000166 J	0.000261	0.00507
Barium	mg/L	--	0.0855	0.0911	0.11	0.116	0.119	0.15	0.122	0.104	0.107	0.0637
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.000241	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000346 J	0.000313 J	0.000273 J	0.000217 J	<0.002
Cobalt	mg/L	--	0.00651	0.00445 J	0.0108	0.0111	0.00975	0.00707	0.00898	0.0064	0.00517	0.00869 J
Combined Radium	pCi/L	--	0.34 U	0.507	0.898	1.09	0.6 U	1.6	1.67	0.621 U	0.741 U	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.0371	0.0537	0.0928	0.0582	0.0511	0.0249	0.0155 J	0.00827 J	<0.007105	0.0359 J
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	8.12e-005 J	<6.8e-005	<0.000102	<0.000102	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-9										
		04/13/2016	06/01/2016	08/17/2016	10/12/2016	01/25/2017	03/15/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	0.376	0.338	0.412	0.46	0.586	--	0.661	0.673	0.723	--	0.954
Calcium	mg/L	32.5	33.9	50.3	53.3	59.9	--	66.5	69.8	72	--	95.1
Chloride	mg/L	14.3	12.6	14.4	16.4	20	--	24	25	25	--	25
Fluoride	mg/L	0.15 J	0.19 J	0.171 J	0.137 J	--	0.15	0.17	0.16	0.19	0.19	0.19
pH_Field	SU	6.32	6.43	6.46	6.53	6.45	6.39	6.39	6.4	6.47	6.54	6.47
Sulfate	mg/L	43.9	32	31.9	39.6	44	--	32	34	34	--	22
TDS	mg/L	202	224	290	315	332	--	361	396	402	--	448
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000847 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.00556	0.00625	0.00648	0.00772	0.00728	--	0.00818	0.00718	--	0.00946	0.00921
Barium	mg/L	0.0552	0.0555	0.0745	0.0897	0.0864	--	0.105	0.0897	--	0.118	0.111
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.00936 J	0.00976 J	0.012	0.0127	0.0109	--	0.0129	0.0125	--	0.013	0.0113
Combined Radium	pCi/L	1 U	0.532	1.07	1.07	1.46	--	1.21	0.821	--	0.232 U	0.722
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.0276 J	0.0296 J	0.0398 J	0.0433 J	0.0366 J	--	0.039 J	0.0345 J	--	0.0349 J	0.0338 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-9										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/18/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/16/2016
Appendix III												
Boron	mg/L	--	1.11	1.14	1.23	1.27	1.24	1.12	1.14	0.727	1.15	1.44
Calcium	mg/L	122	107	132	116	111	109	82.1	93.1	80.8	95.4	76.3
Chloride	mg/L	26	25	25.3	28	24.2	31.4	53.9	90.7	239	106	18.4
Fluoride	mg/L	--	0.2	0.223	0.178	0.181	0.177	0.147	0.164	<0.06	0.156	0.23 J
pH_Field	SU	6.53	6.49	6.47	6.43	6.25	6.21	6.14	6.08	5.61	6.27	6.29
Sulfate	mg/L	33	76	138	115	133	115	107	139	193	171	9.03
TDS	mg/L	462	506	586	586	578	542	532	624	776	692	312
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	0.000786 J
Arsenic	mg/L	--	0.0098	0.00969	0.0108	0.0102	0.0108	0.0105	0.00695	0.00369	0.00787	0.0123
Barium	mg/L	--	0.141	0.175	0.206	0.175	0.165	0.16	0.168	0.139	0.136	0.179
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000381 J	0.000302 J	<0.000203	0.000238 J	<0.002
Cobalt	mg/L	--	0.0145	0.0167	0.0177	0.0166	0.0164	0.0247	0.0323	0.0276	0.0297	0.0135
Combined Radium	pCi/L	--	0.82	1.49	1.75	1.31	1.59	1.16 U	1.43	1.25	1.29	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	7.84e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.0616	0.0931	0.128	0.0693	0.0591	0.0417	0.0383	0.013 J	0.0189 J	0.115
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	0.0101

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-10										
		04/13/2016	05/31/2016	08/16/2016	10/12/2016	01/25/2017	03/15/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	0.373	1.26	1.34	1.34	1.38	--	1.23	1.05	1.17	--	1.31
Calcium	mg/L	30.5	65.9	65.6	63.4	64.2	--	62.6	60.8	61.4	--	65.5
Chloride	mg/L	19	19.2	17.7	16.8	18.6	--	22	20	20	--	18
Fluoride	mg/L	0.236 J	0.255 J	0.238 J	0.198 J	--	0.22	0.25	0.09 J	0.26	0.26	0.24
pH_Field	SU	6.21	6.45	6.58	6.6	6.47	6.54	6.53	6.49	6.49	6.59	6.52
Sulfate	mg/L	10.7	10.2	9.1	7.24	9.71	--	11	10	14	--	39
TDS	mg/L	324	333	327	312	286	--	326	304	348	--	346
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.00128 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.0143	0.0125	0.0128	0.0145	0.0122	--	0.0135	0.0131	--	0.0146	0.0233
Barium	mg/L	0.185	0.158	0.16	0.17	0.156	--	0.169	0.144	--	0.172	0.173
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0155	0.0146	0.016	0.0154	0.0139	--	0.0144	0.0134	--	0.0148	0.0139
Combined Radium	pCi/L	1 U	0.899	0.82	0.92	1.2	--	0.665	0.29 U	--	0.558	0.698
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.135	0.127	0.124	0.101	0.109	--	0.101	0.0954	--	0.111	0.104
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	0.0127	0.0106	0.00991 J	0.00919 J	0.0101	--	0.00984 J	0.0102	--	0.011	0.00752 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-10										GC-AP-MW-
		09/11/2018	11/07/2018	03/27/2019	09/10/2019	04/22/2020	08/18/2020	03/15/2021	08/24/2021	04/04/2022	10/18/2022	02/17/2016
Appendix III												
Boron	mg/L	--	1.26	1.11	1.27	1.23	1.37	1.79	1.93	1.92	2.09	0.581
Calcium	mg/L	66.1	68.5	71.8	69.3	62.9	74.4	73.8	83.4	88.8	105	18.6
Chloride	mg/L	19	19	17.1	16.5	17.6	21.3	23.2	22.4	16.8	17.2	16.6
Fluoride	mg/L	--	0.25	0.206	0.226	0.224	0.203	0.324	0.277	0.276	0.248	0.11 J
pH_Field	SU	6.53	6.51	6.53	6.33	6.44	6.33	6.29	6.04	6.21	6.62	6.04
Sulfate	mg/L	29	45	66.2	50.5	63.2	58.6	68.5	71.6	122	104	40.2
TDS	mg/L	335	342	347	351	338	376	406	423	452	449	158
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	0.0152	0.014	0.0132	0.0121	0.0121	0.0125	0.0129	0.0117	0.0117	0.00437 J
Barium	mg/L	--	0.171	0.167	0.199	0.186	0.223	0.261	0.287	0.244	0.261	0.105
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000357 J	0.000356 J	<0.000203	<0.000203	<0.002
Cobalt	mg/L	--	0.015	0.014	0.0191	0.0233	0.0287	0.0475	0.0514	0.0215	0.0223	0.0504
Combined Radium	pCi/L	--	0.568	0.988	1.1	1.11	1.08	1.12 U	1.45	2.08	1.04	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.11	0.115	0.112	0.123	0.124	0.155	0.198	0.345	0.241	0.0777
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	0.00748 J	0.00778 J	0.00757 J	0.00747 J	0.00808 J	0.0103	0.0132	0.0117	0.00847	0.00651 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-11										
		04/13/2016	05/31/2016	08/16/2016	10/12/2016	01/25/2017	03/14/2017	05/09/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	0.61	0.615	0.554	0.537	0.562	--	0.528	0.313	0.241	--	0.311
Calcium	mg/L	17.8	17.7	18.4	17.3	16.6	--	18	22.6	23.9	--	25.7
Chloride	mg/L	17	19	17	16.2	18	--	23	24	15	--	16
Fluoride	mg/L	0.119 J	0.134 J	0.116 J	0.076 J	--	0.09 J	0.11	0.17	0.14	0.14	0.16
pH_Field	SU	6.07	6.03	6.09	6.06	5.94	6.08	6.07	6.02	6.19	6.21	6.27
Sulfate	mg/L	33.1	28.1	38.5	38.3	32	--	44	88	110	--	79
TDS	mg/L	161	173	173	173	161	--	195	227	229	--	200
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.000896 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.00695	0.0063	0.0068	0.00709	0.00718	--	0.00819	0.00664	--	0.00733	0.00637
Barium	mg/L	0.106	0.0907	0.0989	0.113	0.103	--	0.125	0.103	--	0.0718	0.0643
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0448	0.0405	0.0464	0.0489	0.0417	--	0.0471	0.0664	--	0.0438	0.036
Combined Radium	pCi/L	1 U	0.145 U	0.521 U	0.669 U	0.789	--	0.647	0.415	--	0.864	0.244 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.073	0.0721	0.075	0.0703	0.0683	--	0.0646	0.109	--	0.11	0.102
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	0.00646 J	0.00546 J	0.00582 J	0.00589 J	0.00556 J	--	0.0058 J	0.00616 J	--	0.00962 J	0.00984 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-11										GC-AP-MW-
		09/10/2018	11/05/2018	03/27/2019	09/10/2019	04/22/2020	08/18/2020	03/10/2021	08/25/2021	03/30/2022	10/17/2022	02/16/2016
Appendix III												
Boron	mg/L	--	0.262	0.298	0.141	0.447	0.358	0.502	0.601	0.482	0.637	0.273
Calcium	mg/L	27.2	24.1	31	27.7	36.7	37.6	39.9	57.6	43.4	50.2	34.6
Chloride	mg/L	13	13	14.2	8.88	20.5	16.2	17.1	14.4	13.2	22.4	10.8
Fluoride	mg/L	--	0.15	0.104	0.191	0.167	0.165	0.0749 J	0.135	<0.06	0.118 J	0.16 J
pH_Field	SU	6.33	6.26	6.37	5.91	6.26	6	5.97	6.38	6.02	6.28	6.84
Sulfate	mg/L	80	81	83.2	87.2	58.7	81.1	73.2	126	125	144	119
TDS	mg/L	183	193	211	201	249	260	274	358	280	323	264
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	0.000933 J
Arsenic	mg/L	--	0.00195 J	0.00573	0.00378 J	0.00616	0.00457 J	0.00317	0.00518	0.00108	0.00251	<0.001
Barium	mg/L	--	0.0588	0.0678	0.0651	0.0967	0.0866	0.0637	0.104	0.0485	0.0626	0.0231
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.000347	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000267 J	<0.000203	0.000286 J	<0.002
Cobalt	mg/L	--	0.0171	0.0292	0.02	0.0319	0.0298	0.0197	0.0507	0.0158	0.0256	<0.002
Combined Radium	pCi/L	--	0.682	0.564	0.57	0.502 U	0.457 U	0.666 U	0.729 U	0.597 U	0.175 U	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.0641	0.119	0.124	0.126	0.109	0.0826	0.132	0.0641	0.0928	0.502
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	0.00944 J	0.0151	0.0205	0.0147	0.0146	0.00701	0.0106	0.00403	0.012	0.107

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-12										
		04/13/2016	05/31/2016	08/16/2016	10/12/2016	01/25/2017	03/15/2017	05/09/2017	06/28/2017	08/29/2017	02/28/2018	06/06/2018
Appendix III												
Boron	mg/L	0.276	0.291	0.268	0.252	0.167	--	0.32	0.231	0.191	--	0.26
Calcium	mg/L	32.2	28.8	24	27.8	33.7	--	35.5	28	26.4	--	30.1
Chloride	mg/L	8.2	7.74	12.5	15.7	24.4	--	15	12	10	--	11
Fluoride	mg/L	0.163 J	0.19 J	0.219 J	0.163 J	--	0.13	0.15	0.17	0.22	0.19	0.19
pH_Field	SU	7.03	6.94	6.84	6.75	6.87	6.9	6.85	6.85	6.86	6.94	6.99
Sulfate	mg/L	122	94.3	67.1	94.1	101	--	91	71	80	--	62
TDS	mg/L	238	206	180	223	271	--	236	198	187	--	199
Appendix IV												
Antimony	mg/L	<0.0006	0.000834 J	0.00118 J	0.000899 J	0.00136 J	--	<0.0006	0.000683 J	--	0.000656 J	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.02	0.0175	0.0182	0.0221	0.0187	--	0.0232	0.0178	--	0.0197	0.0204
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	1 U	0.21 U	0.697	0.421 U	0.265 U	--	-0.132 U	0.493	--	1.89	0.114 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.544	0.47	0.282	0.217	0.108	--	0.132	0.126	--	0.0786	0.067
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	0.101	0.0915	0.127	0.11	0.0741	--	0.0883	0.109	--	0.0903	0.0757

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-12										GC-AP-MW-
		09/11/2018	11/05/2018	03/26/2019	09/10/2019	04/21/2020	08/18/2020	03/10/2021	08/25/2021	03/29/2022	10/17/2022	02/16/2016
Appendix III												
Boron	mg/L	--	0.127	0.111	0.153	0.872	0.748	0.389	0.393	0.417	0.276	0.26
Calcium	mg/L	27.4	28.8	33.7	30.5	51	42.9	55.1	45.2	53.7	48.2	29.8
Chloride	mg/L	12	17	14.5	10.9	9.49	6.46	9.3	7.43	11.8	12.9	6.52
Fluoride	mg/L	--	0.2	0.196	0.26	0.198	0.223	0.161	0.188	0.107 J	0.197	0.14 J
pH_Field	SU	6.87	6.81	6.95	6.69	6.96	6.98	6.89	7.04	6.44	6.88	6.4
Sulfate	mg/L	63	74	92.3	89.3	121	89	155	118	108	96.2	113
TDS	mg/L	184	210	230	218	291	250	331	263	290	243	242
Appendix IV												
Antimony	mg/L	--	<0.0008	0.00121 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	0.000972 J
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000251	0.000234	0.000264	0.000335	0.0141
Barium	mg/L	--	0.0255	0.0218	0.0233	0.0325	0.021	0.0373	0.0323	0.0355	0.0301	0.113
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000224 J	0.000346 J	0.000433 J	0.000332 J	<0.002
Cobalt	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.00118	0.000938	0.000681	0.00077	<0.002
Combined Radium	pCi/L	--	0.048 U	0.381	0.434 U	-0.0655 U	0.135 U	0.481 U	0.113 U	1.37	0.99 U	1 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.0912	0.0532	0.0598	0.166	0.0892	0.125	0.117	0.133	0.126	0.51
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	0.0906	0.11	0.134	0.0947	0.0938	0.0611	0.0547	0.0514	0.0559	0.0769

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-13										
		04/12/2016	05/31/2016	08/16/2016	10/12/2016	11/01/2016	01/25/2017	03/15/2017	05/09/2017	06/28/2017	08/29/2017	02/27/2018
Appendix III												
Boron	mg/L	0.26	0.318	0.322	0.244	--	0.188	--	0.281	0.153	0.112	--
Calcium	mg/L	23.3	25.9	25.5	29.5	--	33.6	--	30.4	26	22.3	--
Chloride	mg/L	4.47	10.8	16.6	18.5	--	22	--	10	9.4	9.3	--
Fluoride	mg/L	0.119 J	0.132 J	0.177 J	0.149 J	--	--	0.16	0.18	0.18	0.19	--
pH_Field	SU	6.41	6.22	6.41	6.42	--	6.76	6.82	6.7	6.58	6.4	--
Sulfate	mg/L	86.7	83.1	59.3	99.3	--	113	--	74	71	72	--
TDS	mg/L	176	189	192	--	244	274	--	191	176	163	--
Appendix IV												
Antimony	mg/L	<0.0006	0.000869 J	0.00128 J	0.00114 J	--	0.00384	--	0.00323	0.00406	--	--
Arsenic	mg/L	0.0144	0.00984	0.0126	0.0117	--	0.00316 J	--	0.00393 J	0.00406 J	--	--
Barium	mg/L	0.0912	0.0963	0.0878	0.112	--	0.114	--	0.1	0.0874	--	--
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006	<0.0006	--	--
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--	--
Chromium	mg/L	<0.002	<0.002	0.00381 J	<0.002	--	<0.002	--	<0.002	0.00219 J	--	--
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--	--
Combined Radium	pCi/L	1 U	0.313 U	0.435 U	-0.0137 U	--	0.309 U	--	0.42	0.373	--	1.25
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--	--
Lithium	mg/L	0.508	0.454	0.371	0.282	--	0.0904	--	0.144	0.146	--	--
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	--	<0.00025	<0.00025	--	--
Molybdenum	mg/L	0.0442	0.0481	0.0956	0.114	--	0.078	--	0.0484	0.0598	--	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-13										
		02/28/2018	06/06/2018	09/11/2018	11/05/2018	03/26/2019	09/11/2019	04/20/2020	08/18/2020	03/15/2021	08/25/2021	04/06/2022
Appendix III												
Boron	mg/L	--	0.244	--	0.104	0.213	0.535	0.642	0.501	0.523	0.438	0.262
Calcium	mg/L	--	23.7	26.8	29.4	34.1	53.9	40.3	95.3	68.9	74.2	55.3
Chloride	mg/L	--	6.1	14	18	4.7	12.3	4.7	8.24	7.68	6.37	3.71
Fluoride	mg/L	0.14	0.13	--	0.15	0.0775 J	0.118	0.0844 J	0.108	0.0737 J	0.111	<0.06
pH_Field	SU	6.72	6.57	6.64	6.69	6.54	6.22	6.68	6.76	6	6.66	6.24
Sulfate	mg/L	--	48	62	81	92.4	128	76.5	203	204	181	157
TDS	mg/L	--	138	185	208	198	316	201	444	374	359	298
Appendix IV												
Antimony	mg/L	0.00199 J	0.00261 J	--	0.00275 J	0.00219 J	0.00261 J	0.00338	0.00388	0.0016	0.00263	0.002
Arsenic	mg/L	0.00278 J	0.00352 J	--	0.00497 J	0.00251 J	0.00664	0.00181 J	0.00176 J	0.00207	0.00302	0.00269
Barium	mg/L	0.0984	0.0951	--	0.113	0.109	0.275	0.104	0.199	0.0699	0.114	0.0701
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	7.92e-005 J
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000311 J	0.000261 J	0.000299 J
Cobalt	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000312	6.87e-005 J	0.00131
Combined Radium	pCi/L	--	0.258 U	--	0.441 U	0.471	0.557 U	0.256 U	0.568 U	0.537 U	0.3 U	0.338 U
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0738	0.148	--	0.0914	0.123	0.246	0.201	0.42	0.308	0.5	0.584
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0346	0.0253	--	0.044	0.0262	0.0226	0.0924	0.145	0.0146	0.0319	0.0201

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-13		GC-AP-MW-14								
		05/17/2022	10/17/2022	02/16/2016	04/12/2016	05/31/2016	08/17/2016	10/12/2016	11/01/2016	01/25/2017	03/14/2017	05/09/2017
Appendix III												
Boron	mg/L	--	0.499	0.739	0.733	0.603	0.509	0.569	--	0.671	--	0.622
Calcium	mg/L	--	158	44.4	43.2	43	35.9	31.1	--	42.7	--	48.1
Chloride	mg/L	--	12	16.4	15.9	13.6	12.8	16.3	--	16.4	--	19
Fluoride	mg/L	--	<0.06	0.13 J	0.137 J	0.149 J	0.147 J	0.115 J	--	--	0.11	0.14
pH_Field	SU	6.2	6.22	6.21	6.37	6.42	6.42	6.38	--	6.37	6.3	6.43
Sulfate	mg/L	--	467	108	114	114	85.4	53.5	--	75.4	--	84
TDS	mg/L	--	708	340	298	309	269	--	252	259	--	285
Appendix IV												
Antimony	mg/L	--	0.00202	<0.0006	<0.0006	0.00062 J	<0.0006	<0.0006	--	0.00106 J	--	<0.0006
Arsenic	mg/L	--	0.00384	0.0202	0.0214	0.0156	0.0153	0.0254	--	0.0194	--	0.0361
Barium	mg/L	--	0.119	0.0447	0.043	0.0383	0.0332	0.0454	--	0.0567	--	0.069
Beryllium	mg/L	--	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006
Cadmium	mg/L	--	9.59e-005 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002
Chromium	mg/L	--	0.000237 J	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002
Cobalt	mg/L	--	0.00422	0.00732 J	0.00785 J	0.00712 J	0.00545 J	0.00497 J	--	0.00454 J	--	0.00488 J
Combined Radium	pCi/L	--	0.529 U	1 U	1 U	0.624	0.49 U	-0.0237 U	--	0.455 U	--	0.451
Lead	mg/L	--	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	<0.001
Lithium	mg/L	--	0.838	0.632	0.615	0.613	0.444	0.387	--	0.516	--	0.526
Mercury	mg/L	--	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	--	<0.00025
Molybdenum	mg/L	--	0.0197	0.00839 J	0.00918 J	0.00877 J	0.0236	0.0289	--	0.00501 J	--	0.0108

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-14										
		06/28/2017	08/29/2017	02/27/2018	06/06/2018	09/12/2018	11/07/2018	03/27/2019	09/10/2019	04/21/2020	08/11/2020	03/09/2021
Appendix III												
Boron	mg/L	0.695	1	--	1.01	--	0.908	1.33	1.49	1.55	1.44	1.81
Calcium	mg/L	55	83.6	--	167	109	105	162	125	113	118	115
Chloride	mg/L	17	17	--	14	14	15	14.9	13.5	14.8	12.7	10.4
Fluoride	mg/L	0.13	0.14	0.13	0.15	--	0.19	0.248	0.209	0.254	0.278	0.263
pH_Field	SU	6.4	6.32	6.28	6.25	6.42	6.42	6.41	6.11	6.31	6.02	6.48
Sulfate	mg/L	120	180	--	450	200	180	335	193	168	242	165
TDS	mg/L	348	528	--	932	180	528	834	658	628	688	618
Appendix IV												
Antimony	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.022	--	0.0265	0.0372	--	0.0289	0.0264	0.0263	0.0178	0.0207	0.0292
Barium	mg/L	0.0764	--	0.0908	0.064	--	0.0575	0.0768	0.0685	0.102	0.0806	0.125
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000357 J
Cobalt	mg/L	0.00805 J	--	0.016	0.024	--	0.0124	0.0303	0.0278	0.0339	0.0373	0.0302
Combined Radium	pCi/L	0.63	--	1.59	0.943	--	0.888	1.1	0.852	0.653	1.64	1.28 U
Lead	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.626	--	0.562	1.06	--	0.604	1.11	0.765	0.672	0.712	0.791
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00752 J	--	0.0121	0.0101	--	0.0155	0.0167	0.0125	0.0141	0.0117	0.0205

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-14			GC-AP-MW-15							
		08/25/2021	04/04/2022	10/18/2022	02/17/2016	04/12/2016	05/31/2016	08/16/2016	10/11/2016	11/01/2016	01/24/2017	03/14/2017
Appendix III												
Boron	mg/L	1.33	1.89	1.91	0.454	0.444	0.424	0.438	0.456	--	0.458	--
Calcium	mg/L	134	117	125	47.7	44.4	45.3	49.4	52.7	--	49.4	--
Chloride	mg/L	11.5	10	10.4	11.8	12.6	12.9	10.2	10.2	--	11.2	--
Fluoride	mg/L	0.239	0.245	0.211	0.09 J	0.107 J	0.145 J	0.135 J	0.096 J	--	--	0.09 J
pH_Field	SU	6.21	6.39	6.46	6.02	6.17	6.15	6.21	6.14	--	6.11	6.09
Sulfate	mg/L	346	199	185	187	188	183	196	216	--	183	--
TDS	mg/L	774	658	662	408	334	351	367	--	372	354	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	0.00111 J	--
Arsenic	mg/L	0.0224	0.0241	0.0271	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--
Barium	mg/L	0.11	0.103	0.103	0.022	0.0242	0.0224	0.0243	0.0291	--	0.0223	--
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--
Chromium	mg/L	0.000234 J	0.000216 J	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--
Cobalt	mg/L	0.0436	0.0406	0.0357	0.0169	0.0158	0.014	0.0153	0.0162	--	0.0132	--
Combined Radium	pCi/L	1.01	1.03	1.25	1 U	1 U	0.41 U	0.399 U	0.00389 U	--	0.35 U	--
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--
Lithium	mg/L	0.985	0.607	0.478	0.806	0.719	0.735	0.699	0.727	--	0.689	--
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	--
Molybdenum	mg/L	0.0127	0.0166	0.0185	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-15										
		05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/10/2019	04/20/2020	08/12/2020
Appendix III												
Boron	mg/L	0.486	0.454	0.441	--	0.543	--	0.614	0.699	0.73	0.791	0.813
Calcium	mg/L	47.4	44.9	44.4	--	45.1	48.5	49.2	53.9	57.2	61	72.2
Chloride	mg/L	14	14	14	--	13	14	14	12.8	12.8	12	11.4
Fluoride	mg/L	0.11	0.1	0.13	0.09 J	0.13	--	0.12	0.119	0.122	0.14	0.147
pH_Field	SU	6.11	6.09	6.1	6.11	6.05	6.18	6.09	6.1	5.82	6.16	6.1
Sulfate	mg/L	160	150	160	--	160	140	160	158	150	142	160
TDS	mg/L	332	331	317	--	318	321	331	342	358	369	401
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0281	0.0223	--	0.0271	0.0269	--	0.0271	0.0285	0.0348	0.0338	0.0352
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.014	0.0163	--	0.0157	0.0148	--	0.0158	0.018	0.0201	0.0189	0.0184
Combined Radium	pCi/L	0.0662 U	0.793	--	3.99	-0.365 U	--	0.391 U	0.535	0.3 U	0.693	0.983
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.603	0.558	--	0.571	0.492	--	0.547	0.575	0.6	0.604	0.594
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-15				GC-AP-MW-16						
		03/10/2021	08/25/2021	03/29/2022	10/18/2022	02/17/2016	04/13/2016	06/01/2016	08/15/2016	10/12/2016	11/02/2016	01/24/2017
Appendix III												
Boron	mg/L	0.825	0.829	0.856	0.863	1.47	1.48	1.22	1.31	1.37	--	1.38
Calcium	mg/L	67.4	74.8	75.6	89.4	57	62.5	54.4	56.2	56.6	--	59.1
Chloride	mg/L	11.9	10.3	10.3	8.54	12.5	13.6	14.2	13.6	13.8	--	14.2
Fluoride	mg/L	0.115	0.167	0.117 J	0.139	0.2 J	0.173 J	0.253 J	0.224 J	0.187 J	--	--
pH_Field	SU	6.08	6.12	5.81	6.29	6.18	6.28	6.36	6.37	6.32	--	6.29
Sulfate	mg/L	136	153	165	152	87.4	92.7	111	98.3	99.3	--	85.4
TDS	mg/L	397	407	406	423	310	372	360	366	--	374	380
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	0.000935 J
Arsenic	mg/L	0.000349	0.000424	0.000404	0.000379	0.0788	0.0759	0.292	0.105	0.0831	--	0.0472
Barium	mg/L	0.0365	0.0402	0.0381	0.036	0.0368	0.044	0.0357	0.0377	0.0431	--	0.0418
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	0.00012 J	0.0001 J	0.000459	0.000126 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002
Chromium	mg/L	0.000301 J	0.00027 J	<0.000203	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Cobalt	mg/L	0.0189	0.0181	0.0178	0.0196	0.016	0.0139	0.0117	0.0133	0.0147	--	0.0122
Combined Radium	pCi/L	0.335 U	0.314 U	0.273 U	0.69 U	1 U	1 U	0.515	0.843	0.397 U	--	0.269 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	0.63	0.622	0.534	0.556	0.626	0.594	0.556	0.557	0.589	--	0.522
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-16										
		03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/12/2018	11/06/2018	03/26/2019	09/10/2019	04/20/2020
Appendix III												
Boron	mg/L	--	1.41	1.43	1.36	--	1.36	--	1.47	1.38	1.69	1.83
Calcium	mg/L	--	62.5	63.6	65.7	--	66.8	76.3	77.4	90	86.3	90.8
Chloride	mg/L	--	18	17	16	--	15	17	15	9.27	12.7	12.1
Fluoride	mg/L	0.23	0.23	0.22	0.28	0.23	0.28	--	0.24	0.316	0.267	0.245
pH_Field	SU	6.27	6.3	6.28	6.34	6.33	6.29	6.36	6.37	6.34	6.35	6.43
Sulfate	mg/L	--	74	75	87	--	87	63	97	123	68	49.6
TDS	mg/L	--	381	404	420	--	408	415	447	481	453	461
Appendix IV												
Antimony	mg/L	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	--	0.0814	0.0693	--	0.0852	0.0648	--	0.0701	0.0952	0.0786	0.105
Barium	mg/L	--	0.0449	0.042	--	0.0595	0.0471	--	0.0574	0.0626	0.0754	0.0921
Beryllium	mg/L	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	--	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	--	0.0133	0.0141	--	0.014	0.0114	--	0.0141	0.0177	0.0162	0.0146
Combined Radium	pCi/L	--	0.454	1.25	--	1.17	0.337 U	--	0.661	1.18	0.516 U	0.493 U
Lead	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	--	0.552	0.523	--	0.544	0.49	--	0.54	0.558	0.581	0.62
Mercury	mg/L	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY

Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-16					GC-AP-MW-17					
		08/11/2020	03/09/2021	08/17/2021	04/06/2022	10/18/2022	02/17/2016	04/13/2016	06/01/2016	08/15/2016	10/12/2016	11/02/2016
Appendix III												
Boron	mg/L	1.93	1.94	1.98	2.17	2.14	1.66	1.64	1.66	1.83	2.12	--
Calcium	mg/L	101	101	103	104	128	30.7	39.5	47.7	45.6	57.6	--
Chloride	mg/L	12.1	12	10.4	11.6	10.1	14.6	14.9	15.9	19.5	18.5	--
Fluoride	mg/L	0.294	0.286	0.286	0.266	0.27	0.53	0.437	0.376	0.362	0.377	--
pH_Field	SU	6.7	6.29	6.33	6.42	6.53	6.32	6.44	6.24	6.34	6.42	--
Sulfate	mg/L	55	43.9	46.6	45.3	42.4	72.3	123	144	50.1	72.6	--
TDS	mg/L	482	524	490	456	486	328	373	442	392	--	469
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	0.0698	0.113	0.0765	0.078	0.0531	0.177	0.271	0.251	0.253	0.243	--
Barium	mg/L	0.0948	0.102	0.101	0.103	0.103	0.0402	0.0637	0.0786	0.0634	0.0995	--
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	<0.002	0.000444 J	0.000404 J	0.00034 J	0.000267 J	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.0148	0.0162	0.0155	0.015	0.0143	0.0101	0.0109	0.0134	0.0134	0.0204	--
Combined Radium	pCi/L	1.48	1.2 U	0.49 U	1 U	0.772 U	1 U	1.4698 U	0.972	1.43	0.246 U	--
Lead	mg/L	<0.001	0.000109 J	0.000108 J	8.65e-005 J	8.94e-005 J	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.599	0.692	0.647	0.638	0.594	0.612	0.694	0.675	0.571	0.622	--
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	<0.002	0.000113 J	0.000145 J	0.000149 J	0.000302	0.066	0.0835	0.0835	0.0838	0.111	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-17										
		01/24/2017	03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/12/2018	11/06/2018	03/26/2019	09/09/2019
Appendix III												
Boron	mg/L	1.94	--	1.99	2.18	1.71	--	1.76	--	1.74	1.74	2.33
Calcium	mg/L	69.4	--	66.2	63.8	75.1	--	77.4	58.9	81.6	84.7	66.4
Chloride	mg/L	19	--	24	24	18	--	15	23	11	9.52	15.4
Fluoride	mg/L	--	0.41	0.36	0.38	0.38	0.58	0.41	--	0.45	0.573	0.477
pH_Field	SU	6.53	--	6.33	6.38	6.31	6.57	6.21	6.43	6.47	6.52	5.84
Sulfate	mg/L	63.4	--	82	44	230	--	230	33	220	161	57.3
TDS	mg/L	464	--	492	516	646	--	644	476	634	516	500
Appendix IV												
Antimony	mg/L	0.000997 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	0.000897 J	<0.0008
Arsenic	mg/L	0.363	--	0.499	0.489	--	0.532	0.382	--	0.299	0.32	0.356
Barium	mg/L	0.117	--	0.158	0.139	--	0.199	0.149	--	0.202	0.242	0.319
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0157	--	0.0179	0.0166	--	0.0251	0.0456	--	0.0321	0.0192	0.0121
Combined Radium	pCi/L	0.918	--	1.27	1.51	--	1.05	1.07	--	1.05	1.57	1.29
Lead	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001
Lithium	mg/L	0.752	--	0.622	0.597	--	0.73	0.531	--	0.583	0.595	0.571
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003
Molybdenum	mg/L	0.111	--	0.0566	0.0702	--	0.0957	0.0363	--	0.0418	0.062	0.0681

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-17						GC-AP-MW-18				
		04/21/2020	08/11/2020	03/09/2021	08/17/2021	04/04/2022	10/18/2022	02/17/2016	04/12/2016	06/01/2016	08/15/2016	10/12/2016
Appendix III												
Boron	mg/L	1.97	2.03	2.45	2.18	2.32	2.28	1.94	2.03	1.74	1.66	1.77
Calcium	mg/L	74.4	73	118	78.3	108	125	89.6	96.2	90.2	84.4	82.9
Chloride	mg/L	11.1	15.4	14.3	14.3	8.06	10.7	22.3	22.1	22	22.4	22.1
Fluoride	mg/L	0.565	0.515	0.628	0.494	0.564	0.544	0.15 J	0.168 J	0.178 J	0.149 J	0.12 J
pH_Field	SU	6.61	6.71	6.52	6.57	6.71	6.77	6.23	6.3	6.24	6.25	6.26
Sulfate	mg/L	78	46.7	95.8	32.8	65.5	64.9	60.2	68.2	61.4	56	36.6
TDS	mg/L	490	522	684	506	550	598	464	491	468	454	--
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.689	0.581	0.86	0.937	0.861	0.895	0.133	0.134	0.11	0.116	0.109
Barium	mg/L	0.306	0.29	0.352	0.254	0.252	0.253	0.12	0.131	0.114	0.113	0.126
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	0.000216 J	0.000216 J	0.000233 J	0.000218 J	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0158	0.0122	0.0151	0.0109	0.0114	0.0091	0.0227	0.0209	0.02	0.0225	0.0206
Combined Radium	pCi/L	0.859	2.14	2.27	1.97	2.17	1.22	1 U	1 U	1.55	1.85	0.481
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.629	0.552	0.864	0.585	0.647	0.656	0.67	0.655	0.666	0.558	0.56
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.0694	0.0506	0.067	0.0468	0.054	0.0491	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-18										
		11/02/2016	01/24/2017	03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/12/2018	11/06/2018	03/26/2019
Appendix III												
Boron	mg/L	--	1.49	--	1.65	1.66	1.53	--	1.36	--	1.48	1.63
Calcium	mg/L	--	76.4	--	77.4	75.4	78	--	66.3	67.8	72.7	91.5
Chloride	mg/L	--	23.2	--	26	25	25	--	25	23	26	25.4
Fluoride	mg/L	--	--	0.17	0.17	0.18	0.21	0.17	0.17	--	0.17	0.192
pH_Field	SU	--	6.3	--	6.34	6.32	6.38	6.31	6.16	6.29	6.31	6.3
Sulfate	mg/L	--	12.3	--	10	9.7	7.8	--	13	28	11	21.3
TDS	mg/L	422	408	--	358	382	392	--	352	339	368	406
Appendix IV												
Antimony	mg/L	--	0.000984 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	<0.0008
Arsenic	mg/L	--	0.0825	--	0.0776	0.0672	--	0.063	0.0661	--	0.0509	0.0477
Barium	mg/L	--	0.126	--	0.138	0.12	--	0.143	0.128	--	0.109	0.117
Beryllium	mg/L	--	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	--	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003
Chromium	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	--	0.015	--	0.0141	0.0144	--	0.0136	0.0138	--	0.0158	0.0161
Combined Radium	pCi/L	--	0.889	--	1.01	1.17	--	0.702	0.999	--	0.913	1.35
Lead	mg/L	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	--	0.374	--	0.443	0.451	--	0.343	0.353	--	0.369	0.378
Mercury	mg/L	--	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003
Molybdenum	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-18							GC-AP-MW-21			
		09/09/2019	04/21/2020	08/12/2020	03/09/2021	08/17/2021	04/06/2022	10/17/2022	02/16/2016	04/13/2016	06/01/2016	08/16/2016
Appendix III												
Boron	mg/L	1.73	1.51	1.53	1.52	1.45	1.6	1.46	0.286	0.26	0.283	0.292
Calcium	mg/L	83.2	81.8	85.9	82	77.4	82.7	87.5	40.4	32.2	29.3	25.4
Chloride	mg/L	25.6	26.3	24.5	25.2	25.1	24	26	9.95	7.33	6.97	12
Fluoride	mg/L	0.157	0.171	0.198	0.205	0.212	0.162	0.176	0.18 J	0.191 J	0.201 J	0.218 J
pH_Field	SU	6.28	6.31	6.62	6.39	6.38	6.29	6.49	7.15	7.1	6.76	6.99
Sulfate	mg/L	17.8	19.2	13.8	11.6	12.2	16.3	23.3	125	119	99.2	71.9
TDS	mg/L	406	429	390	412	397	413	382	264	226	231	181
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.0498	0.0478	0.0485	0.0505	0.0509	0.049	0.0468	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.101	0.0926	0.0815	0.0849	0.0763	0.0769	0.07	0.0379	0.0291	0.0254	0.0385
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	0.000346 J	0.00023 J	0.000313 J	0.000294 J	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0174	0.0173	0.0152	0.017	0.0175	0.0187	0.0191	<0.002	<0.002	<0.002	<0.002
Combined Radium	pCi/L	1.08	0.888	1.17	1.11 U	2.04	1.18 U	0.84 U	1 U	1 U	0.126 U	0.477
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.408	0.386	0.326	0.364	0.335	0.327	0.321	0.513	0.532	0.513	0.301
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	0.000362	0.000397	0.000321	0.00029	0.0433	0.0567	0.0565	0.0791

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-21										
		10/12/2016	01/25/2017	03/15/2017	05/09/2017	06/28/2017	08/29/2017	02/28/2018	06/06/2018	09/10/2018	11/05/2018	03/26/2019
Appendix III												
Boron	mg/L	0.254	0.133	--	0.304	0.243	0.249	--	0.245	--	0.151	0.0834 J
Calcium	mg/L	30.7	36.8	--	36.1	26.9	29.4	--	30.2	28.8	29.7	32.4
Chloride	mg/L	15.4	24.7	--	17	11	12	--	9.7	12	16	17.2
Fluoride	mg/L	0.171 J	--	0.16	0.17	0.18	0.23	0.2	0.19	--	0.22	0.219
pH_Field	SU	6.89	6.84	--	6.83	6.98	6.8	6.87	6.94	6.74	6.66	6.84
Sulfate	mg/L	93.9	103	--	100	69	77	--	81	64	68	92
TDS	mg/L	225	277	--	255	175	218	--	207	197	200	218
Appendix IV												
Antimony	mg/L	<0.0006	0.00107 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	0.000964 J
Arsenic	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.0486	0.0371	--	0.0454	0.0352	--	0.0376	0.0355	--	0.0509	0.047
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	0.137 U	0.55	--	0.182 U	0.228 U	--	0.293 U	-0.056 U	--	0.637	0.405
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.22	0.107	--	0.113	0.0962	--	0.0594	0.0469 J	--	0.0902	0.0531
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003
Molybdenum	mg/L	0.0767	0.0398	--	0.0467	0.0833	--	0.0643	0.0579	--	0.0548	0.071

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-21							GC-AP-MW-25			
		09/10/2019	04/21/2020	08/18/2020	03/10/2021	08/25/2021	03/30/2022	10/17/2022	02/17/2016	04/12/2016	06/01/2016	08/17/2016
Appendix III												
Boron	mg/L	0.16	0.586	0.211	0.528	0.288	0.718	0.584	0.0922 J	0.0935 J	0.0826 J	0.092 J
Calcium	mg/L	28.4	43.1	25.5	44.9	31	58.8	57	10.2	10	9.87	8.88
Chloride	mg/L	11	10.1	5.54	20.4	10.4	12.1	13	22.9	22.2	22.3	22.1
Fluoride	mg/L	0.194	0.173	0.18	0.113	0.117	<0.06	0.0988 J	0.02 J	0.021 J	0.051 J	0.037 J
pH_Field	SU	6.58	6.81	6.31	6.26	6.51	6.09	6.21	5.36	5.31	5.35	5.38
Sulfate	mg/L	63.1	99	63.4	51.7	76.1	115	103	28.7	32.5	31.9	30.5
TDS	mg/L	198	265	179	296	207	320	311	144	140	139	142
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	0.000216	0.000143 J	0.000128 J	0.000217	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0568	0.0763	0.0517	0.111	0.0865	0.112	0.0774	0.0895	0.0966	0.0872	0.0875
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	7.02e-005 J	<6.8e-005	6.83e-005 J	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	0.000333 J	0.000274 J	0.000217 J	0.000217 J	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	0.00204	0.00147	0.0022	0.00501	0.00683 J	0.00656 J	0.00637 J	0.00659 J
Combined Radium	pCi/L	0.0889 U	0.271 U	-0.0105 U	0.418 U	0.305 U	1.04	0.772 U	1 U	1 U	0.1 U	0.372 U
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0862	0.0782	0.0718	0.146	0.0872	0.0798	0.0964	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.0609	0.0562	0.0505	0.0123	0.00789	0.00682	0.00666	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-25										
		10/11/2016	11/02/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/29/2017	02/28/2018	06/06/2018	09/12/2018	11/06/2018
Appendix III												
Boron	mg/L	0.0976 J	--	0.0877 J	--	0.0953 J	0.0835 J	0.0914 J	--	0.102	--	0.0995 J
Calcium	mg/L	9.22	--	8.72	--	8.56	7.16	8.32	--	9.05	8.98	9.21
Chloride	mg/L	21.8	--	21.8	--	23	22	22	--	20	20	21
Fluoride	mg/L	<0.01	--	--	<0.032	<0.032	0.04 J	<0.032	<0.032	<0.032	--	<0.032
pH_Field	SU	5.31	--	5.29	--	5.29	5.27	5.27	5.28	5.21	5.23	5.28
Sulfate	mg/L	32.3	--	33.5	--	33	35	37	--	47	41	48
TDS	mg/L	--	128	124	--	136	145	139	--	153	156	153
Appendix IV												
Antimony	mg/L	<0.0006	--	0.00111 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008
Arsenic	mg/L	<0.001	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001
Barium	mg/L	0.1	--	0.0856	--	0.093	0.0829	--	0.0958	0.0892	--	0.0807
Beryllium	mg/L	0.000715 J	--	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003
Chromium	mg/L	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002
Cobalt	mg/L	0.00687 J	--	0.00522 J	--	0.00646 J	0.00721 J	--	0.00771 J	0.00712 J	--	0.00791
Combined Radium	pCi/L	0.277 U	--	0.585	--	0.489	0.333	--	1.08	0.016 U	--	0.0751 U
Lead	mg/L	<0.001	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.01	--	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.00025	--	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-25								GC-AP-MW-31		
		03/27/2019	09/10/2019	04/22/2020	08/11/2020	03/10/2021	08/24/2021	03/29/2022	10/18/2022	08/16/2016	09/19/2016	10/11/2016
Appendix III												
Boron	mg/L	0.113	0.105	0.104	0.11	0.146	0.115	0.122	0.12	<0.02	<0.02	<0.02
Calcium	mg/L	9.77	9.28	11.3	10.7	29.3	25.9	31.9	38.4	39.5	34.5	32.4
Chloride	mg/L	18.4	17.7	17.1	16.7	25.3	25.3	29.6	32.3	5.32	5.29	5.26
Fluoride	mg/L	<0.05	<0.05	<0.06	<0.06	0.104	0.0914 J	0.0724 J	0.0955 J	0.087 J	0.045 J	0.034 J
pH_Field	SU	5.27	5.15	5.26	4.81	5.71	5.25	5.26	5.88	7.13	6.94	6.82
Sulfate	mg/L	62.4	66	76.1	79.5	70.3	66.6	68.6	70.6	1.78	2.06	2.33
TDS	mg/L	178	182	195	193	246	224	247	256	142	121	--
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	0.00033	0.000279	0.000236	0.000464	0.00185 J	0.00121 J	0.00111 J
Barium	mg/L	0.0901	0.101	0.11	0.111	0.0797	0.0988	0.0717	0.0704	0.0226	0.0202	0.0219
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	9.04e-005 J	6.91e-005 J	8.34e-005 J	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.0003 J	0.000284 J	<0.000203	<0.000203	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0114	0.0127	0.0133	0.0126	0.0115	0.0117	0.00988	0.00995	<0.002	0.00242 J	0.0024 J
Combined Radium	pCi/L	0.309 U	0.578	0.218 U	0.511 U	1.03 U	0.693 U	0.37 U	0.617 U	1.34	0.561 U	0.118 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	8.84e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	8.43e-005 J	<6.8e-005	<0.000102	<0.000102	0.00201 J	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-31										
		11/01/2016	11/14/2016	11/28/2016	01/03/2017	01/24/2017	03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018
Appendix III												
Boron	mg/L	--	<0.02	--	<0.02	0.0282 J	--	<0.02	<0.02	<0.02	--	<0.02
Calcium	mg/L	--	26.5	--	22.6	19.5	--	15.7	13.8	11.1	--	9.12
Chloride	mg/L	--	5.28	--	5.18	5.41	--	5.8	5.4	6	--	5.2
Fluoride	mg/L	--	<0.01	--	<0.01	--	<0.032	0.05 J	0.05 J	<0.032	<0.032	<0.032
pH_Field	SU	--	6.57	--	6.56	6.41	--	6.41	6.14	6.08	5.99	5.93
Sulfate	mg/L	--	2.31	--	2.81	3.34	--	2.9 J	3.4 J	3.7 J	--	3.7 J
TDS	mg/L	103	--	84	89.3	83.3	--	31.3	67.3	64	--	50
Appendix IV												
Antimony	mg/L	--	<0.0006	--	<0.0006	0.000928 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	--	0.0215	--	0.019	0.0167	--	0.0246	0.0238	--	0.0231	0.0228
Beryllium	mg/L	--	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	--	<0.002	--	0.00217 J	0.00239 J	--	<0.002	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	--	0.984	--	0.473 U	-0.422 U	--	0.706	0.412	--	0.314 U	0.218 U
Lead	mg/L	--	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	--	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	--	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-31										GC-AP-MW-
		09/11/2018	11/06/2018	03/27/2019	09/11/2019	04/22/2020	08/11/2020	03/15/2021	08/23/2021	03/28/2022	10/05/2022	08/16/2016
Appendix III												
Boron	mg/L	--	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02
Calcium	mg/L	7.5	7.39	7.65	6.96	5.92	7.46	5.9	7.11	6.2	7.15	9.33
Chloride	mg/L	5.5	5.1	5.26	5.31	5.37	5.45	5.47	6.37	6	7.06	4.24
Fluoride	mg/L	--	<0.032	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	0.0671 J	0.054 J
pH_Field	SU	5.86	5.89	5.95	5.85	5.75	5.63	5.61	5.67	5.05	5.49	6
Sulfate	mg/L	2.2 J	3.1 J	3.55	3.83	3.78	4.33	3.74	4	3.34	3.73	2.06
TDS	mg/L	53.3	66	48.7	52.7	49.3	52	49.3	49.3	43.3	43.3	49.3
Appendix IV												
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0006
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000111 J	<6.8e-005	<8.1e-005	<8.1e-005	<0.001
Barium	mg/L	--	0.0211	0.025	0.0267	0.0285	0.0264	0.0316	0.0317	0.0312	0.0297	0.0134
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000468 J	0.000418 J	0.000392 J	0.000252 J	<0.002
Cobalt	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000624	0.000603	0.000554	0.00071	<0.002
Combined Radium	pCi/L	--	0.566 U	0.29 U	0.28 U	0.0983 U	0.767	0.817 U	0.345 U	0.413 U	0.837 U	0.951
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	0.000146 J	6.93e-005 J	<0.001
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	7.41e-005 J	<6.8e-005	<0.000102	<0.000102	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-32										
		09/19/2016	10/11/2016	11/01/2016	11/14/2016	11/28/2016	01/03/2017	01/24/2017	03/14/2017	05/10/2017	05/31/2017	06/27/2017
Appendix III												
Boron	mg/L	<0.02	<0.02	--	<0.02	--	<0.02	<0.02	--	<0.02	--	<0.02
Calcium	mg/L	9.26	9.31	--	9.17	--	9.66	9.67	--	9.81	--	9.88
Chloride	mg/L	4.13	4.07	--	4.08	--	4.06	4.4	--	4.4	--	4
Fluoride	mg/L	0.023 J	0.011 J	--	<0.01	--	<0.01	--	<0.032	0.05 J	--	0.04 J
pH_Field	SU	6	6.02	--	5.98	--	6.03	5.9	--	6	--	6.05
Sulfate	mg/L	1.44	1.38	--	1.15	--	1.57	2.06	--	2.1 J	--	2.7 J
TDS	mg/L	44.7	--	48	--	40.7	49.3	48.7	--	46.7	--	55.3
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	--	<0.0006	--	<0.0006	0.00091 J	--	<0.0006	--	<0.0006
Arsenic	mg/L	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--	<0.001	--	<0.001
Barium	mg/L	0.0125	0.0128	--	0.0129	--	0.0116	0.0118	--	0.0142	--	0.0127
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	--	<0.0006	<0.0006	--	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	--	<0.0002
Chromium	mg/L	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	--	<0.002
Cobalt	mg/L	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	--	<0.002
Combined Radium	pCi/L	0.242 U	0.34 U	--	0.447 U	--	0.729	0.184 U	--	--	0.454	-0.111 U
Lead	mg/L	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.01	--	<0.01	--	<0.01	<0.01	--	<0.01	--	<0.01
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	--	<0.00025	<0.00025	--	<0.00025	--	<0.00025
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-32										
		08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/05/2018	03/27/2019	09/11/2019	04/22/2020	08/12/2020	03/15/2021	08/23/2021
Appendix III												
Boron	mg/L	<0.02	--	<0.02	--	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	10.3	--	11.4	10.5	10.5	11.7	9.95	9.87	9.48	2.02	2.15
Chloride	mg/L	4.8	--	3.8	4.1	3.9	3.86	4.21	4	4.17	5.57	5.55
Fluoride	mg/L	0.04 J	0.04 J	0.04 J	--	<0.032	<0.05	0.0518 J	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	6.13	6.1	6.05	6.07	6.01	6.15	5.87	5.92	5.84	4.57	4.17
Sulfate	mg/L	2.6 J	--	3.1 J	1.6 J	2.4 J	3.22	2.66	2.51	2.54	8.5	9.3
TDS	mg/L	57.3	--	52.7	60	53.3	56	55.3	52.7	49.3	46	64.7
Appendix IV												
Antimony	mg/L	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000142 J	0.000176 J
Barium	mg/L	--	0.0135	0.0126	--	0.0123	0.0138	0.0147	0.0133	0.0127	0.0692	0.0781
Beryllium	mg/L	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000431 J	0.000385 J
Cobalt	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000908	0.00101
Combined Radium	pCi/L	--	0.146 U	-0.128 U	--	0.0946 U	0.5	-0.464 U	0.474 U	3.18	1.11 U	1.09
Lead	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.000121 J	0.00015 J
Lithium	mg/L	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-32		GC-AP-MW-33								
		03/28/2022	10/05/2022	08/16/2016	09/19/2016	10/11/2016	11/01/2016	11/14/2016	11/28/2016	01/03/2017	01/25/2017	03/14/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	0.0268 J	0.0225 J	0.0304 J	--	0.0355 J	--	0.0304 J	<0.02	--
Calcium	mg/L	9.61	9.69	5.54	3.01	2.74	--	2.47	--	2.94	2.91	--
Chloride	mg/L	3.98	4.04	4.88	4.45	4.36	--	4.42	--	5.18	5.66	--
Fluoride	mg/L	<0.06	<0.06	0.061 J	0.018 J	<0.01	--	<0.01	--	<0.01	--	<0.032
pH_Field	SU	5.01	5.84	6.34	6.11	5.99	--	5.83	--	5.39	5.09	--
Sulfate	mg/L	2.55	2.71	9.33	11.2	12.6	--	12.4	--	14.3	15.2	--
TDS	mg/L	51.3	43.3	101	80	--	78	--	68.7	60.7	54.7	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006	0.00112 J	--
Arsenic	mg/L	<8.1e-005	<8.1e-005	0.00122 J	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--
Barium	mg/L	0.0132	0.0133	0.0304	0.0215	0.0236	--	0.0206	--	0.0409	0.0455	--
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	--	<0.0006	--	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--
Chromium	mg/L	0.000336 J	0.000422 J	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--
Cobalt	mg/L	<6.8e-005	<6.8e-005	0.00923 J	0.00539 J	0.00506 J	--	0.00399 J	--	0.0037 J	0.0077 J	--
Combined Radium	pCi/L	0.682 U	0.467 U	0.534 U	0.238 U	0.158 U	--	0.641	--	0.834	0.605	--
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	--	<0.001	--	<0.001	<0.001	--
Lithium	mg/L	<0.007105	<0.007105	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	<0.01	--
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	--	<0.00025	--	<0.00025	<0.00025	--
Molybdenum	mg/L	<0.000102	<0.000102	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-33										
		05/10/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/27/2019	09/11/2019	04/22/2020	08/12/2020
Appendix III												
Boron	mg/L	<0.02	<0.02	<0.02	--	<0.02	--	<0.02	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	2.27	2.2	2.26	--	2.97	2.6	2.42	2.75	2.17	3.15	1.78
Chloride	mg/L	8	7.2	6.9	--	4.2	4.2	4.5	4.33	4.16	5.66	4.46
Fluoride	mg/L	0.06 J	0.07 J	0.08 J	0.07 J	0.1	--	0.08 J	<0.05	<0.05	<0.06	<0.06
pH_Field	SU	4.63	4.76	4.85	4.69	4.62	4.79	4.62	4.68	4.57	4.71	4.65
Sulfate	mg/L	12	13	15	--	17	16	15	15.1	14.5	9.64	13.6
TDS	mg/L	60.7	58	66.7	--	71.3	66.7	61.3	65.3	69.3	62.7	62
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0798	0.0679	--	0.0856	0.0875	--	0.0726	0.0912	0.0824	0.102	0.0601
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.00291 J	0.00247 J	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.563	0.937	--	0.475	1.65	--	1.55	1.83	1.02	1.08	3.41
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-33				GC-AP-PZ-4						
		03/15/2021	08/23/2021	03/28/2022	10/05/2022	09/12/2018	09/10/2019	04/20/2020	08/17/2020	03/10/2021	08/17/2021	04/05/2022
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	--	0.293	0.308	0.344	0.338	0.296	0.373
Calcium	mg/L	9.77	9.48	2.32	2.01	172	160	147	153	157	149	210
Chloride	mg/L	4.18	4.38	5.47	5.32	12	10.9	9.87	9.78	8.48	8.13	7.86
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	--	0.0831 J	0.132	0.0959 J	0.118	0.117	0.0841 J
pH_Field	SU	5.83	6.04	4.29	4.55	6.13	5.79	5.99	5.94	6.04	5.64	5.95
Sulfate	mg/L	2.76	2.44	11.8	12.2	400	499	482	493	510	569	812
TDS	mg/L	48	50.7	57.3	62.7	714	854	824	826	876	900	1240
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<6.8e-005	<6.8e-005	0.000144 J	<8.1e-005	--	0.00176 J	0.0029 J	0.00191 J	0.00597	0.0021	0.00404
Barium	mg/L	0.0144	0.0146	0.0773	0.0679	--	0.0787	0.0801	0.0718	0.0759	0.0781	0.0665
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	7.92e-005 J
Chromium	mg/L	0.000679 J	0.000502 J	0.000436 J	0.000254 J	--	<0.002	<0.002	<0.002	0.000247 J	0.00033 J	0.000468 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	0.00101	0.000909	--	0.146	0.157	0.148	0.167	0.211	0.39
Combined Radium	pCi/L	0.771 U	1.01 U	1.36	1.02	--	1.89	1.59	1.16	1.36 U	1.76	1.73
Lead	mg/L	<6.8e-005	<6.8e-005	0.000154 J	0.000115 J	--	<0.001	<0.001	<0.001	<6.8e-005	0.000224	0.0002 J
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	<6.8e-005	<0.000102	<0.000102	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-PZ-4	GC-AP-MW-34HA								GC-AP-MW-35H	
		10/05/2022	01/17/2019	09/10/2019	04/22/2020	08/12/2020	03/15/2021	08/23/2021	03/28/2022	10/19/2022	01/16/2019	09/11/2019
Appendix III												
Boron	mg/L	0.272	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.0284 J	<0.03
Calcium	mg/L	182	25.3	12.8	12	9.68	12.6	11.1	10.8	12.2	19.6	22.2
Chloride	mg/L	6.54	7.87	5.54	7.6	2.07	5.81	4.36	3.52	3.71	3.1	1.15
Fluoride	mg/L	0.192	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.05	0.082 J
pH_Field	SU	5.42	--	4.87	5.45	4.78	5.32	5.54	4.44	5.42	--	5.6
Sulfate	mg/L	782	47.9	27.1	26.8	13.5	25.6	24.8	27	22.6	34.9	30
TDS	mg/L	1150	156	112	114	66	96	89.3	88.7	86.7	85.3	100
Appendix IV												
Antimony	mg/L	<0.000508	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008
Arsenic	mg/L	0.00336	<0.001	<0.001	<0.001	<0.001	0.000158 J	0.00042	0.000129 J	0.000117 J	<0.001	<0.001
Barium	mg/L	0.0698	0.0714	0.0554	0.0578	0.0467	0.0532	0.0478	0.0481	0.0444	0.0492	0.0369
Beryllium	mg/L	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	0.00018 J	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003
Chromium	mg/L	0.000226 J	<0.002	<0.002	<0.002	<0.002	0.000473 J	0.000298 J	0.000354 J	0.000255 J	<0.002	<0.002
Cobalt	mg/L	0.528	0.033	0.0131	0.00675	0.00222 J	0.00198	0.00159	0.00122	0.00114	<0.002	<0.002
Combined Radium	pCi/L	1.73	0.628	0.656	0.473 U	2.1	0.858 U	0.336 U	0.466 U	0.0804 U	0.0207 U	0.734
Lead	mg/L	0.000298	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.000102	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-35H						GC-AP-MW-36H				
		04/21/2020	08/18/2020	03/16/2021	08/24/2021	04/06/2022	10/17/2022	01/30/2019	09/11/2019	04/22/2020	08/11/2020	03/09/2021
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.164	0.147	0.143	0.145	0.159
Calcium	mg/L	47.3	22.9	24.9	21	23.7	24.8	2.85	1.16	0.941	1.06	0.99
Chloride	mg/L	3.62	1.12	1.91	2.79	1.48	2.97	3.04	3.95	4.4	3.28	2.9
Fluoride	mg/L	0.16	0.0766 J	0.0841 J	0.0681 J	<0.06	<0.06	0.264	0.289	0.279	0.325	0.365
pH_Field	SU	6.54	6.03	6.16	6.08	5.24	6.19	--	7.2	7.72	7.69	7.79
Sulfate	mg/L	44.5	28.8	32.4	22.9	32.3	25.6	11	11	10.9	8.73	10.4
TDS	mg/L	176	100	111	94	92	96	184	182	199	184	185
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	<0.001	<0.001	0.0001 J	0.000105 J	9.11e-005 J	0.000174 J	0.0034 J	0.00222 J	0.00168 J	0.00223 J	0.00291
Barium	mg/L	0.0473	0.033	0.04	0.0336	0.0385	0.0386	0.00776 J	0.00323 J	0.0027 J	0.00393 J	0.00297
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	<0.002	<0.002	0.000912 J	0.000753 J	0.000382 J	0.000588 J	<0.002	0.0155	<0.002	<0.002	0.00143
Cobalt	mg/L	<0.002	<0.002	<6.8e-005	<6.8e-005	7.55e-005 J	<6.8e-005	<0.002	<0.002	<0.002	<0.002	0.000522
Combined Radium	pCi/L	0.423 U	0.636 U	0.536 U	0.492 U	0.108 U	0.533 U	0.479 U	0.412 U	-0.103 U	0.223 U	0.296 U
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	0.000447
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002	<0.002	<0.002	0.000166 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-36H			GC-AP-MW-37H							
		08/24/2021	03/30/2022	10/17/2022	01/15/2019	04/22/2020	08/19/2020	03/16/2021	08/24/2021	03/28/2022	03/29/2022	10/17/2022
Appendix III												
Boron	mg/L	0.139	0.147	0.143	0.224	0.186	0.229	0.159	0.179	--	0.162	0.177
Calcium	mg/L	1.07	0.754	0.765	231	175	143	148	143	--	123	148
Chloride	mg/L	2.91	3.04	2.36	13.4	10.3	13.9	13	9.19	--	5.57	13.2
Fluoride	mg/L	0.318	0.301	0.347	0.0512 J	0.197	0.141	0.263	0.194	--	0.189	0.138
pH_Field	SU	7.06	7.81	7.92	--	6.23	5.95	6.32	6.12	--	6.36	6.23
Sulfate	mg/L	9.79	10.3	9.18	780	510	402	368	383	--	303	306
TDS	mg/L	181	170	165	1210	977	834	756	742	--	624	706
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	--	<0.000508	<0.000508
Arsenic	mg/L	0.00235	0.00237	0.00202	<0.001	0.00768	0.00618	0.00685	0.00811	--	0.011	0.00461
Barium	mg/L	0.00261	0.00372	0.000809 J	0.0454	0.0248	0.0591	0.0347	0.037	--	0.0235	0.106
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	--	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000961 J	0.00108	0.00115	<0.002	<0.002	<0.002	0.000381 J	0.000259 J	--	0.000366 J	0.000395 J
Cobalt	mg/L	0.000321	0.000339	0.00039	0.0407	0.0327	0.0176	0.0225	0.0228	--	0.0205	0.0115
Combined Radium	pCi/L	0.253 U	0.174 U	0.65 U	0.354 U	0.273 U	0.994	0.954 U	0.282 U	0.405 U	0.405 U	0.881 U
Lead	mg/L	0.000306	0.000368	<6.8e-005	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.007105	<0.007105	<0.007105	0.0141 J	0.0134 J	0.0108 J	0.0107 J	0.0112 J	--	0.00871 J	0.00728 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003
Molybdenum	mg/L	8.67e-005 J	0.000175 J	0.000144 J	<0.002	<0.002	<0.002	0.000373	0.000369	--	0.00079	0.00024

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-38H								GC-AP-MW-39H		
		01/14/2019	09/11/2019	04/22/2020	08/19/2020	03/10/2021	08/24/2021	03/30/2022	10/18/2022	01/15/2019	09/11/2019	04/22/2020
Appendix III												
Boron	mg/L	0.148	0.175	0.118	0.135	0.104	0.105	0.102	0.101 J	1.68	1.67	1.89
Calcium	mg/L	123	84	83.9	96	96.2	109	93.9	117	97.6	91.6	102
Chloride	mg/L	37.9	3.82	2.25	3.4	2.3	4.46	3.8	3.6	14.3	14.1	12.9
Fluoride	mg/L	0.0841 J	0.142	0.135	0.149	0.131	0.197	0.0661 J	0.151	0.465	0.443	0.446
pH_Field	SU	--	6.55	6.66	6.57	6.67	5.84	6.62	6.7	--	6.17	6.42
Sulfate	mg/L	103	60.5	66.5	70	44.8	68.2	51.9	40.6	48.5	44.1	31.7
TDS	mg/L	381	280	290	308	308	345	282	288	597	454	512
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	0.00012 J	9.2e-005 J	0.000262	0.0514	0.053	0.0533
Barium	mg/L	0.0814	0.0581	0.0607	0.0678	0.0719	0.0872	0.0702	0.0956	0.185	0.173	0.192
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.0117	<0.002	<0.002	<0.002	0.000421 J	0.000381 J	0.000372 J	0.00025 J	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	0.00363 J	<0.002	<0.002	0.000455	0.000706	0.000371	0.000519	0.0173	0.0194	0.0192
Combined Radium	pCi/L	0.359 U	1.22	0.413 U	0.347 U	0.566 U	0.417 U	0.248 U	0.54 U	0.901	1.16	1.48
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	0.399	0.45	0.41
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00574 J	0.00203 J	<0.002	<0.002	0.000699	0.000476	0.000759	0.000233	0.00419 J	0.00338 J	0.00246 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-39H					GC-AP-MW-40H					
		08/11/2020	03/09/2021	08/24/2021	04/06/2022	10/18/2022	01/15/2019	09/10/2019	04/20/2020	08/12/2020	03/10/2021	08/25/2021
Appendix III												
Boron	mg/L	1.84	1.81	2	2.21	2.01	0.702	0.734	0.821	0.807	0.807	0.627
Calcium	mg/L	111	108	115	103	131	60.7	97.5	88.2	115	109	108
Chloride	mg/L	7.85	8.06	7.38	8.35	6.02	13	10.5	10.8	8.34	6.74	6.66
Fluoride	mg/L	0.494	0.458	0.508	0.39	0.423	0.0981 J	0.18	0.0952 J	0.145	0.112	0.142
pH_Field	SU	6.7	6.47	6.13	6.31	6.59	--	5.61	5.63	5.83	5.99	5.91
Sulfate	mg/L	51.7	32.2	34.1	34.9	25	224	291	247	285	292	330
TDS	mg/L	526	524	490	452	478	392	576	534	588	602	562
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.0635	0.0697	0.069	0.0524	0.0615	<0.001	<0.001	<0.001	<0.001	0.000443	0.000434
Barium	mg/L	0.177	0.206	0.213	0.178	0.21	0.0361	0.0294	0.0282	0.0295	0.0322	0.0296
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	0.000171 J	8.41e-005 J
Chromium	mg/L	<0.002	0.000342 J	0.000327 J	0.000286 J	<0.000203	<0.002	<0.002	<0.002	<0.002	0.000226 J	0.000232 J
Cobalt	mg/L	0.0176	0.0178	0.0183	0.0179	0.0161	0.0203	0.0139	0.0132	0.00717	0.00791	0.00901
Combined Radium	pCi/L	2.02	1.62	0.823 U	1.24	1.18	0.387 U	0.519 U	0.66	0.928	0.522 U	1.09 U
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.47	0.474	0.47	0.355	0.403	0.407	0.545	0.628	0.669	0.772	0.734
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00401 J	0.0047	0.00376	0.00174	0.00284	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-40H		GC-AP-MW-41H								GC-AP-MW-
		03/30/2022	10/05/2022	01/15/2019	09/11/2019	04/29/2020	08/18/2020	03/15/2021	08/25/2021	04/06/2022	10/18/2022	01/15/2019
Appendix III												
Boron	mg/L	0.504	0.545	0.762	0.758	0.699	0.689	0.659	0.632	0.598	0.592	1.73
Calcium	mg/L	98	106	115	72.1	70.8	66.7	70.4	78.3	98.6	111	70
Chloride	mg/L	5.72	7.05	16.6	16.5	16.1	15.9	15.9	14.4	13.6	13.8	19.9
Fluoride	mg/L	<0.06	0.133	0.0859 J	0.0609 J	0.0857 J	0.092 J	0.0721 J	0.074 J	<0.06	<0.06	<0.05
pH_Field	SU	5.69	5.77	--	5.96	6.37	5.93	6.43	6.13	6.16	6.39	--
Sulfate	mg/L	290	264	96	79.1	77.2	76.6	80.9	147	236	236	9.73
TDS	mg/L	493	471	433	334	317	299	321	376	488	484	334
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008
Arsenic	mg/L	0.000303	0.000232	0.002 J	0.00208 J	0.00182 J	0.00171 J	0.00174	0.00182	0.00165	0.00175	0.00372 J
Barium	mg/L	0.0258	0.0241	0.13	0.1	0.0998	0.0879	0.116	0.128	0.145	0.119	0.162
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	0.00018 J	0.000121 J	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003
Chromium	mg/L	<0.000203	0.000206 J	<0.002	<0.002	<0.002	<0.002	0.000553 J	0.000392 J	0.000525 J	0.000221 J	<0.002
Cobalt	mg/L	0.0107	0.00937	0.0044 J	0.00897	0.00777	0.00814	0.00472	0.0101	0.0181	0.0146	0.0281
Combined Radium	pCi/L	0.745 U	0.814 U	0.839	0.13 U	0.684	0.742	0.946 U	0.938 U	1.12	1.65	0.739
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	7.51e-005 J	<6.8e-005	<0.001
Lithium	mg/L	0.707	0.729	0.0411	0.0396	0.041	0.039	0.0459	0.0545	0.0897	0.0617	0.0146 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.000102	<0.000102	<0.002	<0.002	<0.002	<0.002	0.000131 J	9.62e-005 J	0.000131 J	0.000139 J	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-42H							GC-AP-MW-43H			
		09/11/2019	04/21/2020	08/19/2020	03/09/2021	08/18/2021	04/06/2022	10/19/2022	01/16/2019	09/11/2019	04/21/2020	08/19/2020
Appendix III												
Boron	mg/L	1.88	1.76	1.26	1.26	1.03	1.46	1.92	0.835	1.07	1.08	1.15
Calcium	mg/L	57.2	56.5	59.3	69.5	74.4	60.7	91.4	54.9	60.7	81.4	99.7
Chloride	mg/L	20.7	19.9	18.2	18.4	17	15.4	17.6	26.1	31.4	40.4	46.9
Fluoride	mg/L	0.063 J	0.0701 J	0.077 J	0.0697 J	0.111	0.0664 J	<0.06	0.0888 J	0.127	0.147	0.154
pH_Field	SU	6.2	6.01	6.27	6.29	6.16	6.1	6.27	--	6.52	6.18	6.18
Sulfate	mg/L	9.43	12.4	55.7	74.8	83.6	94.3	168	74	45.7	59.7	71.8
TDS	mg/L	299	299	371	375	401	368	431	345	368	463	534
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.00583	0.00417 J	0.00445 J	0.00343	0.00456	0.00515	0.00522	0.00816	0.0124	0.0101	0.0103
Barium	mg/L	0.123	0.108	0.119	0.135	0.145	0.147	0.154	0.12	0.127	0.156	0.168
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	0.000682	8.98e-005 J	0.000241	0.000187 J	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.00325 J	<0.002	<0.002	0.000286 J	<0.000203	0.000278 J	<0.000203	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0449	0.0359	0.037	0.0559	0.0436	0.0704	0.0743	0.0131	0.0143	0.0162	0.0173
Combined Radium	pCi/L	0.195 U	0.678	0.687	0.618 U	1.9	1.01	1.77	0.426 U	0.558 U	1.89	1.99
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0169 J	0.0174 J	0.0168 J	0.0172 J	0.0304	0.0246	0.0212	0.178	0.254	0.376	0.336
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	0.000315	0.000148 J	0.000233	0.000517	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-43H				GC-AP-MW-44H						
		03/09/2021	08/18/2021	04/06/2022	10/19/2022	01/16/2019	09/11/2019	04/20/2020	08/12/2020	03/10/2021	08/23/2021	04/04/2022
Appendix III												
Boron	mg/L	1.14	1.23	1.29	1.22	0.173	0.199	0.2	0.197	0.218	0.208	0.202
Calcium	mg/L	102	106	110	119	174	179	167	173	159	138	129
Chloride	mg/L	41.6	35.8	38.3	33.9	12.3	11.8	12	10.8	11.9	13.1	13.7
Fluoride	mg/L	0.135	0.166	0.133	0.134	0.0727 J	0.0783 J	0.0638 J	0.0867 J	0.0611 J	0.11	<0.06
pH_Field	SU	6.47	6.46	6.43	6.53	--	6.11	6.11	6.27	6.14	6.07	5.56
Sulfate	mg/L	91.3	107	105	109	394	409	429	415	410	406	390
TDS	mg/L	570	578	562	554	706	1570	790	728	794	714	604
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0117	0.0116	0.011	0.0117	<0.001	0.00269 J	0.00215 J	0.00197 J	0.00172	0.00263	0.0013
Barium	mg/L	0.211	0.187	0.168	0.175	0.131	0.0797	0.0594	0.0589	0.064	0.0596	0.0482
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	0.000411	0.00032	0.000301
Chromium	mg/L	0.000227 J	<0.000203	0.000264 J	<0.000203	<0.002	<0.002	<0.002	<0.002	0.000428 J	0.000302 J	0.000225 J
Cobalt	mg/L	0.0175	0.0196	0.0183	0.02	0.106	0.106	0.324	0.273	0.415	0.428	0.324
Combined Radium	pCi/L	1.54	1.64	1.84	1.67	0.422 U	0.637 U	0.386 U	4.07	0.923 U	1.13	0.795 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.448	0.344	0.288	0.246	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0026	0.00283	0.00264	0.00283	<0.002	<0.002	<0.002	<0.002	0.000171 J	0.000182 J	<0.000102

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-	GC-AP-MW-45H							GC-AP-MW-46HO		
		10/05/2022	12/17/2019	04/20/2020	08/17/2020	03/10/2021	08/18/2021	03/29/2022	10/18/2022	07/06/2020	08/11/2020	03/08/2021
Appendix III												
Boron	mg/L	0.197	0.186	0.426	0.57	0.625	0.646	0.575	0.485	0.274	0.252	0.658
Calcium	mg/L	137	47.6	64.9	57.2	39.3	122	109	70.5	51.1	57.8	47.1
Chloride	mg/L	7.16	8.56	10.9	8.99	6.5	9.94	9.44	9.25	4.5	4.27	8.51
Fluoride	mg/L	0.104 J	0.241	0.176	0.195	0.176	0.172	0.13	0.147	0.185	0.169	0.187
pH_Field	SU	6.06	7.72	7.14	6.94	6.83	6.84	6.83	6.38	6.69	6.38	6.86
Sulfate	mg/L	376	94.6	157	128	90.9	395	361	219	83.4	54.5	96.1
TDS	mg/L	606	247	369	305	247	730	646	388	260	258	282
Appendix IV												
Antimony	mg/L	<0.000508	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.00171	<0.001	0.00153 J	<0.001	0.00147	0.00143	0.000699	0.000532	<0.001	<0.001	0.000339
Barium	mg/L	0.0475	0.0977	0.0898	0.0632	0.0543	0.0942	0.0534	0.0372	0.0613	0.0653	0.0523
Beryllium	mg/L	<0.000406	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	0.000221	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	<0.000203	0.00266 J	<0.002	<0.002	0.000314 J	0.0003 J	<0.000203	0.00023 J	<0.002	<0.002	<0.000203
Cobalt	mg/L	0.294	0.00465 J	0.00451 J	0.00458 J	0.00442	0.0119	0.0109	0.00671	<0.002	<0.002	0.00155
Combined Radium	pCi/L	1.17	0.885	0.529	1.16	0.21 U	1.1	0.661 U	0.914 U	0.292 U	0.477 U	0.291 U
Lead	mg/L	<6.8e-005	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005
Lithium	mg/L	<0.007105	0.123	0.148	0.212	0.194	0.367	0.407	0.296	0.089	0.097	0.0991
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000221	0.0721	0.0703	0.0737	0.0852	0.0752	0.0652	0.064	0.0661	0.0443	0.0761

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-46HO			GC-AP-MW-47HO						GC-AP-MW-48H	
		08/17/2021	03/23/2022	10/04/2022	05/28/2020	08/11/2020	03/08/2021	08/17/2021	03/23/2022	10/04/2022	12/17/2019	04/21/2020
Appendix III												
Boron	mg/L	0.392	0.341	0.302	0.143	0.0903 J	0.0769 J	0.105	0.151	0.115	0.237	0.172
Calcium	mg/L	55	53.1	61.5	38.6	15.9	12.9	16.4	21.1	13	31	28.9
Chloride	mg/L	7.84	7.95	5.71	4.92	3.18	8.78	8.79	8.82	3.86	14.3	12.3
Fluoride	mg/L	0.169	0.166	0.151	0.0647 J	<0.06	<0.06	<0.06	<0.06	0.0647 J	<0.05	<0.06
pH_Field	SU	6.7	6.55	6.27	6.99	6.25	5.74	5.98	5.3	5.87	6.65	6.5
Sulfate	mg/L	111	131	82.2	81.5	49.3	31.4	52.1	61.1	42.8	102	90.2
TDS	mg/L	303	300	257	195	109	93.3	121	137	105	228	208
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008
Arsenic	mg/L	0.000262	0.000182 J	0.000268	<0.001	<0.001	0.000152 J	0.000136 J	<8.1e-005	<8.1e-005	<0.001	0.0021 J
Barium	mg/L	0.0563	0.0621	0.0574	0.0267	0.0204	0.0229	0.0297	0.0354	0.0238	0.05	0.028
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	7.26e-005 J	0.00012 J	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003
Chromium	mg/L	0.000285 J	<0.000203	<0.000203	<0.002	<0.002	<0.000203	0.00039 J	<0.000203	<0.000203	<0.002	<0.002
Cobalt	mg/L	0.00295	0.00484	0.00558	<0.002	<0.002	<6.8e-005	0.000247	0.000209	0.000103 J	0.00916	0.00236 J
Combined Radium	pCi/L	0.651 U	0.547 U	0.744 U	-0.0036 U	0.208 U	0.568 U	0.339 U	0.214 U	0.714 U	0.604	0.251 U
Lead	mg/L	<6.8e-005	<6.8e-005	9.87e-005 J	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001
Lithium	mg/L	0.112	0.123	0.119	0.0527	0.0457	0.0456	0.0453	0.05	0.0422	0.113	0.0924
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0556	0.0501	0.0442	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-48H					GC-AP-MW-49H					
		08/17/2020	03/10/2021	08/18/2021	03/30/2022	10/18/2022	12/17/2019	04/21/2020	08/19/2020	03/10/2021	08/18/2021	03/30/2022
Appendix III												
Boron	mg/L	0.218	0.188	0.131	0.0985 J	0.0984 J	0.252	0.272	0.213	0.224	0.157	0.331
Calcium	mg/L	27.6	22.1	18	13.9	14.5	48.5	36.8	27.4	27.3	19.5	29.7
Chloride	mg/L	11.9	8.31	4.28	3.44	4.3	13.3	11.3	7.53	7.57	5.3	8.12
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	0.143	0.075 J	0.0823 J	<0.06	0.0638 J	0.0724 J
pH_Field	SU	6.24	6.35	5.96	5.4	5.14	6.72	6.28	6.14	6.14	6.05	5.72
Sulfate	mg/L	78	62	47	36.4	36.2	94.1	90.8	70.7	76.1	51.4	106
TDS	mg/L	181	158	124	84	88.7	258	222	171	181	130	184
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	0.000557	0.000224	0.000228	0.000111 J	<0.001	<0.001	<0.001	0.000592	0.000739	0.000466
Barium	mg/L	0.027	0.0281	0.0244	0.0252	0.0269	0.0761	0.0437	0.0394	0.0406	0.0492	0.0642
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<6.8e-005	7.26e-005 J	<6.8e-005	0.000162 J	<0.0003	<0.0003	0.000334 J	0.00017 J	0.000212	0.000286
Chromium	mg/L	<0.002	0.00026 J	<0.000203	0.000237 J	0.000216 J	<0.002	<0.002	<0.002	0.000366 J	0.000402 J	0.000207 J
Cobalt	mg/L	<0.002	0.000388	0.000395	0.000155 J	0.000226	0.0139	0.00799	0.00853	0.00662	0.00507	0.00564
Combined Radium	pCi/L	1.11	0.57 U	0.595 U	0.315 U	0.152 U	0.701	0.594	0.0107 U	0.261 U	1.11 U	0.254 U
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.108	0.102	0.0821	0.0717	0.0597	0.0528	0.0733	0.0511	0.0681	0.0538	0.0732
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	0.000144 J	9.4e-005 J	<0.000102	<0.000102	0.00854 J	<0.002	<0.002	0.000173 J	0.000223	0.000187 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-	GC-AP-MW-50HO						GC-AP-MW-52HO			
		10/19/2022	05/28/2020	08/11/2020	03/08/2021	08/17/2021	03/23/2022	10/04/2022	07/06/2020	08/11/2020	03/08/2021	08/16/2021
Appendix III												
Boron	mg/L	0.437	0.343	0.329	0.302	0.281	0.499	0.328	1.2	1.25	1.25	1.35
Calcium	mg/L	31.6	40.1	39.5	32.7	38.1	38.7	37.6	75.6	73.1	63.3	65
Chloride	mg/L	9.04	13.4	11.2	13.7	14.5	17.7	12.8	103	87.4	90	60.9
Fluoride	mg/L	0.0628 J	0.138	0.16	0.127	0.155	0.16	0.157	0.0721 J	0.0762 J	0.0628 J	0.0613 J
pH_Field	SU	5.6	6.42	6.24	6.36	6.07	6.17	6.27	6.07	6.08	5.98	5.98
Sulfate	mg/L	109	94.7	79	71.5	83.1	60.4	79.4	78.2	64.1	56.9	42.2
TDS	mg/L	211	242	229	218	217	236	217	498	462	469	390
Appendix IV												
Antimony	mg/L	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.00044	<0.001	<0.001	0.000267	0.000319	0.000144 J	0.000118 J	<0.001	<0.001	0.00027	0.000189 J
Barium	mg/L	0.0545	0.0701	0.064	0.0685	0.0707	0.0799	0.0696	0.129	0.116	0.131	0.129
Beryllium	mg/L	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	0.000463	<0.0003	<0.0003	0.000287	0.000242	0.000372	0.000223	0.000366 J	0.00042 J	0.000227	0.000222
Chromium	mg/L	0.000244 J	<0.002	<0.002	0.00028 J	0.000808 J	<0.000203	<0.000203	<0.002	<0.002	<0.000203	0.000382 J
Cobalt	mg/L	0.00683	0.00801	0.0056	0.00553	0.00608	0.00883	0.00685	0.0158	0.0129	0.0153	0.0142
Combined Radium	pCi/L	0.484 U	0.612	0.883	1 U	0.939 U	0.908 U	0.402 U	0.432 U	0.777	2.06	1.3
Lead	mg/L	<6.8e-005	<0.001	<0.001	0.000122 J	0.000294	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0754	0.0979	0.0825	0.119	0.106	0.11	0.0749	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000238	<0.002	<0.002	<6.8e-005	8.68e-005 J	<0.000102	<0.000102	<0.002	<0.002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-52HO		GC-AP-MW-53H							GC-AP-MW-54H	
		03/23/2022	10/03/2022	12/17/2019	04/20/2020	08/11/2020	03/10/2021	08/23/2021	04/06/2022	10/17/2022	12/16/2019	04/20/2020
Appendix III												
Boron	mg/L	1.26	1.39	0.288	0.309	0.493	0.338	0.517	0.322	0.564	0.519	0.626
Calcium	mg/L	63.2	95.5	115	93.1	92.8	80.8	79.2	74.4	73.1	110	98.8
Chloride	mg/L	123	62.4	23.9	23.9	21.2	19.4	21.1	8.11	16.2	11.4	9.74
Fluoride	mg/L	<0.06	0.0862 J	0.215	0.154	0.133	0.135	0.245	0.101 J	0.136	0.246	0.25
pH_Field	SU	6.14	5.84	6.32	6.17	5.8	6.58	6.33	6.23	6.43	6.89	6.58
Sulfate	mg/L	38.9	37.4	38.1	14.7	12.6	44.2	11.6	117	32.1	207	242
TDS	mg/L	518	426	624	441	434	408	390	428	382	562	545
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008
Arsenic	mg/L	0.000262	0.000177 J	0.0492	0.0806	0.0869	0.213	0.225	0.229	0.342	0.328	0.41
Barium	mg/L	0.157	0.162	0.292	0.278	0.246	0.393	0.377	0.368	0.308	0.263	0.259
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	9.23e-005 J	0.000101 J	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003
Chromium	mg/L	0.00025 J	<0.000203	<0.002	<0.002	<0.002	0.000474 J	0.000456 J	0.000467 J	0.000567 J	<0.002	<0.002
Cobalt	mg/L	0.0167	0.0122	0.14	0.119	0.0859	0.0204	0.0233	0.00699	0.00557	0.00496 J	0.0203
Combined Radium	pCi/L	0.999	2.13	0.791	1.13	1.56	1.29 U	2.06	1.59	1.34	1.44	1
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	8.2e-005 J	<6.8e-005	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	0.0124 J	0.0107 J	0.0125 J	<0.007105	<0.007105	<0.007105	0.00944 J	0.102	0.101
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.000102	<0.000102	0.00216 J	<0.002	<0.002	0.00131	0.00142	0.000823	0.00182	0.0036 J	0.00223 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-54H					GC-AP-MW-55HO					
		08/12/2020	03/10/2021	08/23/2021	04/05/2022	10/05/2022	05/28/2020	08/11/2020	03/09/2021	08/17/2021	03/23/2022	10/04/2022
Appendix III												
Boron	mg/L	0.76	0.53	0.458	0.453	0.405	0.0435 J	0.0406 J	0.0397 J	<0.03	0.0318 J	0.0305 J
Calcium	mg/L	101	92.8	78.2	79	78.8	2.61	2.43	2.62	1.96	2.26	2.52
Chloride	mg/L	10.8	11.5	6.89	8.22	<0.5	6.88	6.21	5.06	4.25	4.56	4.27
Fluoride	mg/L	0.275	0.25	0.328	0.246	0.261	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	6.67	6.87	6.67	6.59	6.41	4.47	5.1	5.13	4.89	5.2	5.03
Sulfate	mg/L	180	139	106	124	101	10.3	9.32	9.2	7.2	8.46	9
TDS	mg/L	497	444	405	419	403	56.7	52.7	52	45.3	47.3	38.7
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.467	0.45	0.454	0.401	0.425	<0.001	<0.001	0.00013 J	9.15e-005 J	<8.1e-005	0.000103 J
Barium	mg/L	0.221	0.19	0.2	0.185	0.182	0.0389	0.0337	0.0404	0.0317	0.0352	0.0351
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	0.000574 J	0.000388 J	0.000304 J	0.000414 J	<0.002	<0.002	0.000619 J	0.000637 J	0.00107	0.000584 J
Cobalt	mg/L	0.0272	0.0239	0.031	0.0271	0.0334	<0.002	<0.002	0.000738	0.000946	0.00102	0.000975
Combined Radium	pCi/L	2.14	1.41	0.978 U	0.963 U	1.56	0.0544 U	0.462 U	1.02 U	0.442 U	0.748 U	0.823 U
Lead	mg/L	<0.001	9.49e-005 J	<6.8e-005	<6.8e-005	0.000194 J	<0.001	<0.001	8.75e-005 J	<6.8e-005	0.000102 J	<6.8e-005
Lithium	mg/L	0.105	0.0906	0.0805	0.0634	0.065	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00278 J	0.00289	0.00312	0.00291	0.00286	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-57H							GC-AP-MW-59HO			
		12/16/2019	04/20/2020	08/12/2020	03/10/2021	08/23/2021	04/05/2022	10/05/2022	05/28/2020	08/11/2020	03/09/2021	08/17/2021
Appendix III												
Boron	mg/L	0.305	0.252	0.338	0.126	0.211	0.109	0.163	0.208	0.209	0.192	0.192
Calcium	mg/L	90.8	69.5	79.1	29	41.4	18.1	35.2	72.4	76.7	60.5	69.8
Chloride	mg/L	8.94	7.88	6.3	55.3	8.41	19.1	5.31	12.1	12.1	10.4	10.8
Fluoride	mg/L	0.162	0.189	0.165	0.112	0.244	<0.06	0.191	0.0914 J	0.137	0.0715 J	0.096 J
pH_Field	SU	6.68	6.12	6.48	5.96	6.34	5.41	5.99	5.99	6.16	5.94	5.85
Sulfate	mg/L	212	252	274	66.5	117	52	54.8	198	206	202	214
TDS	mg/L	496	502	491	273	301	152	196	401	407	386	403
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.0156	0.0375	0.0467	0.0196	0.029	0.00674	0.0177	0.00208 J	<0.001	0.00103	0.000699
Barium	mg/L	0.111	0.0771	0.0796	0.103	0.084	0.088	0.0729	0.127	0.0909	0.0795	0.0669
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	0.000799 J	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	7.08e-005 J	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	0.000271 J	0.000289 J	0.000416 J	<0.000203	0.00515 J	<0.002	0.000256 J	0.000573 J
Cobalt	mg/L	0.0309	0.0862	0.0857	0.0345	0.0477	0.0193	0.0344	0.0445	0.022	0.0263	0.0216
Combined Radium	pCi/L	0.372 U	1.5	0.991	1.25 U	1.52	0.689 U	1.18	2.27	0.997	1.6	1.19 U
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	0.000314	<6.8e-005	0.0026 J	<0.001	<6.8e-005	0.000172 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	0.000369	0.000892	0.000396	0.000675	<0.002	<0.002	0.000127 J	0.000184 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-59HO		GC-AP-MW-60HO				GC-AP-MW-61HO				GC-AP-MW-
		03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022	06/29/2021
Appendix III												
Boron	mg/L	0.19	0.206	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	57.3	79.1	3.94	3.97	3.07	2.98	47	35.7	23.9	17.3	33.5
Chloride	mg/L	9.19	9.72	4.5	4.94	4.08	3.66	2.83	3.13	2.07	1.75	3.4
Fluoride	mg/L	0.0775 J	0.0929 J	<0.06	<0.06	<0.06	<0.06	0.119	0.142	0.0871 J	0.0748 J	0.0632 J
pH_Field	SU	5.88	6.06	5.27	5.15	5.22	4.83	7.1	6.84	6.38	5.51	7.04
Sulfate	mg/L	225	193	7.67	6.86	6.73	6.49	12.3	13	10.1	8.6	16.4
TDS	mg/L	389	377	32.7	43.3	39.3	28	124	113	74	54	101
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.000819	0.000287	<6.8e-005	<6.8e-005	<8.1e-005	<8.1e-005	0.000518	0.000363	0.000319	0.000353	0.000301
Barium	mg/L	0.0642	0.0602	0.0372	0.0379	0.0362	0.04	0.0484	0.0383	0.0411	0.0413	0.0553
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	<0.000203	0.000694 J	0.00065 J	0.000391 J	0.000421 J	0.000965 J	0.000469 J	0.000367 J	0.000587 J	0.00062 J
Cobalt	mg/L	0.0281	0.0187	0.00108	0.00077	0.000701	0.00073	0.000587	0.000498	0.000286	0.000471	0.000376
Combined Radium	pCi/L	1.02 U	1.23	0.765 U	0.612 U	0.932 U	0.583 U	0.564 U	0.404 U	0.201 U	0.572 U	0.648 U
Lead	mg/L	<6.8e-005	8.79e-005 J	0.000121 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000224	<6.8e-005	<6.8e-005	8e-005 J	0.000152 J
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.000102	0.000225	9.82e-005 J	<6.8e-005	<0.000102	<0.000102	0.00245	0.00151	0.000568	0.000312	0.00136

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-62HO			GC-AP-MW-63HO				GC-AP-MW-64HO			
		08/17/2021	03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022
Appendix III												
Boron	mg/L	<0.03	0.0323 J	<0.03	0.0343 J	<0.03	0.0323 J	0.036 J	0.527	0.571	0.549	0.419
Calcium	mg/L	20.3	8.07	9.58	9.43	8.92	6.08	7.52	51.5	54.6	63.2	68.3
Chloride	mg/L	3.28	3.19	2.99	2.92	3.37	2.42	2.58	8.53	10.9	16.1	9.9
Fluoride	mg/L	0.0716 J	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.238	0.225	0.251	0.212
pH_Field	SU	6.33	5.82	5.82	5.69	5.58	5.34	5.38	6.97	7.03	6.92	6.87
Sulfate	mg/L	14.9	15.9	14.9	20.6	22.7	18.5	19.5	110	128	156	141
TDS	mg/L	59.3	44.7	42	49.3	53.3	41.3	48	278	318	373	320
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.000263	0.000113 J	0.000145 J	0.000106 J	0.000119 J	<8.1e-005	<8.1e-005	0.000649	0.00051	0.000291	0.000271
Barium	mg/L	0.0727	0.0814	0.0737	0.0594	0.0597	0.0533	0.0548	0.0778	0.0762	0.094	0.0677
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	7.13e-005 J	<6.8e-005	0.000109 J	0.000119 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000131 J	<6.8e-005
Chromium	mg/L	0.000673 J	0.000336 J	0.000435 J	0.000352 J	0.000353 J	0.0003 J	0.000384 J	0.000807 J	0.000856 J	<0.000203	<0.000203
Cobalt	mg/L	0.000335	0.00038	0.000124 J	0.000907	0.000809	0.000286	0.000312	0.00376	0.00348	0.00397	0.00298
Combined Radium	pCi/L	0.437 U	0.829 U	1.03	0.307 U	0.219 U	0.207 U	0.862 U	0.87 U	0.56 U	1.03	0.702 U
Lead	mg/L	0.000109 J	<6.8e-005	6.94e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000134 J	0.000281	0.000224	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	0.128	0.142	0.152	0.148
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000551	0.000126 J	0.000126 J	0.000232	7.12e-005 J	<0.000102	<0.000102	0.0675	0.0676	0.065	0.0678

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS			
		GC-AP-PZ-	GC-AP-18-	GC-AP-18-	GC-AP-18-
		09/12/2018	02/06/2019	02/06/2019	02/06/2019
Appendix III					
Boron	mg/L	--	0.982	5.21	1.56
Calcium	mg/L	155	138	245	276
Chloride	mg/L	24	16.4	28.6	13.3
Fluoride	mg/L	--	<0.05	0.166	0.321
pH_Field	SU	6.6	--	--	--
Sulfate	mg/L	160	53.4	53.3	690
TDS	mg/L	538	494	852	1190
Appendix IV					
Antimony	mg/L	--	0.00105 J	<0.0008	<0.0008
Arsenic	mg/L	--	0.279	0.35	1.17
Barium	mg/L	--	0.732	2.31	0.0492
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003
Chromium	mg/L	--	<0.002	<0.002	<0.002
Cobalt	mg/L	--	<0.002	<0.002	<0.002
Combined Radium	pCi/L	--	--	--	--
Lead	mg/L	--	<0.001	<0.001	<0.001
Lithium	mg/L	--	0.417	1.58	0.859
Mercury	mg/L	--	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	<0.002	0.0101	0.0235

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-23										
		02/17/2016	04/12/2016	06/01/2016	08/16/2016	10/11/2016	11/02/2016	01/24/2017	03/14/2017	05/09/2017	06/27/2017	08/29/2017
Appendix IV												
Selenium	mg/L	<0.002	0.00205 J	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--
Thallium	mg/L	0.000364 J	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-23										
		02/27/2018	06/05/2018	09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/12/2020	03/10/2021	08/24/2021	03/28/2022
Appendix IV												
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.00117	0.00113	0.00108
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-	GC-AP-MW-24									
		10/17/2022	02/17/2016	04/12/2016	06/01/2016	08/16/2016	10/11/2016	11/02/2016	01/24/2017	03/14/2017	05/10/2017	06/28/2017
Appendix IV												
Selenium	mg/L	0.000888 J	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	0.00268 J
Thallium	mg/L	<6.8e-005	0.00039 J	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-24										
		08/29/2017	02/27/2018	06/05/2018	09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/22/2020	08/12/2020	03/10/2021	08/24/2021
Appendix IV												
Selenium	mg/L	--	0.00281 J	0.00294 J	--	<0.002	0.00208 J	<0.002	<0.002	<0.002	0.00139	0.000957 J
Thallium	mg/L	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-24		GC-AP-MW-26								
		04/04/2022	10/17/2022	08/17/2016	09/20/2016	10/12/2016	11/15/2016	11/29/2016	01/04/2017	01/23/2017	03/13/2017	05/09/2017
Appendix IV												
Selenium	mg/L	0.000998 J	0.000816 J	<0.002	<0.002	<0.002	<0.002	--	<0.002	0.00247 J	--	0.0072 J
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-26										
		06/27/2017	08/29/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/11/2019	04/21/2020	08/18/2020	03/15/2021
Appendix IV												
Selenium	mg/L	0.00443 J	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-26			GC-AP-MW-27							
		08/18/2021	04/04/2022	10/19/2022	08/17/2016	09/20/2016	10/12/2016	11/15/2016	11/29/2016	01/04/2017	01/23/2017	03/14/2017
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-27										
		05/09/2017	06/27/2017	08/29/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/11/2019	04/21/2020	08/18/2020
Appendix IV												
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-MW-27				GC-AP-MW-28						
		03/15/2021	08/18/2021	03/28/2022	10/19/2022	08/17/2016	09/20/2016	10/12/2016	10/31/2016	11/15/2016	11/29/2016	01/04/2017
Appendix IV												
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	--	<0.002	--	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-28										
		01/24/2017	03/14/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/11/2019
Appendix IV												
Selenium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-28						GC-AP-MW-29				
		04/21/2020	08/18/2020	03/15/2021	08/18/2021	03/28/2022	10/19/2022	08/16/2016	09/20/2016	10/11/2016	10/31/2016	11/15/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-29										
		11/29/2016	01/04/2017	01/26/2017	03/13/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-29								GC-AP-MW-30		
		03/26/2019	09/11/2019	04/21/2020	08/18/2020	03/15/2021	08/18/2021	03/28/2022	10/19/2022	08/16/2016	09/20/2016	10/11/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-30										
		10/31/2016	11/15/2016	11/29/2016	01/04/2017	01/23/2017	03/14/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-30										GC-AP-MW-
		09/11/2018	11/06/2018	03/26/2019	09/11/2019	04/21/2020	08/18/2020	03/15/2021	08/18/2021	03/28/2022	10/19/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	0.00277 J
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000601 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-1										
		04/13/2016	06/01/2016	08/15/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/27/2017	08/30/2017	02/27/2018	06/04/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	0.00206 J	--	0.00206 J	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-1										GC-AP-MW-
		09/10/2018	11/06/2018	03/27/2019	09/10/2019	04/21/2020	08/17/2020	03/16/2021	08/17/2021	04/04/2022	10/05/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.00163	0.00209	0.00233	0.000737 J	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000107 J	0.000124 J	0.000158 J	0.000161 J	0.000388 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-2										
		04/13/2016	06/01/2016	08/15/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/30/2017	02/27/2018	06/04/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern
Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-2										GC-AP-MW-
		09/10/2018	11/06/2018	03/27/2019	09/09/2019	04/21/2020	08/17/2020	03/16/2021	08/17/2021	03/28/2022	10/05/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	0.000542 J	0.000592 J	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000101 J	0.000132 J	0.000133 J	0.000158 J	0.00038 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-3										
		04/12/2016	06/01/2016	08/15/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/30/2017	02/27/2018	06/04/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-3										GC-AP-MW-
		09/12/2018	11/06/2018	03/27/2019	09/09/2019	04/20/2020	08/17/2020	03/16/2021	08/17/2021	04/05/2022	10/05/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.000959 J	0.000974 J	0.000651 J	0.000612 J	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000779 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-5										
		04/12/2016	05/31/2016	08/17/2016	10/11/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/30/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-5										GC-AP-MW-
		09/11/2018	11/06/2018	03/27/2019	09/11/2019	04/21/2020	08/12/2020	03/16/2021	08/23/2021	04/04/2022	10/17/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000639 J

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-6										
		04/12/2016	05/31/2016	08/17/2016	10/11/2016	01/24/2017	03/14/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-6										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/19/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00042 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-7										
		04/13/2016	05/31/2016	08/17/2016	10/12/2016	01/25/2017	03/14/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-7										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/19/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/16/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-8										
		04/13/2016	06/01/2016	08/17/2016	10/12/2016	01/25/2017	03/15/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-8										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/19/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/16/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-9										
		04/13/2016	06/01/2016	08/17/2016	10/12/2016	01/25/2017	03/15/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-9										GC-AP-MW-
		09/11/2018	11/07/2018	03/26/2019	09/10/2019	04/21/2020	08/18/2020	03/09/2021	08/24/2021	03/29/2022	10/18/2022	02/16/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-MW-10										
		04/13/2016	05/31/2016	08/16/2016	10/12/2016	01/25/2017	03/15/2017	05/10/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-10										GC-AP-MW-
		09/11/2018	11/07/2018	03/27/2019	09/10/2019	04/22/2020	08/18/2020	03/15/2021	08/24/2021	04/04/2022	10/18/2022	02/17/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000869 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-11										
		04/13/2016	05/31/2016	08/16/2016	10/12/2016	01/25/2017	03/14/2017	05/09/2017	06/28/2017	08/29/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-11										GC-AP-MW-
		09/10/2018	11/05/2018	03/27/2019	09/10/2019	04/22/2020	08/18/2020	03/10/2021	08/25/2021	03/30/2022	10/17/2022	02/16/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	8.7e-005 J	9.4e-005 J	7.43e-005 J	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-12										
		04/13/2016	05/31/2016	08/16/2016	10/12/2016	01/25/2017	03/15/2017	05/09/2017	06/28/2017	08/29/2017	02/28/2018	06/06/2018
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-12										GC-AP-MW-
		09/11/2018	11/05/2018	03/26/2019	09/10/2019	04/21/2020	08/18/2020	03/10/2021	08/25/2021	03/29/2022	10/17/2022	02/16/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	0.00281	<0.000508	0.0011	0.0227
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-MW-13										
		04/12/2016	05/31/2016	08/16/2016	10/12/2016	11/01/2016	01/25/2017	03/15/2017	05/09/2017	06/28/2017	08/29/2017	02/27/2018
Appendix IV												
Selenium	mg/L	0.0701	0.0129	0.0208	0.00431 J	--	0.00779 J	--	0.00905 J	0.0072 J	--	--
Thallium	mg/L	<0.0002	0.000212 J	0.000449 J	0.000532 J	--	0.000309 J	--	0.00021 J	0.000244 J	--	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-13										
		02/28/2018	06/06/2018	09/11/2018	11/05/2018	03/26/2019	09/11/2019	04/20/2020	08/18/2020	03/15/2021	08/25/2021	04/06/2022
Appendix IV												
Selenium	mg/L	0.00826 J	0.00496 J	--	<0.002	0.0239	<0.002	0.0125	0.00416 J	0.0175	0.00826	0.111
Thallium	mg/L	<0.0002	0.000239 J	--	0.000623 J	0.000215 J	0.00214	0.000433 J	0.00114	0.000506	0.00124	0.00169

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-13		GC-AP-MW-14								
		05/17/2022	10/17/2022	02/16/2016	04/12/2016	05/31/2016	08/17/2016	10/12/2016	11/01/2016	01/25/2017	03/14/2017	05/09/2017
Appendix IV												
Selenium	mg/L	0.0457	0.0103	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--	<0.002
Thallium	mg/L	--	0.00238	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-14										
		06/28/2017	08/29/2017	02/27/2018	06/06/2018	09/12/2018	11/07/2018	03/27/2019	09/10/2019	04/21/2020	08/11/2020	03/09/2021
Appendix IV												
Selenium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-14			GC-AP-MW-15							
		08/25/2021	04/04/2022	10/18/2022	02/17/2016	04/12/2016	05/31/2016	08/16/2016	10/11/2016	11/01/2016	01/24/2017	03/14/2017
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	0.000697 J	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-15										
		05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/11/2018	11/06/2018	03/26/2019	09/10/2019	04/20/2020	08/12/2020
Appendix IV												
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-15				GC-AP-MW-16						
		03/10/2021	08/25/2021	03/29/2022	10/18/2022	02/17/2016	04/13/2016	06/01/2016	08/15/2016	10/12/2016	11/02/2016	01/24/2017
Appendix IV												
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Thallium	mg/L	8.78e-005 J	<6.8e-005	0.000108 J	8.43e-005 J	0.000687 J	<0.0002	0.000272 J	0.000278 J	0.000322 J	--	0.000265 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-MW-16										
		03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/12/2018	11/06/2018	03/26/2019	09/10/2019	04/20/2020
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	--	0.000327 J	0.000301 J	--	0.000321 J	0.000288 J	--	0.000354 J	0.00041 J	0.000396 J	0.00032 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-16					GC-AP-MW-17					
		08/11/2020	03/09/2021	08/17/2021	04/06/2022	10/18/2022	02/17/2016	04/13/2016	06/01/2016	08/15/2016	10/12/2016	11/02/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	0.000329 J	0.000369	0.000356	0.000353	0.000337	0.00067 J	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-17										
		01/24/2017	03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/12/2018	11/06/2018	03/26/2019	09/09/2019
Appendix IV												
Selenium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-17						GC-AP-MW-18				
		04/21/2020	08/11/2020	03/09/2021	08/17/2021	04/04/2022	10/18/2022	02/17/2016	04/12/2016	06/01/2016	08/15/2016	10/12/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000404 J	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-18										
		11/02/2016	01/24/2017	03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/28/2018	06/05/2018	09/12/2018	11/06/2018	03/26/2019
Appendix IV												
Selenium	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-18							GC-AP-MW-21			
		09/09/2019	04/21/2020	08/12/2020	03/09/2021	08/17/2021	04/06/2022	10/17/2022	02/16/2016	04/13/2016	06/01/2016	08/16/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-21										
		10/12/2016	01/25/2017	03/15/2017	05/09/2017	06/28/2017	08/29/2017	02/28/2018	06/06/2018	09/10/2018	11/05/2018	03/26/2019
Appendix IV												
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-21							GC-AP-MW-25			
		09/10/2019	04/21/2020	08/18/2020	03/10/2021	08/25/2021	03/30/2022	10/17/2022	02/17/2016	04/12/2016	06/01/2016	08/17/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	0.000106 J	<6.8e-005	0.000117 J	0.00012 J	0.000232 J	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-25										
		10/11/2016	11/02/2016	01/24/2017	03/14/2017	05/09/2017	06/28/2017	08/29/2017	02/28/2018	06/06/2018	09/12/2018	11/06/2018
Appendix IV												
Selenium	mg/L	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002
Thallium	mg/L	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-25								GC-AP-MW-31		
		03/27/2019	09/10/2019	04/22/2020	08/11/2020	03/10/2021	08/24/2021	03/29/2022	10/18/2022	08/16/2016	09/19/2016	10/11/2016
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-31										
		11/01/2016	11/14/2016	11/28/2016	01/03/2017	01/24/2017	03/14/2017	05/10/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018
Appendix IV												
Selenium	mg/L	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-31										GC-AP-MW-
		09/11/2018	11/06/2018	03/27/2019	09/11/2019	04/22/2020	08/11/2020	03/15/2021	08/23/2021	03/28/2022	10/05/2022	08/16/2016
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-32										
		09/19/2016	10/11/2016	11/01/2016	11/14/2016	11/28/2016	01/03/2017	01/24/2017	03/14/2017	05/10/2017	05/31/2017	06/27/2017
Appendix IV												
Selenium	mg/L	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-32										
		08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/05/2018	03/27/2019	09/11/2019	04/22/2020	08/12/2020	03/15/2021	08/23/2021
Appendix IV												
Selenium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	0.000576 J
Thallium	mg/L	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-32		GC-AP-MW-33								
		03/28/2022	10/05/2022	08/16/2016	09/19/2016	10/11/2016	11/01/2016	11/14/2016	11/28/2016	01/03/2017	01/25/2017	03/14/2017
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	--	<0.002	--	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.0002	--

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-33										
		05/10/2017	06/27/2017	08/30/2017	02/27/2018	06/05/2018	09/11/2018	11/06/2018	03/27/2019	09/11/2019	04/22/2020	08/12/2020
Appendix IV												
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-33				GC-AP-PZ-4						
		03/15/2021	08/23/2021	03/28/2022	10/05/2022	09/12/2018	09/10/2019	04/20/2020	08/17/2020	03/10/2021	08/17/2021	04/05/2022
Appendix IV												
Selenium	mg/L	<0.000507	<0.000508	0.000592 J	<0.000508	--	<0.002	0.00237 J	<0.002	0.0013	0.00321	0.0017
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<0.0002	<0.0002	<0.0002	7.61e-005 J	0.000106 J	0.000107 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-PZ-4	GC-AP-MW-34HA								GC-AP-MW-35H	
		10/05/2022	01/17/2019	09/10/2019	04/22/2020	08/12/2020	03/15/2021	08/23/2021	03/28/2022	10/19/2022	01/16/2019	09/11/2019
Appendix IV												
Selenium	mg/L	0.00642	<0.002	<0.002	<0.002	<0.002	0.000704 J	<0.000508	0.000697 J	0.000622 J	0.00367 J	0.00404 J
Thallium	mg/L	0.000158 J	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-35H						GC-AP-MW-36H				
		04/21/2020	08/18/2020	03/16/2021	08/24/2021	04/06/2022	10/17/2022	01/30/2019	09/11/2019	04/22/2020	08/11/2020	03/09/2021
Appendix IV												
Selenium	mg/L	0.00451 J	0.00268 J	0.00362	0.00237	0.00364	0.00352	<0.002	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-36H			GC-AP-MW-37H							
		08/24/2021	03/30/2022	10/17/2022	01/15/2019	04/22/2020	08/19/2020	03/16/2021	08/24/2021	03/28/2022	03/29/2022	10/17/2022
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.000507	<0.000508	--	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-38H								GC-AP-MW-39H		
		01/14/2019	09/11/2019	04/22/2020	08/19/2020	03/10/2021	08/24/2021	03/30/2022	10/18/2022	01/15/2019	09/11/2019	04/22/2020
Appendix IV												
Selenium	mg/L	0.018	0.0155	0.0111	0.0108	0.0124	0.0148	0.00902	0.0197	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00092 J	0.000983 J	0.0008 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-MW-39H					GC-AP-MW-40H					
		08/11/2020	03/09/2021	08/24/2021	04/06/2022	10/18/2022	01/15/2019	09/10/2019	04/20/2020	08/12/2020	03/10/2021	08/25/2021
Appendix IV												
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	0.000814 J	0.000828	0.000762	0.000594	0.000636	<0.0002	0.000223 J	<0.0002	0.000208 J	0.000186 J	0.000134 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-40H		GC-AP-MW-41H								GC-AP-MW-
		03/30/2022	10/05/2022	01/15/2019	09/11/2019	04/29/2020	08/18/2020	03/15/2021	08/25/2021	04/06/2022	10/18/2022	01/15/2019
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	0.000183 J	0.000185 J	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-42H							GC-AP-MW-43H			
		09/11/2019	04/21/2020	08/19/2020	03/09/2021	08/18/2021	04/06/2022	10/19/2022	01/16/2019	09/11/2019	04/21/2020	08/19/2020
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-43H				GC-AP-MW-44H						
		03/09/2021	08/18/2021	04/06/2022	10/19/2022	01/16/2019	09/11/2019	04/20/2020	08/12/2020	03/10/2021	08/23/2021	04/04/2022
Appendix IV												
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern
Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-	GC-AP-MW-45H							GC-AP-MW-46HO		
		10/05/2022	12/17/2019	04/20/2020	08/17/2020	03/10/2021	08/18/2021	03/29/2022	10/18/2022	07/06/2020	08/11/2020	03/08/2021
Appendix IV												
Selenium	mg/L	<0.000508	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507
Thallium	mg/L	8.68e-005 J	<0.0002	<0.0002	<0.0002	0.000103 J	0.000205	0.000128 J	0.000159 J	<0.0002	<0.0002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-46HO			GC-AP-MW-47HO						GC-AP-MW-48H	
		08/17/2021	03/23/2022	10/04/2022	05/28/2020	08/11/2020	03/08/2021	08/17/2021	03/23/2022	10/04/2022	12/17/2019	04/21/2020
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-48H					GC-AP-MW-49H					
		08/17/2020	03/10/2021	08/18/2021	03/30/2022	10/18/2022	12/17/2019	04/21/2020	08/19/2020	03/10/2021	08/18/2021	03/30/2022
Appendix IV												
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-	GC-AP-MW-50HO						GC-AP-MW-52HO			
		10/19/2022	05/28/2020	08/11/2020	03/08/2021	08/17/2021	03/23/2022	10/04/2022	07/06/2020	08/11/2020	03/08/2021	08/16/2021
Appendix IV												
Selenium	mg/L	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	<6.8e-005	<0.0002	<0.0002	<6.8e-005	7.98e-005 J	0.000108 J	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-52HO		GC-AP-MW-53H							GC-AP-MW-54H	
		03/23/2022	10/03/2022	12/17/2019	04/20/2020	08/11/2020	03/10/2021	08/23/2021	04/06/2022	10/17/2022	12/16/2019	04/20/2020
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	**Units**	**GROUNDWATER MONITORING WELLS**										
		GC-AP-MW-54H					GC-AP-MW-55HO					
		08/12/2020	03/10/2021	08/23/2021	04/05/2022	10/05/2022	05/28/2020	08/11/2020	03/09/2021	08/17/2021	03/23/2022	10/04/2022
Appendix IV												
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-57H							GC-AP-MW-59HO			
		12/16/2019	04/20/2020	08/12/2020	03/10/2021	08/23/2021	04/05/2022	10/05/2022	05/28/2020	08/11/2020	03/09/2021	08/17/2021
Appendix IV												
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	0.00059 J	<0.000508	<0.002	<0.002	0.000652 J	0.00051 J
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	0.000121 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-59HO		GC-AP-MW-60HO				GC-AP-MW-61HO				GC-AP-MW-
		03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022	06/29/2021
Appendix IV												
Selenium	mg/L	0.000981 J	<0.000508	0.00135	0.00115	0.00122	0.00118	0.000905 J	0.00065 J	0.000711 J	0.000631 J	<0.000508
Thallium	mg/L	0.000126 J	9.76e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GC-AP-MW-62HO			GC-AP-MW-63HO				GC-AP-MW-64HO			
		08/17/2021	03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022	06/29/2021	08/17/2021	03/23/2022	10/04/2022
Appendix IV												
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	8.38e-005 J	9.41e-005 J	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS			
		GC-AP-PZ-	GC-AP-18-	GC-AP-18-	GC-AP-18-
		09/12/2018	02/06/2019	02/06/2019	02/06/2019
Appendix IV					
Selenium	mg/L	--	<0.002	<0.002	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

ANALYTICAL DATA SUMMARY
Ash Pond (02/16/2016 - 10/19/2022)
APC Plant Greene County
Greene County Alabama

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Appendix B

Appendix B. Historical Groundwater Elevations Summary

Plant Greene County Ash Pond
02/16/2016 - 10/03/2022

Well	Hydraulic Location	Geologic Unit	Measure Date																
			02/16/16	04/12/16	05/31/16	08/15/16	10/10/16	10/31/16	11/28/16	01/03/17	01/23/17	03/13/17	05/08/17	06/27/17	08/28/17	02/26/18	06/04/18	09/10/18	11/05/18
GC-AP-MW-23	Upgradient	Unit 2: Poorly Graded Sands with Gravel														88.17	88.69	87.82	87.43
GC-AP-MW-24	Upgradient	Unit 2: Poorly Graded Sands with Gravel														87.26	86.30	87.36	86.85
GC-AP-MW-26	Upgradient	Unit 2: Poorly Graded Sands with Gravel							77.13	77.29						85.93	83.80	79.79	79.10
GC-AP-MW-27	Upgradient	Unit 2: Poorly Graded Sands with Gravel							77.17	77.36						84.24	83.20	79.66	78.88
GC-AP-MW-28	Upgradient	Unit 2: Poorly Graded Sands with Gravel							76.79	77.19						83.08	81.98	78.86	78.16
GC-AP-MW-29	Upgradient	Unit 2: Poorly Graded Sands with Gravel							77.26	77.26						85.37	83.47	79.75	79.02
GC-AP-MW-30	Upgradient	Unit 2: Poorly Graded Sands with Gravel							76.57	77.29						83.32	82.12	79.28	78.37
GC-AP-MW-1	Downgradient	Unit 2: Poorly Graded Sands with Gravel	91.81	92.47	91.92	91.43	90.98	90.77			91.09	91.32	91.24	91.86	91.41	91.06	91.37	90.53	90.10
GC-AP-MW-2	Downgradient	Unit 2: Poorly Graded Sands with Gravel	84.35	100.97	100.06	100.03	99.55	99.39			100.49	100.17	99.71	100.09	99.06	99.87	99.38	98.99	98.92
GC-AP-MW-3	Downgradient	Unit 2: Poorly Graded Sands with Gravel	88.54	100.54	99.43	99.42	99.04	98.97			100.16	99.86	99.33	99.58	98.57	100.04	99.11	98.65	98.79
GC-AP-MW-5	Downgradient	Unit 2: Poorly Graded Sands with Gravel	93.14	101.00	98.34	98.33	97.20	96.81			100.72	100.45	98.91	99.81	96.94	100.90	99.34	97.23	96.04
GC-AP-MW-6	Downgradient	Unit 2: Poorly Graded Sands with Gravel	98.75	98.83	97.34	97.48	95.35	94.59			98.43	98.13	97.03	97.80	95.18	98.36	97.47	96.16	95.64
GC-AP-MW-7	Downgradient	Unit 2: Poorly Graded Sands with Gravel	92.13	92.52	90.51	90.11	87.25	86.30			91.65	91.61	90.36	91.35	87.80	92.01	91.06	88.19	87.68
GC-AP-MW-8	Downgradient	Unit 2: Poorly Graded Sands with Gravel	90.78	91.21	89.17	88.80	85.87	84.91			90.14	89.99	88.74	89.64	86.46	90.57	89.37	86.93	86.36
GC-AP-MW-9	Downgradient	Unit 2: Poorly Graded Sands with Gravel	89.62	89.95	88.10	87.73	84.81	83.80			89.25	89.05	87.53	88.71	85.12	89.73	88.37	85.55	85.21
GC-AP-MW-10	Downgradient	Unit 2: Poorly Graded Sands with Gravel	84.13	84.25	83.14	83.76	82.17	81.66			83.30	83.21	82.55	83.82	81.56	83.60	82.96	83.09	83.07
GC-AP-MW-11	Downgradient	Unit 2: Poorly Graded Sands with Gravel	86.33	86.54	85.73	85.48	84.26	83.88			84.86	84.62	84.21	85.22	83.72	84.93	84.83	84.39	84.05
GC-AP-MW-12	Downgradient	Unit 2: Poorly Graded Sands with Gravel	87.52	87.73	86.72	87.01	85.21	84.95			85.50	85.35	85.23	85.82	85.16	85.69	85.52	85.27	85.03
GC-AP-MW-13	Downgradient	Unit 2: Poorly Graded Sands with Gravel	83.32	83.59	82.03	82.27	80.55	80.09			80.62	81.20	80.89	84.44	80.82	82.27	81.73	80.62	80.21
GC-AP-MW-14	Downgradient	Unit 2: Poorly Graded Sands with Gravel	81.59	81.84	78.32	78.67	76.89	76.18			81.37	80.21	77.45	84.37	76.61	82.24	78.71	77.60	76.88
GC-AP-MW-15	Downgradient	Unit 2: Poorly Graded Sands with Gravel	68.67	78.28	74.63	74.73	74.03	73.82			78.62	78.12	74.99	83.63	74.41	79.92	75.89	75.06	74.74
GC-AP-MW-16	Downgradient	Unit 2: Poorly Graded Sands with Gravel	89.77	78.30	74.93	74.77	74.24	74.63			78.16	78.30	75.40	84.19	74.92	79.89	76.56	75.45	75.16

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix B. Historical Groundwater Elevations Summary

Plant Greene County Ash Pond
02/16/2016 - 10/03/2022

Well	Hydraulic Location	Geologic Unit	Measure Date										
			03/25/19	09/09/19	04/20/20	05/28/20	06/30/20	08/10/20	03/08/21	06/28/21	08/16/21	03/22/22	10/03/22
GC-AP-MW-23	Upgradient	Unit 2: Poorly Graded Sands with Gravel	89.65	88.50	89.99	89.78	89.51	89.04	88.44	89.16	88.66	87.78	87.38
GC-AP-MW-24	Upgradient	Unit 2: Poorly Graded Sands with Gravel	89.07	88.00	89.58	89.29	89.09	88.65	87.73	88.47	88.14	87.10	87.02
GC-AP-MW-26	Upgradient	Unit 2: Poorly Graded Sands with Gravel	84.20	79.84	86.10	85.13	82.09	80.80	83.78	83.16	82.59	84.21	79.89
GC-AP-MW-27	Upgradient	Unit 2: Poorly Graded Sands with Gravel	83.62	79.57	84.59	83.55	81.91	80.57	83.09	82.86	82.25	83.43	79.55
GC-AP-MW-28	Upgradient	Unit 2: Poorly Graded Sands with Gravel	82.64	78.79	84.01	82.56	80.75	79.54	81.71	81.80	80.77	82.38	78.61
GC-AP-MW-29	Upgradient	Unit 2: Poorly Graded Sands with Gravel	83.82	79.84	85.75	84.42	81.95	80.77	83.29	82.91	82.18	83.72	79.84
GC-AP-MW-30	Upgradient	Unit 2: Poorly Graded Sands with Gravel	82.28	79.87	83.58	82.76	81.14	80.14	82.11	82.08	81.20	82.67	79.32
GC-AP-MW-1	Downgradient	Unit 2: Poorly Graded Sands with Gravel	91.56	90.75	92.01	91.76	90.85	91.15	89.44	90.35	90.01	88.95	88.89
GC-AP-MW-2	Downgradient	Unit 2: Poorly Graded Sands with Gravel	99.76	97.75	99.01	98.35	97.40	94.66	92.74	93.33	92.69	92.32	91.89
GC-AP-MW-3	Downgradient	Unit 2: Poorly Graded Sands with Gravel	99.28	97.72	98.80	98.14	97.13	94.16	92.78	93.43	92.80	92.39	92.05
GC-AP-MW-5	Downgradient	Unit 2: Poorly Graded Sands with Gravel	99.25	96.21	98.25	96.78	96.27	93.68	94.31	94.24	93.04	93.40	91.14
GC-AP-MW-6	Downgradient	Unit 2: Poorly Graded Sands with Gravel	97.17	95.55	96.95	96.24	95.41	90.37	91.63	91.16	90.31	90.84	85.87
GC-AP-MW-7	Downgradient	Unit 2: Poorly Graded Sands with Gravel	90.76	89.01	90.46	88.94	87.77	86.56	87.95	87.54	86.54	86.65	83.02
GC-AP-MW-8	Downgradient	Unit 2: Poorly Graded Sands with Gravel	89.00	87.63	89.00	87.59	86.47	85.64	86.61	86.14	85.13	85.03	82.08
GC-AP-MW-9	Downgradient	Unit 2: Poorly Graded Sands with Gravel	88.09	86.31	87.57	86.10	84.98	83.71	85.01	84.51	83.43	83.98	80.51
GC-AP-MW-10	Downgradient	Unit 2: Poorly Graded Sands with Gravel	82.83	81.14	83.98	83.18	81.89	80.61	82.53	82.03	80.77	81.92	78.83
GC-AP-MW-11	Downgradient	Unit 2: Poorly Graded Sands with Gravel	84.97	82.30	85.33	84.13	82.94	82.13	83.43	83.33	82.01	83.02	80.42
GC-AP-MW-12	Downgradient	Unit 2: Poorly Graded Sands with Gravel	84.95	81.26	85.40	81.87	81.05	81.21	82.96	81.85	81.26	81.54	78.84
GC-AP-MW-13	Downgradient	Unit 2: Poorly Graded Sands with Gravel	81.97	77.77	83.68	78.31	Dry	76.97	80.98	80.67	77.67	80.64	75.79
GC-AP-MW-14	Downgradient	Unit 2: Poorly Graded Sands with Gravel	79.52	75.81	83.81	77.88	76.55	75.28	78.61	79.30	76.57	81.33	75.17
GC-AP-MW-15	Downgradient	Unit 2: Poorly Graded Sands with Gravel	76.54	74.15	82.89	76.01	75.26	74.10	77.17	77.25	75.49	80.10	73.93
GC-AP-MW-16	Downgradient	Unit 2: Poorly Graded Sands with Gravel	77.20	74.59	83.18	76.41	75.74	74.59	77.49	77.62	75.77	80.22	74.20

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix B. Historical Groundwater Elevations Summary

Plant Greene County Ash Pond
02/16/2016 - 10/03/2022

Well	Hydraulic Location	Geologic Unit	Measure Date																
			02/16/16	04/12/16	05/31/16	08/15/16	10/10/16	10/31/16	11/28/16	01/03/17	01/23/17	03/13/17	05/08/17	06/27/17	08/28/17	02/26/18	06/04/18	09/10/18	11/05/18
GC-AP-MW-17	Downgradient	Unit 2: Poorly Graded Sands with Gravel	80.17	80.22	76.09	75.95	75.25	75.08			79.77	79.52	76.48	84.95	75.92	81.22	77.48	77.44	76.30
GC-AP-MW-18	Downgradient	Unit 2: Poorly Graded Sands with Gravel	79.08	79.41	75.40	75.50	74.85	74.73			79.61	79.15	75.98	84.48	75.43	80.86	76.74	76.66	75.82
GC-AP-MW-21	Downgradient	Unit 2: Poorly Graded Sands with Gravel														85.92	85.82	85.53	85.30
GC-AP-MW-25	Downgradient	Unit 2: Poorly Graded Sands with Gravel														99.95	99.73	100.00	98.23
GC-AP-MW-31	Downgradient	Unit 2: Poorly Graded Sands with Gravel							81.55	82.58						89.66	88.09	83.41	82.97
GC-AP-MW-32	Downgradient	Unit 2: Poorly Graded Sands with Gravel							87.16	87.00						87.29	88.18	87.48	87.20
GC-AP-MW-33	Downgradient	Unit 2: Poorly Graded Sands with Gravel							86.89	86.70						87.58	88.64	87.31	86.94

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix B. Historical Groundwater Elevations Summary

Plant Greene County Ash Pond
02/16/2016 - 10/03/2022

Well	Hydraulic Location	Geologic Unit	Measure Date										
			03/25/19	09/09/19	04/20/20	05/28/20	06/30/20	08/10/20	03/08/21	06/28/21	08/16/21	03/22/22	10/03/22
GC-AP-MW-17	Downgradient	Unit 2: Poorly Graded Sands with Gravel	78.20	75.54	84.31	77.73	76.77	75.54	77.95	77.99	76.91	80.61	74.72
GC-AP-MW-18	Downgradient	Unit 2: Poorly Graded Sands with Gravel	77.29	75.11	83.94	77.19	75.48	75.08	77.58	77.48	76.56	80.46	74.59
GC-AP-MW-21	Downgradient	Unit 2: Poorly Graded Sands with Gravel	85.99	81.70	85.68	82.42	81.66	81.08	83.27	82.16	81.56	81.96	79.62
GC-AP-MW-25	Downgradient	Unit 2: Poorly Graded Sands with Gravel	99.60	97.13	99.30	97.88	97.12	96.38	92.08	92.81	91.67	91.18	89.42
GC-AP-MW-31	Downgradient	Unit 2: Poorly Graded Sands with Gravel	87.99	84.64	90.34	86.81	86.02	84.56	87.86	87.11	85.59	87.38	83.17
GC-AP-MW-32	Downgradient	Unit 2: Poorly Graded Sands with Gravel	89.04	88.32	90.18	90.05	89.41	89.27	85.93	86.66	86.09	88.53	87.88
GC-AP-MW-33	Downgradient	Unit 2: Poorly Graded Sands with Gravel	89.80	88.44	90.84	90.45	89.93	89.40	91.81	92.55	92.12	88.55	87.61

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix B. Historical Groundwater Elevations Summary

Plant Greene County Ash Pond

02/26/2018 - 10/03/2022

Well	Hydraulic Location	Geologic Unit	Measure Date												
			02/26/18	09/10/18	03/25/19	09/09/19	04/20/20	05/28/20	06/30/20	08/10/20	03/08/21	06/28/21	08/16/21	03/22/22	10/03/22
GC-AP-PZ-4	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel	94.88	92.09	94.91	92.39	94.70	93.63	92.55	91.74	91.58	92.25	91.37	90.83	89.91
GC-AP-MW-34HA	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel				86.26	88.38	88.32	87.92	87.41	85.89	87.03	86.63	85.76	85.41
GC-AP-MW-35H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			82.33	80.56	84.17	81.38	Dry	80.70	81.10	82.05	80.68	82.13	80.20
GC-AP-MW-36H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			80.11	78.64	83.84	79.42	79.08	78.81	80.82	80.74	79.12	81.71	78.36
GC-AP-MW-37H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			80.09	76.95	84.94	79.91	79.32	77.07	80.28	82.63	80.96	83.38	82.04
GC-AP-MW-38H	Horizontal Delineation	Fill/Unit 1 Transition			88.33	86.98	87.48	87.26	87.60	86.84	87.14	87.39	86.79	86.98	86.48
GC-AP-MW-39H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			76.47	74.41	82.94	76.08	75.43	74.29	77.02	77.11	75.56	80.02	74.03
GC-AP-MW-40H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			75.62	74.08	82.77	75.90	75.17	74.00	77.09	77.16	75.40	80.02	73.84
GC-AP-MW-41H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			76.12	74.09	82.94	76.10	74.11	73.98	76.61	76.33	75.77	79.84	74.10
GC-AP-MW-42H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			82.61	81.15	84.01	83.03	82.00	80.78	82.45	82.07	80.92	82.18	79.26
GC-AP-MW-43H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			87.45	85.86	87.17	85.86	84.60	83.50	84.90	84.37	83.32	83.98	80.55
GC-AP-MW-44H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel			96.91	93.79	97.30	96.63	94.17	92.70	94.32	93.79	92.38	93.94	90.61
GC-AP-MW-45H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel					82.62	75.87	75.33	74.32	82.64	77.73	75.53	80.14	74.08
GC-AP-MW-46HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel							78.49	77.77	81.17	81.25	78.57	80.97	76.56
GC-AP-MW-47HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel						84.01	82.18	80.95	82.03	82.69	81.25	81.39	78.97
GC-AP-MW-48H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel					86.55	84.11	82.43	81.35	82.32	82.65	81.45	81.50	79.36
GC-AP-MW-49H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel					85.33	84.08	82.79	82.08	82.83	83.07	81.95	82.32	80.22
GC-AP-MW-50HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel						81.98	81.19	80.51	81.50	81.36	80.58	81.56	79.34
GC-AP-MW-52HO	Horizontal Delineation	Unit 1/Unit 2 Transition							84.71	83.65	85.36	84.90	83.75	84.57	81.19
GC-AP-MW-53H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel					97.04	96.29	95.07	93.12	94.25	93.78	92.82	93.70	90.49
GC-AP-MW-54H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel					97.48	96.31	95.01	93.20	94.54	93.96	92.75	93.68	90.76
GC-AP-MW-55HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel						84.31	83.58	83.03	82.76	81.31	82.69	83.45	81.51
GC-AP-MW-57H	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel					97.08	96.02	92.50	92.91	94.23	93.74	92.63	93.79	90.60

Notes:

(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.

(2) NM = Not Measured

Appendix B. Historical Groundwater Elevations Summary

Plant Greene County Ash Pond
02/26/2018 - 10/03/2022

Well	Hydraulic Location	Geologic Unit	Measure Date												
			02/26/18	09/10/18	03/25/19	09/09/19	04/20/20	05/28/20	06/30/20	08/10/20	03/08/21	06/28/21	08/16/21	03/22/22	10/03/22
GC-AP-MW-59HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel						93.61	93.05	92.36	91.87	92.47	91.86	91.36	90.08
GC-AP-MW-60HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel										88.31	88.05	86.89	86.69
GC-AP-MW-61HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel										91.40	90.93	89.35	89.13
GC-AP-MW-62HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel										83.31	81.39	81.77	79.59
GC-AP-MW-63HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel										83.33	81.74	81.49	79.30
GC-AP-MW-64HO	Horizontal Delineation	Unit 2: Poorly Graded Sands with Gravel										78.44	76.10	80.43	74.57
GC-AP-PZ-19	Piezometer	Unit 2: Poorly Graded Sands with Gravel	79.79	75.88	77.19	75.26	83.09	76.51	Dry	75.22	77.76	77.82	76.10	80.60	74.82
GC-AP-PZ-22	Piezometer	Unit 2: Poorly Graded Sands with Gravel					90.29	90.31	Dry	88.92	Artesian	Artesian	88.66	Dry	DRY

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix C

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Compliance Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Rainy conditions were present when pumping and sampling well MW-39H.

Suspected iron bacteria was present during initial pumping of wells MW-1, MW-44H, MW-41H and MW-45H.

A significant number of ants were inside the locking well cap lid of wells MW-53H, MW-31, MW-34HA and MW-42H

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - Field Blank (FB) 2, FB-3 and FB-4 all had results greater than the reporting limit (RL) for Manganese.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Water Level Record/Well Inspection Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason:

Submit

Date: 03/22/2022
Location: Greene Ash Pond
Collector: Dallas Gentry
Weather: Overcast 60

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1204	18.84	☑	☑	☑	☑	☑	
MW-2	1207	13.82	☑	☑	☑	☑	☑	
MW-3	1210	14.00	☑	☑	☑	☑	☑	
PZ-4	1214	12.70	☑	☑	☑	☑	☑	
MW-5	1237	15.03	☑	☑	☑	☑	☑	TJD
MW-6	1233	11.21	☑	☑	☑	☑	☑	TJD
MW-7	1228	11.91	☑	☑	☑	☑	☑	TJD
MW-8	1224	12.08	☑	☑	☑	☑	☑	TJD
MW-9	1218	9.21	☑	☑	☑	☑	☑	TJD
MW-10	1210	5.91	☑	☑	☑	☑	☑	TJD
MW-11	1117	18.16	☑	☑	☑	☑	☑	TJD
MW-12	1105	21.72	☑	☑	☑	☑	☑	
MW-13	1108	20.54	☑	☑	☑	☑	☑	
MW-14	1122	4.28	☑	☑	☑	☑	☑	
MW-14E	1120	4.63	☑	☑	☑	☑	☑	
MW-15	1125	11.59	☑	☑	☑	☑	☑	
MW-16	1132	28.57	☑	☑	☑	☑	☑	
MW-17	1135	25.79	☑	☑	☑	☑	☑	
MW-18	1139	24.58	☑	☑	☑	☑	☑	
PZ-19	1143	24.31	☑	☑	☑	☑	☑	
MW-21	1112	23.76	☑	☑	☑	☑	☑	TJD
PZ-22	1245	Dry	☑	☑	☑	☑	☑	
MW-23	1240	14.86	☑	☑	☑	☑	☐	AWG, needs nameplate
MW-24	1223	18.95	☑	☑	☑	☑	☑	
MW-25	1153	13.80	☑	☑	☑	☑	☑	
MW-26	1140	5.04	☑	☑	☑	☑	☑	AWG
MW-27	1210	7.25	☑	☑	☑	☑	☑	AWG
MW-28	1225	6.98	☑	☑	☑	☑	☑	AWG
MW-29	1145	5.60	☑	☑	☑	☑	☑	AWG
MW-30	1155	7.20	☑	☑	☑	☑	☑	AWG
MW-31	1118	6.81	☑	☑	☑	☑	☑	AWG
MW-32	1131	17.32	☑	☑	☑	☑	☑	AWG
MW-33	1124	20.44	☑	☑	☑	☑	☑	AWG

Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason:

Submit

Date: 03/22/2022
Location: Greene Ash Pond
Collector: Dallas Gentry
Weather: Overcast 60

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1204	18.84	☑	☑	☑	☑	☑	
MW-2	1207	13.82	☑	☑	☑	☑	☑	
MW-3	1210	14.00	☑	☑	☑	☑	☑	
PZ-4	1214	12.70	☑	☑	☑	☑	☑	
MW-5	1237	15.03	☑	☑	☑	☑	☑	TJD
MW-6	1233	11.21	☑	☑	☑	☑	☑	TJD
MW-7	1228	11.91	☑	☑	☑	☑	☑	TJD
MW-8	1224	12.08	☑	☑	☑	☑	☑	TJD
MW-9	1218	9.21	☑	☑	☑	☑	☑	TJD
MW-10	1210	5.91	☑	☑	☑	☑	☑	TJD
MW-11	1117	18.16	☑	☑	☑	☑	☑	TJD
MW-12	1105	21.72	☑	☑	☑	☑	☑	
MW-13	1108	20.54	☑	☑	☑	☑	☑	
MW-14	1122	4.28	☑	☑	☑	☑	☑	
MW-14E	1120	4.63	☑	☑	☑	☑	☑	
MW-15	1125	11.59	☑	☑	☑	☑	☑	
MW-16	1132	28.57	☑	☑	☑	☑	☑	
MW-17	1135	25.79	☑	☑	☑	☑	☑	
MW-18	1139	24.58	☑	☑	☑	☑	☑	
PZ-19	1143	24.31	☑	☑	☑	☑	☑	
MW-21	1112	23.76	☑	☑	☑	☑	☑	TJD
PZ-22	1245	Dry	☑	☑	☑	☑	☑	
MW-23	1240	14.86	☑	☑	☑	☑	☑	AWG, needs nameplate
MW-24	1223	18.95	☑	☑	☑	☑	☑	
MW-25	1153	13.80	☑	☑	☑	☑	☑	
MW-26	1140	5.04	☑	☑	☑	☑	☑	AWG
MW-27	1210	7.25	☑	☑	☑	☑	☑	AWG
MW-28	1225	6.98	☑	☑	☑	☑	☑	AWG
MW-29	1145	5.60	☑	☑	☑	☑	☑	AWG
MW-30	1155	7.20	☐	☐	☐	☐	☐	AWG
MW-31	1118	6.81	☐	☐	☐	☐	☐	AWG
MW-32	1131	17.32	☐	☐	☐	☐	☐	AWG
MW-33	1124	20.44	☐	☐	☐	☐	☐	AWG

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-27	Conductivity	3/28/2022 13:57	34.13	uS/cm
GC-AP-MW-27	DO	3/28/2022 13:57	6.87	mg/L
GC-AP-MW-27	Depth to Water Detail	3/28/2022 13:57	6.38	ft
GC-AP-MW-27	Oxidation Reduction Potention	3/28/2022 13:57	232.1	mv
GC-AP-MW-27	pH	3/28/2022 13:57	4.58	SU
GC-AP-MW-27	Temperature	3/28/2022 13:57	18.6	C
GC-AP-MW-27	Turbidity	3/28/2022 13:57	0.82	NTU
GC-AP-MW-27	Conductivity	3/28/2022 14:02	33.83	uS/cm
GC-AP-MW-27	DO	3/28/2022 14:02	6.91	mg/L
GC-AP-MW-27	Depth to Water Detail	3/28/2022 14:02	6.38	ft
GC-AP-MW-27	Oxidation Reduction Potention	3/28/2022 14:02	237.48	mv
GC-AP-MW-27	pH	3/28/2022 14:02	4.65	SU
GC-AP-MW-27	Temperature	3/28/2022 14:02	18.65	C
GC-AP-MW-27	Turbidity	3/28/2022 14:02	0.69	NTU
GC-AP-MW-27	Conductivity	3/28/2022 14:07	33.64	uS/cm
GC-AP-MW-27	DO	3/28/2022 14:07	6.92	mg/L
GC-AP-MW-27	Depth to Water Detail	3/28/2022 14:07	6.38	ft
GC-AP-MW-27	Oxidation Reduction Potention	3/28/2022 14:07	240.79	mv
GC-AP-MW-27	pH	3/28/2022 14:07	4.7	SU
GC-AP-MW-27	Temperature	3/28/2022 14:07	18.66	C
GC-AP-MW-27	Turbidity	3/28/2022 14:07	0.65	NTU
GC-AP-MW-27	Conductivity	3/28/2022 14:12	33.75	uS/cm
GC-AP-MW-27	DO	3/28/2022 14:12	6.88	mg/L
GC-AP-MW-27	Depth to Water Detail	3/28/2022 14:12	6.38	ft
GC-AP-MW-27	Oxidation Reduction Potention	3/28/2022 14:12	241.1	mv
GC-AP-MW-27	pH	3/28/2022 14:12	4.73	SU
GC-AP-MW-27	Sulfide	3/28/2022 14:12	0	mg/L
GC-AP-MW-27	Temperature	3/28/2022 14:12	18.72	C
GC-AP-MW-27	Turbidity	3/28/2022 14:12	0.78	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-28	Conductivity	3/28/2022 14:45	45.15	uS/cm
GC-AP-MW-28	DO	3/28/2022 14:45	7.99	mg/L
GC-AP-MW-28	Depth to Water Detail	3/28/2022 14:45	5.3	ft
GC-AP-MW-28	Oxidation Reduction Potention	3/28/2022 14:45	238.96	mv
GC-AP-MW-28	pH	3/28/2022 14:45	4.45	SU
GC-AP-MW-28	Temperature	3/28/2022 14:45	18.08	C
GC-AP-MW-28	Turbidity	3/28/2022 14:45	0.81	NTU
GC-AP-MW-28	Conductivity	3/28/2022 14:50	45.01	uS/cm
GC-AP-MW-28	DO	3/28/2022 14:50	7.93	mg/L
GC-AP-MW-28	Depth to Water Detail	3/28/2022 14:50	5.3	ft
GC-AP-MW-28	Oxidation Reduction Potention	3/28/2022 14:50	241.28	mv
GC-AP-MW-28	pH	3/28/2022 14:50	4.51	SU
GC-AP-MW-28	Temperature	3/28/2022 14:50	18.12	C
GC-AP-MW-28	Turbidity	3/28/2022 14:50	0.61	NTU
GC-AP-MW-28	Conductivity	3/28/2022 14:55	45.3	uS/cm
GC-AP-MW-28	DO	3/28/2022 14:55	7.77	mg/L
GC-AP-MW-28	Depth to Water Detail	3/28/2022 14:55	5.3	ft
GC-AP-MW-28	Oxidation Reduction Potention	3/28/2022 14:55	240.74	mv
GC-AP-MW-28	pH	3/28/2022 14:55	4.6	SU
GC-AP-MW-28	Temperature	3/28/2022 14:55	18.25	C
GC-AP-MW-28	Turbidity	3/28/2022 14:55	0.59	NTU
GC-AP-MW-28	Conductivity	3/28/2022 15:00	44.28	uS/cm
GC-AP-MW-28	DO	3/28/2022 15:00	7.7	mg/L
GC-AP-MW-28	Depth to Water Detail	3/28/2022 15:00	5.3	ft
GC-AP-MW-28	Oxidation Reduction Potention	3/28/2022 15:00	235.31	mv
GC-AP-MW-28	pH	3/28/2022 15:00	4.69	SU
GC-AP-MW-28	Sulfide	3/28/2022 15:00	0	mg/L
GC-AP-MW-28	Temperature	3/28/2022 15:00	18.26	C
GC-AP-MW-28	Turbidity	3/28/2022 15:00	0.59	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-29	Conductivity	3/28/2022 11:12	11.54	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:12	9.16	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:12	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:12	226.23	mv
GC-AP-MW-29	pH	3/28/2022 11:12	3.73	SU
GC-AP-MW-29	Temperature	3/28/2022 11:12	17.33	C
GC-AP-MW-29	Turbidity	3/28/2022 11:12	2.49	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:17	11.31	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:17	9.1	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:17	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:17	218.49	mv
GC-AP-MW-29	pH	3/28/2022 11:17	3.82	SU
GC-AP-MW-29	Temperature	3/28/2022 11:17	17.31	C
GC-AP-MW-29	Turbidity	3/28/2022 11:17	1.98	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:22	13.91	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:22	9.12	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:22	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:22	223.29	mv
GC-AP-MW-29	pH	3/28/2022 11:22	4	SU
GC-AP-MW-29	Temperature	3/28/2022 11:22	17.45	C
GC-AP-MW-29	Turbidity	3/28/2022 11:22	2.3	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:27	13.83	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:27	9.11	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:27	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:27	204.96	mv
GC-AP-MW-29	pH	3/28/2022 11:27	4.27	SU
GC-AP-MW-29	Temperature	3/28/2022 11:27	17.46	C
GC-AP-MW-29	Turbidity	3/28/2022 11:27	1.66	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:32	13.28	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:32	9.15	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:32	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:32	196.55	mv
GC-AP-MW-29	pH	3/28/2022 11:32	4.44	SU
GC-AP-MW-29	Temperature	3/28/2022 11:32	17.45	C
GC-AP-MW-29	Turbidity	3/28/2022 11:32	1.37	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:37	12.69	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:37	9.15	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:37	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:37	203.97	mv
GC-AP-MW-29	pH	3/28/2022 11:37	4.57	SU
GC-AP-MW-29	Temperature	3/28/2022 11:37	17.54	C
GC-AP-MW-29	Turbidity	3/28/2022 11:37	1.26	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:42	12.55	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:42	9.13	mg/L
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:42	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:42	194.66	mv
GC-AP-MW-29	pH	3/28/2022 11:42	4.64	SU
GC-AP-MW-29	Temperature	3/28/2022 11:42	17.59	C
GC-AP-MW-29	Turbidity	3/28/2022 11:42	1.12	NTU
GC-AP-MW-29	Conductivity	3/28/2022 11:47	12.5	uS/cm
GC-AP-MW-29	DO	3/28/2022 11:47	9.13	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-29	Depth to Water Detail	3/28/2022 11:47	4.55	ft
GC-AP-MW-29	Oxidation Reduction Potention	3/28/2022 11:47	203.25	mv
GC-AP-MW-29	pH	3/28/2022 11:47	4.67	SU
GC-AP-MW-29	Sulfide	3/28/2022 11:47	0	mg/L
GC-AP-MW-29	Temperature	3/28/2022 11:47	17.65	C
GC-AP-MW-29	Turbidity	3/28/2022 11:47	1.34	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-30	Conductivity	3/28/2022 12:46	24.99	uS/cm
GC-AP-MW-30	DO	3/28/2022 12:46	4.54	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 12:46	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 12:46	223.81	mv
GC-AP-MW-30	pH	3/28/2022 12:46	4.27	SU
GC-AP-MW-30	Temperature	3/28/2022 12:46	17.72	C
GC-AP-MW-30	Turbidity	3/28/2022 12:46	2.86	NTU
GC-AP-MW-30	Conductivity	3/28/2022 12:51	24.8	uS/cm
GC-AP-MW-30	DO	3/28/2022 12:51	4.38	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 12:51	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 12:51	240.38	mv
GC-AP-MW-30	pH	3/28/2022 12:51	4.2	SU
GC-AP-MW-30	Temperature	3/28/2022 12:51	17.67	C
GC-AP-MW-30	Turbidity	3/28/2022 12:51	1.62	NTU
GC-AP-MW-30	Conductivity	3/28/2022 12:56	28.83	uS/cm
GC-AP-MW-30	DO	3/28/2022 12:56	4.35	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 12:56	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 12:56	238.08	mv
GC-AP-MW-30	pH	3/28/2022 12:56	4.41	SU
GC-AP-MW-30	Temperature	3/28/2022 12:56	17.71	C
GC-AP-MW-30	Turbidity	3/28/2022 12:56	0.9	NTU
GC-AP-MW-30	Conductivity	3/28/2022 13:01	28.82	uS/cm
GC-AP-MW-30	DO	3/28/2022 13:01	4.33	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 13:01	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 13:01	236.28	mv
GC-AP-MW-30	pH	3/28/2022 13:01	4.54	SU
GC-AP-MW-30	Temperature	3/28/2022 13:01	17.72	C
GC-AP-MW-30	Turbidity	3/28/2022 13:01	0.7	NTU
GC-AP-MW-30	Conductivity	3/28/2022 13:06	28.33	uS/cm
GC-AP-MW-30	DO	3/28/2022 13:06	4.37	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 13:06	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 13:06	232.99	mv
GC-AP-MW-30	pH	3/28/2022 13:06	4.72	SU
GC-AP-MW-30	Temperature	3/28/2022 13:06	17.76	C
GC-AP-MW-30	Turbidity	3/28/2022 13:06	0.73	NTU
GC-AP-MW-30	Conductivity	3/28/2022 13:11	26.69	uS/cm
GC-AP-MW-30	DO	3/28/2022 13:11	4.38	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 13:11	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 13:11	233.71	mv
GC-AP-MW-30	pH	3/28/2022 13:11	4.78	SU
GC-AP-MW-30	Temperature	3/28/2022 13:11	17.8	C
GC-AP-MW-30	Turbidity	3/28/2022 13:11	0.96	NTU
GC-AP-MW-30	Conductivity	3/28/2022 13:16	26.73	uS/cm
GC-AP-MW-30	DO	3/28/2022 13:16	4.37	mg/L
GC-AP-MW-30	Depth to Water Detail	3/28/2022 13:16	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 13:16	232.52	mv
GC-AP-MW-30	pH	3/28/2022 13:16	4.85	SU
GC-AP-MW-30	Temperature	3/28/2022 13:16	17.8	C
GC-AP-MW-30	Turbidity	3/28/2022 13:16	0.68	NTU
GC-AP-MW-30	Conductivity	3/28/2022 13:21	26.46	uS/cm
GC-AP-MW-30	DO	3/28/2022 13:21	4.36	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-30	Depth to Water Detail	3/28/2022 13:21	6.06	ft
GC-AP-MW-30	Oxidation Reduction Potention	3/28/2022 13:21	226.73	mv
GC-AP-MW-30	pH	3/28/2022 13:21	4.93	SU
GC-AP-MW-30	Sulfide	3/28/2022 13:21	0	mg/L
GC-AP-MW-30	Temperature	3/28/2022 13:21	17.81	C
GC-AP-MW-30	Turbidity	3/28/2022 13:21	0.61	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-23	Conductivity	3/28/2022 15:51	155.59	uS/cm
GC-AP-MW-23	DO	3/28/2022 15:51	5.83	mg/L
GC-AP-MW-23	Depth to Water Detail	3/28/2022 15:51	15.18	ft
GC-AP-MW-23	Oxidation Reduction Potention	3/28/2022 15:51	178.98	mv
GC-AP-MW-23	pH	3/28/2022 15:51	5.74	SU
GC-AP-MW-23	Temperature	3/28/2022 15:51	17.7	C
GC-AP-MW-23	Turbidity	3/28/2022 15:51	3.98	NTU
GC-AP-MW-23	Conductivity	3/28/2022 15:56	151.67	uS/cm
GC-AP-MW-23	DO	3/28/2022 15:56	5.82	mg/L
GC-AP-MW-23	Depth to Water Detail	3/28/2022 15:56	15.18	ft
GC-AP-MW-23	Oxidation Reduction Potention	3/28/2022 15:56	176.53	mv
GC-AP-MW-23	pH	3/28/2022 15:56	5.75	SU
GC-AP-MW-23	Temperature	3/28/2022 15:56	17.78	C
GC-AP-MW-23	Turbidity	3/28/2022 15:56	2.57	NTU
GC-AP-MW-23	Conductivity	3/28/2022 16:01	148.61	uS/cm
GC-AP-MW-23	DO	3/28/2022 16:01	5.84	mg/L
GC-AP-MW-23	Depth to Water Detail	3/28/2022 16:01	15.18	ft
GC-AP-MW-23	Oxidation Reduction Potention	3/28/2022 16:01	170.56	mv
GC-AP-MW-23	pH	3/28/2022 16:01	5.84	SU
GC-AP-MW-23	Temperature	3/28/2022 16:01	17.84	C
GC-AP-MW-23	Turbidity	3/28/2022 16:01	1.97	NTU
GC-AP-MW-23	Conductivity	3/28/2022 16:06	147.33	uS/cm
GC-AP-MW-23	DO	3/28/2022 16:06	5.87	mg/L
GC-AP-MW-23	Depth to Water Detail	3/28/2022 16:06	15.18	ft
GC-AP-MW-23	Oxidation Reduction Potention	3/28/2022 16:06	160.89	mv
GC-AP-MW-23	pH	3/28/2022 16:06	5.98	SU
GC-AP-MW-23	Temperature	3/28/2022 16:06	17.77	C
GC-AP-MW-23	Turbidity	3/28/2022 16:06	1.51	NTU
GC-AP-MW-23	Conductivity	3/28/2022 16:11	146.35	uS/cm
GC-AP-MW-23	DO	3/28/2022 16:11	5.89	mg/L
GC-AP-MW-23	Depth to Water Detail	3/28/2022 16:11	15.18	ft
GC-AP-MW-23	Oxidation Reduction Potention	3/28/2022 16:11	156.45	mv
GC-AP-MW-23	pH	3/28/2022 16:11	6.05	SU
GC-AP-MW-23	Temperature	3/28/2022 16:11	17.71	C
GC-AP-MW-23	Turbidity	3/28/2022 16:11	1.29	NTU
GC-AP-MW-23	Conductivity	3/28/2022 16:16	144.72	uS/cm
GC-AP-MW-23	DO	3/28/2022 16:16	5.9	mg/L
GC-AP-MW-23	Depth to Water Detail	3/28/2022 16:16	15.18	ft
GC-AP-MW-23	Oxidation Reduction Potention	3/28/2022 16:16	154.79	mv
GC-AP-MW-23	pH	3/28/2022 16:16	6.08	SU
GC-AP-MW-23	Sulfide	3/28/2022 16:16	0	mg/L
GC-AP-MW-23	Temperature	3/28/2022 16:16	17.73	C
GC-AP-MW-23	Turbidity	3/28/2022 16:16	1.04	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-37H	Conductivity	3/29/2022 8:39	882.46	uS/cm
GC-AP-MW-37H	DO	3/29/2022 8:39	0.97	mg/L
GC-AP-MW-37H	Depth to Water Detail	3/29/2022 8:39	23.2	ft
GC-AP-MW-37H	Oxidation Reduction Potention	3/29/2022 8:39	-88.35	mv
GC-AP-MW-37H	pH	3/29/2022 8:39	6.31	SU
GC-AP-MW-37H	Temperature	3/29/2022 8:39	19.44	C
GC-AP-MW-37H	Turbidity	3/29/2022 8:39	5.48	NTU
GC-AP-MW-37H	Conductivity	3/29/2022 8:44	881.31	uS/cm
GC-AP-MW-37H	DO	3/29/2022 8:44	0.82	mg/L
GC-AP-MW-37H	Depth to Water Detail	3/29/2022 8:44	23.5	ft
GC-AP-MW-37H	Oxidation Reduction Potention	3/29/2022 8:44	-82.02	mv
GC-AP-MW-37H	pH	3/29/2022 8:44	6.34	SU
GC-AP-MW-37H	Temperature	3/29/2022 8:44	19.45	C
GC-AP-MW-37H	Turbidity	3/29/2022 8:44	4.27	NTU
GC-AP-MW-37H	Conductivity	3/29/2022 8:49	849.64	uS/cm
GC-AP-MW-37H	DO	3/29/2022 8:49	0.78	mg/L
GC-AP-MW-37H	Depth to Water Detail	3/29/2022 8:49	23.79	ft
GC-AP-MW-37H	Oxidation Reduction Potention	3/29/2022 8:49	-74.07	mv
GC-AP-MW-37H	pH	3/29/2022 8:49	6.34	SU
GC-AP-MW-37H	Temperature	3/29/2022 8:49	19.45	C
GC-AP-MW-37H	Turbidity	3/29/2022 8:49	4.39	NTU
GC-AP-MW-37H	Conductivity	3/29/2022 8:54	849.56	uS/cm
GC-AP-MW-37H	DO	3/29/2022 8:54	0.72	mg/L
GC-AP-MW-37H	Depth to Water Detail	3/29/2022 8:54	23.94	ft
GC-AP-MW-37H	Oxidation Reduction Potention	3/29/2022 8:54	-67.37	mv
GC-AP-MW-37H	pH	3/29/2022 8:54	6.36	SU
GC-AP-MW-37H	Temperature	3/29/2022 8:54	19.82	C
GC-AP-MW-37H	Turbidity	3/29/2022 8:54	2.63	NTU
GC-AP-MW-37H	Conductivity	3/29/2022 8:59	848.26	uS/cm
GC-AP-MW-37H	DO	3/29/2022 8:59	0.74	mg/L
GC-AP-MW-37H	Depth to Water Detail	3/29/2022 8:59	24.08	ft
GC-AP-MW-37H	Oxidation Reduction Potention	3/29/2022 8:59	-60.66	mv
GC-AP-MW-37H	pH	3/29/2022 8:59	6.36	SU
GC-AP-MW-37H	Temperature	3/29/2022 8:59	19.75	C
GC-AP-MW-37H	Turbidity	3/29/2022 8:59	2.75	NTU
GC-AP-MW-37H	Conductivity	3/29/2022 9:04	846.53	uS/cm
GC-AP-MW-37H	DO	3/29/2022 9:04	0.71	mg/L
GC-AP-MW-37H	Depth to Water Detail	3/29/2022 9:04	24.15	ft
GC-AP-MW-37H	Oxidation Reduction Potention	3/29/2022 9:04	-64.32	mv
GC-AP-MW-37H	pH	3/29/2022 9:04	6.36	SU
GC-AP-MW-37H	Sulfide	3/29/2022 9:04	0	mg/L
GC-AP-MW-37H	Temperature	3/29/2022 9:04	19.77	C
GC-AP-MW-37H	Turbidity	3/29/2022 9:04	2.74	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-34HA	Conductivity	3/28/2022 15:17	138.9	uS/cm
GC-AP-MW-34HA	DO	3/28/2022 15:17	2.25	mg/L
GC-AP-MW-34HA	Depth to Water Detail	3/28/2022 15:17	22.71	ft
GC-AP-MW-34HA	Oxidation Reduction Potention	3/28/2022 15:17	192.41	mv
GC-AP-MW-34HA	pH	3/28/2022 15:17	4.42	SU
GC-AP-MW-34HA	Temperature	3/28/2022 15:17	21.01	C
GC-AP-MW-34HA	Turbidity	3/28/2022 15:17	8.15	NTU
GC-AP-MW-34HA	Conductivity	3/28/2022 15:22	140.3	uS/cm
GC-AP-MW-34HA	DO	3/28/2022 15:22	2.1	mg/L
GC-AP-MW-34HA	Depth to Water Detail	3/28/2022 15:22	22.71	ft
GC-AP-MW-34HA	Oxidation Reduction Potention	3/28/2022 15:22	191.55	mv
GC-AP-MW-34HA	pH	3/28/2022 15:22	4.43	SU
GC-AP-MW-34HA	Temperature	3/28/2022 15:22	20.95	C
GC-AP-MW-34HA	Turbidity	3/28/2022 15:22	2.36	NTU
GC-AP-MW-34HA	Conductivity	3/28/2022 15:27	139.74	uS/cm
GC-AP-MW-34HA	DO	3/28/2022 15:27	2.12	mg/L
GC-AP-MW-34HA	Depth to Water Detail	3/28/2022 15:27	22.71	ft
GC-AP-MW-34HA	Oxidation Reduction Potention	3/28/2022 15:27	191.44	mv
GC-AP-MW-34HA	pH	3/28/2022 15:27	4.44	SU
GC-AP-MW-34HA	Temperature	3/28/2022 15:27	21	C
GC-AP-MW-34HA	Turbidity	3/28/2022 15:27	2.56	NTU
GC-AP-MW-34HA	Conductivity	3/28/2022 15:32	139.06	uS/cm
GC-AP-MW-34HA	DO	3/28/2022 15:32	2.14	mg/L
GC-AP-MW-34HA	Depth to Water Detail	3/28/2022 15:32	22.71	ft
GC-AP-MW-34HA	Oxidation Reduction Potention	3/28/2022 15:32	190.27	mv
GC-AP-MW-34HA	pH	3/28/2022 15:32	4.44	SU
GC-AP-MW-34HA	Sulfide	3/28/2022 15:32	0	mg/L
GC-AP-MW-34HA	Temperature	3/28/2022 15:32	20.96	C
GC-AP-MW-34HA	Turbidity	3/28/2022 15:32	1.92	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-2	Conductivity	3/28/2022 16:13	1123.89	uS/cm
GC-AP-MW-2	DO	3/28/2022 16:13	1.07	mg/L
GC-AP-MW-2	Depth to Water Detail	3/28/2022 16:13	14.51	ft
GC-AP-MW-2	Oxidation Reduction Potention	3/28/2022 16:13	116.7	mv
GC-AP-MW-2	pH	3/28/2022 16:13	5.18	SU
GC-AP-MW-2	Temperature	3/28/2022 16:13	19.29	C
GC-AP-MW-2	Turbidity	3/28/2022 16:13	20.7	NTU
GC-AP-MW-2	Conductivity	3/28/2022 16:18	1136.39	uS/cm
GC-AP-MW-2	DO	3/28/2022 16:18	1.02	mg/L
GC-AP-MW-2	Depth to Water Detail	3/28/2022 16:18	14.51	ft
GC-AP-MW-2	Oxidation Reduction Potention	3/28/2022 16:18	102.73	mv
GC-AP-MW-2	pH	3/28/2022 16:18	5.26	SU
GC-AP-MW-2	Temperature	3/28/2022 16:18	19.59	C
GC-AP-MW-2	Turbidity	3/28/2022 16:18	5.64	NTU
GC-AP-MW-2	Conductivity	3/28/2022 16:23	1134.22	uS/cm
GC-AP-MW-2	DO	3/28/2022 16:23	0.98	mg/L
GC-AP-MW-2	Depth to Water Detail	3/28/2022 16:23	14.51	ft
GC-AP-MW-2	Oxidation Reduction Potention	3/28/2022 16:23	92.63	mv
GC-AP-MW-2	pH	3/28/2022 16:23	5.29	SU
GC-AP-MW-2	Temperature	3/28/2022 16:23	19.62	C
GC-AP-MW-2	Turbidity	3/28/2022 16:23	3.02	NTU
GC-AP-MW-2	Conductivity	3/28/2022 16:28	1136.48	uS/cm
GC-AP-MW-2	DO	3/28/2022 16:28	0.93	mg/L
GC-AP-MW-2	Depth to Water Detail	3/28/2022 16:28	14.51	ft
GC-AP-MW-2	Oxidation Reduction Potention	3/28/2022 16:28	86.36	mv
GC-AP-MW-2	pH	3/28/2022 16:28	5.32	SU
GC-AP-MW-2	Sulfide	3/28/2022 16:28	0	mg/L
GC-AP-MW-2	Temperature	3/28/2022 16:28	19.67	C
GC-AP-MW-2	Turbidity	3/28/2022 16:28	2.91	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-6	Conductivity	3/29/2022 13:13	964.12	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:13	2.62	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:13	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:13	136.13	mv
GC-AP-MW-6	pH	3/29/2022 13:13	5.66	SU
GC-AP-MW-6	Temperature	3/29/2022 13:13	20.15	C
GC-AP-MW-6	Turbidity	3/29/2022 13:13	1	NTU
GC-AP-MW-6	Conductivity	3/29/2022 13:18	1087.94	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:18	1.43	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:18	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:18	137.73	mv
GC-AP-MW-6	pH	3/29/2022 13:18	5.7	SU
GC-AP-MW-6	Temperature	3/29/2022 13:18	20.33	C
GC-AP-MW-6	Turbidity	3/29/2022 13:18	0.75	NTU
GC-AP-MW-6	Conductivity	3/29/2022 13:23	1131.08	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:23	1.16	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:23	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:23	133.99	mv
GC-AP-MW-6	pH	3/29/2022 13:23	5.77	SU
GC-AP-MW-6	Temperature	3/29/2022 13:23	20.37	C
GC-AP-MW-6	Turbidity	3/29/2022 13:23	0.71	NTU
GC-AP-MW-6	Conductivity	3/29/2022 13:28	1151.1	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:28	1.09	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:28	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:28	126.97	mv
GC-AP-MW-6	pH	3/29/2022 13:28	5.86	SU
GC-AP-MW-6	Temperature	3/29/2022 13:28	20.32	C
GC-AP-MW-6	Turbidity	3/29/2022 13:28	0.69	NTU
GC-AP-MW-6	Conductivity	3/29/2022 13:33	1164.2	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:33	0.95	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:33	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:33	114.96	mv
GC-AP-MW-6	pH	3/29/2022 13:33	5.93	SU
GC-AP-MW-6	Temperature	3/29/2022 13:33	20.36	C
GC-AP-MW-6	Turbidity	3/29/2022 13:33	0.84	NTU
GC-AP-MW-6	Conductivity	3/29/2022 13:38	1178.54	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:38	0.87	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:38	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:38	106.45	mv
GC-AP-MW-6	pH	3/29/2022 13:38	5.97	SU
GC-AP-MW-6	Temperature	3/29/2022 13:38	20.4	C
GC-AP-MW-6	Turbidity	3/29/2022 13:38	0.91	NTU
GC-AP-MW-6	Conductivity	3/29/2022 13:43	1178.36	uS/cm
GC-AP-MW-6	DO	3/29/2022 13:43	0.92	mg/L
GC-AP-MW-6	Depth to Water Detail	3/29/2022 13:43	11.43	ft
GC-AP-MW-6	Oxidation Reduction Potention	3/29/2022 13:43	101.76	mv
GC-AP-MW-6	pH	3/29/2022 13:43	5.99	SU
GC-AP-MW-6	Sulfide	3/29/2022 13:43	0	mg/L
GC-AP-MW-6	Temperature	3/29/2022 13:43	20.48	C
GC-AP-MW-6	Turbidity	3/29/2022 13:43	1.15	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-7	Conductivity	3/29/2022 8:30	1397.11	uS/cm
GC-AP-MW-7	DO	3/29/2022 8:30	1.36	mg/L
GC-AP-MW-7	Depth to Water Detail	3/29/2022 8:30	12.06	ft
GC-AP-MW-7	Oxidation Reduction Potention	3/29/2022 8:30	111.17	mv
GC-AP-MW-7	pH	3/29/2022 8:30	6.65	SU
GC-AP-MW-7	Temperature	3/29/2022 8:30	18.85	C
GC-AP-MW-7	Turbidity	3/29/2022 8:30	0.64	NTU
GC-AP-MW-7	Conductivity	3/29/2022 8:35	1398	uS/cm
GC-AP-MW-7	DO	3/29/2022 8:35	1.14	mg/L
GC-AP-MW-7	Depth to Water Detail	3/29/2022 8:35	12.06	ft
GC-AP-MW-7	Oxidation Reduction Potention	3/29/2022 8:35	107.89	mv
GC-AP-MW-7	pH	3/29/2022 8:35	6.64	SU
GC-AP-MW-7	Temperature	3/29/2022 8:35	18.8	C
GC-AP-MW-7	Turbidity	3/29/2022 8:35	0.77	NTU
GC-AP-MW-7	Conductivity	3/29/2022 8:40	1399.29	uS/cm
GC-AP-MW-7	DO	3/29/2022 8:40	1.02	mg/L
GC-AP-MW-7	Depth to Water Detail	3/29/2022 8:40	12.06	ft
GC-AP-MW-7	Oxidation Reduction Potention	3/29/2022 8:40	106.36	mv
GC-AP-MW-7	pH	3/29/2022 8:40	6.63	SU
GC-AP-MW-7	Temperature	3/29/2022 8:40	18.77	C
GC-AP-MW-7	Turbidity	3/29/2022 8:40	0.87	NTU
GC-AP-MW-7	Conductivity	3/29/2022 8:45	1399.3	uS/cm
GC-AP-MW-7	DO	3/29/2022 8:45	0.95	mg/L
GC-AP-MW-7	Depth to Water Detail	3/29/2022 8:45	12.06	ft
GC-AP-MW-7	Oxidation Reduction Potention	3/29/2022 8:45	104.42	mv
GC-AP-MW-7	pH	3/29/2022 8:45	6.62	SU
GC-AP-MW-7	Sulfide	3/29/2022 8:45	0	mg/L
GC-AP-MW-7	Temperature	3/29/2022 8:45	18.93	C
GC-AP-MW-7	Turbidity	3/29/2022 8:45	0.71	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-8	Conductivity	3/29/2022 9:25	1235.8	uS/cm
GC-AP-MW-8	DO	3/29/2022 9:25	0.97	mg/L
GC-AP-MW-8	Depth to Water Detail	3/29/2022 9:25	12.09	ft
GC-AP-MW-8	Oxidation Reduction Potention	3/29/2022 9:25	122.53	mv
GC-AP-MW-8	pH	3/29/2022 9:25	6.05	SU
GC-AP-MW-8	Temperature	3/29/2022 9:25	19.56	C
GC-AP-MW-8	Turbidity	3/29/2022 9:25	1.22	NTU
GC-AP-MW-8	Conductivity	3/29/2022 9:30	1220.82	uS/cm
GC-AP-MW-8	DO	3/29/2022 9:30	0.8	mg/L
GC-AP-MW-8	Depth to Water Detail	3/29/2022 9:30	12.09	ft
GC-AP-MW-8	Oxidation Reduction Potention	3/29/2022 9:30	118.55	mv
GC-AP-MW-8	pH	3/29/2022 9:30	6.09	SU
GC-AP-MW-8	Temperature	3/29/2022 9:30	19.7	C
GC-AP-MW-8	Turbidity	3/29/2022 9:30	0.97	NTU
GC-AP-MW-8	Conductivity	3/29/2022 9:35	1214.94	uS/cm
GC-AP-MW-8	DO	3/29/2022 9:35	0.74	mg/L
GC-AP-MW-8	Depth to Water Detail	3/29/2022 9:35	12.09	ft
GC-AP-MW-8	Oxidation Reduction Potention	3/29/2022 9:35	112.38	mv
GC-AP-MW-8	pH	3/29/2022 9:35	6.15	SU
GC-AP-MW-8	Temperature	3/29/2022 9:35	19.66	C
GC-AP-MW-8	Turbidity	3/29/2022 9:35	1.26	NTU
GC-AP-MW-8	Conductivity	3/29/2022 9:40	1211.2	uS/cm
GC-AP-MW-8	DO	3/29/2022 9:40	0.71	mg/L
GC-AP-MW-8	Depth to Water Detail	3/29/2022 9:40	12.09	ft
GC-AP-MW-8	Oxidation Reduction Potention	3/29/2022 9:40	101.3	mv
GC-AP-MW-8	pH	3/29/2022 9:40	6.21	SU
GC-AP-MW-8	Sulfide	3/29/2022 9:40	0	mg/L
GC-AP-MW-8	Temperature	3/29/2022 9:40	19.67	C
GC-AP-MW-8	Turbidity	3/29/2022 9:40	1.12	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-9	Conductivity	3/29/2022 10:38	1520.92	uS/cm
GC-AP-MW-9	DO	3/29/2022 10:38	1.12	mg/L
GC-AP-MW-9	Depth to Water Detail	3/29/2022 10:38	9.05	ft
GC-AP-MW-9	Oxidation Reduction Potention	3/29/2022 10:38	105.77	mv
GC-AP-MW-9	pH	3/29/2022 10:38	5.48	SU
GC-AP-MW-9	Temperature	3/29/2022 10:38	19.61	C
GC-AP-MW-9	Turbidity	3/29/2022 10:38	0.46	NTU
GC-AP-MW-9	Conductivity	3/29/2022 10:43	1492.63	uS/cm
GC-AP-MW-9	DO	3/29/2022 10:43	0.96	mg/L
GC-AP-MW-9	Depth to Water Detail	3/29/2022 10:43	9.05	ft
GC-AP-MW-9	Oxidation Reduction Potention	3/29/2022 10:43	101.24	mv
GC-AP-MW-9	pH	3/29/2022 10:43	5.52	SU
GC-AP-MW-9	Temperature	3/29/2022 10:43	19.5	C
GC-AP-MW-9	Turbidity	3/29/2022 10:43	0.61	NTU
GC-AP-MW-9	Conductivity	3/29/2022 10:48	1460.45	uS/cm
GC-AP-MW-9	DO	3/29/2022 10:48	0.87	mg/L
GC-AP-MW-9	Depth to Water Detail	3/29/2022 10:48	9.05	ft
GC-AP-MW-9	Oxidation Reduction Potention	3/29/2022 10:48	96.56	mv
GC-AP-MW-9	pH	3/29/2022 10:48	5.58	SU
GC-AP-MW-9	Temperature	3/29/2022 10:48	19.57	C
GC-AP-MW-9	Turbidity	3/29/2022 10:48	0.66	NTU
GC-AP-MW-9	Conductivity	3/29/2022 10:53	1442.55	uS/cm
GC-AP-MW-9	DO	3/29/2022 10:53	0.82	mg/L
GC-AP-MW-9	Depth to Water Detail	3/29/2022 10:53	9.05	ft
GC-AP-MW-9	Oxidation Reduction Potention	3/29/2022 10:53	93.15	mv
GC-AP-MW-9	pH	3/29/2022 10:53	5.61	SU
GC-AP-MW-9	Sulfide	3/29/2022 10:53	0	mg/L
GC-AP-MW-9	Temperature	3/29/2022 10:53	19.59	C
GC-AP-MW-9	Turbidity	3/29/2022 10:53	0.62	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-11	Conductivity	3/30/2022 8:35	456.55	uS/cm
GC-AP-MW-11	DO	3/30/2022 8:35	1.24	mg/L
GC-AP-MW-11	Depth to Water Detail	3/30/2022 8:35	17.42	ft
GC-AP-MW-11	Oxidation Reduction Potention	3/30/2022 8:35	55.39	mv
GC-AP-MW-11	pH	3/30/2022 8:35	6.02	SU
GC-AP-MW-11	Temperature	3/30/2022 8:35	19.53	C
GC-AP-MW-11	Turbidity	3/30/2022 8:35	0.68	NTU
GC-AP-MW-11	Conductivity	3/30/2022 8:40	458.03	uS/cm
GC-AP-MW-11	DO	3/30/2022 8:40	1.07	mg/L
GC-AP-MW-11	Depth to Water Detail	3/30/2022 8:40	17.42	ft
GC-AP-MW-11	Oxidation Reduction Potention	3/30/2022 8:40	59.5	mv
GC-AP-MW-11	pH	3/30/2022 8:40	6.01	SU
GC-AP-MW-11	Temperature	3/30/2022 8:40	19.58	C
GC-AP-MW-11	Turbidity	3/30/2022 8:40	0.53	NTU
GC-AP-MW-11	Conductivity	3/30/2022 8:45	460.58	uS/cm
GC-AP-MW-11	DO	3/30/2022 8:45	0.98	mg/L
GC-AP-MW-11	Depth to Water Detail	3/30/2022 8:45	17.42	ft
GC-AP-MW-11	Oxidation Reduction Potention	3/30/2022 8:45	60.61	mv
GC-AP-MW-11	pH	3/30/2022 8:45	6.02	SU
GC-AP-MW-11	Temperature	3/30/2022 8:45	19.57	C
GC-AP-MW-11	Turbidity	3/30/2022 8:45	0.57	NTU
GC-AP-MW-11	Conductivity	3/30/2022 8:50	462.47	uS/cm
GC-AP-MW-11	DO	3/30/2022 8:50	0.95	mg/L
GC-AP-MW-11	Depth to Water Detail	3/30/2022 8:50	17.42	ft
GC-AP-MW-11	Oxidation Reduction Potention	3/30/2022 8:50	58.23	mv
GC-AP-MW-11	pH	3/30/2022 8:50	6.02	SU
GC-AP-MW-11	Sulfide	3/30/2022 8:50	0	mg/L
GC-AP-MW-11	Temperature	3/30/2022 8:50	19.61	C
GC-AP-MW-11	Turbidity	3/30/2022 8:50	0.42	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-12	Conductivity	3/29/2022 15:37	474.36	uS/cm
GC-AP-MW-12	DO	3/29/2022 15:37	1.52	mg/L
GC-AP-MW-12	Depth to Water Detail	3/29/2022 15:37	21.12	ft
GC-AP-MW-12	Oxidation Reduction Potention	3/29/2022 15:37	129.85	mv
GC-AP-MW-12	pH	3/29/2022 15:37	6.31	SU
GC-AP-MW-12	Temperature	3/29/2022 15:37	19.89	C
GC-AP-MW-12	Turbidity	3/29/2022 15:37	0.62	NTU
GC-AP-MW-12	Conductivity	3/29/2022 15:42	475.59	uS/cm
GC-AP-MW-12	DO	3/29/2022 15:42	1.4	mg/L
GC-AP-MW-12	Depth to Water Detail	3/29/2022 15:42	21.12	ft
GC-AP-MW-12	Oxidation Reduction Potention	3/29/2022 15:42	125.91	mv
GC-AP-MW-12	pH	3/29/2022 15:42	6.4	SU
GC-AP-MW-12	Temperature	3/29/2022 15:42	19.86	C
GC-AP-MW-12	Turbidity	3/29/2022 15:42	0.56	NTU
GC-AP-MW-12	Conductivity	3/29/2022 15:47	474.83	uS/cm
GC-AP-MW-12	DO	3/29/2022 15:47	1.34	mg/L
GC-AP-MW-12	Depth to Water Detail	3/29/2022 15:47	21.12	ft
GC-AP-MW-12	Oxidation Reduction Potention	3/29/2022 15:47	125.95	mv
GC-AP-MW-12	pH	3/29/2022 15:47	6.41	SU
GC-AP-MW-12	Temperature	3/29/2022 15:47	19.83	C
GC-AP-MW-12	Turbidity	3/29/2022 15:47	0.71	NTU
GC-AP-MW-12	Conductivity	3/29/2022 15:52	474.4	uS/cm
GC-AP-MW-12	DO	3/29/2022 15:52	1.27	mg/L
GC-AP-MW-12	Depth to Water Detail	3/29/2022 15:52	21.12	ft
GC-AP-MW-12	Oxidation Reduction Potention	3/29/2022 15:52	125.13	mv
GC-AP-MW-12	pH	3/29/2022 15:52	6.43	SU
GC-AP-MW-12	Temperature	3/29/2022 15:52	19.81	C
GC-AP-MW-12	Turbidity	3/29/2022 15:52	0.39	NTU
GC-AP-MW-12	Conductivity	3/29/2022 15:57	474.84	uS/cm
GC-AP-MW-12	DO	3/29/2022 15:57	1.2	mg/L
GC-AP-MW-12	Depth to Water Detail	3/29/2022 15:57	21.12	ft
GC-AP-MW-12	Oxidation Reduction Potention	3/29/2022 15:57	123.61	mv
GC-AP-MW-12	pH	3/29/2022 15:57	6.44	SU
GC-AP-MW-12	Sulfide	3/29/2022 15:57	0	mg/L
GC-AP-MW-12	Temperature	3/29/2022 15:57	19.81	C
GC-AP-MW-12	Turbidity	3/29/2022 15:57	0.69	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-21	Conductivity	3/30/2022 9:42	520.37	uS/cm
GC-AP-MW-21	DO	3/30/2022 9:42	0.43	mg/L
GC-AP-MW-21	Depth to Water Detail	3/30/2022 9:42	23.14	ft
GC-AP-MW-21	Oxidation Reduction Potention	3/30/2022 9:42	85.18	mv
GC-AP-MW-21	pH	3/30/2022 9:42	5.89	SU
GC-AP-MW-21	Temperature	3/30/2022 9:42	21.05	C
GC-AP-MW-21	Turbidity	3/30/2022 9:42	1.15	NTU
GC-AP-MW-21	Conductivity	3/30/2022 9:47	524.72	uS/cm
GC-AP-MW-21	DO	3/30/2022 9:47	0.05	mg/L
GC-AP-MW-21	Depth to Water Detail	3/30/2022 9:47	23.14	ft
GC-AP-MW-21	Oxidation Reduction Potention	3/30/2022 9:47	82.17	mv
GC-AP-MW-21	pH	3/30/2022 9:47	5.99	SU
GC-AP-MW-21	Temperature	3/30/2022 9:47	21	C
GC-AP-MW-21	Turbidity	3/30/2022 9:47	0.82	NTU
GC-AP-MW-21	Conductivity	3/30/2022 9:52	527.42	uS/cm
GC-AP-MW-21	DO	3/30/2022 9:52	0.02	mg/L
GC-AP-MW-21	Depth to Water Detail	3/30/2022 9:52	23.14	ft
GC-AP-MW-21	Oxidation Reduction Potention	3/30/2022 9:52	79.94	mv
GC-AP-MW-21	pH	3/30/2022 9:52	6.07	SU
GC-AP-MW-21	Temperature	3/30/2022 9:52	21.05	C
GC-AP-MW-21	Turbidity	3/30/2022 9:52	0.62	NTU
GC-AP-MW-21	Conductivity	3/30/2022 9:57	527.48	uS/cm
GC-AP-MW-21	DO	3/30/2022 9:57	0.03	mg/L
GC-AP-MW-21	Depth to Water Detail	3/30/2022 9:57	23.14	ft
GC-AP-MW-21	Oxidation Reduction Potention	3/30/2022 9:57	79.82	mv
GC-AP-MW-21	pH	3/30/2022 9:57	6.09	SU
GC-AP-MW-21	Sulfide	3/30/2022 9:57	0	mg/L
GC-AP-MW-21	Temperature	3/30/2022 9:57	21.1	C
GC-AP-MW-21	Turbidity	3/30/2022 9:57	0.33	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-25	Conductivity	3/29/2022 11:48	459.63	uS/cm
GC-AP-MW-25	DO	3/29/2022 11:48	1.01	mg/L
GC-AP-MW-25	Depth to Water Detail	3/29/2022 11:48	15.4	ft
GC-AP-MW-25	Oxidation Reduction Potention	3/29/2022 11:48	114.43	mv
GC-AP-MW-25	pH	3/29/2022 11:48	5.29	SU
GC-AP-MW-25	Temperature	3/29/2022 11:48	20.36	C
GC-AP-MW-25	Turbidity	3/29/2022 11:48	7.06	NTU
GC-AP-MW-25	Conductivity	3/29/2022 11:53	441.37	uS/cm
GC-AP-MW-25	DO	3/29/2022 11:53	0.87	mg/L
GC-AP-MW-25	Depth to Water Detail	3/29/2022 11:53	15.4	ft
GC-AP-MW-25	Oxidation Reduction Potention	3/29/2022 11:53	118.42	mv
GC-AP-MW-25	pH	3/29/2022 11:53	5.27	SU
GC-AP-MW-25	Temperature	3/29/2022 11:53	20.47	C
GC-AP-MW-25	Turbidity	3/29/2022 11:53	5.39	NTU
GC-AP-MW-25	Conductivity	3/29/2022 11:58	412.29	uS/cm
GC-AP-MW-25	DO	3/29/2022 11:58	0.8	mg/L
GC-AP-MW-25	Depth to Water Detail	3/29/2022 11:58	15.4	ft
GC-AP-MW-25	Oxidation Reduction Potention	3/29/2022 11:58	123.51	mv
GC-AP-MW-25	pH	3/29/2022 11:58	5.2	SU
GC-AP-MW-25	Temperature	3/29/2022 11:58	20.46	C
GC-AP-MW-25	Turbidity	3/29/2022 11:58	3.63	NTU
GC-AP-MW-25	Conductivity	3/29/2022 12:03	403.74	uS/cm
GC-AP-MW-25	DO	3/29/2022 12:03	0.78	mg/L
GC-AP-MW-25	Depth to Water Detail	3/29/2022 12:03	15.4	ft
GC-AP-MW-25	Oxidation Reduction Potention	3/29/2022 12:03	125.63	mv
GC-AP-MW-25	pH	3/29/2022 12:03	5.2	SU
GC-AP-MW-25	Temperature	3/29/2022 12:03	20.55	C
GC-AP-MW-25	Turbidity	3/29/2022 12:03	3.23	NTU
GC-AP-MW-25	Conductivity	3/29/2022 12:08	387.1	uS/cm
GC-AP-MW-25	DO	3/29/2022 12:08	0.83	mg/L
GC-AP-MW-25	Depth to Water Detail	3/29/2022 12:08	15.4	ft
GC-AP-MW-25	Oxidation Reduction Potention	3/29/2022 12:08	126.83	mv
GC-AP-MW-25	pH	3/29/2022 12:08	5.19	SU
GC-AP-MW-25	Temperature	3/29/2022 12:08	20.5	C
GC-AP-MW-25	Turbidity	3/29/2022 12:08	2.98	NTU
GC-AP-MW-25	Conductivity	3/29/2022 12:13	398.3	uS/cm
GC-AP-MW-25	DO	3/29/2022 12:13	0.97	mg/L
GC-AP-MW-25	Depth to Water Detail	3/29/2022 12:13	15.4	ft
GC-AP-MW-25	Oxidation Reduction Potention	3/29/2022 12:13	124.93	mv
GC-AP-MW-25	pH	3/29/2022 12:13	5.26	SU
GC-AP-MW-25	Sulfide	3/29/2022 12:13	0	mg/L
GC-AP-MW-25	Temperature	3/29/2022 12:13	20.56	C
GC-AP-MW-25	Turbidity	3/29/2022 12:13	2.92	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-31	Conductivity	3/28/2022 12:13	67.52	uS/cm
GC-AP-MW-31	DO	3/28/2022 12:13	3.71	mg/L
GC-AP-MW-31	Depth to Water Detail	3/28/2022 12:13	5.73	ft
GC-AP-MW-31	Oxidation Reduction Potention	3/28/2022 12:13	115.25	mv
GC-AP-MW-31	pH	3/28/2022 12:13	5.3	SU
GC-AP-MW-31	Temperature	3/28/2022 12:13	17.09	C
GC-AP-MW-31	Turbidity	3/28/2022 12:13	14.8	NTU
GC-AP-MW-31	Conductivity	3/28/2022 12:18	67.49	uS/cm
GC-AP-MW-31	DO	3/28/2022 12:18	3.55	mg/L
GC-AP-MW-31	Depth to Water Detail	3/28/2022 12:18	5.73	ft
GC-AP-MW-31	Oxidation Reduction Potention	3/28/2022 12:18	121.21	mv
GC-AP-MW-31	pH	3/28/2022 12:18	5.2	SU
GC-AP-MW-31	Temperature	3/28/2022 12:18	17.17	C
GC-AP-MW-31	Turbidity	3/28/2022 12:18	11.3	NTU
GC-AP-MW-31	Conductivity	3/28/2022 12:23	66.08	uS/cm
GC-AP-MW-31	DO	3/28/2022 12:23	3.51	mg/L
GC-AP-MW-31	Depth to Water Detail	3/28/2022 12:23	5.73	ft
GC-AP-MW-31	Oxidation Reduction Potention	3/28/2022 12:23	132.27	mv
GC-AP-MW-31	pH	3/28/2022 12:23	5.04	SU
GC-AP-MW-31	Temperature	3/28/2022 12:23	17.13	C
GC-AP-MW-31	Turbidity	3/28/2022 12:23	8.06	NTU
GC-AP-MW-31	Conductivity	3/28/2022 12:28	66.43	uS/cm
GC-AP-MW-31	DO	3/28/2022 12:28	3.5	mg/L
GC-AP-MW-31	Depth to Water Detail	3/28/2022 12:28	5.73	ft
GC-AP-MW-31	Oxidation Reduction Potention	3/28/2022 12:28	136.06	mv
GC-AP-MW-31	pH	3/28/2022 12:28	5.05	SU
GC-AP-MW-31	Sulfide	3/28/2022 12:28	0	mg/L
GC-AP-MW-31	Temperature	3/28/2022 12:28	17.18	C
GC-AP-MW-31	Turbidity	3/28/2022 12:28	3.36	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-32	Conductivity	3/28/2022 14:06	66.99	uS/cm
GC-AP-MW-32	DO	3/28/2022 14:06	4.58	mg/L
GC-AP-MW-32	Depth to Water Detail	3/28/2022 14:06	17.25	ft
GC-AP-MW-32	Oxidation Reduction Potention	3/28/2022 14:06	181.65	mv
GC-AP-MW-32	pH	3/28/2022 14:06	4.8	SU
GC-AP-MW-32	Temperature	3/28/2022 14:06	20.02	C
GC-AP-MW-32	Turbidity	3/28/2022 14:06	0.62	NTU
GC-AP-MW-32	Conductivity	3/28/2022 14:11	71.22	uS/cm
GC-AP-MW-32	DO	3/28/2022 14:11	4.41	mg/L
GC-AP-MW-32	Depth to Water Detail	3/28/2022 14:11	17.25	ft
GC-AP-MW-32	Oxidation Reduction Potention	3/28/2022 14:11	178.82	mv
GC-AP-MW-32	pH	3/28/2022 14:11	4.91	SU
GC-AP-MW-32	Temperature	3/28/2022 14:11	20.04	C
GC-AP-MW-32	Turbidity	3/28/2022 14:11	0.45	NTU
GC-AP-MW-32	Conductivity	3/28/2022 14:16	72.47	uS/cm
GC-AP-MW-32	DO	3/28/2022 14:16	4.27	mg/L
GC-AP-MW-32	Depth to Water Detail	3/28/2022 14:16	17.25	ft
GC-AP-MW-32	Oxidation Reduction Potention	3/28/2022 14:16	176.99	mv
GC-AP-MW-32	pH	3/28/2022 14:16	4.94	SU
GC-AP-MW-32	Temperature	3/28/2022 14:16	20.03	C
GC-AP-MW-32	Turbidity	3/28/2022 14:16	0.54	NTU
GC-AP-MW-32	Conductivity	3/28/2022 14:21	73.1	uS/cm
GC-AP-MW-32	DO	3/28/2022 14:21	4.28	mg/L
GC-AP-MW-32	Depth to Water Detail	3/28/2022 14:21	17.25	ft
GC-AP-MW-32	Oxidation Reduction Potention	3/28/2022 14:21	175.87	mv
GC-AP-MW-32	pH	3/28/2022 14:21	5.01	SU
GC-AP-MW-32	Sulfide	3/28/2022 14:21	0	mg/L
GC-AP-MW-32	Temperature	3/28/2022 14:21	20.08	C
GC-AP-MW-32	Turbidity	3/28/2022 14:21	0.41	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-33	Conductivity	3/28/2022 13:04	92.43	uS/cm
GC-AP-MW-33	DO	3/28/2022 13:04	5.95	mg/L
GC-AP-MW-33	Depth to Water Detail	3/28/2022 13:04	20.26	ft
GC-AP-MW-33	Oxidation Reduction Potention	3/28/2022 13:04	185.89	mv
GC-AP-MW-33	pH	3/28/2022 13:04	3.91	SU
GC-AP-MW-33	Temperature	3/28/2022 13:04	18.09	C
GC-AP-MW-33	Turbidity	3/28/2022 13:04	0.81	NTU
GC-AP-MW-33	Conductivity	3/28/2022 13:09	89.73	uS/cm
GC-AP-MW-33	DO	3/28/2022 13:09	5.96	mg/L
GC-AP-MW-33	Depth to Water Detail	3/28/2022 13:09	20.26	ft
GC-AP-MW-33	Oxidation Reduction Potention	3/28/2022 13:09	181.13	mv
GC-AP-MW-33	pH	3/28/2022 13:09	4.03	SU
GC-AP-MW-33	Temperature	3/28/2022 13:09	18.15	C
GC-AP-MW-33	Turbidity	3/28/2022 13:09	0.37	NTU
GC-AP-MW-33	Conductivity	3/28/2022 13:14	90.51	uS/cm
GC-AP-MW-33	DO	3/28/2022 13:14	5.96	mg/L
GC-AP-MW-33	Depth to Water Detail	3/28/2022 13:14	20.26	ft
GC-AP-MW-33	Oxidation Reduction Potention	3/28/2022 13:14	174.28	mv
GC-AP-MW-33	pH	3/28/2022 13:14	4.18	SU
GC-AP-MW-33	Temperature	3/28/2022 13:14	18.11	C
GC-AP-MW-33	Turbidity	3/28/2022 13:14	0.32	NTU
GC-AP-MW-33	Conductivity	3/28/2022 13:19	89.08	uS/cm
GC-AP-MW-33	DO	3/28/2022 13:19	5.97	mg/L
GC-AP-MW-33	Depth to Water Detail	3/28/2022 13:19	20.26	ft
GC-AP-MW-33	Oxidation Reduction Potention	3/28/2022 13:19	171.68	mv
GC-AP-MW-33	pH	3/28/2022 13:19	4.26	SU
GC-AP-MW-33	Temperature	3/28/2022 13:19	18.18	C
GC-AP-MW-33	Turbidity	3/28/2022 13:19	0.45	NTU
GC-AP-MW-33	Conductivity	3/28/2022 13:24	91.81	uS/cm
GC-AP-MW-33	DO	3/28/2022 13:24	5.94	mg/L
GC-AP-MW-33	Depth to Water Detail	3/28/2022 13:24	20.26	ft
GC-AP-MW-33	Oxidation Reduction Potention	3/28/2022 13:24	170.7	mv
GC-AP-MW-33	pH	3/28/2022 13:24	4.29	SU
GC-AP-MW-33	Sulfide	3/28/2022 13:24	0	mg/L
GC-AP-MW-33	Temperature	3/28/2022 13:24	18.2	C
GC-AP-MW-33	Turbidity	3/28/2022 13:24	0.23	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-48H	Conductivity	3/30/2022 10:47	108.7	uS/cm
GC-AP-MW-48H	DO	3/30/2022 10:47	0.77	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 10:47	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 10:47	124.14	mv
GC-AP-MW-48H	pH	3/30/2022 10:47	5.15	SU
GC-AP-MW-48H	Temperature	3/30/2022 10:47	17.51	C
GC-AP-MW-48H	Turbidity	3/30/2022 10:47	0.56	NTU
GC-AP-MW-48H	Conductivity	3/30/2022 10:52	112.55	uS/cm
GC-AP-MW-48H	DO	3/30/2022 10:52	0.64	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 10:52	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 10:52	126.32	mv
GC-AP-MW-48H	pH	3/30/2022 10:52	5.15	SU
GC-AP-MW-48H	Temperature	3/30/2022 10:52	17.62	C
GC-AP-MW-48H	Turbidity	3/30/2022 10:52	0.5	NTU
GC-AP-MW-48H	Conductivity	3/30/2022 10:57	118.21	uS/cm
GC-AP-MW-48H	DO	3/30/2022 10:57	0.21	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 10:57	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 10:57	126.76	mv
GC-AP-MW-48H	pH	3/30/2022 10:57	5.2	SU
GC-AP-MW-48H	Temperature	3/30/2022 10:57	17.77	C
GC-AP-MW-48H	Turbidity	3/30/2022 10:57	0.55	NTU
GC-AP-MW-48H	Conductivity	3/30/2022 11:02	124.88	uS/cm
GC-AP-MW-48H	DO	3/30/2022 11:02	0.13	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 11:02	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 11:02	124.83	mv
GC-AP-MW-48H	pH	3/30/2022 11:02	5.24	SU
GC-AP-MW-48H	Temperature	3/30/2022 11:02	17.8	C
GC-AP-MW-48H	Turbidity	3/30/2022 11:02	0.47	NTU
GC-AP-MW-48H	Conductivity	3/30/2022 11:07	128.99	uS/cm
GC-AP-MW-48H	DO	3/30/2022 11:07	0.44	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 11:07	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 11:07	123.25	mv
GC-AP-MW-48H	pH	3/30/2022 11:07	5.29	SU
GC-AP-MW-48H	Temperature	3/30/2022 11:07	17.79	C
GC-AP-MW-48H	Turbidity	3/30/2022 11:07	0.6	NTU
GC-AP-MW-48H	Conductivity	3/30/2022 11:12	132.42	uS/cm
GC-AP-MW-48H	DO	3/30/2022 11:12	0.43	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 11:12	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 11:12	121.5	mv
GC-AP-MW-48H	pH	3/30/2022 11:12	5.35	SU
GC-AP-MW-48H	Temperature	3/30/2022 11:12	17.81	C
GC-AP-MW-48H	Turbidity	3/30/2022 11:12	0.27	NTU
GC-AP-MW-48H	Conductivity	3/30/2022 11:17	134.45	uS/cm
GC-AP-MW-48H	DO	3/30/2022 11:17	0.42	mg/L
GC-AP-MW-48H	Depth to Water Detail	3/30/2022 11:17	7.86	ft
GC-AP-MW-48H	Oxidation Reduction Potention	3/30/2022 11:17	119.38	mv
GC-AP-MW-48H	pH	3/30/2022 11:17	5.4	SU
GC-AP-MW-48H	Sulfide	3/30/2022 11:17	0	mg/L
GC-AP-MW-48H	Temperature	3/30/2022 11:17	17.78	C
GC-AP-MW-48H	Turbidity	3/30/2022 11:17	0.33	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-49H	Conductivity	3/30/2022 11:53	320.94	uS/cm
GC-AP-MW-49H	DO	3/30/2022 11:53	0.15	mg/L
GC-AP-MW-49H	Depth to Water Detail	3/30/2022 11:53	8.41	ft
GC-AP-MW-49H	Oxidation Reduction Potention	3/30/2022 11:53	106.17	mv
GC-AP-MW-49H	pH	3/30/2022 11:53	5.78	SU
GC-AP-MW-49H	Temperature	3/30/2022 11:53	19	C
GC-AP-MW-49H	Turbidity	3/30/2022 11:53	1.61	NTU
GC-AP-MW-49H	Conductivity	3/30/2022 11:58	318.02	uS/cm
GC-AP-MW-49H	DO	3/30/2022 11:58	0.12	mg/L
GC-AP-MW-49H	Depth to Water Detail	3/30/2022 11:58	8.41	ft
GC-AP-MW-49H	Oxidation Reduction Potention	3/30/2022 11:58	106.95	mv
GC-AP-MW-49H	pH	3/30/2022 11:58	5.7	SU
GC-AP-MW-49H	Temperature	3/30/2022 11:58	18.97	C
GC-AP-MW-49H	Turbidity	3/30/2022 11:58	1.34	NTU
GC-AP-MW-49H	Conductivity	3/30/2022 12:03	313.21	uS/cm
GC-AP-MW-49H	DO	3/30/2022 12:03	0.11	mg/L
GC-AP-MW-49H	Depth to Water Detail	3/30/2022 12:03	8.41	ft
GC-AP-MW-49H	Oxidation Reduction Potention	3/30/2022 12:03	106	mv
GC-AP-MW-49H	pH	3/30/2022 12:03	5.69	SU
GC-AP-MW-49H	Temperature	3/30/2022 12:03	18.96	C
GC-AP-MW-49H	Turbidity	3/30/2022 12:03	1.14	NTU
GC-AP-MW-49H	Conductivity	3/30/2022 12:08	313.62	uS/cm
GC-AP-MW-49H	DO	3/30/2022 12:08	0.1	mg/L
GC-AP-MW-49H	Depth to Water Detail	3/30/2022 12:08	8.41	ft
GC-AP-MW-49H	Oxidation Reduction Potention	3/30/2022 12:08	103.85	mv
GC-AP-MW-49H	pH	3/30/2022 12:08	5.72	SU
GC-AP-MW-49H	Sulfide	3/30/2022 12:08	0	mg/L
GC-AP-MW-49H	Temperature	3/30/2022 12:08	18.99	C
GC-AP-MW-49H	Turbidity	3/30/2022 12:08	1.21	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-38H	Conductivity	3/30/2022 10:19	475.5	uS/cm
GC-AP-MW-38H	DO	3/30/2022 10:19	3.3	mg/L
GC-AP-MW-38H	Depth to Water Detail	3/30/2022 10:19	20.14	ft
GC-AP-MW-38H	Oxidation Reduction Potention	3/30/2022 10:19	161.51	mv
GC-AP-MW-38H	pH	3/30/2022 10:19	6.57	SU
GC-AP-MW-38H	Temperature	3/30/2022 10:19	23.52	C
GC-AP-MW-38H	Turbidity	3/30/2022 10:19	2.06	NTU
GC-AP-MW-38H	Conductivity	3/30/2022 10:24	478.74	uS/cm
GC-AP-MW-38H	DO	3/30/2022 10:24	3.01	mg/L
GC-AP-MW-38H	Depth to Water Detail	3/30/2022 10:24	20.19	ft
GC-AP-MW-38H	Oxidation Reduction Potention	3/30/2022 10:24	141.27	mv
GC-AP-MW-38H	pH	3/30/2022 10:24	6.61	SU
GC-AP-MW-38H	Temperature	3/30/2022 10:24	23.35	C
GC-AP-MW-38H	Turbidity	3/30/2022 10:24	1.61	NTU
GC-AP-MW-38H	Conductivity	3/30/2022 10:29	480.22	uS/cm
GC-AP-MW-38H	DO	3/30/2022 10:29	2.99	mg/L
GC-AP-MW-38H	Depth to Water Detail	3/30/2022 10:29	20.24	ft
GC-AP-MW-38H	Oxidation Reduction Potention	3/30/2022 10:29	133.36	mv
GC-AP-MW-38H	pH	3/30/2022 10:29	6.61	SU
GC-AP-MW-38H	Temperature	3/30/2022 10:29	23.35	C
GC-AP-MW-38H	Turbidity	3/30/2022 10:29	1.33	NTU
GC-AP-MW-38H	Conductivity	3/30/2022 10:34	479.43	uS/cm
GC-AP-MW-38H	DO	3/30/2022 10:34	2.99	mg/L
GC-AP-MW-38H	Depth to Water Detail	3/30/2022 10:34	20.3	ft
GC-AP-MW-38H	Oxidation Reduction Potention	3/30/2022 10:34	128.45	mv
GC-AP-MW-38H	pH	3/30/2022 10:34	6.62	SU
GC-AP-MW-38H	Sulfide	3/30/2022 10:34	0	mg/L
GC-AP-MW-38H	Temperature	3/30/2022 10:34	23.34	C
GC-AP-MW-38H	Turbidity	3/30/2022 10:34	0.95	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-40H	Conductivity	3/30/2022 11:34	672.21	uS/cm
GC-AP-MW-40H	DO	3/30/2022 11:34	0.15	mg/L
GC-AP-MW-40H	Depth to Water Detail	3/30/2022 11:34	8.19	ft
GC-AP-MW-40H	Oxidation Reduction Potention	3/30/2022 11:34	110.08	mv
GC-AP-MW-40H	pH	3/30/2022 11:34	5.85	SU
GC-AP-MW-40H	Temperature	3/30/2022 11:34	22.43	C
GC-AP-MW-40H	Turbidity	3/30/2022 11:34	1.37	NTU
GC-AP-MW-40H	Conductivity	3/30/2022 11:39	676.87	uS/cm
GC-AP-MW-40H	DO	3/30/2022 11:39	0.13	mg/L
GC-AP-MW-40H	Depth to Water Detail	3/30/2022 11:39	8.19	ft
GC-AP-MW-40H	Oxidation Reduction Potention	3/30/2022 11:39	119.24	mv
GC-AP-MW-40H	pH	3/30/2022 11:39	5.74	SU
GC-AP-MW-40H	Temperature	3/30/2022 11:39	22.38	C
GC-AP-MW-40H	Turbidity	3/30/2022 11:39	0.99	NTU
GC-AP-MW-40H	Conductivity	3/30/2022 11:44	673.04	uS/cm
GC-AP-MW-40H	DO	3/30/2022 11:44	0.12	mg/L
GC-AP-MW-40H	Depth to Water Detail	3/30/2022 11:44	8.19	ft
GC-AP-MW-40H	Oxidation Reduction Potention	3/30/2022 11:44	122.83	mv
GC-AP-MW-40H	pH	3/30/2022 11:44	5.7	SU
GC-AP-MW-40H	Temperature	3/30/2022 11:44	22.36	C
GC-AP-MW-40H	Turbidity	3/30/2022 11:44	0.87	NTU
GC-AP-MW-40H	Conductivity	3/30/2022 11:49	670.34	uS/cm
GC-AP-MW-40H	DO	3/30/2022 11:49	0.13	mg/L
GC-AP-MW-40H	Depth to Water Detail	3/30/2022 11:49	8.19	ft
GC-AP-MW-40H	Oxidation Reduction Potention	3/30/2022 11:49	124.28	mv
GC-AP-MW-40H	pH	3/30/2022 11:49	5.69	SU
GC-AP-MW-40H	Sulfide	3/30/2022 11:49	0	mg/L
GC-AP-MW-40H	Temperature	3/30/2022 11:49	22.37	C
GC-AP-MW-40H	Turbidity	3/30/2022 11:49	0.3	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-45H	Conductivity	3/29/2022 13:33	868.27	uS/cm
GC-AP-MW-45H	DO	3/29/2022 13:33	0.31	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 13:33	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 13:33	-29.43	mv
GC-AP-MW-45H	pH	3/29/2022 13:33	6.79	SU
GC-AP-MW-45H	Temperature	3/29/2022 13:33	24.48	C
GC-AP-MW-45H	Turbidity	3/29/2022 13:33	151	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 13:38	862.73	uS/cm
GC-AP-MW-45H	DO	3/29/2022 13:38	0.29	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 13:38	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 13:38	-25.66	mv
GC-AP-MW-45H	pH	3/29/2022 13:38	6.81	SU
GC-AP-MW-45H	Temperature	3/29/2022 13:38	24.55	C
GC-AP-MW-45H	Turbidity	3/29/2022 13:38	50.3	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 13:43	857.09	uS/cm
GC-AP-MW-45H	DO	3/29/2022 13:43	0.28	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 13:43	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 13:43	-24.06	mv
GC-AP-MW-45H	pH	3/29/2022 13:43	6.82	SU
GC-AP-MW-45H	Temperature	3/29/2022 13:43	24.7	C
GC-AP-MW-45H	Turbidity	3/29/2022 13:43	33.5	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 13:48	854.06	uS/cm
GC-AP-MW-45H	DO	3/29/2022 13:48	0.28	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 13:48	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 13:48	-21.98	mv
GC-AP-MW-45H	pH	3/29/2022 13:48	6.79	SU
GC-AP-MW-45H	Temperature	3/29/2022 13:48	24.8	C
GC-AP-MW-45H	Turbidity	3/29/2022 13:48	16.9	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 13:53	850.03	uS/cm
GC-AP-MW-45H	DO	3/29/2022 13:53	0.27	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 13:53	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 13:53	-20.79	mv
GC-AP-MW-45H	pH	3/29/2022 13:53	6.8	SU
GC-AP-MW-45H	Temperature	3/29/2022 13:53	24.75	C
GC-AP-MW-45H	Turbidity	3/29/2022 13:53	11.67	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 13:58	851.41	uS/cm
GC-AP-MW-45H	DO	3/29/2022 13:58	0.27	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 13:58	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 13:58	-21.16	mv
GC-AP-MW-45H	pH	3/29/2022 13:58	6.82	SU
GC-AP-MW-45H	Temperature	3/29/2022 13:58	24.81	C
GC-AP-MW-45H	Turbidity	3/29/2022 13:58	10.34	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 14:03	847.73	uS/cm
GC-AP-MW-45H	DO	3/29/2022 14:03	0.29	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 14:03	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 14:03	-20.59	mv
GC-AP-MW-45H	pH	3/29/2022 14:03	6.83	SU
GC-AP-MW-45H	Temperature	3/29/2022 14:03	24.97	C
GC-AP-MW-45H	Turbidity	3/29/2022 14:03	6.35	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 14:06	848.45	uS/cm
GC-AP-MW-45H	DO	3/29/2022 14:06	0.28	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 14:06	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 14:06	-19.51	mv
GC-AP-MW-45H	pH	3/29/2022 14:06	6.82	SU
GC-AP-MW-45H	Temperature	3/29/2022 14:06	24.89	C
GC-AP-MW-45H	Turbidity	3/29/2022 14:06	4.86	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 14:11	846.21	uS/cm
GC-AP-MW-45H	DO	3/29/2022 14:11	0.28	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 14:11	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 14:11	-18.9	mv
GC-AP-MW-45H	pH	3/29/2022 14:11	6.83	SU
GC-AP-MW-45H	Temperature	3/29/2022 14:11	24.91	C
GC-AP-MW-45H	Turbidity	3/29/2022 14:11	6.19	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 14:14	845.01	uS/cm
GC-AP-MW-45H	DO	3/29/2022 14:14	0.28	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 14:14	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 14:14	-20.03	mv
GC-AP-MW-45H	pH	3/29/2022 14:14	6.83	SU
GC-AP-MW-45H	Temperature	3/29/2022 14:14	24.86	C
GC-AP-MW-45H	Turbidity	3/29/2022 14:14	4.98	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 14:19	843.23	uS/cm
GC-AP-MW-45H	DO	3/29/2022 14:19	0.27	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 14:19	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 14:19	-15.84	mv
GC-AP-MW-45H	pH	3/29/2022 14:19	6.78	SU
GC-AP-MW-45H	Temperature	3/29/2022 14:19	24.99	C
GC-AP-MW-45H	Turbidity	3/29/2022 14:19	4.41	NTU
GC-AP-MW-45H	Conductivity	3/29/2022 14:24	841.42	uS/cm
GC-AP-MW-45H	DO	3/29/2022 14:24	0.27	mg/L
GC-AP-MW-45H	Depth to Water Detail	3/29/2022 14:24	13.61	ft
GC-AP-MW-45H	Oxidation Reduction Potention	3/29/2022 14:24	-18.32	mv
GC-AP-MW-45H	pH	3/29/2022 14:24	6.83	SU
GC-AP-MW-45H	Sulfide	3/29/2022 14:24	0	mg/L
GC-AP-MW-45H	Temperature	3/29/2022 14:24	24.72	C
GC-AP-MW-45H	Turbidity	3/29/2022 14:24	3.62	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-36H	Conductivity	3/30/2022 8:25	286.78	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:25	0.21	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:25	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:25	155.22	mv
GC-AP-MW-36H	pH	3/30/2022 8:25	7.75	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:25	26.19	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:25	8.39	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 8:30	286.39	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:30	0.18	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:30	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:30	139.99	mv
GC-AP-MW-36H	pH	3/30/2022 8:30	7.88	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:30	26.23	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:30	9.49	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 8:35	286.97	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:35	0.17	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:35	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:35	124.59	mv
GC-AP-MW-36H	pH	3/30/2022 8:35	7.84	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:35	26.25	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:35	8.9	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 8:40	286.98	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:40	0.16	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:40	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:40	106.54	mv
GC-AP-MW-36H	pH	3/30/2022 8:40	8.02	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:40	26.28	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:40	8.65	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 8:45	286.9	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:45	0.17	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:45	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:45	101.29	mv
GC-AP-MW-36H	pH	3/30/2022 8:45	7.89	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:45	26.3	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:45	8.17	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 8:50	286.04	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:50	0.16	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:50	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:50	95.8	mv
GC-AP-MW-36H	pH	3/30/2022 8:50	7.88	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:50	26.32	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:50	7.82	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 8:55	286.25	uS/cm
GC-AP-MW-36H	DO	3/30/2022 8:55	0.16	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 8:55	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 8:55	90.65	mv
GC-AP-MW-36H	pH	3/30/2022 8:55	7.86	SU
GC-AP-MW-36H	Temperature	3/30/2022 8:55	26.34	C
GC-AP-MW-36H	Turbidity	3/30/2022 8:55	7.07	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 9:00	285.91	uS/cm
GC-AP-MW-36H	DO	3/30/2022 9:00	0.16	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 9:00	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 9:00	87.52	mv
GC-AP-MW-36H	pH	3/30/2022 9:00	7.82	SU
GC-AP-MW-36H	Temperature	3/30/2022 9:00	26.38	C
GC-AP-MW-36H	Turbidity	3/30/2022 9:00	6.88	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 9:05	284.53	uS/cm
GC-AP-MW-36H	DO	3/30/2022 9:05	0.18	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 9:05	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 9:05	86.69	mv
GC-AP-MW-36H	pH	3/30/2022 9:05	7.77	SU
GC-AP-MW-36H	Temperature	3/30/2022 9:05	26.41	C
GC-AP-MW-36H	Turbidity	3/30/2022 9:05	6.77	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 9:10	283.84	uS/cm
GC-AP-MW-36H	DO	3/30/2022 9:10	0.17	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 9:10	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 9:10	79.59	mv
GC-AP-MW-36H	pH	3/30/2022 9:10	7.83	SU
GC-AP-MW-36H	Temperature	3/30/2022 9:10	26.44	C
GC-AP-MW-36H	Turbidity	3/30/2022 9:10	7.65	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 9:15	282.56	uS/cm
GC-AP-MW-36H	DO	3/30/2022 9:15	0.17	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 9:15	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 9:15	74.78	mv
GC-AP-MW-36H	pH	3/30/2022 9:15	7.86	SU
GC-AP-MW-36H	Temperature	3/30/2022 9:15	26.48	C
GC-AP-MW-36H	Turbidity	3/30/2022 9:15	6.75	NTU
GC-AP-MW-36H	Conductivity	3/30/2022 9:20	282.76	uS/cm
GC-AP-MW-36H	DO	3/30/2022 9:20	0.18	mg/L
GC-AP-MW-36H	Depth to Water Detail	3/30/2022 9:20	23.19	ft
GC-AP-MW-36H	Oxidation Reduction Potention	3/30/2022 9:20	73.03	mv
GC-AP-MW-36H	pH	3/30/2022 9:20	7.81	SU
GC-AP-MW-36H	Sulfide	3/30/2022 9:20	0	mg/L
GC-AP-MW-36H	Temperature	3/30/2022 9:20	26.48	C
GC-AP-MW-36H	Turbidity	3/30/2022 9:20	6.4	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-15	Conductivity	3/29/2022 15:42	585.91	uS/cm
GC-AP-MW-15	DO	3/29/2022 15:42	0.45	mg/L
GC-AP-MW-15	Depth to Water Detail	3/29/2022 15:42	10.98	ft
GC-AP-MW-15	Oxidation Reduction Potention	3/29/2022 15:42	59.47	mv
GC-AP-MW-15	pH	3/29/2022 15:42	5.78	SU
GC-AP-MW-15	Temperature	3/29/2022 15:42	23.31	C
GC-AP-MW-15	Turbidity	3/29/2022 15:42	0.74	NTU
GC-AP-MW-15	Conductivity	3/29/2022 15:47	589.68	uS/cm
GC-AP-MW-15	DO	3/29/2022 15:47	0.38	mg/L
GC-AP-MW-15	Depth to Water Detail	3/29/2022 15:47	10.98	ft
GC-AP-MW-15	Oxidation Reduction Potention	3/29/2022 15:47	59.87	mv
GC-AP-MW-15	pH	3/29/2022 15:47	5.75	SU
GC-AP-MW-15	Temperature	3/29/2022 15:47	23.3	C
GC-AP-MW-15	Turbidity	3/29/2022 15:47	0.79	NTU
GC-AP-MW-15	Conductivity	3/29/2022 15:52	594.15	uS/cm
GC-AP-MW-15	DO	3/29/2022 15:52	0.35	mg/L
GC-AP-MW-15	Depth to Water Detail	3/29/2022 15:52	10.98	ft
GC-AP-MW-15	Oxidation Reduction Potention	3/29/2022 15:52	57.04	mv
GC-AP-MW-15	pH	3/29/2022 15:52	5.77	SU
GC-AP-MW-15	Temperature	3/29/2022 15:52	23.2	C
GC-AP-MW-15	Turbidity	3/29/2022 15:52	0.82	NTU
GC-AP-MW-15	Conductivity	3/29/2022 15:57	595.79	uS/cm
GC-AP-MW-15	DO	3/29/2022 15:57	0.33	mg/L
GC-AP-MW-15	Depth to Water Detail	3/29/2022 15:57	10.98	ft
GC-AP-MW-15	Oxidation Reduction Potention	3/29/2022 15:57	55.92	mv
GC-AP-MW-15	pH	3/29/2022 15:57	5.81	SU
GC-AP-MW-15	Sulfide	3/29/2022 15:57	0	mg/L
GC-AP-MW-15	Temperature	3/29/2022 15:57	23.13	C
GC-AP-MW-15	Turbidity	3/29/2022 15:57	0.97	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-1	Conductivity	4/4/2022 13:56	1433.74	uS/cm
GC-AP-MW-1	DO	4/4/2022 13:56	1.48	mg/L
GC-AP-MW-1	Depth to Water Detail	4/4/2022 13:56	18.6	ft
GC-AP-MW-1	Oxidation Reduction Potention	4/4/2022 13:56	55.14	mv
GC-AP-MW-1	pH	4/4/2022 13:56	5.14	SU
GC-AP-MW-1	Temperature	4/4/2022 13:56	19.97	C
GC-AP-MW-1	Turbidity	4/4/2022 13:56	11.6	NTU
GC-AP-MW-1	Conductivity	4/4/2022 14:01	1450.36	uS/cm
GC-AP-MW-1	DO	4/4/2022 14:01	1.24	mg/L
GC-AP-MW-1	Depth to Water Detail	4/4/2022 14:01	18.6	ft
GC-AP-MW-1	Oxidation Reduction Potention	4/4/2022 14:01	51.96	mv
GC-AP-MW-1	pH	4/4/2022 14:01	5.15	SU
GC-AP-MW-1	Temperature	4/4/2022 14:01	19.92	C
GC-AP-MW-1	Turbidity	4/4/2022 14:01	7.14	NTU
GC-AP-MW-1	Conductivity	4/4/2022 14:06	1459.14	uS/cm
GC-AP-MW-1	DO	4/4/2022 14:06	1.13	mg/L
GC-AP-MW-1	Depth to Water Detail	4/4/2022 14:06	18.6	ft
GC-AP-MW-1	Oxidation Reduction Potention	4/4/2022 14:06	53.58	mv
GC-AP-MW-1	pH	4/4/2022 14:06	5.14	SU
GC-AP-MW-1	Temperature	4/4/2022 14:06	19.95	C
GC-AP-MW-1	Turbidity	4/4/2022 14:06	4.75	NTU
GC-AP-MW-1	Conductivity	4/4/2022 14:11	1465.42	uS/cm
GC-AP-MW-1	DO	4/4/2022 14:11	1.06	mg/L
GC-AP-MW-1	Depth to Water Detail	4/4/2022 14:11	18.6	ft
GC-AP-MW-1	Oxidation Reduction Potention	4/4/2022 14:11	53.31	mv
GC-AP-MW-1	pH	4/4/2022 14:11	5.17	SU
GC-AP-MW-1	Sulfide	4/4/2022 14:11	0	mg/L
GC-AP-MW-1	Temperature	4/4/2022 14:11	20.06	C
GC-AP-MW-1	Turbidity	4/4/2022 14:11	4.22	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-24	Conductivity	4/4/2022 15:12	219.79	uS/cm
GC-AP-MW-24	DO	4/4/2022 15:12	4.41	mg/L
GC-AP-MW-24	Depth to Water Detail	4/4/2022 15:12	18.73	ft
GC-AP-MW-24	Oxidation Reduction Potention	4/4/2022 15:12	135.62	mv
GC-AP-MW-24	pH	4/4/2022 15:12	4.18	SU
GC-AP-MW-24	Temperature	4/4/2022 15:12	19.46	C
GC-AP-MW-24	Turbidity	4/4/2022 15:12	2.76	NTU
GC-AP-MW-24	Conductivity	4/4/2022 15:17	226.1	uS/cm
GC-AP-MW-24	DO	4/4/2022 15:17	4.31	mg/L
GC-AP-MW-24	Depth to Water Detail	4/4/2022 15:17	18.73	ft
GC-AP-MW-24	Oxidation Reduction Potention	4/4/2022 15:17	146.73	mv
GC-AP-MW-24	pH	4/4/2022 15:17	4.28	SU
GC-AP-MW-24	Temperature	4/4/2022 15:17	19.57	C
GC-AP-MW-24	Turbidity	4/4/2022 15:17	2.28	NTU
GC-AP-MW-24	Conductivity	4/4/2022 15:22	230.03	uS/cm
GC-AP-MW-24	DO	4/4/2022 15:22	4.26	mg/L
GC-AP-MW-24	Depth to Water Detail	4/4/2022 15:22	18.73	ft
GC-AP-MW-24	Oxidation Reduction Potention	4/4/2022 15:22	147.84	mv
GC-AP-MW-24	pH	4/4/2022 15:22	4.36	SU
GC-AP-MW-24	Temperature	4/4/2022 15:22	19.44	C
GC-AP-MW-24	Turbidity	4/4/2022 15:22	1.57	NTU
GC-AP-MW-24	Conductivity	4/4/2022 15:27	233.12	uS/cm
GC-AP-MW-24	DO	4/4/2022 15:27	4.18	mg/L
GC-AP-MW-24	Depth to Water Detail	4/4/2022 15:27	18.73	ft
GC-AP-MW-24	Oxidation Reduction Potention	4/4/2022 15:27	152.36	mv
GC-AP-MW-24	pH	4/4/2022 15:27	4.4	SU
GC-AP-MW-24	Sulfide	4/4/2022 15:27	0	mg/L
GC-AP-MW-24	Temperature	4/4/2022 15:27	19.36	C
GC-AP-MW-24	Turbidity	4/4/2022 15:27	1.22	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-26	Conductivity	4/4/2022 12:37	60.86	uS/cm
GC-AP-MW-26	DO	4/4/2022 12:37	2.77	mg/L
GC-AP-MW-26	Depth to Water Detail	4/4/2022 12:37	4.75	ft
GC-AP-MW-26	Oxidation Reduction Potention	4/4/2022 12:37	88.41	mv
GC-AP-MW-26	pH	4/4/2022 12:37	5.49	SU
GC-AP-MW-26	Temperature	4/4/2022 12:37	20.7	C
GC-AP-MW-26	Turbidity	4/4/2022 12:37	1.13	NTU
GC-AP-MW-26	Conductivity	4/4/2022 12:42	60.58	uS/cm
GC-AP-MW-26	DO	4/4/2022 12:42	2.58	mg/L
GC-AP-MW-26	Depth to Water Detail	4/4/2022 12:42	4.75	ft
GC-AP-MW-26	Oxidation Reduction Potention	4/4/2022 12:42	127.58	mv
GC-AP-MW-26	pH	4/4/2022 12:42	5.08	SU
GC-AP-MW-26	Temperature	4/4/2022 12:42	18.3	C
GC-AP-MW-26	Turbidity	4/4/2022 12:42	0.73	NTU
GC-AP-MW-26	Conductivity	4/4/2022 12:47	63.7	uS/cm
GC-AP-MW-26	DO	4/4/2022 12:47	2.46	mg/L
GC-AP-MW-26	Depth to Water Detail	4/4/2022 12:47	4.75	ft
GC-AP-MW-26	Oxidation Reduction Potention	4/4/2022 12:47	137.19	mv
GC-AP-MW-26	pH	4/4/2022 12:47	4.97	SU
GC-AP-MW-26	Temperature	4/4/2022 12:47	18.39	C
GC-AP-MW-26	Turbidity	4/4/2022 12:47	0.68	NTU
GC-AP-MW-26	Conductivity	4/4/2022 12:52	64.26	uS/cm
GC-AP-MW-26	DO	4/4/2022 12:52	2.43	mg/L
GC-AP-MW-26	Depth to Water Detail	4/4/2022 12:52	4.75	ft
GC-AP-MW-26	Oxidation Reduction Potention	4/4/2022 12:52	133.34	mv
GC-AP-MW-26	pH	4/4/2022 12:52	5.15	SU
GC-AP-MW-26	Temperature	4/4/2022 12:52	18.41	C
GC-AP-MW-26	Turbidity	4/4/2022 12:52	0.7	NTU
GC-AP-MW-26	Conductivity	4/4/2022 12:57	63.46	uS/cm
GC-AP-MW-26	DO	4/4/2022 12:57	2.45	mg/L
GC-AP-MW-26	Depth to Water Detail	4/4/2022 12:57	4.75	ft
GC-AP-MW-26	Oxidation Reduction Potention	4/4/2022 12:57	133.05	mv
GC-AP-MW-26	pH	4/4/2022 12:57	5.17	SU
GC-AP-MW-26	Temperature	4/4/2022 12:57	18.39	C
GC-AP-MW-26	Turbidity	4/4/2022 12:57	0.61	NTU
GC-AP-MW-26	Conductivity	4/4/2022 13:02	61.7	uS/cm
GC-AP-MW-26	DO	4/4/2022 13:02	2.51	mg/L
GC-AP-MW-26	Depth to Water Detail	4/4/2022 13:02	4.75	ft
GC-AP-MW-26	Oxidation Reduction Potention	4/4/2022 13:02	129.49	mv
GC-AP-MW-26	pH	4/4/2022 13:02	5.2	SU
GC-AP-MW-26	Sulfide	4/4/2022 13:02	0	mg/L
GC-AP-MW-26	Temperature	4/4/2022 13:02	18.43	C
GC-AP-MW-26	Turbidity	4/4/2022 13:02	1.04	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-44H	Conductivity	4/4/2022 16:30	833.51	uS/cm
GC-AP-MW-44H	DO	4/4/2022 16:30	0.37	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 16:30	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 16:30	101	mv
GC-AP-MW-44H	pH	4/4/2022 16:30	5.42	SU
GC-AP-MW-44H	Temperature	4/4/2022 16:30	17.33	C
GC-AP-MW-44H	Turbidity	4/4/2022 16:30	43.7	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 16:35	849.42	uS/cm
GC-AP-MW-44H	DO	4/4/2022 16:35	0.32	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 16:35	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 16:35	93.95	mv
GC-AP-MW-44H	pH	4/4/2022 16:35	5.46	SU
GC-AP-MW-44H	Temperature	4/4/2022 16:35	17.41	C
GC-AP-MW-44H	Turbidity	4/4/2022 16:35	43.1	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 16:40	858.47	uS/cm
GC-AP-MW-44H	DO	4/4/2022 16:40	0.31	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 16:40	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 16:40	89.33	mv
GC-AP-MW-44H	pH	4/4/2022 16:40	5.5	SU
GC-AP-MW-44H	Temperature	4/4/2022 16:40	17.46	C
GC-AP-MW-44H	Turbidity	4/4/2022 16:40	38.6	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 16:45	869.39	uS/cm
GC-AP-MW-44H	DO	4/4/2022 16:45	0.32	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 16:45	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 16:45	85.62	mv
GC-AP-MW-44H	pH	4/4/2022 16:45	5.53	SU
GC-AP-MW-44H	Temperature	4/4/2022 16:45	17.4	C
GC-AP-MW-44H	Turbidity	4/4/2022 16:45	30.4	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 16:50	871.66	uS/cm
GC-AP-MW-44H	DO	4/4/2022 16:50	0.32	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 16:50	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 16:50	82.74	mv
GC-AP-MW-44H	pH	4/4/2022 16:50	5.55	SU
GC-AP-MW-44H	Temperature	4/4/2022 16:50	17.44	C
GC-AP-MW-44H	Turbidity	4/4/2022 16:50	16.6	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 16:55	868.69	uS/cm
GC-AP-MW-44H	DO	4/4/2022 16:55	0.32	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 16:55	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 16:55	80.16	mv
GC-AP-MW-44H	pH	4/4/2022 16:55	5.55	SU
GC-AP-MW-44H	Temperature	4/4/2022 16:55	17.49	C
GC-AP-MW-44H	Turbidity	4/4/2022 16:55	12.86	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 17:00	871.18	uS/cm
GC-AP-MW-44H	DO	4/4/2022 17:00	0.32	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 17:00	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 17:00	77.14	mv
GC-AP-MW-44H	pH	4/4/2022 17:00	5.55	SU
GC-AP-MW-44H	Temperature	4/4/2022 17:00	17.39	C
GC-AP-MW-44H	Turbidity	4/4/2022 17:00	9.69	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 17:05	869.65	uS/cm
GC-AP-MW-44H	DO	4/4/2022 17:05	0.31	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 17:05	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 17:05	75.15	mv
GC-AP-MW-44H	pH	4/4/2022 17:05	5.55	SU
GC-AP-MW-44H	Temperature	4/4/2022 17:05	17.32	C
GC-AP-MW-44H	Turbidity	4/4/2022 17:05	6.61	NTU
GC-AP-MW-44H	Conductivity	4/4/2022 17:10	870.22	uS/cm
GC-AP-MW-44H	DO	4/4/2022 17:10	0.31	mg/L
GC-AP-MW-44H	Depth to Water Detail	4/4/2022 17:10	8.27	ft
GC-AP-MW-44H	Oxidation Reduction Potention	4/4/2022 17:10	73.11	mv
GC-AP-MW-44H	pH	4/4/2022 17:10	5.56	SU
GC-AP-MW-44H	Sulfide	4/4/2022 17:10	0	mg/L
GC-AP-MW-44H	Temperature	4/4/2022 17:10	17.32	C
GC-AP-MW-44H	Turbidity	4/4/2022 17:10	4.89	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-35H	Conductivity	4/6/2022 15:01	147.7	uS/cm
GC-AP-MW-35H	DO	4/6/2022 15:01	7.56	mg/L
GC-AP-MW-35H	Depth to Water Detail	4/6/2022 15:01	20.22	ft
GC-AP-MW-35H	Oxidation Reduction Potention	4/6/2022 15:01	102.21	mv
GC-AP-MW-35H	pH	4/6/2022 15:01	5.13	SU
GC-AP-MW-35H	Temperature	4/6/2022 15:01	19.38	C
GC-AP-MW-35H	Turbidity	4/6/2022 15:01	1.2	NTU
GC-AP-MW-35H	Conductivity	4/6/2022 15:06	149.29	uS/cm
GC-AP-MW-35H	DO	4/6/2022 15:06	7.53	mg/L
GC-AP-MW-35H	Depth to Water Detail	4/6/2022 15:06	20.22	ft
GC-AP-MW-35H	Oxidation Reduction Potention	4/6/2022 15:06	107.99	mv
GC-AP-MW-35H	pH	4/6/2022 15:06	5.15	SU
GC-AP-MW-35H	Temperature	4/6/2022 15:06	19.43	C
GC-AP-MW-35H	Turbidity	4/6/2022 15:06	1.15	NTU
GC-AP-MW-35H	Conductivity	4/6/2022 15:11	148.17	uS/cm
GC-AP-MW-35H	DO	4/6/2022 15:11	7.55	mg/L
GC-AP-MW-35H	Depth to Water Detail	4/6/2022 15:11	20.22	ft
GC-AP-MW-35H	Oxidation Reduction Potention	4/6/2022 15:11	109.58	mv
GC-AP-MW-35H	pH	4/6/2022 15:11	5.17	SU
GC-AP-MW-35H	Temperature	4/6/2022 15:11	19.46	C
GC-AP-MW-35H	Turbidity	4/6/2022 15:11	1.02	NTU
GC-AP-MW-35H	Conductivity	4/6/2022 15:16	150.13	uS/cm
GC-AP-MW-35H	DO	4/6/2022 15:16	7.61	mg/L
GC-AP-MW-35H	Depth to Water Detail	4/6/2022 15:16	20.22	ft
GC-AP-MW-35H	Oxidation Reduction Potention	4/6/2022 15:16	108.5	mv
GC-AP-MW-35H	pH	4/6/2022 15:16	5.24	SU
GC-AP-MW-35H	Sulfide	4/6/2022 15:16	0	mg/L
GC-AP-MW-35H	Temperature	4/6/2022 15:16	19.54	C
GC-AP-MW-35H	Turbidity	4/6/2022 15:16	1.06	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-39H	Conductivity	4/6/2022 9:09	801.01	uS/cm
GC-AP-MW-39H	DO	4/6/2022 9:09	0.67	mg/L
GC-AP-MW-39H	Depth to Water Detail	4/6/2022 9:09	30.06	ft
GC-AP-MW-39H	Oxidation Reduction Potention	4/6/2022 9:09	-28.1	mv
GC-AP-MW-39H	pH	4/6/2022 9:09	6.3	SU
GC-AP-MW-39H	Temperature	4/6/2022 9:09	19.66	C
GC-AP-MW-39H	Turbidity	4/6/2022 9:09	3.82	NTU
GC-AP-MW-39H	Conductivity	4/6/2022 9:14	804.97	uS/cm
GC-AP-MW-39H	DO	4/6/2022 9:14	0.56	mg/L
GC-AP-MW-39H	Depth to Water Detail	4/6/2022 9:14	30.06	ft
GC-AP-MW-39H	Oxidation Reduction Potention	4/6/2022 9:14	-30.75	mv
GC-AP-MW-39H	pH	4/6/2022 9:14	6.3	SU
GC-AP-MW-39H	Temperature	4/6/2022 9:14	19.6	C
GC-AP-MW-39H	Turbidity	4/6/2022 9:14	3.45	NTU
GC-AP-MW-39H	Conductivity	4/6/2022 9:19	804.11	uS/cm
GC-AP-MW-39H	DO	4/6/2022 9:19	0.51	mg/L
GC-AP-MW-39H	Depth to Water Detail	4/6/2022 9:19	30.06	ft
GC-AP-MW-39H	Oxidation Reduction Potention	4/6/2022 9:19	-32.14	mv
GC-AP-MW-39H	pH	4/6/2022 9:19	6.31	SU
GC-AP-MW-39H	Temperature	4/6/2022 9:19	19.59	C
GC-AP-MW-39H	Turbidity	4/6/2022 9:19	2.13	NTU
GC-AP-MW-39H	Conductivity	4/6/2022 9:24	805.88	uS/cm
GC-AP-MW-39H	DO	4/6/2022 9:24	0.49	mg/L
GC-AP-MW-39H	Depth to Water Detail	4/6/2022 9:24	30.06	ft
GC-AP-MW-39H	Oxidation Reduction Potention	4/6/2022 9:24	-33.75	mv
GC-AP-MW-39H	pH	4/6/2022 9:24	6.31	SU
GC-AP-MW-39H	Sulfide	4/6/2022 9:24	0	mg/L
GC-AP-MW-39H	Temperature	4/6/2022 9:24	19.59	C
GC-AP-MW-39H	Turbidity	4/6/2022 9:24	2.32	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-41H	Conductivity	4/6/2022 11:00	715.35	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:00	0.3	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:00	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:00	6	mv
GC-AP-MW-41H	pH	4/6/2022 11:00	5.96	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:00	18.58	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:00	89.8	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:05	693.77	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:05	0.27	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:05	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:05	7.07	mv
GC-AP-MW-41H	pH	4/6/2022 11:05	5.97	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:05	18.53	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:05	61.3	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:10	677.08	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:10	0.26	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:10	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:10	5.93	mv
GC-AP-MW-41H	pH	4/6/2022 11:10	5.98	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:10	18.59	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:10	39.9	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:15	677.69	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:15	0.26	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:15	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:15	4.6	mv
GC-AP-MW-41H	pH	4/6/2022 11:15	6.02	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:15	18.64	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:15	22.7	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:20	679.3	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:20	0.26	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:20	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:20	2.99	mv
GC-AP-MW-41H	pH	4/6/2022 11:20	6.06	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:20	18.64	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:20	17.8	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:25	688.8	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:25	0.25	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:25	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:25	1.76	mv
GC-AP-MW-41H	pH	4/6/2022 11:25	6.08	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:25	18.63	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:25	18.1	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:30	698.57	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:30	0.25	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:30	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:30	0.51	mv
GC-AP-MW-41H	pH	4/6/2022 11:30	6.1	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:30	18.67	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:30	15.9	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:35	701.12	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:35	0.25	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:35	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:35	-0.42	mv
GC-AP-MW-41H	pH	4/6/2022 11:35	6.11	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:35	18.65	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:35	10.57	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:40	708.48	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:40	0.25	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:40	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:40	-1.35	mv
GC-AP-MW-41H	pH	4/6/2022 11:40	6.12	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:40	18.64	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:40	8.37	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:45	714.76	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:45	0.25	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:45	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:45	-2.34	mv
GC-AP-MW-41H	pH	4/6/2022 11:45	6.15	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:45	18.59	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:45	8.7	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:50	719.57	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:50	0.25	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:50	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:50	-2.93	mv
GC-AP-MW-41H	pH	4/6/2022 11:50	6.15	SU
GC-AP-MW-41H	Temperature	4/6/2022 11:50	18.61	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:50	8.3	NTU
GC-AP-MW-41H	Conductivity	4/6/2022 11:55	723.95	uS/cm
GC-AP-MW-41H	DO	4/6/2022 11:55	0.25	mg/L
GC-AP-MW-41H	Depth to Water Detail	4/6/2022 11:55	6.36	ft
GC-AP-MW-41H	Oxidation Reduction Potention	4/6/2022 11:55	-3.37	mv
GC-AP-MW-41H	pH	4/6/2022 11:55	6.16	SU
GC-AP-MW-41H	Sulfide	4/6/2022 11:55	0	mg/L
GC-AP-MW-41H	Temperature	4/6/2022 11:55	18.6	C
GC-AP-MW-41H	Turbidity	4/6/2022 11:55	8.36	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-53H	Conductivity	4/6/2022 7:52	708.18	uS/cm
GC-AP-MW-53H	DO	4/6/2022 7:52	0.48	mg/L
GC-AP-MW-53H	Depth to Water Detail	4/6/2022 7:52	9.54	ft
GC-AP-MW-53H	Oxidation Reduction Potention	4/6/2022 7:52	-57.42	mv
GC-AP-MW-53H	pH	4/6/2022 7:52	6.11	SU
GC-AP-MW-53H	Temperature	4/6/2022 7:52	16.85	C
GC-AP-MW-53H	Turbidity	4/6/2022 7:52	13.26	NTU
GC-AP-MW-53H	Conductivity	4/6/2022 7:57	712.2	uS/cm
GC-AP-MW-53H	DO	4/6/2022 7:57	0.42	mg/L
GC-AP-MW-53H	Depth to Water Detail	4/6/2022 7:57	9.54	ft
GC-AP-MW-53H	Oxidation Reduction Potention	4/6/2022 7:57	-55.43	mv
GC-AP-MW-53H	pH	4/6/2022 7:57	6.12	SU
GC-AP-MW-53H	Temperature	4/6/2022 7:57	16.89	C
GC-AP-MW-53H	Turbidity	4/6/2022 7:57	8.94	NTU
GC-AP-MW-53H	Conductivity	4/6/2022 8:02	714.47	uS/cm
GC-AP-MW-53H	DO	4/6/2022 8:02	0.4	mg/L
GC-AP-MW-53H	Depth to Water Detail	4/6/2022 8:02	9.54	ft
GC-AP-MW-53H	Oxidation Reduction Potention	4/6/2022 8:02	-57.9	mv
GC-AP-MW-53H	pH	4/6/2022 8:02	6.18	SU
GC-AP-MW-53H	Temperature	4/6/2022 8:02	16.96	C
GC-AP-MW-53H	Turbidity	4/6/2022 8:02	5.69	NTU
GC-AP-MW-53H	Conductivity	4/6/2022 8:07	715.12	uS/cm
GC-AP-MW-53H	DO	4/6/2022 8:07	0.38	mg/L
GC-AP-MW-53H	Depth to Water Detail	4/6/2022 8:07	9.54	ft
GC-AP-MW-53H	Oxidation Reduction Potention	4/6/2022 8:07	-60.82	mv
GC-AP-MW-53H	pH	4/6/2022 8:07	6.23	SU
GC-AP-MW-53H	Sulfide	4/6/2022 8:07	0	mg/L
GC-AP-MW-53H	Temperature	4/6/2022 8:07	16.97	C
GC-AP-MW-53H	Turbidity	4/6/2022 8:07	4.15	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-54H	Conductivity	4/5/2022 17:17	662.96	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:17	0.39	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:17	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:17	-37.59	mv
GC-AP-MW-54H	pH	4/5/2022 17:17	6.4	SU
GC-AP-MW-54H	Temperature	4/5/2022 17:17	16.9	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:17	57.7	NTU
GC-AP-MW-54H	Conductivity	4/5/2022 17:22	674.65	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:22	0.35	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:22	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:22	-55	mv
GC-AP-MW-54H	pH	4/5/2022 17:22	6.46	SU
GC-AP-MW-54H	Temperature	4/5/2022 17:22	16.87	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:22	22.9	NTU
GC-AP-MW-54H	Conductivity	4/5/2022 17:27	680.24	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:27	0.34	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:27	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:27	-64.78	mv
GC-AP-MW-54H	pH	4/5/2022 17:27	6.5	SU
GC-AP-MW-54H	Temperature	4/5/2022 17:27	16.86	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:27	13.15	NTU
GC-AP-MW-54H	Conductivity	4/5/2022 17:32	684.01	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:32	0.33	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:32	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:32	-71.43	mv
GC-AP-MW-54H	pH	4/5/2022 17:32	6.53	SU
GC-AP-MW-54H	Temperature	4/5/2022 17:32	16.85	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:32	9.33	NTU
GC-AP-MW-54H	Conductivity	4/5/2022 17:37	687.62	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:37	0.32	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:37	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:37	-76.21	mv
GC-AP-MW-54H	pH	4/5/2022 17:37	6.56	SU
GC-AP-MW-54H	Temperature	4/5/2022 17:37	16.81	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:37	6.54	NTU
GC-AP-MW-54H	Conductivity	4/5/2022 17:42	690.29	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:42	0.32	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:42	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:42	-79.41	mv
GC-AP-MW-54H	pH	4/5/2022 17:42	6.57	SU
GC-AP-MW-54H	Temperature	4/5/2022 17:42	16.81	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:42	5.47	NTU
GC-AP-MW-54H	Conductivity	4/5/2022 17:47	693.2	uS/cm
GC-AP-MW-54H	DO	4/5/2022 17:47	0.32	mg/L
GC-AP-MW-54H	Depth to Water Detail	4/5/2022 17:47	8.51	ft
GC-AP-MW-54H	Oxidation Reduction Potention	4/5/2022 17:47	-82.01	mv
GC-AP-MW-54H	pH	4/5/2022 17:47	6.59	SU
GC-AP-MW-54H	Sulfide	4/5/2022 17:47	0	mg/L
GC-AP-MW-54H	Temperature	4/5/2022 17:47	16.8	C
GC-AP-MW-54H	Turbidity	4/5/2022 17:47	4.62	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-57H	Conductivity	4/5/2022 16:09	157.93	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:09	0.43	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:09	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:09	144.79	mv
GC-AP-MW-57H	pH	4/5/2022 16:09	4.62	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:09	16.48	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:09	12.49	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:14	185.44	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:14	0.38	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:14	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:14	141.57	mv
GC-AP-MW-57H	pH	4/5/2022 16:14	4.77	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:14	16.56	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:14	9.34	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:19	199.62	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:19	0.36	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:19	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:19	129.98	mv
GC-AP-MW-57H	pH	4/5/2022 16:19	4.92	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:19	16.58	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:19	6.98	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:24	218.78	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:24	0.34	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:24	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:24	116.3	mv
GC-AP-MW-57H	pH	4/5/2022 16:24	5.05	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:24	16.54	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:24	6.39	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:29	228.31	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:29	0.34	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:29	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:29	103.83	mv
GC-AP-MW-57H	pH	4/5/2022 16:29	5.17	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:29	16.52	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:29	5.57	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:34	245.32	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:34	0.33	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:34	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:34	93.22	mv
GC-AP-MW-57H	pH	4/5/2022 16:34	5.27	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:34	16.58	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:34	5.23	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:39	249.04	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:39	0.32	mg/L
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:39	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:39	85.99	mv
GC-AP-MW-57H	pH	4/5/2022 16:39	5.34	SU
GC-AP-MW-57H	Temperature	4/5/2022 16:39	16.57	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:39	4.88	NTU
GC-AP-MW-57H	Conductivity	4/5/2022 16:44	251.21	uS/cm
GC-AP-MW-57H	DO	4/5/2022 16:44	0.32	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-57H	Depth to Water Detail	4/5/2022 16:44	4.84	ft
GC-AP-MW-57H	Oxidation Reduction Potention	4/5/2022 16:44	78.5	mv
GC-AP-MW-57H	pH	4/5/2022 16:44	5.41	SU
GC-AP-MW-57H	Sulfide	4/5/2022 16:44	0	mg/L
GC-AP-MW-57H	Temperature	4/5/2022 16:44	16.57	C
GC-AP-MW-57H	Turbidity	4/5/2022 16:44	4.92	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-3	Conductivity	4/5/2022 17:53	521.49	uS/cm
GC-AP-MW-3	DO	4/5/2022 17:53	0.57	mg/L
GC-AP-MW-3	Depth to Water Detail	4/5/2022 17:53	15.05	ft
GC-AP-MW-3	Oxidation Reduction Potention	4/5/2022 17:53	-45.23	mv
GC-AP-MW-3	pH	4/5/2022 17:53	6.24	SU
GC-AP-MW-3	Temperature	4/5/2022 17:53	26.38	C
GC-AP-MW-3	Turbidity	4/5/2022 17:53	3.83	NTU
GC-AP-MW-3	Conductivity	4/5/2022 17:58	528.26	uS/cm
GC-AP-MW-3	DO	4/5/2022 17:58	0.49	mg/L
GC-AP-MW-3	Depth to Water Detail	4/5/2022 17:58	15.11	ft
GC-AP-MW-3	Oxidation Reduction Potention	4/5/2022 17:58	-48.72	mv
GC-AP-MW-3	pH	4/5/2022 17:58	6.25	SU
GC-AP-MW-3	Temperature	4/5/2022 17:58	26.39	C
GC-AP-MW-3	Turbidity	4/5/2022 17:58	4.5	NTU
GC-AP-MW-3	Conductivity	4/5/2022 18:03	529.93	uS/cm
GC-AP-MW-3	DO	4/5/2022 18:03	0.46	mg/L
GC-AP-MW-3	Depth to Water Detail	4/5/2022 18:03	15.16	ft
GC-AP-MW-3	Oxidation Reduction Potention	4/5/2022 18:03	-51.49	mv
GC-AP-MW-3	pH	4/5/2022 18:03	6.26	SU
GC-AP-MW-3	Temperature	4/5/2022 18:03	26.32	C
GC-AP-MW-3	Turbidity	4/5/2022 18:03	3.89	NTU
GC-AP-MW-3	Conductivity	4/5/2022 18:08	532.06	uS/cm
GC-AP-MW-3	DO	4/5/2022 18:08	0.45	mg/L
GC-AP-MW-3	Depth to Water Detail	4/5/2022 18:08	15.21	ft
GC-AP-MW-3	Oxidation Reduction Potention	4/5/2022 18:08	-53.4	mv
GC-AP-MW-3	pH	4/5/2022 18:08	6.27	SU
GC-AP-MW-3	Sulfide	4/5/2022 18:08	0	mg/L
GC-AP-MW-3	Temperature	4/5/2022 18:08	26.33	C
GC-AP-MW-3	Turbidity	4/5/2022 18:08	1.8	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-5	Conductivity	4/4/2022 18:03	525.46	uS/cm
GC-AP-MW-5	DO	4/4/2022 18:03	0.71	mg/L
GC-AP-MW-5	Depth to Water Detail	4/4/2022 18:03	14.51	ft
GC-AP-MW-5	Oxidation Reduction Potention	4/4/2022 18:03	-88.33	mv
GC-AP-MW-5	pH	4/4/2022 18:03	6.4	SU
GC-AP-MW-5	Temperature	4/4/2022 18:03	25.5	C
GC-AP-MW-5	Turbidity	4/4/2022 18:03	12.22	NTU
GC-AP-MW-5	Conductivity	4/4/2022 18:08	518.87	uS/cm
GC-AP-MW-5	DO	4/4/2022 18:08	0.53	mg/L
GC-AP-MW-5	Depth to Water Detail	4/4/2022 18:08	14.51	ft
GC-AP-MW-5	Oxidation Reduction Potention	4/4/2022 18:08	-81.42	mv
GC-AP-MW-5	pH	4/4/2022 18:08	6.29	SU
GC-AP-MW-5	Temperature	4/4/2022 18:08	25.59	C
GC-AP-MW-5	Turbidity	4/4/2022 18:08	8.33	NTU
GC-AP-MW-5	Conductivity	4/4/2022 18:13	513.18	uS/cm
GC-AP-MW-5	DO	4/4/2022 18:13	0.49	mg/L
GC-AP-MW-5	Depth to Water Detail	4/4/2022 18:13	14.51	ft
GC-AP-MW-5	Oxidation Reduction Potention	4/4/2022 18:13	-79.6	mv
GC-AP-MW-5	pH	4/4/2022 18:13	6.27	SU
GC-AP-MW-5	Temperature	4/4/2022 18:13	25.56	C
GC-AP-MW-5	Turbidity	4/4/2022 18:13	10.04	NTU
GC-AP-MW-5	Conductivity	4/4/2022 18:18	511.98	uS/cm
GC-AP-MW-5	DO	4/4/2022 18:18	0.46	mg/L
GC-AP-MW-5	Depth to Water Detail	4/4/2022 18:18	14.51	ft
GC-AP-MW-5	Oxidation Reduction Potention	4/4/2022 18:18	-81.5	mv
GC-AP-MW-5	pH	4/4/2022 18:18	6.31	SU
GC-AP-MW-5	Temperature	4/4/2022 18:18	25.54	C
GC-AP-MW-5	Turbidity	4/4/2022 18:18	6.67	NTU
GC-AP-MW-5	Conductivity	4/4/2022 18:23	511.59	uS/cm
GC-AP-MW-5	DO	4/4/2022 18:23	0.44	mg/L
GC-AP-MW-5	Depth to Water Detail	4/4/2022 18:23	14.51	ft
GC-AP-MW-5	Oxidation Reduction Potention	4/4/2022 18:23	-85.59	mv
GC-AP-MW-5	pH	4/4/2022 18:23	6.4	SU
GC-AP-MW-5	Temperature	4/4/2022 18:23	25.51	C
GC-AP-MW-5	Turbidity	4/4/2022 18:23	7.94	NTU
GC-AP-MW-5	Conductivity	4/4/2022 18:28	508.59	uS/cm
GC-AP-MW-5	DO	4/4/2022 18:28	0.43	mg/L
GC-AP-MW-5	Depth to Water Detail	4/4/2022 18:28	14.51	ft
GC-AP-MW-5	Oxidation Reduction Potention	4/4/2022 18:28	-86.8	mv
GC-AP-MW-5	pH	4/4/2022 18:28	6.42	SU
GC-AP-MW-5	Sulfide	4/4/2022 18:28	0	mg/L
GC-AP-MW-5	Temperature	4/4/2022 18:28	25.49	C
GC-AP-MW-5	Turbidity	4/4/2022 18:28	4.78	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-10	Conductivity	4/4/2022 14:10	633.53	uS/cm
GC-AP-MW-10	DO	4/4/2022 14:10	0.52	mg/L
GC-AP-MW-10	Depth to Water Detail	4/4/2022 14:10	6.39	ft
GC-AP-MW-10	Oxidation Reduction Potention	4/4/2022 14:10	-99.21	mv
GC-AP-MW-10	pH	4/4/2022 14:10	6.59	SU
GC-AP-MW-10	Temperature	4/4/2022 14:10	25.46	C
GC-AP-MW-10	Turbidity	4/4/2022 14:10	3.61	NTU
GC-AP-MW-10	Conductivity	4/4/2022 14:15	630.43	uS/cm
GC-AP-MW-10	DO	4/4/2022 14:15	0.3	mg/L
GC-AP-MW-10	Depth to Water Detail	4/4/2022 14:15	6.39	ft
GC-AP-MW-10	Oxidation Reduction Potention	4/4/2022 14:15	-98.09	mv
GC-AP-MW-10	pH	4/4/2022 14:15	6.57	SU
GC-AP-MW-10	Temperature	4/4/2022 14:15	25.55	C
GC-AP-MW-10	Turbidity	4/4/2022 14:15	0.93	NTU
GC-AP-MW-10	Conductivity	4/4/2022 14:23	627.26	uS/cm
GC-AP-MW-10	DO	4/4/2022 14:23	2.07	mg/L
GC-AP-MW-10	Depth to Water Detail	4/4/2022 14:23	6.39	ft
GC-AP-MW-10	Oxidation Reduction Potention	4/4/2022 14:23	-92.61	mv
GC-AP-MW-10	pH	4/4/2022 14:23	6.44	SU
GC-AP-MW-10	Temperature	4/4/2022 14:23	25.7	C
GC-AP-MW-10	Turbidity	4/4/2022 14:23	2.12	NTU
GC-AP-MW-10	Conductivity	4/4/2022 14:28	629.11	uS/cm
GC-AP-MW-10	DO	4/4/2022 14:28	0.21	mg/L
GC-AP-MW-10	Depth to Water Detail	4/4/2022 14:28	6.39	ft
GC-AP-MW-10	Oxidation Reduction Potention	4/4/2022 14:28	-74.97	mv
GC-AP-MW-10	pH	4/4/2022 14:28	6.26	SU
GC-AP-MW-10	Temperature	4/4/2022 14:28	25.46	C
GC-AP-MW-10	Turbidity	4/4/2022 14:28	1.06	NTU
GC-AP-MW-10	Conductivity	4/4/2022 14:33	629.53	uS/cm
GC-AP-MW-10	DO	4/4/2022 14:33	0.2	mg/L
GC-AP-MW-10	Depth to Water Detail	4/4/2022 14:33	6.39	ft
GC-AP-MW-10	Oxidation Reduction Potention	4/4/2022 14:33	-73.33	mv
GC-AP-MW-10	pH	4/4/2022 14:33	6.22	SU
GC-AP-MW-10	Temperature	4/4/2022 14:33	25.54	C
GC-AP-MW-10	Turbidity	4/4/2022 14:33	0.64	NTU
GC-AP-MW-10	Conductivity	4/4/2022 14:38	627.33	uS/cm
GC-AP-MW-10	DO	4/4/2022 14:38	0.19	mg/L
GC-AP-MW-10	Depth to Water Detail	4/4/2022 14:38	6.39	ft
GC-AP-MW-10	Oxidation Reduction Potention	4/4/2022 14:38	-71.76	mv
GC-AP-MW-10	pH	4/4/2022 14:38	6.21	SU
GC-AP-MW-10	Sulfide	4/4/2022 14:38	0	mg/L
GC-AP-MW-10	Temperature	4/4/2022 14:38	25.5	C
GC-AP-MW-10	Turbidity	4/4/2022 14:38	0.4	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-13	Conductivity	4/6/2022 10:31	314.52	uS/cm
GC-AP-MW-13	DO	4/6/2022 10:31	1.1	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 10:31	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 10:31	45.96	mv
GC-AP-MW-13	pH	4/6/2022 10:31	6.2	SU
GC-AP-MW-13	Temperature	4/6/2022 10:31	26.54	C
GC-AP-MW-13	Turbidity	4/6/2022 10:31	0.66	NTU
GC-AP-MW-13	Conductivity	4/6/2022 10:36	341.95	uS/cm
GC-AP-MW-13	DO	4/6/2022 10:36	0.96	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 10:36	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 10:36	54.34	mv
GC-AP-MW-13	pH	4/6/2022 10:36	6.23	SU
GC-AP-MW-13	Temperature	4/6/2022 10:36	26.62	C
GC-AP-MW-13	Turbidity	4/6/2022 10:36	0.92	NTU
GC-AP-MW-13	Conductivity	4/6/2022 10:41	376.89	uS/cm
GC-AP-MW-13	DO	4/6/2022 10:41	0.99	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 10:41	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 10:41	60.12	mv
GC-AP-MW-13	pH	4/6/2022 10:41	6.22	SU
GC-AP-MW-13	Temperature	4/6/2022 10:41	26.64	C
GC-AP-MW-13	Turbidity	4/6/2022 10:41	0.85	NTU
GC-AP-MW-13	Conductivity	4/6/2022 10:46	392.3	uS/cm
GC-AP-MW-13	DO	4/6/2022 10:46	0.95	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 10:46	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 10:46	62.38	mv
GC-AP-MW-13	pH	4/6/2022 10:46	6.22	SU
GC-AP-MW-13	Temperature	4/6/2022 10:46	26.68	C
GC-AP-MW-13	Turbidity	4/6/2022 10:46	0.57	NTU
GC-AP-MW-13	Conductivity	4/6/2022 10:51	401.94	uS/cm
GC-AP-MW-13	DO	4/6/2022 10:51	0.95	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 10:51	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 10:51	61.75	mv
GC-AP-MW-13	pH	4/6/2022 10:51	6.24	SU
GC-AP-MW-13	Temperature	4/6/2022 10:51	26.69	C
GC-AP-MW-13	Turbidity	4/6/2022 10:51	0.48	NTU
GC-AP-MW-13	Conductivity	4/6/2022 10:56	420.1	uS/cm
GC-AP-MW-13	DO	4/6/2022 10:56	0.99	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 10:56	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 10:56	62.01	mv
GC-AP-MW-13	pH	4/6/2022 10:56	6.23	SU
GC-AP-MW-13	Temperature	4/6/2022 10:56	26.72	C
GC-AP-MW-13	Turbidity	4/6/2022 10:56	1.13	NTU
GC-AP-MW-13	Conductivity	4/6/2022 11:01	423	uS/cm
GC-AP-MW-13	DO	4/6/2022 11:01	1.01	mg/L
GC-AP-MW-13	Depth to Water Detail	4/6/2022 11:01	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 11:01	61.3	mv
GC-AP-MW-13	pH	4/6/2022 11:01	6.23	SU
GC-AP-MW-13	Temperature	4/6/2022 11:01	26.73	C
GC-AP-MW-13	Turbidity	4/6/2022 11:01	0.68	NTU
GC-AP-MW-13	Conductivity	4/6/2022 11:06	423.79	uS/cm
GC-AP-MW-13	DO	4/6/2022 11:06	0.93	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-13	Depth to Water Detail	4/6/2022 11:06	19.79	ft
GC-AP-MW-13	Oxidation Reduction Potention	4/6/2022 11:06	60.05	mv
GC-AP-MW-13	pH	4/6/2022 11:06	6.24	SU
GC-AP-MW-13	Sulfide	4/6/2022 11:06	0	mg/L
GC-AP-MW-13	Temperature	4/6/2022 11:06	26.7	C
GC-AP-MW-13	Turbidity	4/6/2022 11:06	0.68	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-14	Conductivity	4/4/2022 12:10	880.6	uS/cm
GC-AP-MW-14	DO	4/4/2022 12:10	0.34	mg/L
GC-AP-MW-14	Depth to Water Detail	4/4/2022 12:10	4.36	ft
GC-AP-MW-14	Oxidation Reduction Potention	4/4/2022 12:10	-90.86	mv
GC-AP-MW-14	pH	4/4/2022 12:10	6.41	SU
GC-AP-MW-14	Temperature	4/4/2022 12:10	23.29	C
GC-AP-MW-14	Turbidity	4/4/2022 12:10	2.44	NTU
GC-AP-MW-14	Conductivity	4/4/2022 12:15	875.73	uS/cm
GC-AP-MW-14	DO	4/4/2022 12:15	0.28	mg/L
GC-AP-MW-14	Depth to Water Detail	4/4/2022 12:15	4.38	ft
GC-AP-MW-14	Oxidation Reduction Potention	4/4/2022 12:15	-85.32	mv
GC-AP-MW-14	pH	4/4/2022 12:15	6.4	SU
GC-AP-MW-14	Temperature	4/4/2022 12:15	23.29	C
GC-AP-MW-14	Turbidity	4/4/2022 12:15	2.43	NTU
GC-AP-MW-14	Conductivity	4/4/2022 12:20	887.65	uS/cm
GC-AP-MW-14	DO	4/4/2022 12:20	0.26	mg/L
GC-AP-MW-14	Depth to Water Detail	4/4/2022 12:20	4.38	ft
GC-AP-MW-14	Oxidation Reduction Potention	4/4/2022 12:20	-82.45	mv
GC-AP-MW-14	pH	4/4/2022 12:20	6.39	SU
GC-AP-MW-14	Temperature	4/4/2022 12:20	23.32	C
GC-AP-MW-14	Turbidity	4/4/2022 12:20	0.85	NTU
GC-AP-MW-14	Conductivity	4/4/2022 12:25	891.38	uS/cm
GC-AP-MW-14	DO	4/4/2022 12:25	0.23	mg/L
GC-AP-MW-14	Depth to Water Detail	4/4/2022 12:25	4.38	ft
GC-AP-MW-14	Oxidation Reduction Potention	4/4/2022 12:25	-81.39	mv
GC-AP-MW-14	pH	4/4/2022 12:25	6.39	SU
GC-AP-MW-14	Sulfide	4/4/2022 12:25	0	mg/L
GC-AP-MW-14	Temperature	4/4/2022 12:25	23.4	C
GC-AP-MW-14	Turbidity	4/4/2022 12:25	0.96	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-16	Conductivity	4/6/2022 11:34	748.69	uS/cm
GC-AP-MW-16	DO	4/6/2022 11:34	0.12	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 11:34	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 11:34	-30.73	mv
GC-AP-MW-16	pH	4/6/2022 11:34	6.4	SU
GC-AP-MW-16	Temperature	4/6/2022 11:34	26.32	C
GC-AP-MW-16	Turbidity	4/6/2022 11:34	41.6	NTU
GC-AP-MW-16	Conductivity	4/6/2022 11:39	748.6	uS/cm
GC-AP-MW-16	DO	4/6/2022 11:39	0.09	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 11:39	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 11:39	-37.08	mv
GC-AP-MW-16	pH	4/6/2022 11:39	6.41	SU
GC-AP-MW-16	Temperature	4/6/2022 11:39	26.31	C
GC-AP-MW-16	Turbidity	4/6/2022 11:39	25.9	NTU
GC-AP-MW-16	Conductivity	4/6/2022 11:44	749.95	uS/cm
GC-AP-MW-16	DO	4/6/2022 11:44	0.08	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 11:44	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 11:44	-41.63	mv
GC-AP-MW-16	pH	4/6/2022 11:44	6.42	SU
GC-AP-MW-16	Temperature	4/6/2022 11:44	26.25	C
GC-AP-MW-16	Turbidity	4/6/2022 11:44	14.7	NTU
GC-AP-MW-16	Conductivity	4/6/2022 11:49	749.68	uS/cm
GC-AP-MW-16	DO	4/6/2022 11:49	0.07	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 11:49	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 11:49	-44.36	mv
GC-AP-MW-16	pH	4/6/2022 11:49	6.42	SU
GC-AP-MW-16	Temperature	4/6/2022 11:49	26.28	C
GC-AP-MW-16	Turbidity	4/6/2022 11:49	10.13	NTU
GC-AP-MW-16	Conductivity	4/6/2022 11:54	748.84	uS/cm
GC-AP-MW-16	DO	4/6/2022 11:54	0.06	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 11:54	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 11:54	-46.24	mv
GC-AP-MW-16	pH	4/6/2022 11:54	6.42	SU
GC-AP-MW-16	Temperature	4/6/2022 11:54	26.3	C
GC-AP-MW-16	Turbidity	4/6/2022 11:54	7.95	NTU
GC-AP-MW-16	Conductivity	4/6/2022 11:59	749.84	uS/cm
GC-AP-MW-16	DO	4/6/2022 11:59	0.06	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 11:59	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 11:59	-46.76	mv
GC-AP-MW-16	pH	4/6/2022 11:59	6.41	SU
GC-AP-MW-16	Temperature	4/6/2022 11:59	26.35	C
GC-AP-MW-16	Turbidity	4/6/2022 11:59	5.13	NTU
GC-AP-MW-16	Conductivity	4/6/2022 12:04	746.84	uS/cm
GC-AP-MW-16	DO	4/6/2022 12:04	0.06	mg/L
GC-AP-MW-16	Depth to Water Detail	4/6/2022 12:04	28.8	ft
GC-AP-MW-16	Oxidation Reduction Potention	4/6/2022 12:04	-48.49	mv
GC-AP-MW-16	pH	4/6/2022 12:04	6.42	SU
GC-AP-MW-16	Sulfide	4/6/2022 12:04	0	mg/L
GC-AP-MW-16	Temperature	4/6/2022 12:04	26.29	C
GC-AP-MW-16	Turbidity	4/6/2022 12:04	4.33	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-17	Conductivity	4/4/2022 15:59	750.01	uS/cm
GC-AP-MW-17	DO	4/4/2022 15:59	0.18	mg/L
GC-AP-MW-17	Depth to Water Detail	4/4/2022 15:59	26.84	ft
GC-AP-MW-17	Oxidation Reduction Potention	4/4/2022 15:59	-116.72	mv
GC-AP-MW-17	pH	4/4/2022 15:59	6.69	SU
GC-AP-MW-17	Temperature	4/4/2022 15:59	26.61	C
GC-AP-MW-17	Turbidity	4/4/2022 15:59	3.26	NTU
GC-AP-MW-17	Conductivity	4/4/2022 16:04	752.41	uS/cm
GC-AP-MW-17	DO	4/4/2022 16:04	0.15	mg/L
GC-AP-MW-17	Depth to Water Detail	4/4/2022 16:04	26.84	ft
GC-AP-MW-17	Oxidation Reduction Potention	4/4/2022 16:04	-119.35	mv
GC-AP-MW-17	pH	4/4/2022 16:04	6.7	SU
GC-AP-MW-17	Temperature	4/4/2022 16:04	26.58	C
GC-AP-MW-17	Turbidity	4/4/2022 16:04	2.74	NTU
GC-AP-MW-17	Conductivity	4/4/2022 16:09	762.94	uS/cm
GC-AP-MW-17	DO	4/4/2022 16:09	0.13	mg/L
GC-AP-MW-17	Depth to Water Detail	4/4/2022 16:09	26.84	ft
GC-AP-MW-17	Oxidation Reduction Potention	4/4/2022 16:09	-120.66	mv
GC-AP-MW-17	pH	4/4/2022 16:09	6.71	SU
GC-AP-MW-17	Temperature	4/4/2022 16:09	26.51	C
GC-AP-MW-17	Turbidity	4/4/2022 16:09	2.27	NTU
GC-AP-MW-17	Conductivity	4/4/2022 16:14	773.09	uS/cm
GC-AP-MW-17	DO	4/4/2022 16:14	0.13	mg/L
GC-AP-MW-17	Depth to Water Detail	4/4/2022 16:14	26.84	ft
GC-AP-MW-17	Oxidation Reduction Potention	4/4/2022 16:14	-120.55	mv
GC-AP-MW-17	pH	4/4/2022 16:14	6.71	SU
GC-AP-MW-17	Sulfide	4/4/2022 16:14	0	mg/L
GC-AP-MW-17	Temperature	4/4/2022 16:14	26.47	C
GC-AP-MW-17	Turbidity	4/4/2022 16:14	2.05	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-18	Conductivity	4/6/2022 14:51	626.86	uS/cm
GC-AP-MW-18	DO	4/6/2022 14:51	0.17	mg/L
GC-AP-MW-18	Depth to Water Detail	4/6/2022 14:51	24.16	ft
GC-AP-MW-18	Oxidation Reduction Potention	4/6/2022 14:51	-18.21	mv
GC-AP-MW-18	pH	4/6/2022 14:51	6.3	SU
GC-AP-MW-18	Temperature	4/6/2022 14:51	27.6	C
GC-AP-MW-18	Turbidity	4/6/2022 14:51	7.31	NTU
GC-AP-MW-18	Conductivity	4/6/2022 14:56	628.8	uS/cm
GC-AP-MW-18	DO	4/6/2022 14:56	0.14	mg/L
GC-AP-MW-18	Depth to Water Detail	4/6/2022 14:56	24.16	ft
GC-AP-MW-18	Oxidation Reduction Potention	4/6/2022 14:56	-23.77	mv
GC-AP-MW-18	pH	4/6/2022 14:56	6.32	SU
GC-AP-MW-18	Temperature	4/6/2022 14:56	27.4	C
GC-AP-MW-18	Turbidity	4/6/2022 14:56	3.63	NTU
GC-AP-MW-18	Conductivity	4/6/2022 15:01	634.67	uS/cm
GC-AP-MW-18	DO	4/6/2022 15:01	0.12	mg/L
GC-AP-MW-18	Depth to Water Detail	4/6/2022 15:01	24.16	ft
GC-AP-MW-18	Oxidation Reduction Potention	4/6/2022 15:01	-25.48	mv
GC-AP-MW-18	pH	4/6/2022 15:01	6.3	SU
GC-AP-MW-18	Temperature	4/6/2022 15:01	27.46	C
GC-AP-MW-18	Turbidity	4/6/2022 15:01	2.91	NTU
GC-AP-MW-18	Conductivity	4/6/2022 15:06	636.34	uS/cm
GC-AP-MW-18	DO	4/6/2022 15:06	0.11	mg/L
GC-AP-MW-18	Depth to Water Detail	4/6/2022 15:06	24.16	ft
GC-AP-MW-18	Oxidation Reduction Potention	4/6/2022 15:06	-26.21	mv
GC-AP-MW-18	pH	4/6/2022 15:06	6.29	SU
GC-AP-MW-18	Sulfide	4/6/2022 15:06	0	mg/L
GC-AP-MW-18	Temperature	4/6/2022 15:06	27.48	C
GC-AP-MW-18	Turbidity	4/6/2022 15:06	2.48	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-42H	Conductivity	4/6/2022 8:15	601.7	uS/cm
GC-AP-MW-42H	DO	4/6/2022 8:15	0.15	mg/L
GC-AP-MW-42H	Depth to Water Detail	4/6/2022 8:15	5.03	ft
GC-AP-MW-42H	Oxidation Reduction Potention	4/6/2022 8:15	-24.71	mv
GC-AP-MW-42H	pH	4/6/2022 8:15	6.19	SU
GC-AP-MW-42H	Temperature	4/6/2022 8:15	24.7	C
GC-AP-MW-42H	Turbidity	4/6/2022 8:15	10.21	NTU
GC-AP-MW-42H	Conductivity	4/6/2022 8:20	592.09	uS/cm
GC-AP-MW-42H	DO	4/6/2022 8:20	0.13	mg/L
GC-AP-MW-42H	Depth to Water Detail	4/6/2022 8:20	5.06	ft
GC-AP-MW-42H	Oxidation Reduction Potention	4/6/2022 8:20	-25.92	mv
GC-AP-MW-42H	pH	4/6/2022 8:20	6.17	SU
GC-AP-MW-42H	Temperature	4/6/2022 8:20	24.72	C
GC-AP-MW-42H	Turbidity	4/6/2022 8:20	5.68	NTU
GC-AP-MW-42H	Conductivity	4/6/2022 8:25	584.8	uS/cm
GC-AP-MW-42H	DO	4/6/2022 8:25	0.12	mg/L
GC-AP-MW-42H	Depth to Water Detail	4/6/2022 8:25	5.11	ft
GC-AP-MW-42H	Oxidation Reduction Potention	4/6/2022 8:25	-25.79	mv
GC-AP-MW-42H	pH	4/6/2022 8:25	6.15	SU
GC-AP-MW-42H	Temperature	4/6/2022 8:25	24.78	C
GC-AP-MW-42H	Turbidity	4/6/2022 8:25	3.35	NTU
GC-AP-MW-42H	Conductivity	4/6/2022 8:30	577.97	uS/cm
GC-AP-MW-42H	DO	4/6/2022 8:30	0.14	mg/L
GC-AP-MW-42H	Depth to Water Detail	4/6/2022 8:30	5.14	ft
GC-AP-MW-42H	Oxidation Reduction Potention	4/6/2022 8:30	-24.33	mv
GC-AP-MW-42H	pH	4/6/2022 8:30	6.1	SU
GC-AP-MW-42H	Sulfide	4/6/2022 8:30	0	mg/L
GC-AP-MW-42H	Temperature	4/6/2022 8:30	24.82	C
GC-AP-MW-42H	Turbidity	4/6/2022 8:30	3.33	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-43H	Conductivity	4/6/2022 9:19	838.31	uS/cm
GC-AP-MW-43H	DO	4/6/2022 9:19	0.14	mg/L
GC-AP-MW-43H	Depth to Water Detail	4/6/2022 9:19	6.81	ft
GC-AP-MW-43H	Oxidation Reduction Potention	4/6/2022 9:19	-32.57	mv
GC-AP-MW-43H	pH	4/6/2022 9:19	6.42	SU
GC-AP-MW-43H	Temperature	4/6/2022 9:19	25.2	C
GC-AP-MW-43H	Turbidity	4/6/2022 9:19	20.3	NTU
GC-AP-MW-43H	Conductivity	4/6/2022 9:24	842.2	uS/cm
GC-AP-MW-43H	DO	4/6/2022 9:24	0.12	mg/L
GC-AP-MW-43H	Depth to Water Detail	4/6/2022 9:24	6.81	ft
GC-AP-MW-43H	Oxidation Reduction Potention	4/6/2022 9:24	-35.83	mv
GC-AP-MW-43H	pH	4/6/2022 9:24	6.43	SU
GC-AP-MW-43H	Temperature	4/6/2022 9:24	25.11	C
GC-AP-MW-43H	Turbidity	4/6/2022 9:24	11.28	NTU
GC-AP-MW-43H	Conductivity	4/6/2022 9:29	842.9	uS/cm
GC-AP-MW-43H	DO	4/6/2022 9:29	0.11	mg/L
GC-AP-MW-43H	Depth to Water Detail	4/6/2022 9:29	6.81	ft
GC-AP-MW-43H	Oxidation Reduction Potention	4/6/2022 9:29	-38.8	mv
GC-AP-MW-43H	pH	4/6/2022 9:29	6.43	SU
GC-AP-MW-43H	Temperature	4/6/2022 9:29	25.2	C
GC-AP-MW-43H	Turbidity	4/6/2022 9:29	7.79	NTU
GC-AP-MW-43H	Conductivity	4/6/2022 9:34	839.57	uS/cm
GC-AP-MW-43H	DO	4/6/2022 9:34	0.12	mg/L
GC-AP-MW-43H	Depth to Water Detail	4/6/2022 9:34	6.81	ft
GC-AP-MW-43H	Oxidation Reduction Potention	4/6/2022 9:34	-40.63	mv
GC-AP-MW-43H	pH	4/6/2022 9:34	6.43	SU
GC-AP-MW-43H	Sulfide	4/6/2022 9:34	0	mg/L
GC-AP-MW-43H	Temperature	4/6/2022 9:34	25.25	C
GC-AP-MW-43H	Turbidity	4/6/2022 9:34	4.25	NTU

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-PZ-4	Conductivity	4/5/2022 16:06	1023.98	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:06	0.86	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:06	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:06	2.98	mv
GC-AP-PZ-4	pH	4/5/2022 16:06	5.71	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:06	27.65	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:06	2.86	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:11	1085.12	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:11	0.66	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:11	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:11	-2.91	mv
GC-AP-PZ-4	pH	4/5/2022 16:11	5.78	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:11	27.54	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:11	4.76	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:16	1140.08	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:16	0.51	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:16	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:16	-6.61	mv
GC-AP-PZ-4	pH	4/5/2022 16:16	5.81	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:16	27.62	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:16	11.74	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:21	1173.78	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:21	0.45	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:21	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:21	-10.44	mv
GC-AP-PZ-4	pH	4/5/2022 16:21	5.85	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:21	27.73	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:21	11.59	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:26	1199.61	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:26	0.38	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:26	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:26	-10.46	mv
GC-AP-PZ-4	pH	4/5/2022 16:26	5.83	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:26	27.78	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:26	11.33	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:31	1215.67	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:31	0.34	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:31	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:31	-14.3	mv
GC-AP-PZ-4	pH	4/5/2022 16:31	5.88	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:31	27.7	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:31	10.49	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:36	1229.58	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:36	0.31	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:36	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:36	-16.72	mv
GC-AP-PZ-4	pH	4/5/2022 16:36	5.9	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:36	27.81	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:36	8.17	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:41	1248.3	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:41	0.28	mg/L

Groundwater Field Parameters
Plant Greene County Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:41	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:41	-17.95	mv
GC-AP-PZ-4	pH	4/5/2022 16:41	5.91	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:41	27.9	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:41	6.95	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:46	1250.1	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:46	0.25	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:46	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:46	-19.36	mv
GC-AP-PZ-4	pH	4/5/2022 16:46	5.93	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:46	27.94	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:46	6.04	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:51	1249.15	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:51	0.24	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:51	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:51	-19.84	mv
GC-AP-PZ-4	pH	4/5/2022 16:51	5.93	SU
GC-AP-PZ-4	Temperature	4/5/2022 16:51	27.91	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:51	5.61	NTU
GC-AP-PZ-4	Conductivity	4/5/2022 16:56	1260.99	uS/cm
GC-AP-PZ-4	DO	4/5/2022 16:56	0.23	mg/L
GC-AP-PZ-4	Depth to Water Detail	4/5/2022 16:56	12.48	ft
GC-AP-PZ-4	Oxidation Reduction Potention	4/5/2022 16:56	-21.08	mv
GC-AP-PZ-4	pH	4/5/2022 16:56	5.95	SU
GC-AP-PZ-4	Sulfide	4/5/2022 16:56	0	mg/L
GC-AP-PZ-4	Temperature	4/5/2022 16:56	27.79	C
GC-AP-PZ-4	Turbidity	4/5/2022 16:56	4.61	NTU

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1358

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
(205) 664-6101
tbwill@southernco.com

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

May 10, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between March 29, 2022 and April 07, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.05.10
14:04:49 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US
United States l=US United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-05-11 10:56-05:00

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06388	722568	WMWGREAP_1358
BC06389	722568	WMWGREAP_1358
BC06390	722568	WMWGREAP_1358
BC06391	722568	WMWGREAP_1358
BC06392	722568	WMWGREAP_1358
BC06393	722568	WMWGREAP_1358
BC06394	722568	WMWGREAP_1358
BC06395	722568	WMWGREAP_1358
BC06396	722568	WMWGREAP_1358
BC06397	722568	WMWGREAP_1358
BC06398	722569	WMWGREAP_1358
BC06399	722569	WMWGREAP_1358
BC06400	722569	WMWGREAP_1358
BC06401	722569	WMWGREAP_1358
BC06402	722569	WMWGREAP_1358
BC06403	722569	WMWGREAP_1358
BC06404	722569	WMWGREAP_1358
BC06405	722569	WMWGREAP_1358
BC06485	722569	WMWGREAP_1358
BC06486	722569	WMWGREAP_1358
BC06487	722570	WMWGREAP_1358
BC06488	722570	WMWGREAP_1358
BC06489	722570	WMWGREAP_1358
BC06490	722570	WMWGREAP_1358
BC06491	722570	WMWGREAP_1358
BC06492	722570	WMWGREAP_1358
BC06493	722570	WMWGREAP_1358
BC06494	722570	WMWGREAP_1358
BC06495	722570	WMWGREAP_1358
BC06496	722570	WMWGREAP_1358
BC06497	722571	WMWGREAP_1358

BC06498	722571	WMWGREAP_1358
BC06499	722571	WMWGREAP_1358
BC06500	722571	WMWGREAP_1358
BC06745	723307	WMWGREAP_1358
BC06746	723307	WMWGREAP_1358
BC06747	723307	WMWGREAP_1358
BC06748	723307	WMWGREAP_1358
BC06749	723307	WMWGREAP_1358
BC06750	723307	WMWGREAP_1358
BC06751	723307	WMWGREAP_1358
BC06752	723307	WMWGREAP_1358
BC06753	723307	WMWGREAP_1358
BC06971	723307	WMWGREAP_1358
BC06972	723308	WMWGREAP_1358
BC06973	723308	WMWGREAP_1358
BC06974	723308	WMWGREAP_1358
BC06975	723308	WMWGREAP_1358
BC06976	723308	WMWGREAP_1358
BC06977	723308	WMWGREAP_1358
BC06978	723308	WMWGREAP_1358
BC06979	723308	WMWGREAP_1358
BC06980	723308	WMWGREAP_1358
BC06981	723308	WMWGREAP_1358
BC06982	723309	WMWGREAP_1358
BC06983	723309	WMWGREAP_1358
BC06984	723309	WMWGREAP_1358
BC06985	723309	WMWGREAP_1358

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.

- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06486 Calcium MS/MSD spike levels were <30% of the sample concentrations.
    - BC06496 Calcium MS/MSD spike levels were <30% of the sample concentrations.
    - BC06971 Calcium, Iron, & Magnesium MS/MSD spike levels were <30% of the sample concentrations.
    - BC06981 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06395	Calcium, Iron	20.3
BC06401	Calcium, Iron	20.3
BC06402	Calcium, Iron	20.3
BC06403	Calcium, Sodium	20.3
BC06405	Calcium, Sodium	20.3
BC06485	Calcium	20.3
BC06486	Calcium	20.3
BC06487	Calcium	20.3
BC06488	Sodium	20.3
BC06489	Calcium	20.3
BC06490	Calcium	20.3
BC06491	Calcium, Iron, Sodium	20.3
BC06492	Calcium, Iron, Sodium	20.3

BC06494	Calcium, Sodium	20.3
BC06495	Calcium	20.3
BC06498	Calcium	20.3
BC06746	Calcium, Sodium	50.75
BC06746	Iron	101.5
BC06748	Calcium, Iron	20.3
BC06750	Calcium, Iron	20.3
BC06751	Calcium, Iron	20.3
BC06752	Calcium, Iron, Sodium	20.3
BC06753	Calcium, Iron	20.3
BC06971	Calcium, Iron, Magnesium	20.3
BC06972	Calcium, Iron	20.3
BC06973	Calcium, Iron	20.3
BC06974	Calcium, Iron, Sodium	20.3
BC06975	Calcium	20.3
BC06977	Calcium, Iron	20.3
BC06978	Calcium, Iron, Sodium	20.3
BC06980	Iron	20.3
BC06981	Calcium, Iron	20.3
BC06982	Calcium, Iron	20.3
BC06983	Calcium, Iron	20.3
BC06984	Calcium, Iron	20.3

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06388	722137	WMWGREAP_1358
BC06389	722137	WMWGREAP_1358
BC06391	722137	WMWGREAP_1358
BC06392	722137	WMWGREAP_1358
BC06393	722137	WMWGREAP_1358
BC06394	722137	WMWGREAP_1358
BC06395	722137	WMWGREAP_1358
BC06397	722137	WMWGREAP_1358
BC06398	722137	WMWGREAP_1358
BC06399	722137	WMWGREAP_1358
BC06400	722138	WMWGREAP_1358
BC06401	722138	WMWGREAP_1358
BC06402	722138	WMWGREAP_1358
BC06403	722138	WMWGREAP_1358
BC06405	722138	WMWGREAP_1358
BC06485	722138	WMWGREAP_1358
BC06486	722138	WMWGREAP_1358
BC06487	722138	WMWGREAP_1358
BC06488	722138	WMWGREAP_1358
BC06489	722138	WMWGREAP_1358
BC06490	722139	WMWGREAP_1358
BC06491	722139	WMWGREAP_1358
BC06492	722139	WMWGREAP_1358
BC06493	722139	WMWGREAP_1358
BC06494	722139	WMWGREAP_1358
BC06495	722139	WMWGREAP_1358
BC06496	722139	WMWGREAP_1358
BC06497	722139	WMWGREAP_1358
BC06498	722139	WMWGREAP_1358
BC06499	722139	WMWGREAP_1358
BC06500	722140	WMWGREAP_1358

BC06745	723313	WMWGREAP_1358
BC06746	723313	WMWGREAP_1358
BC06747	723313	WMWGREAP_1358
BC06748	723313	WMWGREAP_1358
BC06750	723313	WMWGREAP_1358
BC06751	723313	WMWGREAP_1358
BC06752	723313	WMWGREAP_1358
BC06753	723313	WMWGREAP_1358
BC06971	723313	WMWGREAP_1358
BC06972	723313	WMWGREAP_1358
BC06973	723314	WMWGREAP_1358
BC06974	723314	WMWGREAP_1358
BC06975	723314	WMWGREAP_1358
BC06977	723314	WMWGREAP_1358
BC06978	723314	WMWGREAP_1358
BC06980	723314	WMWGREAP_1358
BC06981	723314	WMWGREAP_1358
BC06982	723314	WMWGREAP_1358
BC06983	723314	WMWGREAP_1358
BC06984	723314	WMWGREAP_1358
BC06985	723315	WMWGREAP_1358

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06489 Calcium MS/MSD spike levels were <30% of the sample concentrations.
    - BC06972 Iron MS/MSD spike levels were <30% of the sample concentrations.
    - BC06984 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06395	Calcium, Iron	20.3
BC06401	Calcium, Iron	20.3
BC06402	Calcium, Iron	20.3
BC06403	Calcium, Sodium	20.3
BC06405	Calcium, Sodium	20.3
BC06485	Calcium	20.3
BC06486	Calcium	20.3
BC06487	Calcium	20.3
BC06488	Sodium	20.3
BC06489	Calcium	20.3
BC06490	Calcium	20.3
BC06491	Calcium, Iron, Sodium	20.3
BC06492	Calcium, Iron, Sodium	20.3
BC06494	Calcium, Sodium	20.3
BC06495	Calcium	20.3
BC06496	Calcium	20.3
BC06497	Calcium	20.3
BC06498	Calcium	20.3

BC06746	Calcium, Sodium	50.75
BC06746	Iron	101.5
BC06748	Calcium, Iron	20.3
BC06750	Calcium, Iron	20.3
BC06751	Calcium, Iron	20.3
BC06752	Calcium, Iron, Sodium	20.3
BC06753	Calcium, Iron	20.3
BC06971	Calcium, Iron, Magnesium	20.3
BC06972	Calcium, Iron	20.3
BC06973	Calcium, Iron	20.3
BC06974	Calcium, Iron, Sodium	20.3
BC06975	Calcium	20.3
BC06977	Calcium, iron	20.3
BC06978	Calcium, Iron, Sodium	20.3
BC06980	Iron	20.3
BC06981	Calcium, Iron	20.3
BC06982	Calcium, Iron	20.3
BC06983	Calcium, Iron	20.3
BC06984	Calcium, Iron	20.3

8. The raw data results are shown with dilution factors included.

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06388	722664	WMWGREAP_1358
BC06389	722664	WMWGREAP_1358
BC06390	722664	WMWGREAP_1358
BC06391	722664	WMWGREAP_1358
BC06392	722664	WMWGREAP_1358
BC06393	722664	WMWGREAP_1358
BC06394	722664	WMWGREAP_1358
BC06395	722664	WMWGREAP_1358
BC06396	722664	WMWGREAP_1358
BC06397	722664	WMWGREAP_1358
BC06398	722665	WMWGREAP_1358
BC06399	722665	WMWGREAP_1358
BC06400	722665	WMWGREAP_1358
BC06401	722665	WMWGREAP_1358
BC06402	722665	WMWGREAP_1358
BC06403	722665	WMWGREAP_1358
BC06404	722665	WMWGREAP_1358
BC06405	722665	WMWGREAP_1358
BC06485	723042	WMWGREAP_1358
BC06486	723042	WMWGREAP_1358
BC06487	723042	WMWGREAP_1358
BC06488	723042	WMWGREAP_1358
BC06489	723042	WMWGREAP_1358
BC06490	723042	WMWGREAP_1358
BC06491	723042	WMWGREAP_1358
BC06492	723042	WMWGREAP_1358
BC06493	723042	WMWGREAP_1358
BC06494	723042	WMWGREAP_1358
BC06495	723043	WMWGREAP_1358
BC06496	723043	WMWGREAP_1358
BC06497	723043	WMWGREAP_1358

BC06498	723043	WMWGREAP_1358
BC06499	723043	WMWGREAP_1358
BC06500	723043	WMWGREAP_1358
BC06745	723117	WMWGREAP_1358
BC06746	723117	WMWGREAP_1358
BC06747	723117	WMWGREAP_1358
BC06748	723117	WMWGREAP_1358
BC06749	723117	WMWGREAP_1358
BC06750	723117	WMWGREAP_1358
BC06751	723117	WMWGREAP_1358
BC06752	723117	WMWGREAP_1358
BC06753	723117	WMWGREAP_1358
BC06971	723453	WMWGREAP_1358
BC06972	723453	WMWGREAP_1358
BC06973	723453	WMWGREAP_1358
BC06974	723453	WMWGREAP_1358
BC06975	723453	WMWGREAP_1358
BC06976	723453	WMWGREAP_1358
BC06977	723453	WMWGREAP_1358
BC06978	723453	WMWGREAP_1358
BC06979	723453	WMWGREAP_1358
BC06980	723453	WMWGREAP_1358
BC06981	723454	WMWGREAP_1358
BC06982	723454	WMWGREAP_1358
BC06983	723454	WMWGREAP_1358
BC06984	723454	WMWGREAP_1358
BC06985	723454	WMWGREAP_1358

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.

- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06500 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC06753 Manganese MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06395	Manganese	5.075
BC06401	Manganese	10.15
BC06402	Manganese	10.15
BC06405	Manganese	5.075
BC06485	Manganese	10.15
BC06486	Manganese	10.15
BC06487	Manganese	5.075
BC06490	Manganese	5.075
BC06491	Manganese	10.15
BC06492	Manganese	10.15
BC06495	Manganese	5.075
BC06496	Manganese	5.075
BC06497	Manganese	5.075
BC06498	Manganese	5.075

BC06500	Manganese	5.075
BC06746	Manganese	92.365
BC06748	Manganese	10.15
BC06750	Manganese	5.075
BC06751	Manganese	5.075
BC06752	Manganese	5.075
BC06753	Manganese	5.075
BC06971	Manganese	92.365
BC06973	Manganese	10.15
BC06974	Manganese	10.15
BC06975	Manganese	5.075
BC06977	Manganese	5.075
BC06978	Manganese	5.075
BC06981	Manganese	5.075
BC06982	Manganese	5.075
BC06983	Manganese	5.075
BC06984	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06388	722606	WMWGREAP_1358
BC06389	722606	WMWGREAP_1358
BC06391	722606	WMWGREAP_1358
BC06392	722606	WMWGREAP_1358
BC06393	722606	WMWGREAP_1358
BC06394	722606	WMWGREAP_1358
BC06395	722606	WMWGREAP_1358
BC06397	722606	WMWGREAP_1358
BC06398	722606	WMWGREAP_1358
BC06399	722606	WMWGREAP_1358
BC06400	722607	WMWGREAP_1358
BC06401	722607	WMWGREAP_1358
BC06402	722607	WMWGREAP_1358
BC06403	722607	WMWGREAP_1358
BC06405	722607	WMWGREAP_1358
BC06485	722983	WMWGREAP_1358
BC06486	722983	WMWGREAP_1358
BC06487	722983	WMWGREAP_1358
BC06488	722983	WMWGREAP_1358
BC06489	722983	WMWGREAP_1358
BC06490	722983	WMWGREAP_1358
BC06491	722983	WMWGREAP_1358
BC06492	722983	WMWGREAP_1358
BC06493	722983	WMWGREAP_1358
BC06494	722983	WMWGREAP_1358
BC06495	722984	WMWGREAP_1358
BC06496	722984	WMWGREAP_1358
BC06497	722984	WMWGREAP_1358
BC06498	722984	WMWGREAP_1358
BC06499	722984	WMWGREAP_1358
BC06500	722984	WMWGREAP_1358

BC06745	723088	WMWGREAP_1358
BC06746	723088	WMWGREAP_1358
BC06747	723088	WMWGREAP_1358
BC06748	723088	WMWGREAP_1358
BC06750	723088	WMWGREAP_1358
BC06751	723088	WMWGREAP_1358
BC06752	723088	WMWGREAP_1358
BC06753	723088	WMWGREAP_1358
BC06971	723464	WMWGREAP_1358
BC06972	723464	WMWGREAP_1358
BC06973	723464	WMWGREAP_1358
BC06974	723464	WMWGREAP_1358
BC06975	723464	WMWGREAP_1358
BC06977	723464	WMWGREAP_1358
BC06978	723464	WMWGREAP_1358
BC06980	723464	WMWGREAP_1358
BC06981	723479	WMWGREAP_1358
BC06982	723479	WMWGREAP_1358
BC06983	723479	WMWGREAP_1358
BC06984	723479	WMWGREAP_1358
BC06985	723479	WMWGREAP_1358

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Revision 5

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06500 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC06753 Manganese MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06395	Manganese	5.075
BC06401	Manganese	10.15
BC06402	Manganese	10.15
BC06405	Manganese	5.075
BC06485	Manganese	10.15
BC06486	Manganese	10.15
BC06487	Manganese	5.075
BC06490	Manganese	5.075
BC06491	Manganese	10.15
BC06492	Manganese	10.15
BC06495	Manganese	5.075
BC06496	Manganese	5.075
BC06497	Manganese	5.075
BC06498	Manganese	5.075
BC06500	Manganese	5.075
BC06746	Manganese	92.365
BC06748	Manganese	10.15
BC06750	Manganese	5.075
BC06751	Manganese	5.075
BC06752	Manganese	5.075
BC06753	Manganese	5.075

BC06971	Manganese	92.365
BC06973	Manganese	10.15
BC06974	Manganese	10.15
BC06975	Manganese	5.075
BC06977	Manganese	5.075
BC06978	Manganese	5.075
BC06981	Manganese	5.075
BC06982	Manganese	5.075
BC06983	Manganese	5.075
BC06984	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06388	722237	WMWGREAP_1358
BC06389	722237	WMWGREAP_1358
BC06390	722237	WMWGREAP_1358
BC06391	722237	WMWGREAP_1358
BC06392	722237	WMWGREAP_1358
BC06393	722237	WMWGREAP_1358
BC06394	722237	WMWGREAP_1358
BC06395	722237	WMWGREAP_1358
BC06396	722237	WMWGREAP_1358
BC06397	722237	WMWGREAP_1358
BC06398	722238	WMWGREAP_1358
BC06399	722238	WMWGREAP_1358
BC06400	722238	WMWGREAP_1358
BC06401	722238	WMWGREAP_1358
BC06402	722238	WMWGREAP_1358
BC06403	722238	WMWGREAP_1358
BC06404	722238	WMWGREAP_1358
BC06405	722238	WMWGREAP_1358
BC06485	722238	WMWGREAP_1358
BC06486	722238	WMWGREAP_1358
BC06487	722239	WMWGREAP_1358
BC06488	722239	WMWGREAP_1358
BC06489	722239	WMWGREAP_1358
BC06490	722239	WMWGREAP_1358
BC06491	722239	WMWGREAP_1358
BC06492	722239	WMWGREAP_1358
BC06493	722239	WMWGREAP_1358
BC06494	722239	WMWGREAP_1358
BC06495	722239	WMWGREAP_1358
BC06496	722239	WMWGREAP_1358
BC06497	722240	WMWGREAP_1358

BC06498	722240	WMWGREAP_1358
BC06499	722240	WMWGREAP_1358
BC06500	722240	WMWGREAP_1358
BC06745	722922	WMWGREAP_1358
BC06746	722922	WMWGREAP_1358
BC06747	722922	WMWGREAP_1358
BC06748	722922	WMWGREAP_1358
BC06749	722922	WMWGREAP_1358
BC06750	722922	WMWGREAP_1358
BC06751	722922	WMWGREAP_1358
BC06752	722922	WMWGREAP_1358
BC06753	722922	WMWGREAP_1358
BC06971	723168	WMWGREAP_1358
BC06972	723168	WMWGREAP_1358
BC06973	723168	WMWGREAP_1358
BC06974	723168	WMWGREAP_1358
BC06975	723168	WMWGREAP_1358
BC06976	723168	WMWGREAP_1358
BC06977	723168	WMWGREAP_1358
BC06978	723168	WMWGREAP_1358
BC06979	723168	WMWGREAP_1358
BC06980	723168	WMWGREAP_1358
BC06981	723169	WMWGREAP_1358
BC06982	723169	WMWGREAP_1358
BC06983	723169	WMWGREAP_1358
BC06984	723169	WMWGREAP_1358
BC06985	723169	WMWGREAP_1358

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.

- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06388	722034	WMWGREAP_1358
BC06389	722034	WMWGREAP_1358
BC06390	722034	WMWGREAP_1358
BC06391	722034	WMWGREAP_1358
BC06392	722034	WMWGREAP_1358
BC06393	722034	WMWGREAP_1358
BC06394	722034	WMWGREAP_1358
BC06395	722034	WMWGREAP_1358
BC06396	722034	WMWGREAP_1358
BC06397	722034	WMWGREAP_1358
BC06398	722035	WMWGREAP_1358
BC06399	722035	WMWGREAP_1358
BC06400	722035	WMWGREAP_1358
BC06401	722035	WMWGREAP_1358
BC06402	722035	WMWGREAP_1358
BC06403	722035	WMWGREAP_1358
BC06404	722035	WMWGREAP_1358
BC06405	722035	WMWGREAP_1358
BC06485	722035	WMWGREAP_1358
BC06486	722035	WMWGREAP_1358
BC06487	722828	WMWGREAP_1358
BC06488	722828	WMWGREAP_1358
BC06489	722828	WMWGREAP_1358
BC06490	722828	WMWGREAP_1358
BC06491	722828	WMWGREAP_1358
BC06492	722828	WMWGREAP_1358
BC06493	722828	WMWGREAP_1358
BC06494	722828	WMWGREAP_1358
BC06495	722828	WMWGREAP_1358
BC06496	722828	WMWGREAP_1358
BC06497	722829	WMWGREAP_1358

BC06498	722829	WMWGREAP_1358
BC06499	722829	WMWGREAP_1358
BC06500	722829	WMWGREAP_1358
BC06745	723383	WMWGREAP_1358
BC06746	723383	WMWGREAP_1358
BC06747	723383	WMWGREAP_1358
BC06748	723383	WMWGREAP_1358
BC06749	723383	WMWGREAP_1358
BC06750	723383	WMWGREAP_1358
BC06751	723383	WMWGREAP_1358
BC06752	723383	WMWGREAP_1358
BC06753	723383	WMWGREAP_1358
BC06971	723383	WMWGREAP_1358
BC06972	723384	WMWGREAP_1358
BC06973	723384	WMWGREAP_1358
BC06974	723384	WMWGREAP_1358
BC06975	723384	WMWGREAP_1358
BC06976	723384	WMWGREAP_1358
BC06977	723384	WMWGREAP_1358
BC06978	723384	WMWGREAP_1358
BC06979	723384	WMWGREAP_1358
BC06980	723384	WMWGREAP_1358
BC06981	723384	WMWGREAP_1358
BC06982	723385	WMWGREAP_1358
BC06983	723385	WMWGREAP_1358
BC06984	723385	WMWGREAP_1358
BC06985	723385	WMWGREAP_1358

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

Revision 5

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met, except for the following:
    - BC06971
    - BC06985

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06388	722335	WMWGREAP_1358
BC06389	722335	WMWGREAP_1358
BC06390	722335	WMWGREAP_1358
BC06391	722335	WMWGREAP_1358
BC06392	722335	WMWGREAP_1358
BC06393	722335	WMWGREAP_1358
BC06394	722335	WMWGREAP_1358
BC06395	722335	WMWGREAP_1358
BC06396	722335	WMWGREAP_1358
BC06397	722335	WMWGREAP_1358
BC06398	722336	WMWGREAP_1358
BC06399	722336	WMWGREAP_1358
BC06400	722336	WMWGREAP_1358
BC06401	722336	WMWGREAP_1358
BC06402	722336	WMWGREAP_1358
BC06403	722336	WMWGREAP_1358
BC06404	722336	WMWGREAP_1358
BC06405	722336	WMWGREAP_1358
BC06485	723064	WMWGREAP_1358
BC06486	723064	WMWGREAP_1358
BC06487	723064	WMWGREAP_1358
BC06488	723064	WMWGREAP_1358
BC06489	723064	WMWGREAP_1358
BC06490	723064	WMWGREAP_1358
BC06491	723064	WMWGREAP_1358
BC06492	723064	WMWGREAP_1358
BC06493	723064	WMWGREAP_1358
BC06494	723064	WMWGREAP_1358
BC06495	723065	WMWGREAP_1358
BC06496	723065	WMWGREAP_1358
BC06497	723065	WMWGREAP_1358

BC06498	723065	WMWGREAP_1358
BC06499	723065	WMWGREAP_1358
BC06500	723065	WMWGREAP_1358
BC06745	723065	WMWGREAP_1358
BC06746	723065	WMWGREAP_1358
BC06747	723065	WMWGREAP_1358
BC06748	723065	WMWGREAP_1358
BC06749	723066	WMWGREAP_1358
BC06750	723066	WMWGREAP_1358
BC06751	723066	WMWGREAP_1358
BC06752	723066	WMWGREAP_1358
BC06753	723066	WMWGREAP_1358
BC06971	723557	WMWGREAP_1358
BC06972	723557	WMWGREAP_1358
BC06973	723557	WMWGREAP_1358
BC06974	723557	WMWGREAP_1358
BC06975	723557	WMWGREAP_1358
BC06976	723557	WMWGREAP_1358
BC06977	723557	WMWGREAP_1358
BC06978	723557	WMWGREAP_1358
BC06979	723557	WMWGREAP_1358
BC06980	723557	WMWGREAP_1358
BC06981	723558	WMWGREAP_1358
BC06982	723558	WMWGREAP_1358
BC06983	723558	WMWGREAP_1358
BC06984	723558	WMWGREAP_1358
BC06985	723558	WMWGREAP_1358

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06388	722073	WMWGREAP_1358
BC06389	722073	WMWGREAP_1358
BC06390	722073	WMWGREAP_1358
BC06391	722073	WMWGREAP_1358
BC06392	722073	WMWGREAP_1358
BC06393	722073	WMWGREAP_1358
BC06394	722073	WMWGREAP_1358
BC06395	722073	WMWGREAP_1358
BC06396	722073	WMWGREAP_1358
BC06397	722074	WMWGREAP_1358
BC06398	722074	WMWGREAP_1358
BC06399	722074	WMWGREAP_1358
BC06400	722074	WMWGREAP_1358
BC06401	722074	WMWGREAP_1358
BC06402	722074	WMWGREAP_1358
BC06403	722074	WMWGREAP_1358
BC06404	722074	WMWGREAP_1358
BC06405	722074	WMWGREAP_1358
BC06485	722275	WMWGREAP_1358
BC06486	722275	WMWGREAP_1358
BC06487	722275	WMWGREAP_1358
BC06488	722275	WMWGREAP_1358
BC06489	722275	WMWGREAP_1358
BC06490	722275	WMWGREAP_1358
BC06491	722275	WMWGREAP_1358
BC06492	722275	WMWGREAP_1358
BC06493	722275	WMWGREAP_1358
BC06494	722275	WMWGREAP_1358
BC06495	722276	WMWGREAP_1358
BC06496	722276	WMWGREAP_1358
BC06497	722276	WMWGREAP_1358

BC06498	722276	WMWGREAP_1358
BC06499	722276	WMWGREAP_1358
BC06500	722276	WMWGREAP_1358
BC06745	722853	WMWGREAP_1358
BC06746	722853	WMWGREAP_1358
BC06747	722853	WMWGREAP_1358
BC06748	722853	WMWGREAP_1358
BC06749	722853	WMWGREAP_1358
BC06750	722853	WMWGREAP_1358
BC06751	722853	WMWGREAP_1358
BC06752	722853	WMWGREAP_1358
BC06753	722853	WMWGREAP_1358
BC06971	723171	WMWGREAP_1358
BC06972	723171	WMWGREAP_1358
BC06973	723171	WMWGREAP_1358
BC06974	723171	WMWGREAP_1358
BC06975	723420	WMWGREAP_1358
BC06976	723420	WMWGREAP_1358
BC06977	723420	WMWGREAP_1358
BC06978	723420	WMWGREAP_1358
BC06979	723420	WMWGREAP_1358
BC06980	723171	WMWGREAP_1358
BC06981	723171	WMWGREAP_1358
BC06982	723171	WMWGREAP_1358
BC06983	723171	WMWGREAP_1358
BC06984	723420	WMWGREAP_1358
BC06985	723420	WMWGREAP_1358

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.

- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BC06388
    - BC06389
    - BC06390
    - BC06396
    - BC06404
    - BC06749
    - BC06976
    - BC06979

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06388	722666, 722600, 723495	WMWGREAP_1358
BC06389	722666, 722600, 723495	WMWGREAP_1358
BC06390	722666, 722600, 723495	WMWGREAP_1358
BC06391	722666, 722600, 723495	WMWGREAP_1358
BC06392	722666, 722600, 723495	WMWGREAP_1358
BC06393	722666, 722600, 723495	WMWGREAP_1358
BC06394	722666, 722600, 723495	WMWGREAP_1358
BC06395	722666, 722600, 723495	WMWGREAP_1358
BC06396	722666, 722600, 723495	WMWGREAP_1358
BC06397	722666, 722600, 723496	WMWGREAP_1358
BC06398	722667, 722601, 723496	WMWGREAP_1358
BC06399	722667, 722601, 723496	WMWGREAP_1358
BC06400	722667, 722601, 723496	WMWGREAP_1358
BC06401	722667, 722601, 723496	WMWGREAP_1358
BC06402	722667, 722601, 723496	WMWGREAP_1358
BC06403	722667, 722601, 723496	WMWGREAP_1358
BC06404	722667, 722601, 723496	WMWGREAP_1358
BC06405	722667, 722601, 723496	WMWGREAP_1358
BC06485	722667, 722601, 723496	WMWGREAP_1358
BC06486	722667, 722601, 723497	WMWGREAP_1358
BC06487	722668, 722602, 723497	WMWGREAP_1358
BC06488	722668, 722602, 723497	WMWGREAP_1358
BC06489	722668, 722602, 723497	WMWGREAP_1358
BC06490	722668, 722602, 723497	WMWGREAP_1358
BC06491	722668, 722602, 723497	WMWGREAP_1358
BC06492	722668, 722602, 723497	WMWGREAP_1358
BC06493	722668, 722602, 723497	WMWGREAP_1358
BC06494	722668, 722602, 723497	WMWGREAP_1358
BC06495	722668, 722602, 723497	WMWGREAP_1358
BC06496	722668, 722602, 723498	WMWGREAP_1358
BC06497	722669, 722603, 723498	WMWGREAP_1358

BC06498	722669, 722603, 723498	WMWGREAP_1358
BC06499	722669, 722603, 723498	WMWGREAP_1358
BC06500	722669, 722603, 723498	WMWGREAP_1358
BC06745	722874, 722876, 723498	WMWGREAP_1358
BC06746	722874, 722876, 723498	WMWGREAP_1358
BC06747	722874, 722876, 723498	WMWGREAP_1358
BC06748	722874, 722876, 723498	WMWGREAP_1358
BC06749	722874, 722876, 723498	WMWGREAP_1358
BC06750	722874, 722876, 723499	WMWGREAP_1358
BC06751	722874, 722876, 723499	WMWGREAP_1358
BC06752	722874, 722876, 723499	WMWGREAP_1358
BC06753	722874, 722876, 723499	WMWGREAP_1358
BC06971	723566, 723686, 723501	WMWGREAP_1358
BC06972	723566, 723686, 723501	WMWGREAP_1358
BC06973	723566, 723686, 723501	WMWGREAP_1358
BC06974	723566, 723686, 723501	WMWGREAP_1358
BC06975	723566, 723686, 723501	WMWGREAP_1358
BC06976	723566, 723686, 723501	WMWGREAP_1358
BC06977	723566, 723686, 723501	WMWGREAP_1358
BC06978	723566, 723686, 723501	WMWGREAP_1358
BC06979	723566, 723686, 723501	WMWGREAP_1358
BC06980	723566, 723686, 723501	WMWGREAP_1358
BC06981	723567, 723687, 723502	WMWGREAP_1358
BC06982	723567, 723687, 723502	WMWGREAP_1358
BC06983	723567, 723687, 723502	WMWGREAP_1358
BC06984	723567, 723687, 723502	WMWGREAP_1358
BC06985	723567, 723687, 723502	WMWGREAP_1358

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06395	Sulfate	20
BC06401	Sulfate	32
BC06402	Sulfate	32
BC06403	Chloride, Sulfate	5, 16
BC06405	Chloride, Sulfate	8, 5
BC06485	Sulfate	32
BC06486	Sulfate	16
BC06487	Sulfate	10
BC06489	Sulfate	2
BC06490	Sulfate	20
BC06491	Chloride, Sulfate	25, 10
BC06492	Chloride, Sulfate	25, 10
BC06493	Chloride, Sulfate	2, 4
BC06494	Chloride, Sulfate	5, 10
BC06495	Sulfate	10
BC06496	Sulfate	8
BC06497	Sulfate	8
BC06498	Sulfate	8
BC06500	Sulfate	5
BC06746	Chloride, Sulfate	8, 40
BC06747	Sulfate	5
BC06748	Sulfate	25
BC06750	Sulfate	10
BC06751	Sulfate	8

BC06752	Sulfate	3
BC06753	Sulfate	16
BC06971	Sulfate	40
BC06972	Chloride	2
BC06973	Sulfate	4
BC06974	Chloride, Sulfate	4, 5
BC06975	Sulfate	8
BC06977	Sulfate	2
BC06978	Chloride	2
BC06980	Sulfate	4
BC06981	Sulfate	5
BC06982	Sulfate	8
BC06984	Sulfate	16

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1358

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06388	723133,723134	WMWGREAP_1358
BC06389	723133,723134	WMWGREAP_1358
BC06391	723133,723134	WMWGREAP_1358
BC06392	723133,723134	WMWGREAP_1358
BC06393	723133,723134	WMWGREAP_1358
BC06394	723133,723134	WMWGREAP_1358
BC06395	723133,723134	WMWGREAP_1358
BC06397	723269,723270	WMWGREAP_1358
BC06398	723269,723270	WMWGREAP_1358
BC06399	723269,723270	WMWGREAP_1358
BC06400	723269,723270	WMWGREAP_1358
BC06401	723269,723270	WMWGREAP_1358
BC06402	723269,723270	WMWGREAP_1358
BC06403	723416,723417	WMWGREAP_1358
BC06405	723416,723417	WMWGREAP_1358
BC06485	723416,723417	WMWGREAP_1358
BC06486	723416,723417	WMWGREAP_1358
BC06487	723416,723417	WMWGREAP_1358
BC06488	723577,723578	WMWGREAP_1358
BC06489	723577,723578	WMWGREAP_1358
BC06490	723577,723578	WMWGREAP_1358
BC06491	723416,723417	WMWGREAP_1358
BC06492	723416,723417	WMWGREAP_1358
BC06493	723416,723417	WMWGREAP_1358
BC06494	723416,723417	WMWGREAP_1358
BC06495	723416,723417	WMWGREAP_1358
BC06496	723577,723578	WMWGREAP_1358
BC06497	723577,723578	WMWGREAP_1358
BC06498	723577,723578	WMWGREAP_1358
BC06499	723577,723578	WMWGREAP_1358
BC06500	723577,723578	WMWGREAP_1358

Revision 5

BC06745	723573,723574	WMWGREAP_1358
BC06746	723573,723574	WMWGREAP_1358
BC06747	723573,723574	WMWGREAP_1358
BC06748	723573,723574	WMWGREAP_1358
BC06750	723573,723574	WMWGREAP_1358
BC06751	723801,723802	WMWGREAP_1358
BC06752	723801,723802	WMWGREAP_1358
BC06753	723801,723802	WMWGREAP_1358
BC06971	723801,723802	WMWGREAP_1358
BC06972	723801,723802	WMWGREAP_1358
BC06973	724179,724180	WMWGREAP_1358
BC06974	724179,724180	WMWGREAP_1358
BC06975	724179,724180	WMWGREAP_1358
BC06977	724179,724180	WMWGREAP_1358
BC06978	724179,724180	WMWGREAP_1358
BC06980	723801,723802	WMWGREAP_1358
BC06981	723801,723802	WMWGREAP_1358
BC06982	724179,724180	WMWGREAP_1358
BC06983	724179,724180	WMWGREAP_1358
BC06984	724179,724180	WMWGREAP_1358
BC06985	724179,724180	WMWGREAP_1358

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times, except for the following:

- BC06973
- BC06974
- BC06975
- BC06977
- BC06978
- BC06982
- BC06983
- BC06984
- BC06985

6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BC06401
    - BC06402
    - BC06403
    - BC06405
    - BC06485
    - BC06486
    - BC06491
    - BC06492
    - BC06494
    - BC06746
    - BC06748
    - BC06750
    - BC06752
    - BC06971
    - BC06974

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29

Location Code: WMWGREAP
Collected: 3/28/22 11:52
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06388

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:26		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:26		1.015	0.172	mg/L	0.070035	0.406	J
* Iron, Total	4/5/22 07:00	4/8/22 09:26		1.015	0.0137	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 09:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:26		1.015	0.257	mg/L	0.021315	0.406	J
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:26		1	8.35	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:26		1.015	3.90	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:26		1.015	0.897	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	0.173	mg/L	0.070035	0.406	J
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	0.257	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:30		1	8.43	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	3.94	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:30		1.015	0.923	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.0331	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.0337	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.000162	mg/L	0.000068	0.000203	J
* Chromium, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.000393	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.000787	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.0126	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:30		1.015	0.735	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29

Location Code: WMWGREAP
Collected: 3/28/22 11:52
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06388

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.0149	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.0312	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.000159	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.000819	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.0126	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	0.740	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 17:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 15:51	4/4/22 15:51		1	0.307	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	0.84	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	Not Detected	mg/L		25	U
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		1	
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 12:01	3/31/22 12:01		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29

Location Code: WMWGREAP
Collected: 3/28/22 11:52
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06388

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:23	4/4/22 09:23		1	1.24	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:35	4/4/22 12:35		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:38	4/11/22 11:38		1	1.29	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/22 11:47	3/28/22 11:47			12.50	uS/cm			FA
pH	3/28/22 11:47	3/28/22 11:47			4.67	SU			FA
Temperature	3/28/22 11:47	3/28/22 11:47			17.65	C			FA
Turbidity	3/28/22 11:47	3/28/22 11:47			1.34	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC06388

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC06388

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC06388

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC06388

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29 DUP

Location Code: WMWGREAP
Collected: 3/28/22 11:52
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06389

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:29		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:29		1.015	0.169	mg/L	0.070035	0.406	J
* Iron, Total	4/5/22 07:00	4/8/22 09:29		1.015	0.0121	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 09:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:29		1.015	0.259	mg/L	0.021315	0.406	J
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:29		1	8.39	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:29		1.015	3.92	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:29		1.015	0.894	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	0.182	mg/L	0.070035	0.406	J
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	0.256	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:33		1	8.45	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	3.95	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:33		1.015	0.934	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.0305	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.0320	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.000121	mg/L	0.000068	0.000203	J
* Chromium, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.000351	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.000689	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.0121	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:34		1.015	0.685	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29 DUP

Location Code: WMWGREAP
Collected: 3/28/22 11:52
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06389

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.0148	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.0329	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.0000944	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.000250	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.000920	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.0124	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	0.708	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 17:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 15:53	4/4/22 15:53		1	0.302	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	0.60	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	Not Detected	mg/L		25	U
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		1	
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 12:21	3/31/22 12:21		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29 DUP

Location Code: WMWGREAP
Collected: 3/28/22 11:52
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06389

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:24	4/4/22 09:24		1	1.24	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:37	4/4/22 12:37		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:39	4/11/22 11:39		1	1.24	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/22 11:47	3/28/22 11:47			12.50	uS/cm			FA
pH	3/28/22 11:47	3/28/22 11:47			4.67	SU			FA
Temperature	3/28/22 11:47	3/28/22 11:47			17.65	C			FA
Turbidity	3/28/22 11:47	3/28/22 11:47			1.34	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29 DUP

Laboratory ID Number: BC06389

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29 DUP

Laboratory ID Number: BC06389

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29 DUP

Laboratory ID Number: BC06389

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 11:52
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-29 DUP

Laboratory ID Number: BC06389

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
TDS result did not meet the 2.5 mg residue requirement, but 150mL of sample was filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/28/22 12:22
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06390

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:31		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/8/22 09:31		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 13:37		1.015	0.000253	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 17:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 15:55	4/4/22 15:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/28/22 12:22
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06390

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 12:37	3/31/22 12:37		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:25	4/4/22 09:25		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:38	4/4/22 12:38		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:40	4/11/22 11:40		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/28/22 12:22
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06390

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/28/22 12:22
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06390

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/28/22 12:22
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06390

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-30

Location Code: WMWGREAP
Collected: 3/28/22 13:25
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06391

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:34		1.015	0.542	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 09:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 09:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:34		1.015	0.164	mg/L	0.021315	0.406	J
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:34		1	10.6	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:34		1.015	4.94	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:34		1.015	4.76	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	0.532	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	0.161	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:36		1	10.6	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	4.96	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:36		1.015	4.63	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:41		1.015	0.00974	mg/L	0.006090	0.01015	J
* Arsenic, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:41		1.015	0.0286	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 13:41		1.015	0.000396	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:41		1.015	0.0000700	mg/L	0.000068	0.000203	J
* Lead, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:41		1.015	0.00447	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:41		1.015	0.662	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-30

Location Code: WMWGREAP
Collected: 3/28/22 13:25
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06391

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	0.0286	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	0.000389	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	0.0000726	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	0.00431	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	0.654	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 15:57	4/4/22 15:57		1	0.625	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	3.96	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	27.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	3.95	mg/L			
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 12:54	3/31/22 12:54		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-30

Location Code: WMWGREAP
Collected: 3/28/22 13:25
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06391

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:27	4/4/22 09:27		1	4.12	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:39	4/4/22 12:39		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:41	4/11/22 11:41		1	0.951	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/22 13:21	3/28/22 13:21			26.46	uS/cm			FA
pH	3/28/22 13:21	3/28/22 13:21			4.93	SU			FA
Temperature	3/28/22 13:21	3/28/22 13:21			17.81	C			FA
Turbidity	3/28/22 13:21	3/28/22 13:21			0.61	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:25
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC06391

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:25
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC06391

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:25
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC06391

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:25
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC06391

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-27

Location Code: WMWGREAP
Collected: 3/28/22 14:14
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06392

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:37		1.015	1.37	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 09:37		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 09:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:37		1.015	0.586	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:37		1	10.4	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:37		1.015	4.86	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:37		1.015	3.56	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	1.46	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	0.622	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:39		1	10.6	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	4.95	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:39		1.015	3.60	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.0131	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.0625	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.000182	mg/L	0.000068	0.000203	J
* Chromium, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.000306	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.000142	mg/L	0.000068	0.000203	J
* Lead, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.0135	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:45		1.015	0.812	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-27

Location Code: WMWGREAP
Collected: 3/28/22 14:14
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06392

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.0119	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.0613	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.000172	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.000205	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.000160	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.0137	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	0.765	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 15:59	4/4/22 15:59		1	1.05	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	3.24	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	32.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	3.24	mg/L			
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 13:14	3/31/22 13:14		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-27

Location Code: WMWGREAP
Collected: 3/28/22 14:14
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06392

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:28	4/4/22 09:28		1	1.96	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:40	4/4/22 12:40		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:43	4/11/22 11:43		1	6.24	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/22 14:12	3/28/22 14:12			33.75	uS/cm			FA
pH	3/28/22 14:12	3/28/22 14:12			4.73	SU			FA
Temperature	3/28/22 14:12	3/28/22 14:12			18.72	C			FA
Turbidity	3/28/22 14:12	3/28/22 14:12			0.78	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:14
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC06392

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:14
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC06392

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:14
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC06392

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:14
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC06392

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-28

Location Code: WMWGREAP
Collected: 3/28/22 15:03
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06393

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:40		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:40		1.015	1.94	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 09:40		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 09:40		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:40		1.015	1.74	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:40		1	7.96	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:40		1.015	3.72	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:40		1.015	1.36	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	1.98	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	1.78	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:41		1	7.92	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	3.70	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:41		1.015	1.35	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:49		1.015	0.0607	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:49		1.015	0.186	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:49		1.015	0.000429	mg/L	0.000068	0.000203	
* Chromium, Total	3/30/22 12:09	3/31/22 13:49		1.015	0.000723	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:49		1.015	0.000517	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:49		1.015	0.0719	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:49		1.015	1.70	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-28

Location Code: WMWGREAP
Collected: 3/28/22 15:03
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06393

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	0.0590	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	0.184	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	0.000379	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	0.000634	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	0.000508	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	0.0734	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	1.74	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:00	4/4/22 16:00		1	0.945	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	0.56	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	38.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		1	
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 13:31	3/31/22 13:31		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-28

Location Code: WMWGREAP
Collected: 3/28/22 15:03
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06393

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:29	4/4/22 09:29		1	1.35	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:42	4/4/22 12:42		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:44	4/11/22 11:44		1	11.2	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/22 15:00	3/28/22 15:00			44.28	uS/cm			FA
pH	3/28/22 15:00	3/28/22 15:00			4.69	SU			FA
Temperature	3/28/22 15:00	3/28/22 15:00			18.26	C			FA
Turbidity	3/28/22 15:00	3/28/22 15:00			0.59	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:03
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC06393

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:03
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC06393

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:03
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC06393

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:03
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC06393

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-23

Location Code: WMWGREAP
Collected: 3/28/22 16:18
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06394

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:43		1.015	26.0	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 09:43		1.015	0.0159	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 09:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:43		1.015	2.12	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:43		1	7.51	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:43		1.015	3.51	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:43		1.015	2.33	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	26.3	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	2.16	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:44		1	7.51	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	3.51	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:44		1.015	2.36	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.0118	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.0264	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.000337	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.000308	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.000124	mg/L	0.000102	0.000203	J
* Potassium, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.650	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-23

Location Code: WMWGREAP
Collected: 3/28/22 16:18
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06394

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:52		1.015	0.000989	mg/L	0.000508	0.001015	J
* Thallium, Total	3/30/22 12:09	3/31/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	0.0292	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	0.650	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	0.00108	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:02	4/4/22 16:02		1	0.219	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	78.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	96.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	78.3	mg/L			
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 13:51	3/31/22 13:51		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-23

Location Code: WMWGREAP
Collected: 3/28/22 16:18
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06394

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:30	4/4/22 09:30		1	1.09	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:43	4/4/22 12:43		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:45	4/11/22 11:45		1	11.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/22 16:16	3/28/22 16:16			144.72	uS/cm			FA
pH	3/28/22 16:16	3/28/22 16:16			6.08	SU			FA
Temperature	3/28/22 16:16	3/28/22 16:16			17.73	C			FA
Turbidity	3/28/22 16:16	3/28/22 16:16			1.04	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:18
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC06394

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:18
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC06394

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:18
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC06394

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:18
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC06394

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-37H

Location Code: WMWGREAP
Collected: 3/29/22 09:07
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06395

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:46		1.015	0.157	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 11:57		20.3	118	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 11:57		20.3	43.4	mg/L	0.1624	0.812	
* Lithium, Total	4/5/22 07:00	4/8/22 09:46		1.015	0.00867	mg/L	0.007105	0.01999956	J
* Magnesium, Total	4/5/22 07:00	4/8/22 09:46		1.015	19.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:46		1	15.1	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:46		1.015	7.05	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:46		1.015	21.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:47		1.015	0.162	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:06		20.3	123	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 15:06		20.3	41.5	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:47		1.015	0.00871	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:47		1.015	20.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:47		1	15.3	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:47		1.015	7.17	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:47		1.015	21.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/30/22 12:09	3/31/22 13:56		1.015	0.0110	mg/L	0.000081	0.000203	
* Barium, Total	3/30/22 12:09	3/31/22 13:56		1.015	0.0235	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 13:56		1.015	0.000366	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:56		1.015	0.0198	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 15:12		5.075	4.06	mg/L	0.000761	0.001015	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:56		1.015	0.000790	mg/L	0.000102	0.000203	
* Potassium, Total	3/30/22 12:09	3/31/22 13:56		1.015	1.79	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-37H

Location Code: WMWGREAP
Collected: 3/29/22 09:07
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06395

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	0.0107	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	0.0233	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	0.0205	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/31/22 11:59		5.075	4.05	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	0.000678	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	1.77	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:04	4/4/22 16:04		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/7/22 13:00	4/7/22 16:12		1	182	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	624	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	182	mg/L			
Carbonate Alkalinity, (calc.)	4/7/22 13:00	4/7/22 16:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 14:06	3/31/22 14:06		1	2.88	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-37H

Location Code: WMWGREAP
Collected: 3/29/22 09:07
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06395

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:31	4/4/22 09:31		1	5.57	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:44	4/4/22 12:44		1	0.189	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:00	4/11/22 12:00		20	303	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/29/22 09:04	3/29/22 09:04			846.53	uS/cm			FA
pH	3/29/22 09:04	3/29/22 09:04			6.36	SU			FA
Temperature	3/29/22 09:04	3/29/22 09:04			19.77	C			FA
Turbidity	3/29/22 09:04	3/29/22 09:04			2.74	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:07
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC06395

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:07
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC06395

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:07
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC06395

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:07
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC06395

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06395	Alkalinity, Total as CaCO3	mg/L					174	51.4	45.0 to 55.0			4.49	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-2

Location Code: WMWGREAPFB
Collected: 3/29/22 09:15
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06396

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:49		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/8/22 09:49		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 13:59		1.015	0.000254	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 13:59		1.015	0.000389	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 13:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:06	4/4/22 16:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-2

Location Code: WMWGREAPFB
Collected: 3/29/22 09:15
Customer ID:
Submittal Date: 3/29/22 15:47

Laboratory ID Number: BC06396

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 14:25	3/31/22 14:25		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:33	4/4/22 09:33		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:45	4/4/22 12:45		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 11:47	4/11/22 11:47		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/29/22 09:15
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond Field Blank-2

Laboratory ID Number: BC06396

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/29/22 09:15
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond Field Blank-2

Laboratory ID Number: BC06396

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06396	Sulfate	mg/L	0.224	2.0	20.0	20.7	20.5	19.6	18.0 to 22.0	104	80.0 to 120	0.971	20.0
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/29/22 09:15
Customer ID:
Delivery Date: 3/29/22 15:47

Description: Greene County Ash Pond Field Blank-2

Laboratory ID Number: BC06396

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06395	Solids, Dissolved	mg/L	1.00	25.0			630	49.0	40.0 to 60.0			0.957	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31

Location Code: WMWGREAP
Collected: 3/28/22 12:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06397

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 09:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 09:52		1.015	5.95	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 09:52		1.015	0.116	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 09:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 09:52		1.015	1.23	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 09:52		1	9.91	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 09:52		1.015	4.63	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 09:52		1.015	6.17	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	6.20	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	1.34	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:50		1	9.84	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	4.60	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:50		1.015	6.25	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:03		1.015	0.0347	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 14:03		1.015	0.0325	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:03		1.015	0.000392	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:03		1.015	0.000608	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:03		1.015	0.000146	mg/L	0.000068	0.000203	J
* Manganese, Total	3/30/22 12:09	3/31/22 14:03		1.015	0.00643	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:03		1.015	1.07	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31

Location Code: WMWGREAP
Collected: 3/28/22 12:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06397

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	0.0312	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	0.000242	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	0.000554	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	0.00564	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	1.11	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:08	4/4/22 16:08		1	0.854	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/8/22 13:45	4/8/22 15:23		1	24.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	43.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	24.7	mg/L			
Carbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 14:42	3/31/22 14:42		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31

Location Code: WMWGREAP
Collected: 3/28/22 12:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06397

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:34	4/4/22 09:34		1	6.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:46	4/4/22 12:46		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:10	4/11/22 12:10		1	3.34	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/22 12:28	3/28/22 12:28			66.43	uS/cm			FA
pH	3/28/22 12:28	3/28/22 12:28			5.05	SU			FA
Temperature	3/28/22 12:28	3/28/22 12:28			17.18	C			FA
Turbidity	3/28/22 12:28	3/28/22 12:28			3.36	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 12:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC06397

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06397	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.134	0.133	0.0981	0.0850 to 0.115	99.3	70.0 to 130	0.749	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06397	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.0934	0.0951	0.0942	0.0850 to 0.115	93.4	70.0 to 130	1.80	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06397	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0978	0.0965	0.0978	0.0850 to 0.115	97.8	70.0 to 130	1.34	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06397	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.128	0.128	0.0984	0.0850 to 0.115	95.5	70.0 to 130	0.00	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06397	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0832	0.0943	0.0857	0.0850 to 0.115	83.2	70.0 to 130	12.5	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06397	Boron, Total	mg/L	0.000035	0.0650	1.00	1.03	1.02	1.03	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06397	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06397	Calcium, Total	mg/L	0.00137	0.152	5.00	10.7	10.7	4.90	4.25 to 5.75	95.0	70.0 to 130	0.00	20.0
BC06397	Chloride	mg/L	0.0011	1.00	10.0	16.8	17.3	10.2	9.00 to 11.0	108	80.0 to 120	2.93	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06397	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0971	0.0982	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06397	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.0999	0.102	0.103	0.0850 to 0.115	99.3	70.0 to 130	2.08	20.0
BC06397	Fluoride	mg/L	-0.0367	0.125	2.50	2.55	2.51	2.57	2.25 to 2.75	102	80.0 to 120	1.58	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 12:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC06397

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Iron, Total	mg/L	0.000296	0.0176	0.2	0.315	0.313	0.202	0.170 to 0.230	99.5	70.0 to 130	0.637	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06397	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0968	0.117	0.0986	0.0850 to 0.115	96.7	70.0 to 130	18.9	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06397	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.204	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06397	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	6.35	6.31	5.22	4.25 to 5.75	102	70.0 to 130	0.632	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06397	Manganese, Total	mg/L	0.0000175	0.0002	0.100	0.107	0.109	0.102	0.0850 to 0.115	101	70.0 to 130	1.85	20.0
BC06397	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00393	0.00383	0.00397	0.00340 to 0.00460	98.2	70.0 to 130	2.58	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06397	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0976	0.100	0.0986	0.0850 to 0.115	97.6	70.0 to 130	2.43	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06397	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	97.3	70.0 to 130	0.922	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06397	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06397	Silicon, Total	mg/L	0.000001	0.0440	1.00	5.70	5.68	1.02	0.850 to 1.15	107	70.0 to 130	0.351	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06397	Sodium, Total	mg/L	0.000473	0.0660	5.00	11.3	11.3	5.22	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 12:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC06397

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06397	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0953	0.114	0.0980	0.0850 to 0.115	95.3	70.0 to 130	17.9	20.0
BC06397	Total Organic Carbon	mg/L	0.280	1.00	10.0	9.83	10.3	9.77		98.3	80.0 to 120	4.67	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 12:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC06397

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06402	Alkalinity, Total as CaCO3	mg/L					23.0	51.52	45.0 to 55.0			9.09	10.0
BC06397	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.90	0.837	1.94	1.80 to 2.20	102	90.0 to 110	2.01	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-33

Location Code: WMWGREAP
Collected: 3/28/22 13:28
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06398

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:06		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 10:06		1.015	2.21	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 10:06		1.015	0.00821	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 10:06		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:06		1.015	2.92	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:06		1	7.17	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:06		1.015	3.35	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:06		1.015	5.32	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	2.32	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	3.07	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:53		1	7.04	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	3.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:53		1.015	5.34	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.151	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.000147	mg/L	0.000081	0.000203	J
* Barium, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.0773	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.000436	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.000992	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.000154	mg/L	0.000068	0.000203	J
* Manganese, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.0176	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:25		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:25		1.015	3.87	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-33

Location Code: WMWGREAP
Collected: 3/28/22 13:28
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06398

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:25		1.015	0.000715	mg/L	0.000508	0.001015	J
* Thallium, Total	3/30/22 12:09	3/31/22 14:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.155	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.000144	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.0774	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.000306	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.00101	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.000141	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.0182	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	4.02	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	0.000592	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/30/22 12:09	3/30/22 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:17	4/4/22 16:17		1	3.60	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/8/22 13:45	4/8/22 15:23		1	1.92	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	57.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	1.92	mg/L			
Carbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 15:59	3/31/22 15:59		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-33

Location Code: WMWGREAP
Collected: 3/28/22 13:28
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06398

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:48	4/4/22 09:48		1	5.47	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:58	4/4/22 12:58		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:11	4/11/22 12:11		1	11.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/22 13:24	3/28/22 13:24			91.81	uS/cm			FA
pH	3/28/22 13:24	3/28/22 13:24			4.29	SU			FA
Temperature	3/28/22 13:24	3/28/22 13:24			18.20	C			FA
Turbidity	3/28/22 13:24	3/28/22 13:24			0.23	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:28
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC06398

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:28
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC06398

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:28
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC06398

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 13:28
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC06398

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06402	Alkalinity, Total as CaCO3	mg/L					23.0	51.52	45.0 to 55.0			9.09	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-32

Location Code: WMWGREAP
Collected: 3/28/22 14:24
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06399

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 10:09		1.015	9.61	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 10:09		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 10:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:09		1.015	0.709	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:09		1	11.7	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:09		1.015	5.46	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:09		1.015	3.92	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	9.73	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	0.743	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 12:56		1	11.6	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	5.40	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 12:56		1.015	3.98	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:28		1.015	0.00656	mg/L	0.006090	0.01015	J
* Arsenic, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 14:28		1.015	0.0132	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:28		1.015	0.000420	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:28		1.015	0.712	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-32

Location Code: WMWGREAP
Collected: 3/28/22 14:24
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06399

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 14:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	0.0135	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	0.000336	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	0.690	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/30/22 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:19	4/4/22 16:19		1	0.385	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/8/22 13:45	4/8/22 15:23		1	29.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	51.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	29.2	mg/L			
Carbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 16:18	3/31/22 16:18		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-32

Location Code: WMWGREAP
Collected: 3/28/22 14:24
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06399

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:49	4/4/22 09:49		1	3.98	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 12:59	4/4/22 12:59		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:13	4/11/22 12:13		1	2.55	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/22 14:21	3/28/22 14:21			73.10	uS/cm			FA
pH	3/28/22 14:21	3/28/22 14:21			5.01	SU			FA
Temperature	3/28/22 14:21	3/28/22 14:21			20.08	C			FA
Turbidity	3/28/22 14:21	3/28/22 14:21			0.41	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:24
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC06399

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06399	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.0984	0.0990	0.0996	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06399	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.0922	0.0949	0.0936	0.0850 to 0.115	92.2	70.0 to 130	2.89	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06399	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0965	0.0983	0.102	0.0850 to 0.115	96.5	70.0 to 130	1.85	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06399	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.108	0.111	0.0993	0.0850 to 0.115	94.5	70.0 to 130	2.74	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06399	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0905	0.0908	0.0932	0.0850 to 0.115	90.5	70.0 to 130	0.331	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06399	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.04	1.03	1.04	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06399	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06399	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	15.0	14.7	4.96	4.25 to 5.75	105	70.0 to 130	2.02	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06399	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.100	0.0998	0.101	0.0850 to 0.115	99.7	70.0 to 130	0.200	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06399	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06399	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.199	0.200	0.202	0.170 to 0.230	99.5	70.0 to 130	0.501	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:24
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC06399

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06399	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0985	0.0992	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.708	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06399	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.207	0.210	0.201	0.170 to 0.230	104	70.0 to 130	1.44	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06399	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	6.09	6.16	5.26	4.25 to 5.75	107	70.0 to 130	1.14	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06399	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06399	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0989	0.0994	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.504	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06399	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.5	10.7	10.2	8.50 to 11.5	98.1	70.0 to 130	1.89	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06399	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06399	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	6.48	6.44	1.03	0.850 to 1.15	108	70.0 to 130	0.619	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06399	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.17	9.29	5.10	4.25 to 5.75	104	70.0 to 130	1.30	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06399	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.100	0.100	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:24
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC06399

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 14:24
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC06399

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06402	Alkalinity, Total as CaCO3	mg/L					23.0	51.52	45.0 to 55.0			9.09	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-34HA

Location Code: WMWGREAP
Collected: 3/28/22 15:35
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06400

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 10:12		1.015	10.8	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 10:12		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 10:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:12		1.015	1.90	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:12		1	10.1	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:12		1.015	4.70	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:12		1.015	14.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	11.3	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	1.94	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:11		1	9.99	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	4.67	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:11		1.015	14.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.0131	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.000129	mg/L	0.000081	0.000203	J
* Barium, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.0481	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.000354	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.00117	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.00627	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:32		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.844	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-34HA

Location Code: WMWGREAP
Collected: 3/28/22 15:35
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06400

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:32		1.015	0.000600	mg/L	0.000508	0.001015	J
* Thallium, Total	3/30/22 12:09	3/31/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.00876	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.0481	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.000319	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.00122	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.00603	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.874	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	0.000697	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/30/22 12:09	3/31/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:21	4/4/22 16:21		1	1.54	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/8/22 13:45	4/8/22 15:23		1	32.9	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	88.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	32.9	mg/L			
Carbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 16:39	3/31/22 16:39		1	1.28	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-34HA

Location Code: WMWGREAP
Collected: 3/28/22 15:35
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06400

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:50	4/4/22 09:50		1	3.52	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:01	4/4/22 13:01		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:14	4/11/22 12:14		1	27.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/22 15:32	3/28/22 15:32			139.06	uS/cm			FA
pH	3/28/22 15:32	3/28/22 15:32			4.44	SU			FA
Temperature	3/28/22 15:32	3/28/22 15:32			20.96	C			FA
Turbidity	3/28/22 15:32	3/28/22 15:32			1.92	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:35
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC06400

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.100	0.0959	0.0996	0.0850 to 0.115	100	70.0 to 130	4.19	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06405	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.101	0.0978	0.0936	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06405	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0989	0.0993	0.102	0.0850 to 0.115	98.7	70.0 to 130	0.404	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06405	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.202	0.199	0.0993	0.0850 to 0.115	92.0	70.0 to 130	1.50	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06405	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0931	0.0915	0.0932	0.0850 to 0.115	93.1	70.0 to 130	1.73	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06405	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.0965	0.0971	0.102	0.0850 to 0.115	96.5	70.0 to 130	0.620	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06405	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.0981	0.0942	0.101	0.0850 to 0.115	97.8	70.0 to 130	4.06	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06405	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.106	0.102	0.104	0.0850 to 0.115	99.6	70.0 to 130	3.85	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:35
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC06400

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06405	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0986	0.0971	0.101	0.0850 to 0.115	98.6	70.0 to 130	1.53	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06405	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	1.60	1.64	0.103	0.0850 to 0.115	90.0	70.0 to 130	2.47	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06405	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0968	0.0950	0.0997	0.0850 to 0.115	96.8	70.0 to 130	1.88	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06405	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.8	10.4	10.2	8.50 to 11.5	99.9	70.0 to 130	3.77	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06405	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06405	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0968	0.0959	0.102	0.0850 to 0.115	96.8	70.0 to 130	0.934	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:35
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC06400

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 15:35
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC06400

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06402	Alkalinity, Total as CaCO3	mg/L					23.0	51.52	45.0 to 55.0			9.09	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2

Location Code: WMWGREAP
Collected: 3/28/22 16:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06401

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:15		1.015	0.125	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:00		20.3	157	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 12:00		20.3	48.5	mg/L	0.1624	0.812	
* Lithium, Total	4/5/22 07:00	4/8/22 10:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:15		1.015	23.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:15		1	10.6	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:15		1.015	4.96	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:15		1.015	33.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:13		1.015	0.123	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:09		20.3	152	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 15:09		20.3	46.7	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:13		1.015	24.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:13		1	10.7	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:13		1.015	4.98	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:13		1.015	33.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.0398	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.00381	mg/L	0.000081	0.000203	
* Barium, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.0301	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.000115	mg/L	0.000068	0.000203	J
* Chromium, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.000304	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.0309	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.000665	mg/L	0.000068	0.000203	
* Manganese, Total	3/30/22 12:09	3/31/22 15:15		10.15	6.02	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:36		1.015	5.82	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2

Location Code: WMWGREAP
Collected: 3/28/22 16:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06401

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.000585	mg/L	0.000508	0.001015	J
* Thallium, Total	3/30/22 12:09	3/31/22 14:36		1.015	0.000150	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.0468	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.00423	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.0345	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.000130	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.000350	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.0324	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.000459	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/30/22 12:09	3/31/22 12:03		10.15	6.30	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	6.22	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.000616	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/30/22 12:09	3/31/22 11:31		1.015	0.000133	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 18:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:23	4/4/22 16:23		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/8/22 13:45	4/8/22 15:23		1	26.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	868	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	26.2	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 16:57	3/31/22 16:57		1	1.79	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2

Location Code: WMWGREAP
Collected: 3/28/22 16:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06401

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:51	4/4/22 09:51		1	11.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:02	4/4/22 13:02		1	0.105	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:25	4/11/22 12:25		32	563	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/22 16:28	3/28/22 16:28			1136.48	uS/cm			FA
pH	3/28/22 16:28	3/28/22 16:28			5.32	SU			FA
Temperature	3/28/22 16:28	3/28/22 16:28			19.67	C			FA
Turbidity	3/28/22 16:28	3/28/22 16:28			2.91	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC06401

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.100	0.0959	0.0996	0.0850 to 0.115	100	70.0 to 130	4.19	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06405	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.101	0.0978	0.0936	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06405	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0989	0.0993	0.102	0.0850 to 0.115	98.7	70.0 to 130	0.404	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06405	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.202	0.199	0.0993	0.0850 to 0.115	92.0	70.0 to 130	1.50	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06405	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0931	0.0915	0.0932	0.0850 to 0.115	93.1	70.0 to 130	1.73	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06405	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.0965	0.0971	0.102	0.0850 to 0.115	96.5	70.0 to 130	0.620	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06405	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.0981	0.0942	0.101	0.0850 to 0.115	97.8	70.0 to 130	4.06	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06405	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.106	0.102	0.104	0.0850 to 0.115	99.6	70.0 to 130	3.85	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC06401

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06405	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0986	0.0971	0.101	0.0850 to 0.115	98.6	70.0 to 130	1.53	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06405	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	1.60	1.64	0.103	0.0850 to 0.115	90.0	70.0 to 130	2.47	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06405	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0968	0.0950	0.0997	0.0850 to 0.115	96.8	70.0 to 130	1.88	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06405	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.8	10.4	10.2	8.50 to 11.5	99.9	70.0 to 130	3.77	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06405	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06405	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0968	0.0959	0.102	0.0850 to 0.115	96.8	70.0 to 130	0.934	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC06401

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC06401

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06402	Alkalinity, Total as CaCO3	mg/L					23.0	51.52	45.0 to 55.0			9.09	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2 DUP

Location Code: WMWGREAP
Collected: 3/28/22 16:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:18		1.015	0.127	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:03		20.3	164	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 12:03		20.3	49.3	mg/L	0.1624	0.812	
* Lithium, Total	4/5/22 07:00	4/8/22 10:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:18		1.015	23.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:18		1	10.5	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:18		1.015	4.90	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:18		1.015	33.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:16		1.015	0.0991	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:12		20.3	148	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 15:12		20.3	44.3	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:16		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:16		1.015	24.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:16		1	10.7	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:16		1.015	4.98	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:16		1.015	34.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.0273	mg/L	0.006090	0.01015	
* Arsenic, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.00326	mg/L	0.000081	0.000203	
* Barium, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.0310	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.000156	mg/L	0.000068	0.000203	J
* Chromium, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.000354	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.0324	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.000588	mg/L	0.000068	0.000203	
* Manganese, Total	3/30/22 12:09	3/31/22 15:19		10.15	5.99	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:39		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:39		1.015	5.97	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2 DUP

Location Code: WMWGREAP
Collected: 3/28/22 16:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.000600	mg/L	0.000508	0.001015	J
* Thallium, Total	3/30/22 12:09	3/31/22 14:39		1.015	0.000158	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.0330	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.00323	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.0309	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.000159	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.000310	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.0331	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.000497	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/30/22 12:09	3/31/22 12:06		10.15	6.10	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	6.27	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.000592	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/30/22 12:09	3/31/22 11:35		1.015	0.000140	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:24	4/4/22 16:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/8/22 13:45	4/8/22 15:23		1	21.0	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	892	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	21.0	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/8/22 13:45	4/8/22 15:23		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 17:16	3/31/22 17:16		1	1.76	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2 DUP

Location Code: WMWGREAP
Collected: 3/28/22 16:31
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:53	4/4/22 09:53		1	11.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:03	4/4/22 13:03		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:26	4/11/22 12:26		32	553	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/22 16:28	3/28/22 16:28			1136.48	uS/cm			FA
pH	3/28/22 16:28	3/28/22 16:28			5.32	SU			FA
Temperature	3/28/22 16:28	3/28/22 16:28			19.67	C			FA
Turbidity	3/28/22 16:28	3/28/22 16:28			2.91	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2 DUP

Laboratory ID Number: BC06402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.100	0.0959	0.0996	0.0850 to 0.115	100	70.0 to 130	4.19	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06405	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.101	0.0978	0.0936	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06405	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0989	0.0993	0.102	0.0850 to 0.115	98.7	70.0 to 130	0.404	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06405	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.202	0.199	0.0993	0.0850 to 0.115	92.0	70.0 to 130	1.50	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06405	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0931	0.0915	0.0932	0.0850 to 0.115	93.1	70.0 to 130	1.73	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06405	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.0965	0.0971	0.102	0.0850 to 0.115	96.5	70.0 to 130	0.620	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06405	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.0981	0.0942	0.101	0.0850 to 0.115	97.8	70.0 to 130	4.06	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06405	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.106	0.102	0.104	0.0850 to 0.115	99.6	70.0 to 130	3.85	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2 DUP

Laboratory ID Number: BC06402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06405	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0986	0.0971	0.101	0.0850 to 0.115	98.6	70.0 to 130	1.53	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06405	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	1.60	1.64	0.103	0.0850 to 0.115	90.0	70.0 to 130	2.47	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06405	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0968	0.0950	0.0997	0.0850 to 0.115	96.8	70.0 to 130	1.88	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06405	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.8	10.4	10.2	8.50 to 11.5	99.9	70.0 to 130	3.77	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06405	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06405	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0968	0.0959	0.102	0.0850 to 0.115	96.8	70.0 to 130	0.934	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2 DUP

Laboratory ID Number: BC06402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/28/22 16:31
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-2 DUP

Laboratory ID Number: BC06402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06402	Alkalinity, Total as CaCO3	mg/L					23.0	51.52	45.0 to 55.0			9.09	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-7

Location Code: WMWGREAP
Collected: 3/29/22 08:48
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:21		1.015	0.0842	mg/L	0.030000	0.1015	J
* Calcium, Total	4/5/22 07:00	4/8/22 12:05		20.3	126	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 10:21		1.015	0.0181	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 10:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:21		1.015	15.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:21		1	16.9	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:21		1.015	7.91	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 12:05		20.3	192	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:19		1.015	0.0852	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:15		20.3	129	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:19		1.015	0.0161	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:19		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:19		1.015	15.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:19		1	16.6	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:19		1.015	7.77	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 15:15		20.3	192	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.000659	mg/L	0.000508	0.001015	J
* Aluminum, Total	3/30/22 12:09	3/31/22 14:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.0000841	mg/L	0.000081	0.000203	J
* Barium, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.0639	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.000239	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.00140	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.590	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.000161	mg/L	0.000102	0.000203	J
* Potassium, Total	3/30/22 12:09	3/31/22 14:43		1.015	0.942	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-7

Location Code: WMWGREAP
Collected: 3/29/22 08:48
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	0.0654	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	0.00136	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	0.602	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	0.000171	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	1.00	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/31/22 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:26	4/4/22 16:26		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	493	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	894	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	490	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	2.59	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 17:36	3/31/22 17:36		1	1.22	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-7

Location Code: WMWGREAP
Collected: 3/29/22 08:48
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:02	4/4/22 10:02		5	94.7	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:04	4/4/22 13:04		1	0.104	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:27	4/11/22 12:27		16	187	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 08:45	3/29/22 08:45			1399.30	uS/cm			FA
pH	3/29/22 08:45	3/29/22 08:45			6.62	SU			FA
Temperature	3/29/22 08:45	3/29/22 08:45			18.93	C			FA
Turbidity	3/29/22 08:45	3/29/22 08:45			0.71	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 08:48
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC06403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.100	0.0959	0.0996	0.0850 to 0.115	100	70.0 to 130	4.19	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06405	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.101	0.0978	0.0936	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06405	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0989	0.0993	0.102	0.0850 to 0.115	98.7	70.0 to 130	0.404	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06405	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.202	0.199	0.0993	0.0850 to 0.115	92.0	70.0 to 130	1.50	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06405	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0931	0.0915	0.0932	0.0850 to 0.115	93.1	70.0 to 130	1.73	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06405	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.0965	0.0971	0.102	0.0850 to 0.115	96.5	70.0 to 130	0.620	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06405	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.0981	0.0942	0.101	0.0850 to 0.115	97.8	70.0 to 130	4.06	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06405	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.106	0.102	0.104	0.0850 to 0.115	99.6	70.0 to 130	3.85	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 08:48
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC06403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06405	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0986	0.0971	0.101	0.0850 to 0.115	98.6	70.0 to 130	1.53	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06405	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	1.60	1.64	0.103	0.0850 to 0.115	90.0	70.0 to 130	2.47	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06405	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0968	0.0950	0.0997	0.0850 to 0.115	96.8	70.0 to 130	1.88	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06405	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.8	10.4	10.2	8.50 to 11.5	99.9	70.0 to 130	3.77	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06405	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06405	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0968	0.0959	0.102	0.0850 to 0.115	96.8	70.0 to 130	0.934	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 08:48
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC06403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 08:48
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC06403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-3

Location Code: WMWGREAPFB
Collected: 3/29/22 09:05
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06404

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:24		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/8/22 10:24		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:47		1.015	0.000252	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 14:47		1.015	0.000219	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:28	4/4/22 16:28		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-3

Location Code: WMWGREAPFB
Collected: 3/29/22 09:05
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06404

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 17:55	3/31/22 17:55		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:55	4/4/22 09:55		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:05	4/4/22 13:05		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:19	4/11/22 12:19		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/29/22 09:05
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond Field Blank-3

Laboratory ID Number: BC06404

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/29/22 09:05
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond Field Blank-3

Laboratory ID Number: BC06404

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/29/22 09:05
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond Field Blank-3

Laboratory ID Number: BC06404

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-8

Location Code: WMWGREAP
Collected: 3/29/22 09:43
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:27		1.015	1.08	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:08		20.3	92.8	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 10:27		1.015	0.0273	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 10:27		1.015	0.00828	mg/L	0.007105	0.01999956	J
* Magnesium, Total	4/5/22 07:00	4/8/22 10:27		1.015	18.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:27		1	15.0	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:27		1.015	6.99	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 12:08		20.3	168	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:22		1.015	1.10	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:18		20.3	93.1	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:22		1.015	0.0271	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:22		1.015	0.00827	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:22		1.015	18.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:22		1	15.1	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:22		1.015	7.06	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 15:18		20.3	163	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/30/22 12:09	3/31/22 14:50		1.015	0.000146	mg/L	0.000081	0.000203	J
* Barium, Total	3/30/22 12:09	3/31/22 14:50		1.015	0.104	mg/L	0.000102	0.000203	
* Beryllium, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/30/22 12:09	3/31/22 14:50		1.015	0.000267	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/30/22 12:09	3/31/22 14:50		1.015	0.00619	mg/L	0.000068	0.000203	
* Lead, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/30/22 12:09	3/31/22 15:23		5.075	1.53	mg/L	0.000761	0.001015	
* Molybdenum, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/30/22 12:09	3/31/22 14:50		1.015	0.741	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-8

Location Code: WMWGREAP
Collected: 3/29/22 09:43
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/30/22 12:09	3/31/22 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	0.000166	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	0.110	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	0.000273	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	0.00640	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/22 12:09	3/31/22 12:10		5.075	1.51	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	0.811	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/22 12:09	3/31/22 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:30	4/4/22 16:30		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	473	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/30/22 13:54	3/31/22 13:50		1	730	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	472	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	0.672	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/31/22 18:16	3/31/22 18:16		1	1.71	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-8

Location Code: WMWGREAP
Collected: 3/29/22 09:43
Customer ID:
Submittal Date: 3/29/22 15:48

Laboratory ID Number: BC06405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 11:20	4/4/22 11:20		8	95.4	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:07	4/4/22 13:07		1	0.108	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:28	4/11/22 12:28		5	75.3	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 09:40	3/29/22 09:40			1211.20	uS/cm			FA
pH	3/29/22 09:40	3/29/22 09:40			6.21	SU			FA
Temperature	3/29/22 09:40	3/29/22 09:40			19.67	C			FA
Turbidity	3/29/22 09:40	3/29/22 09:40			1.12	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:43
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC06405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Aluminum, Dissolved	mg/L	0.000112	0.010	0.100	0.100	0.0959	0.0996	0.0850 to 0.115	100	70.0 to 130	4.19	20.0
BC06405	Aluminum, Total	mg/L	0.000338	0.010	0.100	0.0956	0.0956	0.0981	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC06405	Antimony, Dissolved	mg/L	0.000249	0.00100	0.100	0.101	0.0978	0.0936	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BC06405	Antimony, Total	mg/L	0.000336	0.00100	0.100	0.105	0.101	0.0942	0.0850 to 0.115	105	70.0 to 130	3.88	20.0
BC06405	Arsenic, Dissolved	mg/L	-0.0000245	0.000176	0.100	0.0989	0.0993	0.102	0.0850 to 0.115	98.7	70.0 to 130	0.404	20.0
BC06405	Arsenic, Total	mg/L	0.0000714	0.000176	0.100	0.0963	0.0990	0.0978	0.0850 to 0.115	96.2	70.0 to 130	2.76	20.0
BC06405	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.202	0.199	0.0993	0.0850 to 0.115	92.0	70.0 to 130	1.50	20.0
BC06405	Barium, Total	mg/L	0.0000233	0.00100	0.100	0.205	0.203	0.0984	0.0850 to 0.115	101	70.0 to 130	0.980	20.0
BC06405	Beryllium, Dissolved	mg/L	0.0000661	0.000880	0.100	0.0931	0.0915	0.0932	0.0850 to 0.115	93.1	70.0 to 130	1.73	20.0
BC06405	Beryllium, Total	mg/L	0.0000708	0.000880	0.100	0.0840	0.0849	0.0857	0.0850 to 0.115	84.0	70.0 to 130	1.07	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06405	Cadmium, Dissolved	mg/L	0.0000166	0.000147	0.100	0.0965	0.0971	0.102	0.0850 to 0.115	96.5	70.0 to 130	0.620	20.0
BC06405	Cadmium, Total	mg/L	-0.0000095	0.000147	0.100	0.0966	0.0985	0.101	0.0850 to 0.115	96.6	70.0 to 130	1.95	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06405	Chromium, Dissolved	mg/L	0.0000007	0.000440	0.100	0.0981	0.0942	0.101	0.0850 to 0.115	97.8	70.0 to 130	4.06	20.0
BC06405	Chromium, Total	mg/L	0.0000517	0.000440	0.100	0.0965	0.0957	0.0979	0.0850 to 0.115	96.2	70.0 to 130	0.832	20.0
BC06405	Cobalt, Dissolved	mg/L	-0.0000130	0.000147	0.100	0.106	0.102	0.104	0.0850 to 0.115	99.6	70.0 to 130	3.85	20.0
BC06405	Cobalt, Total	mg/L	0.0000032	0.000147	0.100	0.105	0.103	0.103	0.0850 to 0.115	98.8	70.0 to 130	1.92	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:43
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC06405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06405	Lead, Dissolved	mg/L	0.0000057	0.000147	0.100	0.0986	0.0971	0.101	0.0850 to 0.115	98.6	70.0 to 130	1.53	20.0
BC06405	Lead, Total	mg/L	0.0000253	0.000147	0.100	0.0960	0.0985	0.0986	0.0850 to 0.115	96.0	70.0 to 130	2.57	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06405	Manganese, Dissolved	mg/L	-0.0000794	0.0002	0.100	1.60	1.64	0.103	0.0850 to 0.115	90.0	70.0 to 130	2.47	20.0
BC06405	Manganese, Total	mg/L	0.0000175	0.0002	0.100	1.61	1.62	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.619	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06405	Molybdenum, Dissolved	mg/L	0.0000036	0.0002	0.100	0.0968	0.0950	0.0997	0.0850 to 0.115	96.8	70.0 to 130	1.88	20.0
BC06405	Molybdenum, Total	mg/L	0.0000044	0.0002	0.100	0.0979	0.0974	0.0986	0.0850 to 0.115	97.9	70.0 to 130	0.512	20.0
BC06405	Potassium, Dissolved	mg/L	-0.0102	0.367	10.0	10.8	10.4	10.2	8.50 to 11.5	99.9	70.0 to 130	3.77	20.0
BC06405	Potassium, Total	mg/L	-0.0106	0.367	10.0	10.5	10.5	10.1	8.50 to 11.5	97.6	70.0 to 130	0.00	20.0
BC06405	Selenium, Dissolved	mg/L	0.0000769	0.00100	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC06405	Selenium, Total	mg/L	0.0000258	0.00100	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06405	Thallium, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0968	0.0959	0.102	0.0850 to 0.115	96.8	70.0 to 130	0.934	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:43
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC06405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06405	Thallium, Total	mg/L	0.0000227	0.000147	0.100	0.0934	0.0960	0.0980	0.0850 to 0.115	93.4	70.0 to 130	2.75	20.0
BC06405	Total Organic Carbon	mg/L	0.420	1.00	10.0	11.3	11.6	10.1		95.9	80.0 to 120	2.62	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 09:43
Customer ID:
Delivery Date: 3/29/22 15:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC06405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06405	Solids, Dissolved	mg/L	1.00	25.0			744	49.0	40.0 to 60.0			1.90	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H

Location Code: WMWGREAP
Collected: 3/29/22 14:28
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06485

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:30		1.015	0.567	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:11		20.3	110	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 10:30		1.015	0.516	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 10:30		1.015	0.411	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 10:30		1.015	38.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:30		1	5.44	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:30		1.015	2.54	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:30		1.015	25.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:25		1.015	0.581	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:21		20.3	109	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:25		1.015	0.308	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:25		1.015	0.422	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:25		1.015	39.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:25		1	5.41	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:25		1.015	2.53	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:25		1.015	26.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.0199	mg/L	0.006090	0.01015	
* Arsenic, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.00106	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.0534	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.000262	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.0108	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 19:58		10.15	6.27	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.0652	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 18:35		1.015	7.63	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H

Location Code: WMWGREAP
Collected: 3/29/22 14:28
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06485

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 18:35		1.015	0.000127	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	0.000699	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	0.0526	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	0.0109	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 15:48		10.15	6.08	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	0.0676	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	7.56	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:35		1.015	0.000128	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:32	4/4/22 16:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	133	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	646	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	132	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	1.27	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 14:24	4/7/22 14:24		1	1.38	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H

Location Code: WMWGREAP
Collected: 3/29/22 14:28
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06485

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:57	4/4/22 09:57		1	9.58	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:08	4/4/22 13:08		1	0.162	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 12:41	4/11/22 12:41		32	337	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/29/22 14:24	3/29/22 14:24			841.42	uS/cm			FA
pH	3/29/22 14:24	3/29/22 14:24			6.83	SU			FA
Temperature	3/29/22 14:24	3/29/22 14:24			24.72	C			FA
Turbidity	3/29/22 14:24	3/29/22 14:24			3.62	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC06485

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC06485

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06485	Sulfate	mg/L	0.234	2.0	640	984	1010	19.6	18.0 to 22.0	101	80.0 to 120	2.61	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC06485

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC06485

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-45H DUP

Location Code: WMWGREAP
Collected: 3/29/22 14:28
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06486

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:32		1.015	0.570	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:14		20.3	104	mg/L	1.4007	8.12	RA
* Iron, Total	4/5/22 07:00	4/8/22 10:32		1.015	0.478	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 10:32		1.015	0.407	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 10:32		1.015	37.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:32		1	5.46	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:32		1.015	2.55	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:32		1.015	25.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:28		1.015	0.575	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:24		20.3	111	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:28		1.015	0.305	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:28		1.015	0.425	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:28		1.015	39.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:28		1	5.41	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:28		1.015	2.53	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:28		1.015	26.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.0201	mg/L	0.006090	0.01015	
* Arsenic, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.000952	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.0558	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.000280	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.0113	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:02		10.15	6.28	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.0690	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 18:39		1.015	7.93	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description:	Greene County Ash Pond - MW-45H DUP	**Location Code:**	WMWGREAP
		Collected:	3/29/22 14:28
		Customer ID:	
Laboratory ID Number:	BC06486	**Submittal Date:**	3/31/22 10:44

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 18:39		1.015	0.000125	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	0.000733	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	0.0533	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	0.000228	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	0.0112	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 15:51		10.15	6.39	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	0.0688	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	7.77	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:39		1.015	0.000145	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:34	4/4/22 16:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	194	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	614	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	194	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 14:43	4/7/22 14:43		1	1.32	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H DUP

Location Code: WMWGREAP
Collected: 3/29/22 14:28
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06486

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 09:59	4/4/22 09:59		1	9.44	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:09	4/4/22 13:09		1	0.130	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:36	4/11/22 13:36		16	361	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/29/22 14:24	3/29/22 14:24			841.42	uS/cm			FA
pH	3/29/22 14:24	3/29/22 14:24			6.83	SU			FA
Temperature	3/29/22 14:24	3/29/22 14:24			24.72	C			FA
Turbidity	3/29/22 14:24	3/29/22 14:24			3.62	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H DUP

Laboratory ID Number: BC06486

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06486	Boron, Total	mg/L	0.000035	0.0650	1.00	1.61	1.61	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06486	Calcium, Total	mg/L	0.00137	0.152	5.00	110	112	4.90	4.25 to 5.75	120	70.0 to 130	1.80	20.0
BC06486	Chloride	mg/L	0.0111	1.00	10.0	20.2	20.2	10.2	9.00 to 11.0	108	80.0 to 120	0.00	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06486	Fluoride	mg/L	-0.0428	0.125	2.50	2.69	2.85	2.64	2.25 to 2.75	102	80.0 to 120	5.78	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H DUP

Laboratory ID Number: BC06486

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06486	Iron, Total	mg/L	0.000296	0.0176	0.2	0.670	0.681	0.202	0.170 to 0.230	96.0	70.0 to 130	1.63	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06486	Lithium, Total	mg/L	0.00002	0.0154	0.200	0.610	0.618	0.204	0.170 to 0.230	102	70.0 to 130	1.30	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06486	Magnesium, Total	mg/L	-0.00211	0.0462	5.00	42.5	42.9	5.22	4.25 to 5.75	94.0	70.0 to 130	0.937	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06486	Mercury, Total by CVAA	mg/L	-0.0002	0.000500	0.004	0.00396	0.00401	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	1.25	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06486	Silicon, Total	mg/L	0.000001	0.0440	1.00	3.53	3.53	1.02	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06486	Sodium, Total	mg/L	0.000473	0.0660	5.00	30.5	30.9	5.22	4.25 to 5.75	96.0	70.0 to 130	1.30	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H DUP

Laboratory ID Number: BC06486

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 14:28
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-45H DUP

Laboratory ID Number: BC06486

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06486	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.10	-0.007	2.04	1.80 to 2.20	105	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-15

Location Code: WMWGREAP
Collected: 3/29/22 16:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06487

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:53		1.015	0.848	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:23		20.3	75.7	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 10:53		1.015	1.25	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 10:53		1.015	0.534	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 10:53		1.015	18.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:53		1	12.2	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:53		1.015	5.69	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:53		1.015	30.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:31		1.015	0.856	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:27		20.3	75.6	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:31		1.015	1.31	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:31		1.015	0.618	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:31		1.015	19.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:31		1	12.1	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:31		1.015	5.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:31		1.015	33.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 18:42		1.015	0.000318	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 18:42		1.015	0.0381	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:42		1.015	0.000459	mg/L	0.000068	0.000203	
* Chromium, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	4/5/22 09:00	4/5/22 18:42		1.015	0.0172	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:17		5.075	2.25	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/5/22 09:00	4/5/22 18:42		1.015	10.3	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-15

Location Code: WMWGREAP
Collected: 3/29/22 16:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06487

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 18:42		1.015	0.000115	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	0.000404	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	0.0387	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	0.000479	mg/L	0.000068	0.000203	
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	0.0178	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 15:55		5.075	2.23	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	10.5	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:42		1.015	0.000108	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:43	4/4/22 16:43		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	183	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	406	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	183	mg/L			
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 15:04	4/7/22 15:04		1	1.41	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-15

Location Code: WMWGREAP
Collected: 3/29/22 16:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06487

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:13	4/4/22 10:13		1	10.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:21	4/4/22 13:21		1	0.117	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:37	4/11/22 13:37		10	165	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/29/22 15:57	3/29/22 15:57			595.79	uS/cm			FA
pH	3/29/22 15:57	3/29/22 15:57			5.81	SU			FA
Temperature	3/29/22 15:57	3/29/22 15:57			23.13	C			FA
Turbidity	3/29/22 15:57	3/29/22 15:57			0.97	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC06487

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC06487

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC06487

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC06487

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-36H

Location Code: WMWGREAP
Collected: 3/30/22 09:23
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06488

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:56		1.015	0.145	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 10:56		1.015	1.01	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 10:56		1.015	0.250	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 10:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:56		1.015	0.0930	mg/L	0.021315	0.406	J
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:56		1	13.0	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:56		1.015	6.06	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 12:26		20.3	68.5	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:34		1.015	0.147	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 13:34		1.015	0.754	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:34		1.015	0.0133	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:34		1.015	0.0663	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:34		1	12.0	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:34		1.015	5.60	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 15:29		20.3	66.2	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.715	mg/L	0.006090	0.01015	
* Arsenic, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.00263	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.00372	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.00108	mg/L	0.000203	0.001015	
* Cobalt, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.000700	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.000368	mg/L	0.000068	0.000203	
* Manganese, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.00350	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.000175	mg/L	0.000102	0.000203	J
* Potassium, Total	4/5/22 09:00	4/5/22 18:46		1.015	0.628	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-36H

Location Code: WMWGREAP
Collected: 3/30/22 09:23
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06488

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 18:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.0257	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.00237	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.00116	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.000273	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.000339	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.000110	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.00116	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.000227	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	0.601	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:45	4/4/22 16:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	139	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	170	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	137	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	2.18	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 15:25	4/7/22 15:25		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-36H

Location Code: WMWGREAP
Collected: 3/30/22 09:23
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06488

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:15	4/4/22 10:15		1	3.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:22	4/4/22 13:22		1	0.301	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:38	4/11/22 13:38		1	10.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/30/22 09:20	3/30/22 09:20			282.76	uS/cm			FA
pH	3/30/22 09:20	3/30/22 09:20			7.81	SU			FA
Temperature	3/30/22 09:20	3/30/22 09:20			26.48	C			FA
Turbidity	3/30/22 09:20	3/30/22 09:20			6.4	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 09:23
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC06488

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 09:23
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC06488

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 09:23
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC06488

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 09:23
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC06488

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-38H

Location Code: WMWGREAP
Collected: 3/30/22 10:38
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06489

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 10:59		1.015	0.102	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:29		20.3	93.5	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 10:59		1.015	0.0210	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 10:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 10:59		1.015	7.55	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 10:59		1	9.63	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 10:59		1.015	4.50	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 10:59		1.015	3.63	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:37		1.015	0.102	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:32		20.3	93.9	mg/L	1.4007	8.12	RA
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:37		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:37		1.015	7.66	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:37		1	9.59	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:37		1.015	4.48	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:37		1.015	3.77	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.00814	mg/L	0.006090	0.01015	J
* Arsenic, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.0000944	mg/L	0.000081	0.000203	J
* Barium, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.0702	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.000372	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.000338	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.0272	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.000759	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 18:50		1.015	2.10	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-38H

Location Code: WMWGREAP
Collected: 3/30/22 10:38
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06489

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:50		1.015	0.00902	mg/L	0.000508	0.001015	
* Thallium, Total	4/5/22 09:00	4/5/22 18:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.000092	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.0770	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.000381	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.000371	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.0334	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.000689	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	2.19	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	0.0100	mg/L	0.000508	0.001015	
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:47	4/4/22 16:47		1	0.386	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	222	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	282	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	222	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 15:46	4/7/22 15:46		1	1.25	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-38H

Location Code: WMWGREAP
Collected: 3/30/22 10:38
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06489

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:16	4/4/22 10:16		1	3.80	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:23	4/4/22 13:23		1	0.0661	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:40	4/11/22 13:40		2	51.9	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/30/22 10:34	3/30/22 10:34			479.43	uS/cm			FA
pH	3/30/22 10:34	3/30/22 10:34			6.62	SU			FA
Temperature	3/30/22 10:34	3/30/22 10:34			23.34	C			FA
Turbidity	3/30/22 10:34	3/30/22 10:34			0.95	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:38
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC06489

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06489	Boron, Dissolved	mg/L	-0.000305	0.0650	1.00	1.15	1.14	1.04	0.850 to 1.15	105	70.0 to 130	0.873	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06489	Calcium, Dissolved	mg/L	-0.0107	0.152	5.00	97.3	97.3	4.96	4.25 to 5.75	68.0	70.0 to 130	0.00	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06489	Iron, Dissolved	mg/L	0.000237	0.0176	0.2	0.205	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:38
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC06489

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06489	Lithium, Dissolved	mg/L	0.00012	0.0154	0.200	0.212	0.213	0.201	0.170 to 0.230	106	70.0 to 130	0.471	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06489	Magnesium, Dissolved	mg/L	-0.00575	0.0462	5.00	12.9	12.9	5.26	4.25 to 5.75	105	70.0 to 130	0.00	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06489	Silicon, Dissolved	mg/L	-0.000448	0.0440	1.00	5.47	5.46	1.03	0.850 to 1.15	99.0	70.0 to 130	0.183	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06489	Sodium, Dissolved	mg/L	0.00154	0.0660	5.00	9.00	9.03	5.10	4.25 to 5.75	105	70.0 to 130	0.333	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:38
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC06489

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:38
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC06489

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-40H

Location Code: WMWGREAP
Collected: 3/30/22 11:52
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06490

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:02		1.015	0.506	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:37		20.3	96.0	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 11:02		1.015	0.390	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 11:02		1.015	0.707	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:02		1.015	24.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:02		1	6.36	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:02		1.015	2.97	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:02		1.015	19.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 13:57		1.015	0.504	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:47		20.3	98.0	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 13:57		1.015	0.356	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 13:57		1.015	0.716	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 13:57		1.015	25.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 13:57		1	6.33	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 13:57		1.015	2.96	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 13:57		1.015	19.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 18:53		1.015	0.000273	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 18:53		1.015	0.0277	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:53		1.015	0.000180	mg/L	0.000068	0.000203	J
* Chromium, Total	4/5/22 09:00	4/5/22 18:53		1.015	0.000304	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 18:53		1.015	0.0103	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:20		5.075	3.33	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/5/22 09:00	4/5/22 18:53		1.015	10.1	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-40H

Location Code: WMWGREAP
Collected: 3/30/22 11:52
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06490

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 18:53		1.015	0.000168	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	0.000303	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	0.0258	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	0.000150	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	0.0107	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 15:59		5.075	3.31	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	10.1	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:53		1.015	0.000183	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 19:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:48	4/4/22 16:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	96.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	493	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	96.2	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 16:07	4/7/22 16:07		1	1.28	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-40H

Location Code: WMWGREAP
Collected: 3/30/22 11:52
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06490

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:17	4/4/22 10:17		1	5.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:25	4/4/22 13:25		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:41	4/11/22 13:41		20	290	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/30/22 11:49	3/30/22 11:49			670.34	uS/cm			FA
pH	3/30/22 11:49	3/30/22 11:49			5.69	SU			FA
Temperature	3/30/22 11:49	3/30/22 11:49			22.37	C			FA
Turbidity	3/30/22 11:49	3/30/22 11:49			0.3	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:52
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC06490

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:52
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC06490

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:52
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC06490

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:52
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC06490

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9

Location Code: WMWGREAP
Collected: 3/29/22 10:56
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06491

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:04		1.015	0.710	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:40		20.3	72.1	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 12:40		20.3	5.27	mg/L	0.1624	0.812	
* Lithium, Total	4/5/22 07:00	4/8/22 11:04		1.015	0.0126	mg/L	0.007105	0.01999956	J
* Magnesium, Total	4/5/22 07:00	4/8/22 11:04		1.015	30.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:04		1	8.73	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:04		1.015	4.08	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 12:40		20.3	171	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:00		1.015	0.735	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:50		20.3	76.5	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 15:50		20.3	5.34	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:00		1.015	0.0137	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:00		1.015	31.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:00		1	8.73	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:00		1.015	4.08	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 15:50		20.3	156	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 18:57		1.015	0.00316	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 18:57		1.015	0.139	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 18:57		1.015	0.000270	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 18:57		1.015	0.0267	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:24		10.15	5.83	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/5/22 09:00	4/5/22 18:57		1.015	5.57	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9

Location Code: WMWGREAP
Collected: 3/29/22 10:56
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06491

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 18:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	0.00393	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	0.136	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	0.0276	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:03		10.15	5.76	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	5.69	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 12:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/4/22 16:50	4/4/22 16:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	227	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	800	mg/L		75.8	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	226	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	1.31	mg/L		0.5	A
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/7/22 16:29	4/7/22 16:29		1	1.90	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9

Location Code: WMWGREAP
Collected: 3/29/22 10:56
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06491

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:28	4/4/22 10:28		25	225	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:26	4/4/22 13:26		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:42	4/11/22 13:42		10	193	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 10:53	3/29/22 10:53			1442.55	uS/cm			FA
pH	3/29/22 10:53	3/29/22 10:53			5.61	SU			FA
Temperature	3/29/22 10:53	3/29/22 10:53			19.59	C			FA
Turbidity	3/29/22 10:53	3/29/22 10:53			0.62	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC06491

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC06491

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC06491

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC06491

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9 DUP

Location Code: WMWGREAP
Collected: 3/29/22 10:56
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06492

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:07		1.015	0.720	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:43		20.3	69.7	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 12:43		20.3	5.01	mg/L	0.1624	0.812	
* Lithium, Total	4/5/22 07:00	4/8/22 11:07		1.015	0.0126	mg/L	0.007105	0.01999956	J
* Magnesium, Total	4/5/22 07:00	4/8/22 11:07		1.015	30.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:07		1	8.82	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:07		1.015	4.12	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 12:43		20.3	167	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:03		1.015	0.727	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:53		20.3	80.8	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 15:53		20.3	5.37	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:03		1.015	0.0130	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:03		1.015	31.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:03		1	8.73	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:03		1.015	4.08	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 15:53		20.3	157	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:00		1.015	0.00331	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 19:00		1.015	0.139	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 19:00		1.015	0.000227	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:00		1.015	0.0266	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:28		10.15	5.97	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/5/22 09:00	4/5/22 19:00		1.015	5.59	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9 DUP

Location Code: WMWGREAP
Collected: 3/29/22 10:56
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06492

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	0.00369	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	0.133	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	0.0274	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:06		10.15	6.05	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	5.65	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:52	4/4/22 16:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	233	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	776	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	233	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 16:50	4/7/22 16:50		1	2.01	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9 DUP

Location Code: WMWGREAP
Collected: 3/29/22 10:56
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06492

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:29	4/4/22 10:29		25	239	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:27	4/4/22 13:27		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:43	4/11/22 13:43		10	187	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 10:53	3/29/22 10:53			1442.55	uS/cm			FA
pH	3/29/22 10:53	3/29/22 10:53			5.61	SU			FA
Temperature	3/29/22 10:53	3/29/22 10:53			19.59	C			FA
Turbidity	3/29/22 10:53	3/29/22 10:53			0.62	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9 DUP

Laboratory ID Number: BC06492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9 DUP

Laboratory ID Number: BC06492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9 DUP

Laboratory ID Number: BC06492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 10:56
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-9 DUP

Laboratory ID Number: BC06492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-25

Location Code: WMWGREAP
Collected: 3/29/22 12:16
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06493

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:10		1.015	0.122	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 11:10		1.015	31.9	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 11:10		1.015	0.903	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 11:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 11:10		1.015	7.30	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:10		1	22.9	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:10		1.015	10.7	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:10		1.015	34.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	0.122	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	33.4	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	0.817	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	7.58	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:06		1	22.5	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:06		1.015	34.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.0155	mg/L	0.006090	0.01015	
* Arsenic, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.000262	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.0717	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.0000691	mg/L	0.000068	0.000203	J
* Chromium, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.000415	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.0101	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 19:04		1.015	0.286	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/5/22 09:00	4/5/22 19:04		1.015	1.02	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-25

Location Code:	WMWGREAP
Collected:	3/29/22 12:16
Customer ID:	
Submittal Date:	3/31/22 10:44

Laboratory ID Number: BC06493

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	0.000236	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	0.0737	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	0.00988	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	0.278	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	0.981	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:54	4/4/22 16:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	70.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	247	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	69.8	mg/L			
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 17:08	4/7/22 17:08		1	1.00	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-25

Location Code: WMWGREAP
Collected: 3/29/22 12:16
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06493

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:30	4/4/22 10:30		2	29.6	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:28	4/4/22 13:28		1	0.0724	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:44	4/11/22 13:44		4	68.6	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 12:13	3/29/22 12:13			398.30	uS/cm			FA
pH	3/29/22 12:13	3/29/22 12:13			5.26	SU			FA
Temperature	3/29/22 12:13	3/29/22 12:13			20.56	C			FA
Turbidity	3/29/22 12:13	3/29/22 12:13			2.92	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 12:16
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC06493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 12:16
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC06493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 12:16
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC06493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 12:16
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC06493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6

Location Code: WMWGREAP
Collected: 3/29/22 13:46
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06494

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:13		1.015	1.39	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:46		20.3	128	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 11:13		1.015	0.504	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 11:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/8/22 11:13		1.015	26.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:13		1	20.5	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:13		1.015	9.59	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 12:46		20.3	115	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:09		1.015	1.40	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:56		20.3	134	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:09		1.015	0.489	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:09		1.015	0.00733	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:09		1.015	26.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:09		1	20.4	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:09		1.015	9.52	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 15:56		20.3	104	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.000128	mg/L	0.000081	0.000203	J
* Barium, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.0614	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.000497	mg/L	0.000068	0.000203	
* Chromium, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.00223	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.743	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.00142	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 19:08		1.015	0.797	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6

Location Code: WMWGREAP
Collected: 3/29/22 13:46
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06494

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.000127	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.0604	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.000439	mg/L	0.000068	0.000203	
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.00228	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.738	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.00149	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	0.804	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:56	4/4/22 16:56		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	436	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	722	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	436	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 17:29	4/7/22 17:29		1	1.35	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6

Location Code: WMWGREAP
Collected: 3/29/22 13:46
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06494

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:31	4/4/22 10:31		5	45.3	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:29	4/4/22 13:29		1	0.193	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:46	4/11/22 13:46		10	190	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 13:43	3/29/22 13:43			1178.36	uS/cm			FA
pH	3/29/22 13:43	3/29/22 13:43			5.99	SU			FA
Temperature	3/29/22 13:43	3/29/22 13:43			20.48	C			FA
Turbidity	3/29/22 13:43	3/29/22 13:43			1.15	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 13:46
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC06494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC06494	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC06494	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0900	0.0927	0.0901	0.0850 to 0.115	90.0	70.0 to 130	2.96	20.0
BC06494	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.106	0.106	0.0968	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC06494	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0997	0.101	0.0980	0.0850 to 0.115	99.6	70.0 to 130	1.30	20.0
BC06494	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0964	0.0975	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BC06494	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.157	0.161	0.0983	0.0850 to 0.115	96.6	70.0 to 130	2.52	20.0
BC06494	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.163	0.165	0.100	0.0850 to 0.115	102	70.0 to 130	1.22	20.0
BC06494	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0908	0.0897	0.0914	0.0850 to 0.115	90.8	70.0 to 130	1.22	20.0
BC06494	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0842	0.0850	0.0908	0.0850 to 0.115	84.2	70.0 to 130	0.946	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06494	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0951	0.0972	0.0976	0.0850 to 0.115	94.7	70.0 to 130	2.18	20.0
BC06494	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0964	0.0974	0.101	0.0850 to 0.115	95.9	70.0 to 130	1.03	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06494	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0963	0.0953	0.0970	0.0850 to 0.115	96.3	70.0 to 130	1.04	20.0
BC06494	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0956	0.0954	0.0955	0.0850 to 0.115	95.6	70.0 to 130	0.209	20.0
BC06494	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.0991	0.0985	0.0989	0.0850 to 0.115	96.8	70.0 to 130	0.607	20.0
BC06494	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.0983	0.0973	0.0977	0.0850 to 0.115	96.1	70.0 to 130	1.02	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 13:46
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC06494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06494	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0983	0.0987	0.0973	0.0850 to 0.115	98.3	70.0 to 130	0.406	20.0
BC06494	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0962	0.0980	0.0962	0.0850 to 0.115	96.2	70.0 to 130	1.85	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06494	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	0.832	0.822	0.0985	0.0850 to 0.115	94.0	70.0 to 130	1.21	20.0
BC06494	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	0.828	0.817	0.0976	0.0850 to 0.115	85.0	70.0 to 130	1.34	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06494	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.100	0.0992	0.0990	0.0850 to 0.115	98.5	70.0 to 130	0.803	20.0
BC06494	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.100	0.101	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BC06494	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	10.8	11.1	9.88	8.50 to 11.5	100	70.0 to 130	2.74	20.0
BC06494	Potassium, Total	mg/L	0.0250	0.367	10.0	10.9	10.9	10.4	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC06494	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.101	0.102	0.0974	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06494	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0977	0.0982	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06494	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0940	0.0979	0.0951	0.0850 to 0.115	94.0	70.0 to 130	4.06	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 13:46
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC06494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06494	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.0931	0.0966	0.0984	0.0850 to 0.115	93.1	70.0 to 130	3.69	20.0
BC06494	Total Organic Carbon	mg/L	0.390	1.00	10.0	11.1	10.8	24.8		97.5	80.0 to 120	2.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 13:46
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC06494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06494	Solids, Dissolved	mg/L	1.00	25.0			740	50.0	40.0 to 60.0			2.46	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-12

Location Code: WMWGREAP
Collected: 3/29/22 16:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06495

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:16		1.015	0.416	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 12:49		20.3	52.0	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 11:16		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 11:16		1.015	0.130	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:16		1.015	16.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:16		1	5.99	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:16		1.015	2.80	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:16		1.015	21.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:12		1.015	0.417	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 15:58		20.3	53.7	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:12		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:12		1.015	0.133	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:12		1.015	16.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:12		1	5.97	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:12		1.015	2.79	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:12		1.015	21.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:29		1.015	0.000232	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 19:29		1.015	0.0355	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 19:29		1.015	0.000433	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:29		1.015	0.000876	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:31		5.075	2.29	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:29		1.015	0.0514	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 19:29		1.015	6.17	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-12

Location Code: WMWGREAP
Collected: 3/29/22 16:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06495

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	0.000264	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	0.0365	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	0.000681	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:10		5.075	1.96	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	0.0480	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	6.33	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 16:58	4/4/22 16:58		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/11/22 12:15	4/11/22 15:48		1	126	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	290	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	126	mg/L			
Carbonate Alkalinity, (calc.)	4/11/22 12:15	4/11/22 15:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 18:50	4/7/22 18:50		1	1.07	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-12

Location Code: WMWGREAP
Collected: 3/29/22 16:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06495

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:23	4/4/22 10:23		1	11.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:31	4/4/22 13:31		1	0.107	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 13:47	4/11/22 13:47		10	108	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/29/22 15:57	3/29/22 15:57			474.84	uS/cm			FA
pH	3/29/22 15:57	3/29/22 15:57			6.44	SU			FA
Temperature	3/29/22 15:57	3/29/22 15:57			19.81	C			FA
Turbidity	3/29/22 15:57	3/29/22 15:57			0.69	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC06495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.165	0.161	0.105	0.0850 to 0.115	104	70.0 to 130	2.45	20.0
BC06500	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.166	0.166	0.101	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BC06500	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0921	0.0935	0.0901	0.0850 to 0.115	92.1	70.0 to 130	1.51	20.0
BC06500	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.103	0.102	0.0968	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06500	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0986	0.0987	0.0980	0.0850 to 0.115	98.1	70.0 to 130	0.101	20.0
BC06500	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0976	0.0975	0.0850 to 0.115	98.0	70.0 to 130	0.816	20.0
BC06500	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.164	0.164	0.0983	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC06500	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.169	0.170	0.100	0.0850 to 0.115	105	70.0 to 130	0.590	20.0
BC06500	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0873	0.0870	0.0914	0.0850 to 0.115	87.3	70.0 to 130	0.344	20.0
BC06500	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0904	0.0850	0.0908	0.0850 to 0.115	90.4	70.0 to 130	6.16	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06500	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0992	0.0981	0.0976	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC06500	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0975	0.0966	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.927	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06500	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0978	0.0968	0.0970	0.0850 to 0.115	97.6	70.0 to 130	1.03	20.0
BC06500	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0988	0.0981	0.0955	0.0850 to 0.115	98.6	70.0 to 130	0.711	20.0
BC06500	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.105	0.104	0.0989	0.0850 to 0.115	99.4	70.0 to 130	0.957	20.0
BC06500	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.104	0.104	0.0977	0.0850 to 0.115	98.4	70.0 to 130	0.00	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC06495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06500	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0962	0.0976	0.0973	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BC06500	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0969	0.0969	0.0962	0.0850 to 0.115	96.9	70.0 to 130	0.00	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06500	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	2.07	2.02	0.0985	0.0850 to 0.115	90.0	70.0 to 130	2.44	20.0
BC06500	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	2.04	2.02	0.0976	0.0850 to 0.115	140	70.0 to 130	0.985	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06500	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.0977	0.0983	0.0990	0.0850 to 0.115	97.5	70.0 to 130	0.612	20.0
BC06500	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.0984	0.0970	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.43	20.0
BC06500	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	15.1	14.8	9.88	8.50 to 11.5	103	70.0 to 130	2.01	20.0
BC06500	Potassium, Total	mg/L	0.0250	0.367	10.0	15.2	15.2	10.4	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC06500	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.0965	0.0970	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.517	20.0
BC06500	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0964	0.0949	0.0972	0.0850 to 0.115	96.4	70.0 to 130	1.57	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06495	Sulfate	mg/L	0.062	2.0	200	329	328	19.6	18.0 to 22.0	110	80.0 to 120	0.304	20.0
BC06500	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0933	0.0939	0.0951	0.0850 to 0.115	93.3	70.0 to 130	0.641	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC06495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.101	0.100	0.0984	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/29/22 16:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC06495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06495	Alkalinity, Total as CaCO3	mg/L					132	51.3	45.0 to 55.0			4.65	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06500	Solids, Dissolved	mg/L	1.00	25.0			194	50.0	40.0 to 60.0			5.29	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-11

Location Code: WMWGREAP
Collected: 3/30/22 08:53
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06496

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:19		1.015	0.472	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 11:19		1.015	39.6	mg/L	0.070035	0.406	RA
* Iron, Total	4/5/22 07:00	4/8/22 11:19		1.015	0.319	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 11:19		1.015	0.0615	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:19		1.015	13.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:19		1	5.56	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:19		1.015	2.60	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:19		1.015	30.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:14		1.015	0.487	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 16:01		20.3	44.6	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:14		1.015	0.323	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:14		1.015	0.0635	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:14		1.015	13.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:14		1	5.56	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:14		1.015	2.60	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:14		1.015	30.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:33		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:33		1.015	0.000967	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 19:33		1.015	0.0485	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 19:33		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:33		1.015	0.0157	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:35		5.075	4.50	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:33		1.015	0.00425	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 19:33		1.015	7.52	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11

Location Code: WMWGREAP
Collected: 3/30/22 08:53
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06496

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:33		1.015	0.0000745	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	0.00113	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	0.0483	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	0.0163	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:14		5.075	4.48	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	0.00420	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	7.70	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:33		1.015	0.0000753	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 17:00	4/4/22 17:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	118	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	280	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	117	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	0.579	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 19:05	4/7/22 19:05		1	1.27	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11

Location Code: WMWGREAP
Collected: 3/30/22 08:53
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06496

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 10:24	4/4/22 10:24		1	12.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 13:32	4/4/22 13:32		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:45	4/11/22 14:45		8	125	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/30/22 08:50	3/30/22 08:50			462.47	uS/cm			FA
pH	3/30/22 08:50	3/30/22 08:50			6.02	SU			FA
Temperature	3/30/22 08:50	3/30/22 08:50			19.61	C			FA
Turbidity	3/30/22 08:50	3/30/22 08:50			0.42	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC06496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.165	0.161	0.105	0.0850 to 0.115	104	70.0 to 130	2.45	20.0
BC06500	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.166	0.166	0.101	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BC06500	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0921	0.0935	0.0901	0.0850 to 0.115	92.1	70.0 to 130	1.51	20.0
BC06500	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.103	0.102	0.0968	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06500	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0986	0.0987	0.0980	0.0850 to 0.115	98.1	70.0 to 130	0.101	20.0
BC06500	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0976	0.0975	0.0850 to 0.115	98.0	70.0 to 130	0.816	20.0
BC06500	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.164	0.164	0.0983	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC06500	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.169	0.170	0.100	0.0850 to 0.115	105	70.0 to 130	0.590	20.0
BC06500	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0873	0.0870	0.0914	0.0850 to 0.115	87.3	70.0 to 130	0.344	20.0
BC06500	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0904	0.0850	0.0908	0.0850 to 0.115	90.4	70.0 to 130	6.16	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06496	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.51	1.50	1.03	0.850 to 1.15	104	70.0 to 130	0.664	20.0
BC06500	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0992	0.0981	0.0976	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC06500	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0975	0.0966	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.927	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06496	Calcium, Total	mg/L	-0.000205	0.152	5.00	45.8	47.0	5.02	4.25 to 5.75	124	70.0 to 130	2.59	20.0
BC06496	Chloride	mg/L	-0.00786	1.00	10.0	23.0	23.2	10.1	9.00 to 11.0	103	80.0 to 120	0.866	20.0
BC06500	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0978	0.0968	0.0970	0.0850 to 0.115	97.6	70.0 to 130	1.03	20.0
BC06500	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0988	0.0981	0.0955	0.0850 to 0.115	98.6	70.0 to 130	0.711	20.0
BC06500	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.105	0.104	0.0989	0.0850 to 0.115	99.4	70.0 to 130	0.957	20.0
BC06500	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.104	0.104	0.0977	0.0850 to 0.115	98.4	70.0 to 130	0.00	20.0
BC06496	Fluoride	mg/L	-0.0794	0.125	2.50	2.62	2.62	2.60	2.25 to 2.75	105	80.0 to 120	0.00	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC06496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06496	Iron, Total	mg/L	0.000375	0.0176	0.2	0.529	0.520	0.202	0.170 to 0.230	105	70.0 to 130	1.72	20.0
BC06500	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0962	0.0976	0.0973	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BC06500	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0969	0.0969	0.0962	0.0850 to 0.115	96.9	70.0 to 130	0.00	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06496	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.267	0.265	0.201	0.170 to 0.230	103	70.0 to 130	0.752	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06496	Magnesium, Total	mg/L	0.000546	0.0462	5.00	18.4	18.1	5.23	4.25 to 5.75	106	70.0 to 130	1.64	20.0
BC06500	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	2.07	2.02	0.0985	0.0850 to 0.115	90.0	70.0 to 130	2.44	20.0
BC06500	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	2.04	2.02	0.0976	0.0850 to 0.115	140	70.0 to 130	0.985	20.0
BC06496	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00397	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.252	20.0
BC06500	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.0977	0.0983	0.0990	0.0850 to 0.115	97.5	70.0 to 130	0.612	20.0
BC06500	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.0984	0.0970	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.43	20.0
BC06500	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	15.1	14.8	9.88	8.50 to 11.5	103	70.0 to 130	2.01	20.0
BC06500	Potassium, Total	mg/L	0.0250	0.367	10.0	15.2	15.2	10.4	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC06500	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.0965	0.0970	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.517	20.0
BC06500	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0964	0.0949	0.0972	0.0850 to 0.115	96.4	70.0 to 130	1.57	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06496	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.62	3.59	1.02	0.850 to 1.15	102	70.0 to 130	0.832	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06496	Sodium, Total	mg/L	0.00593	0.0660	5.00	36.5	36.3	5.15	4.25 to 5.75	116	70.0 to 130	0.549	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06500	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0933	0.0939	0.0951	0.0850 to 0.115	93.3	70.0 to 130	0.641	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC06496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.101	0.100	0.0984	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC06496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06496	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.07	-0.052	1.99	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC06500	Solids, Dissolved	mg/L	1.00	25.0			194	50.0	40.0 to 60.0			5.29	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11 DUP

Location Code: WMWGREAP
Collected: 3/30/22 08:53
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06497

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:34		1.015	0.465	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 11:34		1.015	40.2	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 11:34		1.015	0.304	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 11:34		1.015	0.0619	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:34		1.015	13.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:34		1	5.54	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:34		1.015	2.59	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:34		1.015	30.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:17		1.015	0.482	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 16:04		20.3	43.4	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:17		1.015	0.326	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:17		1.015	0.0641	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:17		1.015	13.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:17		1	5.56	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:17		1.015	2.60	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:17		1.015	31.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:37		1.015	0.000959	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 19:37		1.015	0.0503	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 19:37		1.015	0.000244	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:37		1.015	0.0155	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:38		5.075	4.37	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:37		1.015	0.00403	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 19:37		1.015	7.37	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11 DUP

Location Code: WMWGREAP
Collected: 3/30/22 08:53
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06497

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:37		1.015	0.0000803	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	0.00108	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	0.0481	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	0.0158	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:17		5.075	4.41	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	0.00430	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	7.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:37		1.015	0.0000743	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 17:08	4/4/22 17:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	127	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	277	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	127	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 19:24	4/7/22 19:24		1	1.29	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11 DUP

Location Code: WMWGREAP
Collected: 3/30/22 08:53
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06497

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 11:23	4/4/22 11:23		1	13.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 15:47	4/4/22 15:47		1	0.0814	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:47	4/11/22 14:47		8	141	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/30/22 08:50	3/30/22 08:50			462.47	uS/cm			FA
pH	3/30/22 08:50	3/30/22 08:50			6.02	SU			FA
Temperature	3/30/22 08:50	3/30/22 08:50			19.61	C			FA
Turbidity	3/30/22 08:50	3/30/22 08:50			0.42	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11 DUP

Laboratory ID Number: BC06497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.165	0.161	0.105	0.0850 to 0.115	104	70.0 to 130	2.45	20.0
BC06500	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.166	0.166	0.101	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BC06500	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0921	0.0935	0.0901	0.0850 to 0.115	92.1	70.0 to 130	1.51	20.0
BC06500	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.103	0.102	0.0968	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06500	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0986	0.0987	0.0980	0.0850 to 0.115	98.1	70.0 to 130	0.101	20.0
BC06500	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0976	0.0975	0.0850 to 0.115	98.0	70.0 to 130	0.816	20.0
BC06500	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.164	0.164	0.0983	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC06500	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.169	0.170	0.100	0.0850 to 0.115	105	70.0 to 130	0.590	20.0
BC06500	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0873	0.0870	0.0914	0.0850 to 0.115	87.3	70.0 to 130	0.344	20.0
BC06500	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0904	0.0850	0.0908	0.0850 to 0.115	90.4	70.0 to 130	6.16	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06500	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.35	1.35	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC06500	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0992	0.0981	0.0976	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC06500	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0975	0.0966	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.927	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06500	Calcium, Total	mg/L	-0.000205	0.152	5.00	32.9	33.2	5.02	4.25 to 5.75	102	70.0 to 130	0.908	20.0
BC06500	Chloride	mg/L	0.0367	1.00	10.0	19.5	19.3	10.5	9.00 to 11.0	114	80.0 to 120	1.03	20.0
BC06500	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0978	0.0968	0.0970	0.0850 to 0.115	97.6	70.0 to 130	1.03	20.0
BC06500	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0988	0.0981	0.0955	0.0850 to 0.115	98.6	70.0 to 130	0.711	20.0
BC06500	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.105	0.104	0.0989	0.0850 to 0.115	99.4	70.0 to 130	0.957	20.0
BC06500	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.104	0.104	0.0977	0.0850 to 0.115	98.4	70.0 to 130	0.00	20.0
BC06500	Fluoride	mg/L	0.0302	0.125	2.50	2.50	2.51	2.59	2.25 to 2.75	97.1	80.0 to 120	0.399	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11 DUP

Laboratory ID Number: BC06497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Iron, Total	mg/L	0.000375	0.0176	0.2	0.350	0.351	0.202	0.170 to 0.230	98.0	70.0 to 130	0.285	20.0
BC06500	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0962	0.0976	0.0973	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BC06500	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0969	0.0969	0.0962	0.0850 to 0.115	96.9	70.0 to 130	0.00	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06500	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.275	0.273	0.201	0.170 to 0.230	101	70.0 to 130	0.730	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06500	Magnesium, Total	mg/L	0.000546	0.0462	5.00	12.8	12.8	5.23	4.25 to 5.75	99.0	70.0 to 130	0.00	20.0
BC06500	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	2.07	2.02	0.0985	0.0850 to 0.115	90.0	70.0 to 130	2.44	20.0
BC06500	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	2.04	2.02	0.0976	0.0850 to 0.115	140	70.0 to 130	0.985	20.0
BC06500	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00399	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06500	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.0977	0.0983	0.0990	0.0850 to 0.115	97.5	70.0 to 130	0.612	20.0
BC06500	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.0984	0.0970	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.43	20.0
BC06500	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	15.1	14.8	9.88	8.50 to 11.5	103	70.0 to 130	2.01	20.0
BC06500	Potassium, Total	mg/L	0.0250	0.367	10.0	15.2	15.2	10.4	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC06500	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.0965	0.0970	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.517	20.0
BC06500	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0964	0.0949	0.0972	0.0850 to 0.115	96.4	70.0 to 130	1.57	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06500	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.94	3.94	1.02	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06500	Sodium, Total	mg/L	0.00593	0.0660	5.00	23.3	23.2	5.15	4.25 to 5.75	96.0	70.0 to 130	0.430	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06500	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0933	0.0939	0.0951	0.0850 to 0.115	93.3	70.0 to 130	0.641	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11 DUP

Laboratory ID Number: BC06497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.101	0.100	0.0984	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 08:53
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-11 DUP

Laboratory ID Number: BC06497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06500	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.14	0.057	2.01	1.80 to 2.20	107	90.0 to 110	0.00	15.0
BC06500	Solids, Dissolved	mg/L	1.00	25.0			194	50.0	40.0 to 60.0			5.29	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-21

Location Code: WMWGREAP
Collected: 3/30/22 10:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06498

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:36		1.015	0.696	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 13:01		20.3	51.0	mg/L	1.4007	8.12	
* Iron, Total	4/5/22 07:00	4/8/22 11:36		1.015	0.0331	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/8/22 11:36		1.015	0.0820	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:36		1.015	16.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:36		1	8.54	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:36		1.015	3.99	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:36		1.015	32.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:20		1.015	0.718	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 16:07		20.3	58.8	mg/L	1.4007	8.12	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:20		1.015	0.0152	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:20		1.015	0.0798	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:20		1.015	17.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:20		1	8.43	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:20		1.015	3.94	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:20		1.015	32.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.000167	mg/L	0.000081	0.000203	J
* Barium, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.112	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.0000683	mg/L	0.000068	0.000203	J
* Chromium, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.00284	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:42		5.075	1.94	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.00682	mg/L	0.000102	0.000203	
* Potassium, Total	4/5/22 09:00	4/5/22 19:40		1.015	8.06	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-21

Location Code: WMWGREAP
Collected: 3/30/22 10:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06498

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:40		1.015	0.000107	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	0.000128	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	0.109	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	0.000144	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	0.00220	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:21		5.075	1.78	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	0.00742	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	8.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:40		1.015	0.000117	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 17:09	4/4/22 17:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	190	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	320	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	190	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 19:45	4/7/22 19:45		1	1.26	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-21

Location Code: WMWGREAP
Collected: 3/30/22 10:00
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06498

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 11:18	4/4/22 11:18		1	12.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 15:48	4/4/22 15:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:48	4/11/22 14:48		8	115	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/30/22 09:57	3/30/22 09:57			527.48	uS/cm			FA
pH	3/30/22 09:57	3/30/22 09:57			6.09	SU			FA
Temperature	3/30/22 09:57	3/30/22 09:57			21.10	C			FA
Turbidity	3/30/22 09:57	3/30/22 09:57			0.33	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC06498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.165	0.161	0.105	0.0850 to 0.115	104	70.0 to 130	2.45	20.0
BC06500	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.166	0.166	0.101	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BC06500	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0921	0.0935	0.0901	0.0850 to 0.115	92.1	70.0 to 130	1.51	20.0
BC06500	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.103	0.102	0.0968	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06500	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0986	0.0987	0.0980	0.0850 to 0.115	98.1	70.0 to 130	0.101	20.0
BC06500	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0976	0.0975	0.0850 to 0.115	98.0	70.0 to 130	0.816	20.0
BC06500	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.164	0.164	0.0983	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC06500	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.169	0.170	0.100	0.0850 to 0.115	105	70.0 to 130	0.590	20.0
BC06500	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0873	0.0870	0.0914	0.0850 to 0.115	87.3	70.0 to 130	0.344	20.0
BC06500	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0904	0.0850	0.0908	0.0850 to 0.115	90.4	70.0 to 130	6.16	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06500	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.35	1.35	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC06500	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0992	0.0981	0.0976	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC06500	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0975	0.0966	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.927	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06500	Calcium, Total	mg/L	-0.000205	0.152	5.00	32.9	33.2	5.02	4.25 to 5.75	102	70.0 to 130	0.908	20.0
BC06500	Chloride	mg/L	0.0367	1.00	10.0	19.5	19.3	10.5	9.00 to 11.0	114	80.0 to 120	1.03	20.0
BC06500	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0978	0.0968	0.0970	0.0850 to 0.115	97.6	70.0 to 130	1.03	20.0
BC06500	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0988	0.0981	0.0955	0.0850 to 0.115	98.6	70.0 to 130	0.711	20.0
BC06500	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.105	0.104	0.0989	0.0850 to 0.115	99.4	70.0 to 130	0.957	20.0
BC06500	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.104	0.104	0.0977	0.0850 to 0.115	98.4	70.0 to 130	0.00	20.0
BC06500	Fluoride	mg/L	0.0302	0.125	2.50	2.50	2.51	2.59	2.25 to 2.75	97.1	80.0 to 120	0.399	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC06498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Iron, Total	mg/L	0.000375	0.0176	0.2	0.350	0.351	0.202	0.170 to 0.230	98.0	70.0 to 130	0.285	20.0
BC06500	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0962	0.0976	0.0973	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BC06500	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0969	0.0969	0.0962	0.0850 to 0.115	96.9	70.0 to 130	0.00	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06500	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.275	0.273	0.201	0.170 to 0.230	101	70.0 to 130	0.730	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06500	Magnesium, Total	mg/L	0.000546	0.0462	5.00	12.8	12.8	5.23	4.25 to 5.75	99.0	70.0 to 130	0.00	20.0
BC06500	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	2.07	2.02	0.0985	0.0850 to 0.115	90.0	70.0 to 130	2.44	20.0
BC06500	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	2.04	2.02	0.0976	0.0850 to 0.115	140	70.0 to 130	0.985	20.0
BC06500	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00399	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06500	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.0977	0.0983	0.0990	0.0850 to 0.115	97.5	70.0 to 130	0.612	20.0
BC06500	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.0984	0.0970	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.43	20.0
BC06500	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	15.1	14.8	9.88	8.50 to 11.5	103	70.0 to 130	2.01	20.0
BC06500	Potassium, Total	mg/L	0.0250	0.367	10.0	15.2	15.2	10.4	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC06500	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.0965	0.0970	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.517	20.0
BC06500	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0964	0.0949	0.0972	0.0850 to 0.115	96.4	70.0 to 130	1.57	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06500	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.94	3.94	1.02	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06500	Sodium, Total	mg/L	0.00593	0.0660	5.00	23.3	23.2	5.15	4.25 to 5.75	96.0	70.0 to 130	0.430	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06500	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0933	0.0939	0.0951	0.0850 to 0.115	93.3	70.0 to 130	0.641	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC06498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.101	0.100	0.0984	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 10:00
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC06498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06500	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.14	0.057	2.01	1.80 to 2.20	107	90.0 to 110	0.00	15.0
BC06500	Solids, Dissolved	mg/L	1.00	25.0			194	50.0	40.0 to 60.0			5.29	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-48H

Location Code: WMWGREAP
Collected: 3/30/22 11:17
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06499

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:39		1.015	0.0985	mg/L	0.030000	0.1015	J
* Calcium, Total	4/5/22 07:00	4/8/22 11:39		1.015	13.4	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 11:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/8/22 11:39		1.015	0.0704	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:39		1.015	3.64	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:39		1	8.60	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:39		1.015	4.02	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:39		1.015	6.31	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	13.9	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	0.0717	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	3.77	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:23		1	8.58	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	4.01	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:23		1.015	6.47	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/5/22 09:00	4/5/22 19:44		1.015	0.000139	mg/L	0.000081	0.000203	J
* Barium, Total	4/5/22 09:00	4/5/22 19:44		1.015	0.0253	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/5/22 09:00	4/5/22 19:44		1.015	0.000237	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:44		1.015	0.000181	mg/L	0.000068	0.000203	J
* Lead, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 19:44		1.015	0.0906	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/5/22 09:00	4/5/22 19:44		1.015	2.65	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H

Location Code: WMWGREAP
Collected: 3/30/22 11:17
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06499

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	0.000228	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	0.0252	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	0.000155	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	0.0898	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	2.63	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 17:10	4/4/22 17:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	30.5	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	84.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	30.5	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 20:02	4/7/22 20:02		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H

Location Code: WMWGREAP
Collected: 3/30/22 11:17
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06499

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 11:19	4/4/22 11:19		1	3.44	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 15:49	4/4/22 15:49		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:49	4/11/22 14:49		1	36.4	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/30/22 11:17	3/30/22 11:17			134.45	uS/cm			FA
pH	3/30/22 11:17	3/30/22 11:17			5.40	SU			FA
Temperature	3/30/22 11:17	3/30/22 11:17			17.78	C			FA
Turbidity	3/30/22 11:17	3/30/22 11:17			0.33	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:17
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC06499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.165	0.161	0.105	0.0850 to 0.115	104	70.0 to 130	2.45	20.0
BC06500	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.166	0.166	0.101	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BC06500	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0921	0.0935	0.0901	0.0850 to 0.115	92.1	70.0 to 130	1.51	20.0
BC06500	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.103	0.102	0.0968	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06500	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0986	0.0987	0.0980	0.0850 to 0.115	98.1	70.0 to 130	0.101	20.0
BC06500	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0976	0.0975	0.0850 to 0.115	98.0	70.0 to 130	0.816	20.0
BC06500	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.164	0.164	0.0983	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC06500	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.169	0.170	0.100	0.0850 to 0.115	105	70.0 to 130	0.590	20.0
BC06500	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0873	0.0870	0.0914	0.0850 to 0.115	87.3	70.0 to 130	0.344	20.0
BC06500	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0904	0.0850	0.0908	0.0850 to 0.115	90.4	70.0 to 130	6.16	20.0
BC06499	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.13	1.13	1.04	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06500	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.35	1.35	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC06500	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0992	0.0981	0.0976	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC06500	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0975	0.0966	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.927	20.0
BC06499	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	19.3	18.9	5.17	4.25 to 5.75	108	70.0 to 130	2.09	20.0
BC06500	Calcium, Total	mg/L	-0.000205	0.152	5.00	32.9	33.2	5.02	4.25 to 5.75	102	70.0 to 130	0.908	20.0
BC06500	Chloride	mg/L	0.0367	1.00	10.0	19.5	19.3	10.5	9.00 to 11.0	114	80.0 to 120	1.03	20.0
BC06500	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0978	0.0968	0.0970	0.0850 to 0.115	97.6	70.0 to 130	1.03	20.0
BC06500	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0988	0.0981	0.0955	0.0850 to 0.115	98.6	70.0 to 130	0.711	20.0
BC06500	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.105	0.104	0.0989	0.0850 to 0.115	99.4	70.0 to 130	0.957	20.0
BC06500	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.104	0.104	0.0977	0.0850 to 0.115	98.4	70.0 to 130	0.00	20.0
BC06500	Fluoride	mg/L	0.0302	0.125	2.50	2.50	2.51	2.59	2.25 to 2.75	97.1	80.0 to 120	0.399	20.0
BC06499	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.201	0.202	0.203	0.170 to 0.230	100	70.0 to 130	0.496	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:17
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC06499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Iron, Total	mg/L	0.000375	0.0176	0.2	0.350	0.351	0.202	0.170 to 0.230	98.0	70.0 to 130	0.285	20.0
BC06500	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0962	0.0976	0.0973	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BC06500	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0969	0.0969	0.0962	0.0850 to 0.115	96.9	70.0 to 130	0.00	20.0
BC06499	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.274	0.282	0.203	0.170 to 0.230	101	70.0 to 130	2.88	20.0
BC06500	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.275	0.273	0.201	0.170 to 0.230	101	70.0 to 130	0.730	20.0
BC06499	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	9.10	9.13	5.38	4.25 to 5.75	107	70.0 to 130	0.329	20.0
BC06500	Magnesium, Total	mg/L	0.000546	0.0462	5.00	12.8	12.8	5.23	4.25 to 5.75	99.0	70.0 to 130	0.00	20.0
BC06500	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	2.07	2.02	0.0985	0.0850 to 0.115	90.0	70.0 to 130	2.44	20.0
BC06500	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	2.04	2.02	0.0976	0.0850 to 0.115	140	70.0 to 130	0.985	20.0
BC06500	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00399	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06500	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.0977	0.0983	0.0990	0.0850 to 0.115	97.5	70.0 to 130	0.612	20.0
BC06500	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.0984	0.0970	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.43	20.0
BC06500	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	15.1	14.8	9.88	8.50 to 11.5	103	70.0 to 130	2.01	20.0
BC06500	Potassium, Total	mg/L	0.0250	0.367	10.0	15.2	15.2	10.4	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC06500	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.0965	0.0970	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.517	20.0
BC06500	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0964	0.0949	0.0972	0.0850 to 0.115	96.4	70.0 to 130	1.57	20.0
BC06499	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	5.02	5.05	1.02	0.850 to 1.15	101	70.0 to 130	0.596	20.0
BC06500	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.94	3.94	1.02	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC06499	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	11.4	11.8	5.15	4.25 to 5.75	98.6	70.0 to 130	3.45	20.0
BC06500	Sodium, Total	mg/L	0.00593	0.0660	5.00	23.3	23.2	5.15	4.25 to 5.75	96.0	70.0 to 130	0.430	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06500	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0933	0.0939	0.0951	0.0850 to 0.115	93.3	70.0 to 130	0.641	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:17
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC06499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.101	0.100	0.0984	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 11:17
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC06499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06500	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.14	0.057	2.01	1.80 to 2.20	107	90.0 to 110	0.00	15.0
BC06500	Solids, Dissolved	mg/L	1.00	25.0			194	50.0	40.0 to 60.0			5.29	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-49H

Location Code: WMWGREAP
Collected: 3/30/22 12:11
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06500

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/8/22 11:42		1.015	0.330	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/8/22 11:42		1.015	27.8	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/8/22 11:42		1.015	0.154	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/8/22 11:42		1.015	0.0726	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/8/22 11:42		1.015	7.85	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/8/22 11:42		1	6.36	mg/L			
Silicon, Total	4/5/22 07:00	4/8/22 11:42		1.015	2.97	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/8/22 11:42		1.015	18.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	0.331	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	29.7	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	0.141	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	0.0732	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	8.06	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:25	4/7/22 14:38		1	6.25	mg/L			
Silicon, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	2.92	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:25	4/7/22 14:38		1.015	18.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/5/22 09:00	4/5/22 19:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.0667	mg/L	0.006090	0.01015	
* Arsenic, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.000409	mg/L	0.000081	0.000203	
* Barium, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.0642	mg/L	0.000102	0.000203	
* Beryllium, Total	4/5/22 09:00	4/5/22 19:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.000286	mg/L	0.000068	0.000203	
* Chromium, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.000211	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.00562	mg/L	0.000068	0.000203	
* Lead, Total	4/5/22 09:00	4/5/22 19:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/5/22 09:00	4/5/22 20:46		5.075	1.90	mg/L	0.000761	0.001015	RA
* Molybdenum, Total	4/5/22 09:00	4/5/22 19:48		1.015	0.000187	mg/L	0.000102	0.000203	J
* Potassium, Total	4/5/22 09:00	4/5/22 19:48		1.015	4.72	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-49H

Location Code: WMWGREAP
Collected: 3/30/22 12:11
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06500

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/5/22 09:00	4/5/22 19:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/5/22 09:00	4/5/22 19:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.0608	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.000466	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.0645	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.000296	mg/L	0.000068	0.000203	
* Chromium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.000207	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.00564	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/5/22 09:01	4/5/22 16:35		5.075	1.98	mg/L	0.000761	0.001015	RA
* Molybdenum, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	0.000186	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	4.78	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/5/22 09:01	4/5/22 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/1/22 13:52	4/1/22 20:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/4/22 17:10	4/4/22 17:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/12/22 12:30	4/12/22 15:30		1	45.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/1/22 10:51	4/5/22 10:10		1	184	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	45.3	mg/L			
Carbonate Alkalinity, (calc.)	4/12/22 12:30	4/12/22 15:30		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 20:20	4/7/22 20:20		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-49H

Location Code: WMWGREAP
Collected: 3/30/22 12:11
Customer ID:
Submittal Date: 3/31/22 10:44

Laboratory ID Number: BC06500

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/4/22 11:24	4/4/22 11:24		1	8.12	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/4/22 15:50	4/4/22 15:50		1	0.0724	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:50	4/11/22 14:50		5	106	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/30/22 12:08	3/30/22 12:08			313.62	uS/cm			FA
pH	3/30/22 12:08	3/30/22 12:08			5.72	SU			FA
Temperature	3/30/22 12:08	3/30/22 12:08			18.99	C			FA
Turbidity	3/30/22 12:08	3/30/22 12:08			1.21	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 12:11
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC06500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Aluminum, Dissolved	mg/L	0.000285	0.010	0.100	0.165	0.161	0.105	0.0850 to 0.115	104	70.0 to 130	2.45	20.0
BC06500	Aluminum, Total	mg/L	0.000881	0.010	0.100	0.166	0.166	0.101	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BC06500	Antimony, Dissolved	mg/L	0.000311	0.00100	0.100	0.0921	0.0935	0.0901	0.0850 to 0.115	92.1	70.0 to 130	1.51	20.0
BC06500	Antimony, Total	mg/L	0.000263	0.00100	0.100	0.103	0.102	0.0968	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06500	Arsenic, Dissolved	mg/L	0.0000088	0.000176	0.100	0.0986	0.0987	0.0980	0.0850 to 0.115	98.1	70.0 to 130	0.101	20.0
BC06500	Arsenic, Total	mg/L	-0.0000156	0.000176	0.100	0.0984	0.0976	0.0975	0.0850 to 0.115	98.0	70.0 to 130	0.816	20.0
BC06500	Barium, Dissolved	mg/L	0.0000109	0.00100	0.100	0.164	0.164	0.0983	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC06500	Barium, Total	mg/L	0.0000102	0.00100	0.100	0.169	0.170	0.100	0.0850 to 0.115	105	70.0 to 130	0.590	20.0
BC06500	Beryllium, Dissolved	mg/L	0.000149	0.000880	0.100	0.0873	0.0870	0.0914	0.0850 to 0.115	87.3	70.0 to 130	0.344	20.0
BC06500	Beryllium, Total	mg/L	0.0000759	0.000880	0.100	0.0904	0.0850	0.0908	0.0850 to 0.115	90.4	70.0 to 130	6.16	20.0
BC06500	Boron, Dissolved	mg/L	-0.00027	0.0650	1.00	1.36	1.35	1.04	0.850 to 1.15	103	70.0 to 130	0.738	20.0
BC06500	Boron, Total	mg/L	-0.000053	0.0650	1.00	1.35	1.35	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC06500	Cadmium, Dissolved	mg/L	-0.0000082	0.000147	0.100	0.0992	0.0981	0.0976	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC06500	Cadmium, Total	mg/L	0.0000083	0.000147	0.100	0.0975	0.0966	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.927	20.0
BC06500	Calcium, Dissolved	mg/L	0.0173	0.152	5.00	34.4	33.9	5.17	4.25 to 5.75	94.0	70.0 to 130	1.46	20.0
BC06500	Calcium, Total	mg/L	-0.000205	0.152	5.00	32.9	33.2	5.02	4.25 to 5.75	102	70.0 to 130	0.908	20.0
BC06500	Chloride	mg/L	0.0367	1.00	10.0	19.5	19.3	10.5	9.00 to 11.0	114	80.0 to 120	1.03	20.0
BC06500	Chromium, Dissolved	mg/L	-0.0000157	0.000440	0.100	0.0978	0.0968	0.0970	0.0850 to 0.115	97.6	70.0 to 130	1.03	20.0
BC06500	Chromium, Total	mg/L	-0.0000836	0.000440	0.100	0.0988	0.0981	0.0955	0.0850 to 0.115	98.6	70.0 to 130	0.711	20.0
BC06500	Cobalt, Dissolved	mg/L	0.0000104	0.000147	0.100	0.105	0.104	0.0989	0.0850 to 0.115	99.4	70.0 to 130	0.957	20.0
BC06500	Cobalt, Total	mg/L	0.0000021	0.000147	0.100	0.104	0.104	0.0977	0.0850 to 0.115	98.4	70.0 to 130	0.00	20.0
BC06500	Fluoride	mg/L	0.0302	0.125	2.50	2.50	2.51	2.59	2.25 to 2.75	97.1	80.0 to 120	0.399	20.0
BC06500	Iron, Dissolved	mg/L	0.000098	0.0176	0.2	0.337	0.336	0.203	0.170 to 0.230	98.0	70.0 to 130	0.297	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 12:11
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC06500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Iron, Total	mg/L	0.000375	0.0176	0.2	0.350	0.351	0.202	0.170 to 0.230	98.0	70.0 to 130	0.285	20.0
BC06500	Lead, Dissolved	mg/L	0.0000472	0.000147	0.100	0.0962	0.0976	0.0973	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BC06500	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0969	0.0969	0.0962	0.0850 to 0.115	96.9	70.0 to 130	0.00	20.0
BC06500	Lithium, Dissolved	mg/L	0.000339	0.0154	0.200	0.281	0.285	0.203	0.170 to 0.230	104	70.0 to 130	1.41	20.0
BC06500	Lithium, Total	mg/L	0.000168	0.0154	0.200	0.275	0.273	0.201	0.170 to 0.230	101	70.0 to 130	0.730	20.0
BC06500	Magnesium, Dissolved	mg/L	-0.00935	0.0462	5.00	13.4	13.3	5.38	4.25 to 5.75	107	70.0 to 130	0.749	20.0
BC06500	Magnesium, Total	mg/L	0.000546	0.0462	5.00	12.8	12.8	5.23	4.25 to 5.75	99.0	70.0 to 130	0.00	20.0
BC06500	Manganese, Dissolved	mg/L	-0.0000048	0.0002	0.100	2.07	2.02	0.0985	0.0850 to 0.115	90.0	70.0 to 130	2.44	20.0
BC06500	Manganese, Total	mg/L	-0.0000068	0.0002	0.100	2.04	2.02	0.0976	0.0850 to 0.115	140	70.0 to 130	0.985	20.0
BC06500	Mercury, Total by CVAA	mg/L	-0.00021	0.000500	0.004	0.00398	0.00399	0.0039	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06500	Molybdenum, Dissolved	mg/L	0.0000276	0.0002	0.100	0.0977	0.0983	0.0990	0.0850 to 0.115	97.5	70.0 to 130	0.612	20.0
BC06500	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.0984	0.0970	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.43	20.0
BC06500	Potassium, Dissolved	mg/L	0.0249	0.367	10.0	15.1	14.8	9.88	8.50 to 11.5	103	70.0 to 130	2.01	20.0
BC06500	Potassium, Total	mg/L	0.0250	0.367	10.0	15.2	15.2	10.4	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC06500	Selenium, Dissolved	mg/L	-0.000128	0.00100	0.100	0.0965	0.0970	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.517	20.0
BC06500	Selenium, Total	mg/L	-0.000346	0.00100	0.100	0.0964	0.0949	0.0972	0.0850 to 0.115	96.4	70.0 to 130	1.57	20.0
BC06500	Silicon, Dissolved	mg/L	0.000668	0.0440	1.00	3.93	3.91	1.02	0.850 to 1.15	101	70.0 to 130	0.510	20.0
BC06500	Silicon, Total	mg/L	0.000385	0.0440	1.00	3.94	3.94	1.02	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC06500	Sodium, Dissolved	mg/L	0.00947	0.0660	5.00	23.8	24.2	5.15	4.25 to 5.75	104	70.0 to 130	1.67	20.0
BC06500	Sodium, Total	mg/L	0.00593	0.0660	5.00	23.3	23.2	5.15	4.25 to 5.75	96.0	70.0 to 130	0.430	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06500	Thallium, Dissolved	mg/L	0.0000311	0.000147	0.100	0.0933	0.0939	0.0951	0.0850 to 0.115	93.3	70.0 to 130	0.641	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 12:11
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC06500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Thallium, Total	mg/L	0.0000141	0.000147	0.100	0.101	0.100	0.0984	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/30/22 12:11
Customer ID:
Delivery Date: 3/31/22 10:44

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC06500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06500	Alkalinity, Total as CaCO3	mg/L					48.1	50.1	45.0 to 55.0			6.00	10.0
BC06500	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.14	0.057	2.01	1.80 to 2.20	107	90.0 to 110	0.00	15.0
BC06500	Solids, Dissolved	mg/L	1.00	25.0			194	50.0	40.0 to 60.0			5.29	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-26

Location Code: WMWGREAP
Collected: 4/4/22 13:05
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06745

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/11/22 14:00	4/12/22 10:04		1.015	6.70	mg/L	0.070035	0.406	
* Iron, Total	4/11/22 14:00	4/12/22 10:04		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/11/22 14:00	4/12/22 10:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:04		1.015	0.899	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:04		1	12.6	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:04		1.015	5.88	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:04		1.015	4.35	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	7.04	mg/L	0.070035	0.406	
* Iron, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	0.886	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 09:54		1	13.0	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	6.08	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 09:54		1.015	4.14	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.0677	mg/L	0.006090	0.01015	
* Arsenic, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.000112	mg/L	0.000081	0.000203	J
* Barium, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.0335	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.000295	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.000448	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.0443	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/6/22 09:22	4/6/22 14:29		1.015	0.462	mg/L	0.169505	0.5075	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-26

Location Code: WMWGREAP
Collected: 4/4/22 13:05
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06745

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.0276	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.0345	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.000266	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.000447	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.0000798	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.0452	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	0.487	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/6/22 10:05	4/6/22 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 18:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:25	4/11/22 15:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/13/22 08:30	4/13/22 11:14		1	12.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	40.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	12.8	mg/L			
Carbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 20:37	4/7/22 20:37		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-26

Location Code: WMWGREAP
Collected: 4/4/22 13:05
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06745

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:39	4/6/22 12:39		1	2.93	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 13:59	4/6/22 13:59		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:51	4/11/22 14:51		1	12.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/4/22 13:02	4/4/22 13:02			61.70	uS/cm			FA
pH	4/4/22 13:02	4/4/22 13:02			5.20	SU			FA
Temperature	4/4/22 13:02	4/4/22 13:02			18.43	C			FA
Turbidity	4/4/22 13:02	4/4/22 13:02			1.04	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 13:05
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC06745

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 13:05
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC06745

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 13:05
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC06745

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 13:05
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC06745

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06750	Alkalinity, Total as CaCO3	mg/L					410	50.8	45.0 to 55.0			1.23	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1

Location Code: WMWGREAP
Collected: 4/4/22 14:14
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06746

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:06		1.015	0.269	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 11:54		50.75	106	mg/L	3.50175	20.3	
* Iron, Total	4/11/22 14:00	4/12/22 13:04		101.5	210	mg/L	0.8120	4.06	
* Lithium, Total	4/11/22 14:00	4/12/22 10:06		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:06		1.015	36.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:06		1	11.6	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:06		1.015	5.42	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:54		50.75	55.4	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 09:57		1.015	0.297	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 11:55		50.75	106	mg/L	3.50175	20.3	
* Iron, Dissolved	4/11/22 15:57	4/12/22 13:48		101.5	213	mg/L	0.8120	4.06	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 09:57		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 09:57		1.015	35.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 09:57		1	11.9	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 09:57		1.015	5.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 11:55		50.75	51.5	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.0471	mg/L	0.006090	0.01015	
* Arsenic, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.0164	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.0235	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.000449	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.296	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 15:20		92.365	15.3	mg/L	0.013855	0.018473	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:32		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/6/22 09:22	4/6/22 14:32		1.015	3.54	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1

Location Code: WMWGREAP
Collected: 4/4/22 14:14
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06746

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.00221	mg/L	0.000508	0.001015	
* Thallium, Total	4/6/22 09:22	4/6/22 14:32		1.015	0.000155	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.0410	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.0159	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.0218	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.000279	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.298	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 13:42		92.365	15.6	mg/L	0.013855	0.018473	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.000126	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	3.51	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.00233	mg/L	0.000508	0.001015	
* Thallium, Dissolved	4/6/22 10:05	4/6/22 11:49		1.015	0.000158	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 18:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:26	4/11/22 15:26		1	0.360	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/13/22 08:30	4/13/22 11:14		1	47.6	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	1280	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	47.6	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 20:53	4/7/22 20:53		1	2.86	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1

Location Code: WMWGREAP
Collected: 4/4/22 14:14
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06746

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:52	4/6/22 12:52		8	41.2	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:00	4/6/22 14:00		1	0.161	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:53	4/11/22 14:53		40	801	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/4/22 14:11	4/4/22 14:11			1465.42	uS/cm			FA
pH	4/4/22 14:11	4/4/22 14:11			5.17	SU			FA
Temperature	4/4/22 14:11	4/4/22 14:11			20.06	C			FA
Turbidity	4/4/22 14:11	4/4/22 14:11			4.22	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC06746

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC06746

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC06746

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC06746

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06750	Alkalinity, Total as CaCO3	mg/L					410	50.8	45.0 to 55.0			1.23	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-24

Location Code: WMWGREAP
Collected: 4/4/22 15:30
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06747

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/11/22 14:00	4/12/22 10:09		1.015	37.0	mg/L	0.070035	0.406	
* Iron, Total	4/11/22 14:00	4/12/22 10:09		1.015	0.359	mg/L	0.008120	0.0406	
* Lithium, Total	4/11/22 14:00	4/12/22 10:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:09		1.015	4.39	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:09		1	11.7	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:09		1.015	5.49	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:09		1.015	2.48	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	38.3	mg/L	0.070035	0.406	
* Iron, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	0.201	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	4.35	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:01		1	11.8	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	5.50	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:01		1.015	2.46	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.0321	mg/L	0.006090	0.01015	
* Arsenic, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.000332	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.0635	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.000371	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.000726	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.180	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/6/22 09:22	4/6/22 14:36		1.015	1.36	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-24

Location Code: WMWGREAP
Collected: 4/4/22 15:30
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06747

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:36		1.015	0.000931	mg/L	0.000508	0.001015	J
* Thallium, Total	4/6/22 09:22	4/6/22 14:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.0266	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.000297	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.0637	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.000232	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.000686	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.185	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	1.39	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	0.000998	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	4/6/22 10:05	4/6/22 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 18:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:28	4/11/22 15:28		1	0.399	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/13/22 08:30	4/13/22 11:14		1	15.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	155	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	15.2	mg/L			
Carbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 21:11	4/7/22 21:11		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-24

Location Code: WMWGREAP
Collected: 4/4/22 15:30
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06747

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:42	4/6/22 12:42		1	3.09	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:01	4/6/22 14:01		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:54	4/11/22 14:54		5	90.2	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/4/22 15:27	4/4/22 15:27			233.12	uS/cm			FA
pH	4/4/22 15:27	4/4/22 15:27			4.40	SU			FA
Temperature	4/4/22 15:27	4/4/22 15:27			19.36	C			FA
Turbidity	4/4/22 15:27	4/4/22 15:27			1.22	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 15:30
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC06747

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 15:30
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC06747

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 15:30
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC06747

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 15:30
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC06747

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06750	Alkalinity, Total as CaCO3	mg/L					410	50.8	45.0 to 55.0			1.23	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-44H

Location Code: WMWGREAP
Collected: 4/4/22 17:14
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06748

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:12		1.015	0.202	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 11:57		20.3	137	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 11:57		20.3	6.24	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:12		1.015	19.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:12		1	9.33	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:12		1.015	4.36	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:12		1.015	28.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:04		1.015	0.202	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 11:58		20.3	129	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 11:58		20.3	5.69	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:04		1.015	19.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:04		1	9.67	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:04		1.015	4.52	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:04		1.015	28.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:40		1.015	0.00863	mg/L	0.006090	0.01015	J
* Arsenic, Total	4/6/22 09:22	4/6/22 14:40		1.015	0.00187	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:40		1.015	0.0482	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:40		1.015	0.000301	mg/L	0.000068	0.000203	
* Chromium, Total	4/6/22 09:22	4/6/22 14:40		1.015	0.000225	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:40		1.015	0.323	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 15:23		10.15	9.81	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/6/22 09:22	4/6/22 14:40		1.015	2.72	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-44H

Location Code: WMWGREAP
Collected: 4/4/22 17:14
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06748

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	0.00130	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	0.0495	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	0.000393	mg/L	0.000068	0.000203	
* Chromium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	0.324	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 13:45		10.15	9.64	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	2.74	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/6/22 10:05	4/6/22 11:57		1.015	0.0000755	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 18:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:30	4/11/22 15:30		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/13/22 08:30	4/13/22 11:14		1	91.1	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	604	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	91.0	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 21:26	4/7/22 21:26		1	1.27	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-44H

Location Code: WMWGREAP
Collected: 4/4/22 17:14
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06748

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:43	4/6/22 12:43		1	13.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:02	4/6/22 14:02		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:55	4/11/22 14:55		25	390	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/4/22 17:10	4/4/22 17:10			870.22	uS/cm			FA
pH	4/4/22 17:10	4/4/22 17:10			5.56	SU			FA
Temperature	4/4/22 17:10	4/4/22 17:10			17.32	C			FA
Turbidity	4/4/22 17:10	4/4/22 17:10			4.89	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 17:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC06748

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 17:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC06748

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 17:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC06748

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06748	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.0	10.9	24.7		97.3	80.0 to 120	0.913	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 17:14
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC06748

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06750	Alkalinity, Total as CaCO3	mg/L					410	50.8	45.0 to 55.0			1.23	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-4

Location Code: WMWGREAPFB
Collected: 4/4/22 17:45
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06749

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:15		1	Not Detected	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/11/22 14:00	4/12/22 10:15		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:43		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 14:43		1.015	0.00110	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 18:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:32	4/11/22 15:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-4

Location Code: WMWGREAPFB
Collected: 4/4/22 17:45
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06749

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 22:49	4/7/22 22:49		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:44	4/6/22 12:44		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:04	4/6/22 14:04		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 14:56	4/11/22 14:56		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 4/4/22 17:45
Customer ID:
Delivery Date: 4/5/22 12:49

Description:Greene County Ash Pond Field Blank-4

Laboratory ID Number: BC06749

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 4/4/22 17:45
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond Field Blank-4

Laboratory ID Number: BC06749

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06749	Sulfate	mg/L	0.0777	2.0	20.0	22.5	20.2	19.6	18.0 to 22.0	112	80.0 to 120	10.8	20.0
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06753	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.5	11.2	25.3		98.1	80.0 to 120	2.64	20.0

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 4/4/22 17:45
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond Field Blank-4

Laboratory ID Number: BC06749

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14

Location Code: WMWGREAP
Collected: 4/4/22 12:28
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06750

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:18		1.015	1.89	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:00		20.3	117	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:00		20.3	51.1	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:18		1.015	0.607	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:18		1.015	27.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:18		1	12.9	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:18		1.015	6.02	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:18		1.015	33.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:07		1.015	1.88	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:01		20.3	117	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:01		20.3	53.7	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:07		1.015	0.636	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:07		1.015	27.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:07		1	13.5	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:07		1.015	6.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:07		1.015	35.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/6/22 09:22	4/6/22 14:47		1.015	0.0241	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:47		1.015	0.103	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:47		1.015	0.000248	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:47		1.015	0.0423	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 15:27		5.075	4.91	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:47		1.015	0.0166	mg/L	0.000102	0.000203	
* Potassium, Total	4/6/22 09:22	4/6/22 14:47		1.015	10.4	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14

Location Code: WMWGREAP
Collected: 4/4/22 12:28
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06750

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	0.0215	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	0.107	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	0.0406	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 13:49		5.075	4.83	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	0.0153	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	10.1	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/6/22 10:05	4/6/22 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 18:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:34	4/11/22 15:34		1	0.263	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/13/22 08:30	4/13/22 11:14		1	405	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	630	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	404	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/13/22 08:30	4/13/22 11:14		1	0.741	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 23:11	4/7/22 23:11		1	2.77	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14

Location Code: WMWGREAP
Collected: 4/4/22 12:28
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06750

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:45	4/6/22 12:45		1	9.75	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:05	4/6/22 14:05		1	0.245	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 15:27	4/11/22 15:27		10	192	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/4/22 12:25	4/4/22 12:25			891.38	uS/cm			FA
pH	4/4/22 12:25	4/4/22 12:25			6.39	SU			FA
Temperature	4/4/22 12:25	4/4/22 12:25			23.40	C			FA
Turbidity	4/4/22 12:25	4/4/22 12:25			0.96	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 12:28
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC06750

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 12:28
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC06750

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06753	Sulfate	mg/L	-0.0181	2.0	320	504	517	19.4	18.0 to 22.0	108	80.0 to 120	2.55	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 12:28
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC06750

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06753	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.5	11.2	25.3		98.1	80.0 to 120	2.64	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 12:28
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC06750

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06750	Alkalinity, Total as CaCO3	mg/L					410	50.8	45.0 to 55.0			1.23	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10

Location Code: WMWGREAP
Collected: 4/4/22 14:40
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06751

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:21		1.015	1.92	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:03		20.3	93.7	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:03		20.3	19.4	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:21		1.015	0.329	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:21		1.015	20.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:21		1	9.61	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:21		1.015	4.49	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:21		1.015	28.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:11		1.015	1.91	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:06		20.3	88.8	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:06		20.3	19.6	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:11		1.015	0.345	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:11		1.015	20.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:11		1	9.95	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:11		1.015	4.65	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:11		1.015	28.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/6/22 09:22	4/6/22 14:50		1.015	0.0117	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:50		1.015	0.260	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	4/6/22 09:22	4/6/22 14:50		1.015	0.0218	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 15:30		5.075	3.27	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:50		1.015	0.0117	mg/L	0.000102	0.000203	
* Potassium, Total	4/6/22 09:22	4/6/22 14:50		1.015	6.35	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10

Location Code: WMWGREAP
Collected: 4/4/22 14:40
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06751

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	0.0120	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	0.244	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	0.0215	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 13:52		5.075	3.06	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	0.0111	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	6.26	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/6/22 10:05	4/6/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 19:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:36	4/11/22 15:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	267	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	435	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	266	mg/L			
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	1.44	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 23:30	4/7/22 23:30		1	2.64	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10

Location Code: WMWGREAP
Collected: 4/4/22 14:40
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06751

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:46	4/6/22 12:46		1	16.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:06	4/6/22 14:06		1	0.276	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 15:28	4/11/22 15:28		8	111	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/4/22 14:38	4/4/22 14:38			627.33	uS/cm			FA
pH	4/4/22 14:38	4/4/22 14:38			6.21	SU			FA
Temperature	4/4/22 14:38	4/4/22 14:38			25.50	C			FA
Turbidity	4/4/22 14:38	4/4/22 14:38			0.4	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:40
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC06751

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:40
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC06751

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06753	Sulfate	mg/L	-0.0181	2.0	320	504	517	19.4	18.0 to 22.0	108	80.0 to 120	2.55	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:40
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC06751

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06753	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.5	11.2	25.3		98.1	80.0 to 120	2.64	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:40
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC06751

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17

Location Code: WMWGREAP
Collected: 4/4/22 16:18
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06752

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:24		1.015	2.32	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:06		20.3	104	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:06		20.3	26.6	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:24		1.015	0.647	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:24		1.015	29.0	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:24		1	19.6	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:24		1.015	9.15	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 12:06		20.3	42.8	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:14		1.015	2.25	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:09		20.3	108	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:09		20.3	30.0	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:14		1.015	0.710	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:14		1.015	28.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:14		1	20.0	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:14		1.015	9.36	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 12:09		20.3	45.0	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/6/22 09:22	4/6/22 14:54		1.015	0.861	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:54		1.015	0.270	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:54		1.015	0.000224	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:54		1.015	0.0115	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 15:34		5.075	2.42	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:54		1.015	0.0540	mg/L	0.000102	0.000203	
* Potassium, Total	4/6/22 09:22	4/6/22 14:54		1.015	12.5	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17

Location Code: WMWGREAP
Collected: 4/4/22 16:18
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06752

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	0.875	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	0.252	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	0.000233	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	0.0114	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 13:56		5.075	2.22	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	0.0546	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	12.4	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/6/22 10:05	4/6/22 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 19:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:38	4/11/22 15:38		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	505	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	556	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	499	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	6.18	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/7/22 23:48	4/7/22 23:48		1	2.06	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17

Location Code: WMWGREAP
Collected: 4/4/22 16:18
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06752

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:48	4/6/22 12:48		1	8.06	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:12	4/6/22 14:12		1	0.564	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 15:30	4/11/22 15:30		3	65.5	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/4/22 16:14	4/4/22 16:14			773.09	uS/cm			FA
pH	4/4/22 16:14	4/4/22 16:14			6.71	SU			FA
Temperature	4/4/22 16:14	4/4/22 16:14			26.47	C			FA
Turbidity	4/4/22 16:14	4/4/22 16:14			2.05	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 16:18
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC06752

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 16:18
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC06752

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06753	Sulfate	mg/L	-0.0181	2.0	320	504	517	19.4	18.0 to 22.0	108	80.0 to 120	2.55	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 16:18
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC06752

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06753	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.5	11.2	25.3		98.1	80.0 to 120	2.64	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 16:18
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC06752

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-5

Location Code: WMWGREAP
Collected: 4/4/22 18:31
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06753

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:27		1.015	0.615	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:09		20.3	98.8	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:09		20.3	34.0	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:27		1.015	0.102	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:27		1.015	20.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:27		1	18.0	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:27		1.015	8.43	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:27		1.015	21.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:18		1.015	0.614	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:13		20.3	95.6	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:13		20.3	33.2	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:18		1.015	0.111	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:18		1.015	19.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:18		1	18.3	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:18		1.015	8.56	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:18		1.015	23.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/6/22 09:22	4/6/22 14:58		1.015	0.432	mg/L	0.000081	0.000203	
* Barium, Total	4/6/22 09:22	4/6/22 14:58		1.015	0.131	mg/L	0.000102	0.000203	
* Beryllium, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/6/22 09:22	4/6/22 14:58		1.015	0.000249	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/6/22 09:22	4/6/22 14:58		1.015	0.0104	mg/L	0.000068	0.000203	
* Lead, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/6/22 09:22	4/6/22 15:38		5.075	1.99	mg/L	0.000761	0.001015	RA
* Molybdenum, Total	4/6/22 09:22	4/6/22 14:58		1.015	0.00354	mg/L	0.000102	0.000203	
* Potassium, Total	4/6/22 09:22	4/6/22 14:58		1.015	6.46	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-5

Location Code: WMWGREAP
Collected: 4/4/22 18:31
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06753

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/6/22 09:22	4/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	0.382	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	0.125	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	0.0102	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/6/22 10:05	4/6/22 14:00		5.075	1.93	mg/L	0.000761	0.001015	RA
* Molybdenum, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	0.00321	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	6.40	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/6/22 10:05	4/6/22 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	4/7/22 14:37	4/7/22 19:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:40	4/11/22 15:40		1	0.224	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	234	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	488	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	233	mg/L			
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	0.551	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/8/22 00:07	4/7/22 00:07		1	1.69	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-5

Location Code: WMWGREAP
Collected: 4/4/22 18:31
Customer ID:
Submittal Date: 4/5/22 12:49

Laboratory ID Number: BC06753

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 12:49	4/6/22 12:49		1	9.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:08	4/6/22 14:08		1	0.216	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/11/22 15:31	4/11/22 15:31		16	160	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/4/22 18:28	4/4/22 18:28			508.59	uS/cm			FA
pH	4/4/22 18:28	4/4/22 18:28			6.42	SU			FA
Temperature	4/4/22 18:28	4/4/22 18:28			25.49	C			FA
Turbidity	4/4/22 18:28	4/4/22 18:28			4.78	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 18:31
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC06753

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Aluminum, Dissolved	mg/L	0.000227	0.010	0.100	0.0985	0.0978	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.713	20.0
BC06753	Aluminum, Total	mg/L	0.000768	0.010	0.100	0.108	0.103	0.0988	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC06753	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.0849	0.0876	0.0873	0.0850 to 0.115	84.9	70.0 to 130	3.13	20.0
BC06753	Antimony, Total	mg/L	0.000332	0.00100	0.100	0.101	0.0992	0.0916	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC06753	Arsenic, Dissolved	mg/L	-0.0000138	0.000176	0.100	0.462	0.471	0.100	0.0850 to 0.115	80.0	70.0 to 130	1.93	20.0
BC06753	Arsenic, Total	mg/L	0.000004	0.000176	0.100	0.513	0.511	0.101	0.0850 to 0.115	81.0	70.0 to 130	0.391	20.0
BC06753	Barium, Dissolved	mg/L	-0.000041	0.00100	0.100	0.225	0.231	0.0935	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Barium, Total	mg/L	-0.0000526	0.00100	0.100	0.231	0.225	0.0956	0.0850 to 0.115	100	70.0 to 130	2.63	20.0
BC06753	Beryllium, Dissolved	mg/L	0.0000378	0.000880	0.100	0.0931	0.0935	0.0926	0.0850 to 0.115	93.1	70.0 to 130	0.429	20.0
BC06753	Beryllium, Total	mg/L	0.0000141	0.000880	0.100	0.0912	0.0886	0.0895	0.0850 to 0.115	91.2	70.0 to 130	2.89	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06753	Cadmium, Dissolved	mg/L	-0.0000392	0.000147	0.100	0.100	0.0966	0.101	0.0850 to 0.115	100	70.0 to 130	3.46	20.0
BC06753	Cadmium, Total	mg/L	-0.0000297	0.000147	0.100	0.102	0.0950	0.103	0.0850 to 0.115	102	70.0 to 130	7.11	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06753	Chloride	mg/L	-0.0468	1.00	10.0	19.5	19.8	9.77	9.00 to 11.0	98.7	80.0 to 120	1.53	20.0
BC06753	Chromium, Dissolved	mg/L	-0.0000231	0.000440	0.100	0.0973	0.0976	0.101	0.0850 to 0.115	97.3	70.0 to 130	0.308	20.0
BC06753	Chromium, Total	mg/L	-0.0000043	0.000440	0.100	0.102	0.0965	0.0997	0.0850 to 0.115	102	70.0 to 130	5.54	20.0
BC06753	Cobalt, Dissolved	mg/L	-0.0000214	0.000147	0.100	0.110	0.110	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BC06753	Cobalt, Total	mg/L	-0.0000181	0.000147	0.100	0.114	0.108	0.102	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BC06753	Fluoride	mg/L	-0.00629	0.125	2.50	2.76	2.77	2.55	2.25 to 2.75	102	80.0 to 120	0.362	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 18:31
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC06753

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06753	Lead, Dissolved	mg/L	0.0000085	0.000147	0.100	0.0988	0.0981	0.0995	0.0850 to 0.115	98.8	70.0 to 130	0.711	20.0
BC06753	Lead, Total	mg/L	0.0000144	0.000147	0.100	0.0981	0.0975	0.0995	0.0850 to 0.115	98.1	70.0 to 130	0.613	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06753	Manganese, Dissolved	mg/L	-0.000074	0.0002	0.100	2.03	2.07	0.102	0.0850 to 0.115	100	70.0 to 130	1.95	20.0
BC06753	Manganese, Total	mg/L	-0.0000526	0.0002	0.100	2.09	2.15	0.101	0.0850 to 0.115	100	70.0 to 130	2.83	20.0
BC06753	Mercury, Total by CVAA	mg/L	-0.00018	0.000500	0.004	0.00387	0.00391	0.00387	0.00340 to 0.00460	96.8	70.0 to 130	1.03	20.0
BC06753	Molybdenum, Dissolved	mg/L	-0.0000145	0.0002	0.100	0.101	0.100	0.0989	0.0850 to 0.115	97.8	70.0 to 130	0.995	20.0
BC06753	Molybdenum, Total	mg/L	-0.0000238	0.0002	0.100	0.101	0.0988	0.0993	0.0850 to 0.115	97.5	70.0 to 130	2.20	20.0
BC06753	Potassium, Dissolved	mg/L	-0.00591	0.367	10.0	16.0	15.7	10.0	8.50 to 11.5	96.0	70.0 to 130	1.89	20.0
BC06753	Potassium, Total	mg/L	-0.0359	0.367	10.0	16.5	16.0	9.95	8.50 to 11.5	100	70.0 to 130	3.08	20.0
BC06753	Selenium, Dissolved	mg/L	0.0000407	0.00100	0.100	0.102	0.101	0.106	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06753	Selenium, Total	mg/L	-0.0000212	0.00100	0.100	0.101	0.0981	0.102	0.0850 to 0.115	101	70.0 to 130	2.91	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06753	Sulfate	mg/L	-0.0181	2.0	320	504	517	19.4	18.0 to 22.0	108	80.0 to 120	2.55	20.0
BC06753	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0922	0.0917	0.0929	0.0850 to 0.115	92.2	70.0 to 130	0.544	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 18:31
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC06753

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06753	Thallium, Total	mg/L	0.0000109	0.000147	0.100	0.0916	0.0931	0.0955	0.0850 to 0.115	91.6	70.0 to 130	1.62	20.0
BC06753	Total Organic Carbon	mg/L	0.400	1.00	10.0	11.5	11.2	25.3		98.1	80.0 to 120	2.64	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 18:31
Customer ID:
Delivery Date: 4/5/22 12:49

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC06753

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06753	Solids, Dissolved	mg/L	1.00	25.0			492	46.0	40.0 to 60.0			0.816	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4

Location Code: WMWGREAP
Collected: 4/5/22 17:00
Customer ID:
Submittal Date: 4/7/22 13:11

Laboratory ID Number: BC06971

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:30		1.015	0.351	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:11		20.3	209	mg/L	1.4007	8.12	RA
* Iron, Total	4/11/22 14:00	4/12/22 12:11		20.3	73.3	mg/L	0.1624	0.812	RA
* Lithium, Total	4/11/22 14:00	4/12/22 10:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 12:11		20.3	43.4	mg/L	0.4263	8.12	RA
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:30		1	10.7	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:30		1.015	5.02	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:30		1.015	24.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:21		1.015	0.373	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:16		20.3	210	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:16		20.3	77.4	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 12:16		20.3	45.1	mg/L	0.4263	8.12	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:21		1	11.1	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:21		1.015	5.21	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:21		1.015	27.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.233	mg/L	0.006090	0.01015	
* Arsenic, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.00404	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.0665	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.0000792	mg/L	0.000068	0.000203	J
* Chromium, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.000468	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.390	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.000200	mg/L	0.000068	0.000203	J
* Manganese, Total	4/8/22 12:07	4/11/22 14:39		92.365	13.3	mg/L	0.013855	0.018473	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:10		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/8/22 12:07	4/11/22 13:10		1.015	6.97	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4

Location Code: WMWGREAP
Collected: 4/5/22 17:00
Customer ID:
Submittal Date: 4/7/22 13:11

Laboratory ID Number: BC06971

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.00192	mg/L	0.000508	0.001015	
* Thallium, Total	4/8/22 12:07	4/11/22 13:10		1.015	0.0000945	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.132	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.00416	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.0679	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.0000746	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.395	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.000202	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:25		92.365	13.4	mg/L	0.013855	0.018473	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	7.14	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.00170	mg/L	0.000508	0.001015	
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:07		1.015	0.000107	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 20:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:41	4/11/22 15:41		1	0.382	mg/L as N	0.20	0.3	R
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	66.0	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	1210	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	66.0	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 17:03	4/11/22 17:03		1	1.44	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4

Location Code: WMWGREAP
Collected: 4/5/22 17:00
Customer ID:
Submittal Date: 4/7/22 13:11

Laboratory ID Number: BC06971

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:20	4/13/22 09:20		1	7.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:12	4/14/22 10:12		1	0.158	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:34	4/12/22 10:34		40	833	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/5/22 16:56	4/5/22 16:56			1260.99	uS/cm			FA
pH	4/5/22 16:56	4/5/22 16:56			5.95	SU			FA
Temperature	4/5/22 16:56	4/5/22 16:56			27.79	C			FA
Turbidity	4/5/22 16:56	4/5/22 16:56			4.61	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:00
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC06971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06971	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.40	1.40	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06971	Calcium, Total	mg/L	0.00368	0.152	5.00	228	223	4.96	4.25 to 5.75	380	70.0 to 130	2.22	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:00
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC06971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06971	Iron, Total	mg/L	0.000206	0.0176	0.2	75.3	75.8	0.202	0.170 to 0.230	1000	70.0 to 130	0.662	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06971	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.211	0.219	0.202	0.170 to 0.230	106	70.0 to 130	3.72	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06971	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	50.6	50.2	5.26	4.25 to 5.75	144	70.0 to 130	0.794	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06971	Silicon, Total	mg/L	-0.000061	0.0440	1.00	5.99	5.96	1.02	0.850 to 1.15	97.0	70.0 to 130	0.502	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06971	Sodium, Total	mg/L	0.00116	0.0660	5.00	29.8	31.1	5.20	4.25 to 5.75	104	70.0 to 130	4.27	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:00
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC06971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:00
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC06971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06971	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	0.381	1.93	1.80 to 2.20	79.9	90.0 to 110	0.262	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-3

Location Code: WMWGREAP
Collected: 4/5/22 18:10
Customer ID:
Submittal Date: 4/7/22 13:11

Laboratory ID Number: BC06972

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:44		1.015	0.0453	mg/L	0.030000	0.1015	J
* Calcium, Total	4/11/22 14:00	4/12/22 12:20		20.3	67.4	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:20		20.3	45.2	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:44		1.015	4.51	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:44		1	9.42	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:44		1.015	4.40	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:44		1.015	29.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:24		1.015	0.0549	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:20		20.3	69.9	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:20		20.3	49.4	mg/L	0.1624	0.812	RA
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:24		1.015	4.43	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:24		1	9.52	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:24		1.015	4.45	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:24		1.015	28.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.0100	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.145	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.000390	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.000826	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.356	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.817	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-3

Location Code: WMWGREAP
Collected: 4/5/22 18:10
Customer ID:
Submittal Date: 4/7/22 13:11

Laboratory ID Number: BC06972

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:13		1.015	0.000744	mg/L	0.000508	0.001015	J
* Thallium, Total	4/8/22 12:07	4/11/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.0103	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.137	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.000219	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.000870	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.371	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.788	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	0.000651	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 20:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:51	4/11/22 15:51		1	0.207	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	287	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	339	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	287	mg/L			
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 17:20	4/11/22 17:20		1	9.87	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-3

Location Code: WMWGREAP
Collected: 4/5/22 18:10
Customer ID:
Submittal Date: 4/7/22 13:11

Laboratory ID Number: BC06972

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:34	4/13/22 09:34		2	21.3	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:13	4/14/22 10:13		1	0.185	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:35	4/12/22 10:35		1	15.2	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/5/22 18:08	4/5/22 18:08			532.06	uS/cm			FA
pH	4/5/22 18:08	4/5/22 18:08			6.27	SU			FA
Temperature	4/5/22 18:08	4/5/22 18:08			26.33	C			FA
Turbidity	4/5/22 18:08	4/5/22 18:08			1.8	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 18:10
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC06972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06972	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.06	1.08	1.03	0.850 to 1.15	101	70.0 to 130	1.87	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06972	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	73.4	75.3	5.16	4.25 to 5.75	70.0	70.0 to 130	2.56	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06972	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	48.4	49.4	0.203	0.170 to 0.230	-500	70.0 to 130	2.04	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 18:10
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC06972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06972	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.211	0.215	0.200	0.170 to 0.230	106	70.0 to 130	1.88	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06972	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	9.53	9.63	5.32	4.25 to 5.75	102	70.0 to 130	1.04	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06972	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.49	5.49	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06972	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	34.4	34.5	5.15	4.25 to 5.75	112	70.0 to 130	0.290	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 18:10
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC06972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 18:10
Customer ID:
Delivery Date: 4/7/22 13:11

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC06972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-42H

Location Code: WMWGREAP
Collected: 4/6/22 08:33
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06973

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:47		1.015	1.46	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:23		20.3	69.6	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:23		20.3	17.6	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:47		1.015	0.0231	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:47		1.015	13.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:47		1	10.2	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:47		1.015	4.77	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:47		1.015	36.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:41		1.015	1.44	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:30		20.3	60.7	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:30		20.3	15.9	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:41		1.015	0.0246	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:41		1.015	13.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:41		1	10.5	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:41		1.015	4.90	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:41		1.015	36.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.0104	mg/L	0.006090	0.01015	
* Arsenic, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.00515	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.147	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.000241	mg/L	0.000068	0.000203	
* Chromium, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.000278	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.0651	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 14:42		10.15	6.70	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:17		1.015	0.000233	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 13:17		1.015	4.25	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-42H

Location Code: WMWGREAP
Collected: 4/6/22 08:33
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06973

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	0.00502	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	0.151	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	0.000260	mg/L	0.000068	0.000203	
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	0.0704	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:28		10.15	6.51	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	0.000284	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	4.49	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 20:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:52	4/11/22 15:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	221	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	359	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	221	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 17:39	4/11/22 17:39		1	2.63	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-42H

Location Code: WMWGREAP
Collected: 4/6/22 08:33
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06973

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:23	4/13/22 09:23		1	15.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:14	4/14/22 10:14		1	0.0664	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:36	4/12/22 10:36		4	95.9	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 08:30	4/6/22 08:30			577.97	uS/cm			FA
pH	4/6/22 08:30	4/6/22 08:30			6.10	SU			FA
Temperature	4/6/22 08:30	4/6/22 08:30			24.82	C			FA
Turbidity	4/6/22 08:30	4/6/22 08:30			3.33	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:33
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC06973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:33
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC06973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:33
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC06973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:33
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC06973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H

Location Code: WMWGREAP
Collected: 4/6/22 09:38
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:50		1.015	1.29	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:26		20.3	110	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:26		20.3	11.9	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:50		1.015	0.261	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:50		1.015	31.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:50		1	9.16	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:50		1.015	4.28	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 12:26		20.3	49.9	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:45		1.015	1.26	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:33		20.3	106	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:33		20.3	12.1	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:45		1.015	0.288	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:45		1.015	31.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:45		1	9.42	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:45		1.015	4.40	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 12:33		20.3	51.0	mg/L	0.609	8.12	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:20		1.015	0.00610	mg/L	0.006090	0.01015	J
* Arsenic, Total	4/8/22 12:07	4/11/22 13:20		1.015	0.0110	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:20		1.015	0.168	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:20		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:20		1.015	0.0184	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 14:46		10.15	9.68	mg/L	0.001522	0.00203	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:20		1.015	0.00264	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 13:20		1.015	8.80	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H

Location Code: WMWGREAP
Collected: 4/6/22 09:38
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	0.0114	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	0.169	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	0.0183	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:32		10.15	9.19	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	0.00264	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	8.91	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 20:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:54	4/11/22 15:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	370	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	540	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	370	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 17:58	4/11/22 17:58		1	2.10	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H

Location Code: WMWGREAP
Collected: 4/6/22 09:38
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:36	4/13/22 09:36		4	37.1	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:15	4/14/22 10:15		1	0.133	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:37	4/12/22 10:37		5	106	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 09:34	4/6/22 09:34			839.57	uS/cm			FA
pH	4/6/22 09:34	4/6/22 09:34			6.43	SU			FA
Temperature	4/6/22 09:34	4/6/22 09:34			25.25	C			FA
Turbidity	4/6/22 09:34	4/6/22 09:34			4.25	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:38
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC06974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:38
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC06974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:38
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC06974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:38
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC06974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC06975

Location Code: WMWGREAP
Collected: 4/6/22 11:10
Customer ID:
Submittal Date: 4/7/22 13:12

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:53		1.015	0.260	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:35		20.3	55.5	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 10:53		1.015	0.312	mg/L	0.008120	0.0406	
* Lithium, Total	4/11/22 14:00	4/12/22 10:53		1.015	0.584	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:53		1.015	13.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:53		1	7.47	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:53		1.015	3.49	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:53		1.015	9.98	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:48		1.015	0.262	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:43		20.3	55.3	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 10:48		1.015	0.307	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:48		1.015	0.612	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:48		1.015	14.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:48		1	7.66	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:48		1.015	3.58	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:48		1.015	10.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.00200	mg/L	0.000508	0.001015	
* Aluminum, Total	4/8/22 12:07	4/11/22 13:24		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.00261	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.0701	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.0000792	mg/L	0.000068	0.000203	J
* Chromium, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.000299	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.00126	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 14:49		5.075	2.05	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.0201	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 13:24		1.015	6.61	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-13

Location Code: WMWGREAP
Collected: 4/6/22 11:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.111	mg/L	0.000508	0.001015	
* Thallium, Total	4/8/22 12:07	4/11/22 13:24		1.015	0.00169	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.00208	mg/L	0.000508	0.001015	
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.00269	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.0692	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.00131	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:35		5.075	2.17	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.0211	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	6.85	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.119	mg/L	0.000508	0.001015	
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:21		1.015	0.00164	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:56	4/11/22 15:56		1	0.746	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	66.8	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	298	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	66.8	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 18:16	4/11/22 18:16		1	1.84	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-13

Location Code: WMWGREAP
Collected: 4/6/22 11:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:25	4/13/22 09:25		1	3.71	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:17	4/14/22 10:17		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:38	4/12/22 10:38		8	157	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 11:06	4/6/22 11:06			423.79	uS/cm			FA
pH	4/6/22 11:06	4/6/22 11:06			6.24	SU			FA
Temperature	4/6/22 11:06	4/6/22 11:06			26.70	C			FA
Turbidity	4/6/22 11:06	4/6/22 11:06			0.68	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC06975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC06975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC06975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC06975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-5

Location Code: WMWGREAPFB
Collected: 4/6/22 11:35
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:56		1	Not Detected	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/11/22 14:00	4/12/22 10:56		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:28		1.015	0.000287	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 13:28		1.015	0.000170	mg/L	0.000152	0.000203	J
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 15:58	4/11/22 15:58		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-5

Location Code: WMWGREAPFB
Collected: 4/6/22 11:35
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 18:36	4/11/22 18:36		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:26	4/13/22 09:26		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:18	4/14/22 10:18		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:40	4/12/22 10:40		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 4/6/22 11:35
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond Field Blank-5

Laboratory ID Number: BC06976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 4/6/22 11:35
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond Field Blank-5

Laboratory ID Number: BC06976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 4/6/22 11:35
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond Field Blank-5

Laboratory ID Number: BC06976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-16

Location Code: WMWGREAP
Collected: 4/6/22 12:07
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 10:59		1.015	2.17	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:38		20.3	101	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:38		20.3	13.3	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 10:59		1.015	0.638	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 10:59		1.015	25.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 10:59		1	12.7	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 10:59		1.015	5.94	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 10:59		1.015	39.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:51		1.015	2.11	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:47		20.3	104	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:47		20.3	14.4	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:51		1.015	0.670	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:51		1.015	25.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:51		1	13.0	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:51		1.015	6.07	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:51		1.015	39.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.0780	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.103	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.000340	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.0147	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.0000865	mg/L	0.000068	0.000203	J
* Manganese, Total	4/8/22 12:07	4/11/22 14:53		5.075	3.32	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.000149	mg/L	0.000102	0.000203	J
* Potassium, Total	4/8/22 12:07	4/11/22 13:31		1.015	12.6	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC06977

Location Code: WMWGREAP
Collected: 4/6/22 12:07
Customer ID:
Submittal Date: 4/7/22 13:12

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 13:31		1.015	0.000353	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	0.0549	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	0.0988	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	0.0150	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:39		5.075	3.36	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	0.000171	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	13.0	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:24		1.015	0.000340	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/11/22 16:00	4/11/22 16:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	449	mg/L		0.1	HT
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	488	mg/L		50	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	448	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	0.61	mg/L			
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/11/22 18:51	4/11/22 18:51		1	2.05	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-16

Location Code: WMWGREAP
Collected: 4/6/22 12:07
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:27	4/13/22 09:27		1	12.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:19	4/14/22 10:19		1	0.266	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:41	4/12/22 10:41		2	45.3	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 12:04	4/6/22 12:04			746.84	uS/cm			FA
pH	4/6/22 12:04	4/6/22 12:04			6.42	SU			FA
Temperature	4/6/22 12:04	4/6/22 12:04			26.29	C			FA
Turbidity	4/6/22 12:04	4/6/22 12:04			4.33	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 12:07
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC06977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 12:07
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC06977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 12:07
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC06977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 12:07
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC06977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18

Location Code: WMWGREAP
Collected: 4/6/22 15:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:02		1.015	1.60	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:40		20.3	96.1	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:40		20.3	12.7	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 11:02		1.015	0.312	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 11:02		1.015	15.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:02		1	16.8	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:02		1.015	7.83	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 12:40		20.3	49.2	mg/L	0.609	8.12	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:55		1.015	1.55	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 12:50		20.3	82.7	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:50		20.3	12.4	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:55		1.015	0.327	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:55		1.015	15.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:55		1	17.2	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:55		1.015	8.02	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 12:50		20.3	46.7	mg/L	0.609	8.12	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 13:35		1.015	0.0490	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:35		1.015	0.0769	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:35		1.015	0.000313	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:35		1.015	0.0183	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 14:56		5.075	3.57	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:35		1.015	0.000321	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 13:35		1.015	6.15	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18

Location Code: WMWGREAP
Collected: 4/6/22 15:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	0.0494	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	0.0742	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	0.000224	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	0.0187	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:43		5.075	3.58	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	0.000345	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	6.26	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 16:02	4/11/22 16:02		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	371	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	404	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	371	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 19:14	4/11/22 19:14		1	2.32	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18

Location Code: WMWGREAP
Collected: 4/6/22 15:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:37	4/13/22 09:37		2	24.7	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:20	4/14/22 10:20		1	0.162	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:42	4/12/22 10:42		1	16.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 15:06	4/6/22 15:06			636.34	uS/cm			FA
pH	4/6/22 15:06	4/6/22 15:06			6.29	SU			FA
Temperature	4/6/22 15:06	4/6/22 15:06			27.48	C			FA
Turbidity	4/6/22 15:06	4/6/22 15:06			2.48	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC06978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC06978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC06978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC06978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 4/6/22 15:30
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:05		1	Not Detected	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/11/22 14:00	4/12/22 11:05		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:38		1.015	0.000316	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/11/22 16:04	4/11/22 16:04		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 4/6/22 15:30
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 19:33	4/11/22 19:33		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:30	4/13/22 09:30		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:21	4/14/22 10:21		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:43	4/12/22 10:43		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 4/6/22 15:30
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 4/6/22 15:30
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments:

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 4/6/22 15:30
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H

Location Code: WMWGREAP
Collected: 4/5/22 16:47
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:07		1.015	0.104	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 11:07		1.015	17.8	mg/L	0.070035	0.406	
* Iron, Total	4/11/22 14:00	4/12/22 12:43		20.3	8.59	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 11:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 11:07		1.015	5.06	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:07		1	11.2	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:07		1.015	5.24	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:07		1.015	22.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 10:58		1.015	0.109	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 10:58		1.015	18.1	mg/L	0.070035	0.406	
* Iron, Dissolved	4/11/22 15:57	4/12/22 12:53		20.3	9.24	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 10:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 10:58		1.015	5.05	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 10:58		1	11.3	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 10:58		1.015	5.26	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 10:58		1.015	22.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 13:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.165	mg/L	0.006090	0.01015	
* Arsenic, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.00687	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.0880	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 13:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.000416	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.0191	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.000314	mg/L	0.000068	0.000203	
* Manganese, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.493	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.000396	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 13:42		1.015	3.10	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H

Location Code: WMWGREAP
Collected: 4/5/22 16:47
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 13:42		1.015	0.000590	mg/L	0.000508	0.001015	J
* Thallium, Total	4/8/22 12:07	4/11/22 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.0996	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.00674	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.0881	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.000249	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.0193	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.000220	mg/L	0.000068	0.000203	
* Manganese, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.517	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.000364	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	3.07	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	0.000538	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 16:05	4/11/22 16:05		1	0.445	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	55.1	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	156	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	55.1	mg/L			
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/11/22 19:50	4/11/22 19:50		1	5.11	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H

Location Code: WMWGREAP
Collected: 4/5/22 16:47
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 09:31	4/13/22 09:31		1	20.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:23	4/14/22 10:23		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 10:44	4/12/22 10:44		4	52.0	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/5/22 16:44	4/5/22 16:44			251.21	uS/cm			FA
pH	4/5/22 16:44	4/5/22 16:44			5.41	SU			FA
Temperature	4/5/22 16:44	4/5/22 16:44			16.57	C			FA
Turbidity	4/5/22 16:44	4/5/22 16:44			4.92	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 16:47
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC06980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.203	0.204	0.102	0.0850 to 0.115	103	70.0 to 130	0.491	20.0
BC06980	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.289	0.288	0.101	0.0850 to 0.115	124	70.0 to 130	0.347	20.0
BC06980	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0949	0.0954	0.0906	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC06980	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0960	0.0977	0.0880	0.0850 to 0.115	96.0	70.0 to 130	1.76	20.0
BC06980	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.108	0.108	0.0962	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.106	0.105	0.0995	0.0850 to 0.115	99.1	70.0 to 130	0.948	20.0
BC06980	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.180	0.177	0.0938	0.0850 to 0.115	91.9	70.0 to 130	1.68	20.0
BC06980	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.183	0.183	0.0946	0.0850 to 0.115	95.0	70.0 to 130	0.00	20.0
BC06980	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.0979	0.101	0.0910	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC06980	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0935	0.0949	0.0954	0.0850 to 0.115	93.5	70.0 to 130	1.49	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06980	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.0966	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06980	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0986	0.0995	0.0997	0.0850 to 0.115	98.6	70.0 to 130	0.909	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06980	Chloride	mg/L	-0.094	1.00	10.0	28.6	28.8	10.0	9.00 to 11.0	86.0	80.0 to 120	0.697	20.0
BC06980	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0991	0.100	0.0957	0.0850 to 0.115	98.9	70.0 to 130	0.904	20.0
BC06980	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06980	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.121	0.122	0.0980	0.0850 to 0.115	102	70.0 to 130	0.823	20.0
BC06980	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.123	0.121	0.105	0.0850 to 0.115	104	70.0 to 130	1.64	20.0
BC06980	Fluoride	mg/L	-0.0509	0.125	2.50	2.61	2.74	2.62	2.25 to 2.75	104	80.0 to 120	4.86	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 16:47
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC06980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06980	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06980	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.101	0.0997	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06980	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.606	0.619	0.0993	0.0850 to 0.115	89.0	70.0 to 130	2.12	20.0
BC06980	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.592	0.587	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.848	20.0
BC06980	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00398	0.00399	0.00397	0.00340 to 0.00460	99.5	70.0 to 130	0.251	20.0
BC06980	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.0983	0.0985	0.0981	0.0850 to 0.115	97.9	70.0 to 130	0.203	20.0
BC06980	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0937	0.0957	0.0983	0.0850 to 0.115	93.3	70.0 to 130	2.11	20.0
BC06980	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	13.0	13.0	9.93	8.50 to 11.5	99.3	70.0 to 130	0.00	20.0
BC06980	Potassium, Total	mg/L	0.0532	0.367	10.0	12.9	12.9	9.93	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BC06980	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.104	0.104	0.0983	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC06980	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.0985	0.0981	0.101	0.0850 to 0.115	97.9	70.0 to 130	0.407	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06980	Sulfate	mg/L	0.0895	2.0	80.0	132	134	19.7	18.0 to 22.0	100	80.0 to 120	1.50	20.0
BC06980	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.101	0.104	0.0850 to 0.115	104	70.0 to 130	2.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 16:47
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC06980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06980	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06980	Total Organic Carbon	mg/L	0.280	1.00	10.0	15.3	15.4	25.3		102	80.0 to 120	0.651	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 16:47
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC06980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-54H

Location Code: WMWGREAP
Collected: 4/5/22 17:50
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***			***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:10		1.015	0.462	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:46		20.3	95.6	mg/L	1.4007	8.12	RA
* Iron, Total	4/11/22 14:00	4/12/22 12:46		20.3	38.9	mg/L	0.1624	0.812	RA
* Lithium, Total	4/11/22 14:00	4/12/22 11:10		1.015	0.0584	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 11:10		1.015	19.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:10		1	15.2	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:10		1.015	7.10	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:10		1.015	20.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	4/11/22 15:57	4/12/22 11:01		1.015	0.453	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 13:27		20.3	79.0	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 13:27		20.3	37.2	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 11:01		1.015	0.0634	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 11:01		1.015	19.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 11:01		1	15.3	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 11:01		1.015	7.17	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 11:01		1.015	21.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 14:03		1.015	0.0410	mg/L	0.006090	0.01015	
* Arsenic, Total	4/8/22 12:07	4/11/22 14:03		1.015	0.401	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 14:03		1.015	0.180	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 14:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 14:03		1.015	0.000304	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 14:03		1.015	0.0265	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 15:00		5.075	1.86	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 14:03		1.015	0.00291	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 14:03		1.015	5.86	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-54H

Location Code: WMWGREAP
Collected: 4/5/22 17:50
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	0.414	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	0.185	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	0.0271	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:46		5.075	1.87	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	0.00314	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	5.94	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 16:07	4/11/22 16:07		1	0.217	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/18/22 12:35	4/18/22 15:45		1	285	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	419	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	285	mg/L		1	
Carbonate Alkalinity, (calc.)	4/18/22 12:35	4/18/22 15:45		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 08:55	4/12/22 08:55		1	2.09	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-54H

Location Code: WMWGREAP
Collected: 4/5/22 17:50
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:18	4/13/22 10:18		1	8.13	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:36	4/14/22 10:36		1	0.246	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 11:15	4/12/22 11:15		5	114	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/5/22 17:47	4/5/22 17:47			693.20	uS/cm			FA
pH	4/5/22 17:47	4/5/22 17:47			6.59	SU			FA
Temperature	4/5/22 17:47	4/5/22 17:47			16.80	C			FA
Turbidity	4/5/22 17:47	4/5/22 17:47			4.62	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:50
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC06981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.106	0.109	0.102	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC06985	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0935	0.0955	0.0906	0.0850 to 0.115	93.5	70.0 to 130	2.12	20.0
BC06985	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0896	0.0925	0.0880	0.0850 to 0.115	89.6	70.0 to 130	3.19	20.0
BC06985	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.101	0.104	0.0962	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC06985	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.100	0.0996	0.0995	0.0850 to 0.115	99.9	70.0 to 130	0.401	20.0
BC06985	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.134	0.133	0.0938	0.0850 to 0.115	96.9	70.0 to 130	0.749	20.0
BC06985	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.131	0.133	0.0946	0.0850 to 0.115	92.5	70.0 to 130	1.52	20.0
BC06985	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.101	0.101	0.0910	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06985	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0956	0.0945	0.0954	0.0850 to 0.115	95.6	70.0 to 130	1.16	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06981	Boron, Total	mg/L	-0.000287	0.0650	1.00	1.51	1.52	1.04	0.850 to 1.15	105	70.0 to 130	0.660	20.0
BC06985	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.102	0.0966	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0987	0.0967	0.0997	0.0850 to 0.115	98.7	70.0 to 130	2.05	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06981	Calcium, Total	mg/L	0.00368	0.152	5.00	96.8	95.1	4.96	4.25 to 5.75	24.0	70.0 to 130	1.77	20.0
BC06985	Chloride	mg/L	-0.108	1.00	10.0	11.5	11.6	9.68	9.00 to 11.0	100	80.0 to 120	0.866	20.0
BC06985	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0979	0.100	0.0957	0.0850 to 0.115	97.5	70.0 to 130	2.12	20.0
BC06985	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.0975	0.0982	0.100	0.0850 to 0.115	97.0	70.0 to 130	0.715	20.0
BC06985	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.100	0.104	0.0980	0.0850 to 0.115	99.9	70.0 to 130	3.92	20.0
BC06985	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.105	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Fluoride	mg/L	-0.0171	0.125	2.50	2.63	2.72	2.60	2.25 to 2.75	105	80.0 to 120	3.36	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:50
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC06981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Iron, Total	mg/L	0.000206	0.0176	0.2	40.0	39.7	0.202	0.170 to 0.230	550	70.0 to 130	0.753	20.0
BC06985	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC06985	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.107	0.0997	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06981	Lithium, Total	mg/L	0.000049	0.0154	0.200	0.266	0.263	0.202	0.170 to 0.230	104	70.0 to 130	1.13	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06981	Magnesium, Total	mg/L	-0.0119	0.0462	5.00	24.6	24.4	5.26	4.25 to 5.75	102	70.0 to 130	0.816	20.0
BC06985	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.103	0.106	0.0993	0.0850 to 0.115	101	70.0 to 130	2.87	20.0
BC06985	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.0997	0.101	0.101	0.0850 to 0.115	97.7	70.0 to 130	1.30	20.0
BC06985	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00396	0.00396	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	0.00	20.0
BC06985	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.101	0.103	0.0981	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06985	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0953	0.0959	0.0983	0.0850 to 0.115	95.3	70.0 to 130	0.628	20.0
BC06985	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	11.3	11.6	9.93	8.50 to 11.5	98.8	70.0 to 130	2.62	20.0
BC06985	Potassium, Total	mg/L	0.0532	0.367	10.0	11.3	11.2	9.93	8.50 to 11.5	98.4	70.0 to 130	0.889	20.0
BC06985	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.108	0.111	0.0983	0.0850 to 0.115	104	70.0 to 130	2.74	20.0
BC06985	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	96.4	70.0 to 130	0.995	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06981	Silicon, Total	mg/L	-0.000061	0.0440	1.00	7.99	8.05	1.02	0.850 to 1.15	89.0	70.0 to 130	0.748	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06981	Sodium, Total	mg/L	0.00116	0.0660	5.00	25.4	25.3	5.20	4.25 to 5.75	108	70.0 to 130	0.394	20.0
BC06985	Sulfate	mg/L	-0.229	2.0	20.0	51.6	52.8	19.4	18.0 to 22.0	96.5	80.0 to 120	2.30	20.0
BC06985	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:50
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC06981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.109	0.103	0.0850 to 0.115	102	70.0 to 130	6.64	20.0
BC06985	Total Organic Carbon	mg/L	0.250	1.00	10.0	8.81	9.99	21.6		88.1	80.0 to 120	12.6	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:50
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC06981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06981	Alkalinity, Total as CaCO3	mg/L					265	51.2	45.0 to 55.0			7.27	10.0
BC06981	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.03	0.224	1.88	1.80 to 2.20	90.6	90.0 to 110	3.17	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-53H

Location Code: WMWGREAP
Collected: 4/6/22 08:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06982

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:31		1.015	0.329	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:55		20.3	78.5	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:55		20.3	65.8	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 11:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 11:31		1.015	11.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:31		1	14.0	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:31		1.015	6.54	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:31		1.015	22.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 11:05		1.015	0.322	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 13:31		20.3	74.4	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 13:31		20.3	64.7	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 11:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 11:05		1.015	11.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 11:05		1	13.9	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 11:05		1.015	6.50	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 11:05		1.015	23.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.0512	mg/L	0.006090	0.01015	
* Arsenic, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.229	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.382	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 14:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.000467	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.00706	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.0000820	mg/L	0.000068	0.000203	J
* Manganese, Total	4/8/22 12:07	4/11/22 15:04		5.075	2.65	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 14:07		1.015	0.000823	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 14:07		1.015	4.57	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-53H

Location Code: WMWGREAP
Collected: 4/6/22 08:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06982

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	0.228	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	0.368	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	0.000276	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	0.00699	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:50		5.075	2.53	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	0.000856	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	4.41	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 17:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 16:16	4/11/22 16:16		1	0.320	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	225	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	428	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	225	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 09:11	4/12/22 09:11		1	5.42	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-53H

Location Code: WMWGREAP
Collected: 4/6/22 08:10
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06982

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:19	4/13/22 10:19		1	8.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:37	4/14/22 10:37		1	0.101	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 11:16	4/12/22 11:16		8	117	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/6/22 08:07	4/6/22 08:07			715.12	uS/cm			FA
pH	4/6/22 08:07	4/6/22 08:07			6.23	SU			FA
Temperature	4/6/22 08:07	4/6/22 08:07			16.97	C			FA
Turbidity	4/6/22 08:07	4/6/22 08:07			4.15	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC06982

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.106	0.109	0.102	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC06985	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0935	0.0955	0.0906	0.0850 to 0.115	93.5	70.0 to 130	2.12	20.0
BC06985	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0896	0.0925	0.0880	0.0850 to 0.115	89.6	70.0 to 130	3.19	20.0
BC06985	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.101	0.104	0.0962	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC06985	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.100	0.0996	0.0995	0.0850 to 0.115	99.9	70.0 to 130	0.401	20.0
BC06985	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.134	0.133	0.0938	0.0850 to 0.115	96.9	70.0 to 130	0.749	20.0
BC06985	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.131	0.133	0.0946	0.0850 to 0.115	92.5	70.0 to 130	1.52	20.0
BC06985	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.101	0.101	0.0910	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06985	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0956	0.0945	0.0954	0.0850 to 0.115	95.6	70.0 to 130	1.16	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06985	Boron, Total	mg/L	-0.000114	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC06985	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.102	0.0966	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0987	0.0967	0.0997	0.0850 to 0.115	98.7	70.0 to 130	2.05	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06985	Calcium, Total	mg/L	0.00612	0.152	5.00	27.5	27.3	4.84	4.25 to 5.75	100	70.0 to 130	0.730	20.0
BC06985	Chloride	mg/L	-0.108	1.00	10.0	11.5	11.6	9.68	9.00 to 11.0	100	80.0 to 120	0.866	20.0
BC06985	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0979	0.100	0.0957	0.0850 to 0.115	97.5	70.0 to 130	2.12	20.0
BC06985	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.0975	0.0982	0.100	0.0850 to 0.115	97.0	70.0 to 130	0.715	20.0
BC06985	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.100	0.104	0.0980	0.0850 to 0.115	99.9	70.0 to 130	3.92	20.0
BC06985	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.105	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Fluoride	mg/L	-0.0171	0.125	2.50	2.63	2.72	2.60	2.25 to 2.75	105	80.0 to 120	3.36	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC06982

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Iron, Total	mg/L	0.000379	0.0176	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC06985	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC06985	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.107	0.0997	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06985	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.201	0.204	0.204	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06985	Magnesium, Total	mg/L	-0.00594	0.0462	5.00	8.09	8.15	5.21	4.25 to 5.75	103	70.0 to 130	0.739	20.0
BC06985	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.103	0.106	0.0993	0.0850 to 0.115	101	70.0 to 130	2.87	20.0
BC06985	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.0997	0.101	0.101	0.0850 to 0.115	97.7	70.0 to 130	1.30	20.0
BC06985	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00396	0.00396	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	0.00	20.0
BC06985	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.101	0.103	0.0981	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06985	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0953	0.0959	0.0983	0.0850 to 0.115	95.3	70.0 to 130	0.628	20.0
BC06985	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	11.3	11.6	9.93	8.50 to 11.5	98.8	70.0 to 130	2.62	20.0
BC06985	Potassium, Total	mg/L	0.0532	0.367	10.0	11.3	11.2	9.93	8.50 to 11.5	98.4	70.0 to 130	0.889	20.0
BC06985	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.108	0.111	0.0983	0.0850 to 0.115	104	70.0 to 130	2.74	20.0
BC06985	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	96.4	70.0 to 130	0.995	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06985	Silicon, Total	mg/L	-0.000359	0.0440	1.00	4.30	4.28	1.00	0.850 to 1.15	100	70.0 to 130	0.466	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06985	Sodium, Total	mg/L	0.00582	0.0660	5.00	7.26	7.35	5.26	4.25 to 5.75	104	70.0 to 130	1.23	20.0
BC06985	Sulfate	mg/L	-0.229	2.0	20.0	51.6	52.8	19.4	18.0 to 22.0	96.5	80.0 to 120	2.30	20.0
BC06985	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC06982

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.109	0.103	0.0850 to 0.115	102	70.0 to 130	6.64	20.0
BC06985	Total Organic Carbon	mg/L	0.250	1.00	10.0	8.81	9.99	21.6		88.1	80.0 to 120	12.6	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:10
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC06982

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06985	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.56	0.890	1.88	1.80 to 2.20	84.1	90.0 to 110	1.36	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H

Location Code: WMWGREAP
Collected: 4/6/22 09:27
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06983

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:34		1.015	2.21	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 12:58		20.3	119	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 12:58		20.3	27.4	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 11:34		1.015	0.336	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 11:34		1.015	22.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:34		1	10.2	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:34		1.015	4.78	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:34		1.015	30.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 11:08		1.015	2.14	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 13:34		20.3	103	mg/L	1.4007	8.12	
* Iron, Dissolved	4/11/22 15:57	4/12/22 13:34		20.3	26.8	mg/L	0.1624	0.812	
* Lithium, Dissolved	4/11/22 15:57	4/12/22 11:08		1.015	0.355	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 11:08		1.015	23.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 11:08		1	10.4	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 11:08		1.015	4.86	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 11:08		1.015	30.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 14:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 14:10		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 14:10		1.015	0.0524	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 14:10		1.015	0.178	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 14:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 14:10		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 14:10		1.015	0.0173	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 15:07		5.075	4.23	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 14:10		1.015	0.00174	mg/L	0.000102	0.000203	
* Potassium, Total	4/8/22 12:07	4/11/22 14:10		1.015	11.2	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H

Location Code: WMWGREAP
Collected: 4/6/22 09:27
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06983

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 14:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 14:10		1.015	0.000594	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	0.0541	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	0.173	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	0.0179	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:54		5.075	4.13	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	0.00175	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	11.8	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 18:00		1.015	0.000580	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 16:16	4/11/22 16:16		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	369	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	448	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	369	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 09:30	4/12/22 09:30		1	1.78	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H

Location Code: WMWGREAP
Collected: 4/6/22 09:27
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06983

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:20	4/13/22 10:20		1	8.43	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:38	4/14/22 10:38		1	0.390	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 11:17	4/12/22 11:17		1	34.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/6/22 09:24	4/6/22 09:24			805.88	uS/cm			FA
pH	4/6/22 09:24	4/6/22 09:24			6.31	SU			FA
Temperature	4/6/22 09:24	4/6/22 09:24			19.59	C			FA
Turbidity	4/6/22 09:24	4/6/22 09:24			2.32	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:27
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC06983

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.106	0.109	0.102	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC06985	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0935	0.0955	0.0906	0.0850 to 0.115	93.5	70.0 to 130	2.12	20.0
BC06985	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0896	0.0925	0.0880	0.0850 to 0.115	89.6	70.0 to 130	3.19	20.0
BC06985	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.101	0.104	0.0962	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC06985	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.100	0.0996	0.0995	0.0850 to 0.115	99.9	70.0 to 130	0.401	20.0
BC06985	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.134	0.133	0.0938	0.0850 to 0.115	96.9	70.0 to 130	0.749	20.0
BC06985	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.131	0.133	0.0946	0.0850 to 0.115	92.5	70.0 to 130	1.52	20.0
BC06985	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.101	0.101	0.0910	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06985	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0956	0.0945	0.0954	0.0850 to 0.115	95.6	70.0 to 130	1.16	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06985	Boron, Total	mg/L	-0.000114	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC06985	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.102	0.0966	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0987	0.0967	0.0997	0.0850 to 0.115	98.7	70.0 to 130	2.05	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06985	Calcium, Total	mg/L	0.00612	0.152	5.00	27.5	27.3	4.84	4.25 to 5.75	100	70.0 to 130	0.730	20.0
BC06985	Chloride	mg/L	-0.108	1.00	10.0	11.5	11.6	9.68	9.00 to 11.0	100	80.0 to 120	0.866	20.0
BC06985	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0979	0.100	0.0957	0.0850 to 0.115	97.5	70.0 to 130	2.12	20.0
BC06985	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.0975	0.0982	0.100	0.0850 to 0.115	97.0	70.0 to 130	0.715	20.0
BC06985	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.100	0.104	0.0980	0.0850 to 0.115	99.9	70.0 to 130	3.92	20.0
BC06985	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.105	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Fluoride	mg/L	-0.0171	0.125	2.50	2.63	2.72	2.60	2.25 to 2.75	105	80.0 to 120	3.36	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:27
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC06983

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Iron, Total	mg/L	0.000379	0.0176	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC06985	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC06985	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.107	0.0997	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06985	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.201	0.204	0.204	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06985	Magnesium, Total	mg/L	-0.00594	0.0462	5.00	8.09	8.15	5.21	4.25 to 5.75	103	70.0 to 130	0.739	20.0
BC06985	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.103	0.106	0.0993	0.0850 to 0.115	101	70.0 to 130	2.87	20.0
BC06985	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.0997	0.101	0.101	0.0850 to 0.115	97.7	70.0 to 130	1.30	20.0
BC06985	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00396	0.00396	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	0.00	20.0
BC06985	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.101	0.103	0.0981	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06985	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0953	0.0959	0.0983	0.0850 to 0.115	95.3	70.0 to 130	0.628	20.0
BC06985	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	11.3	11.6	9.93	8.50 to 11.5	98.8	70.0 to 130	2.62	20.0
BC06985	Potassium, Total	mg/L	0.0532	0.367	10.0	11.3	11.2	9.93	8.50 to 11.5	98.4	70.0 to 130	0.889	20.0
BC06985	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.108	0.111	0.0983	0.0850 to 0.115	104	70.0 to 130	2.74	20.0
BC06985	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	96.4	70.0 to 130	0.995	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06985	Silicon, Total	mg/L	-0.000359	0.0440	1.00	4.30	4.28	1.00	0.850 to 1.15	100	70.0 to 130	0.466	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06985	Sodium, Total	mg/L	0.00582	0.0660	5.00	7.26	7.35	5.26	4.25 to 5.75	104	70.0 to 130	1.23	20.0
BC06985	Sulfate	mg/L	-0.229	2.0	20.0	51.6	52.8	19.4	18.0 to 22.0	96.5	80.0 to 120	2.30	20.0
BC06985	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:27
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC06983

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.109	0.103	0.0850 to 0.115	102	70.0 to 130	6.64	20.0
BC06985	Total Organic Carbon	mg/L	0.250	1.00	10.0	8.81	9.99	21.6		88.1	80.0 to 120	12.6	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:27
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC06983

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06985	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.56	0.890	1.88	1.80 to 2.20	84.1	90.0 to 110	1.36	15.0
BC06983	Solids, Dissolved	mg/L	0.0000	25.0			430	51.0	40.0 to 60.0			4.10	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-41H

Location Code: WMWGREAP
Collected: 4/6/22 11:58
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06984

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:37		1.015	0.607	mg/L	0.030000	0.1015	
* Calcium, Total	4/11/22 14:00	4/12/22 13:01		20.3	110	mg/L	1.4007	8.12	
* Iron, Total	4/11/22 14:00	4/12/22 13:01		20.3	9.97	mg/L	0.1624	0.812	
* Lithium, Total	4/11/22 14:00	4/12/22 11:37		1.015	0.0809	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/11/22 14:00	4/12/22 11:37		1.015	14.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:37		1	9.03	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:37		1.015	4.22	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:37		1.015	30.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 11:12		1.015	0.598	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/11/22 15:57	4/12/22 13:37		20.3	98.6	mg/L	1.4007	8.12	RA
* Iron, Dissolved	4/11/22 15:57	4/12/22 13:37		20.3	8.49	mg/L	0.1624	0.812	RA
* Lithium, Dissolved	4/11/22 15:57	4/12/22 11:12		1.015	0.0897	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 11:12		1.015	13.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 11:12		1	9.01	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 11:12		1.015	4.21	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 11:12		1.015	30.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 14:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.0471	mg/L	0.006090	0.01015	
* Arsenic, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.00197	mg/L	0.000081	0.000203	
* Barium, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.145	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 14:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.000525	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.0185	mg/L	0.000068	0.000203	
* Lead, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.0000751	mg/L	0.000068	0.000203	J
* Manganese, Total	4/8/22 12:07	4/11/22 15:11		5.075	4.07	mg/L	0.000761	0.001015	
* Molybdenum, Total	4/8/22 12:07	4/11/22 14:14		1.015	0.000131	mg/L	0.000102	0.000203	J
* Potassium, Total	4/8/22 12:07	4/11/22 14:14		1.015	6.27	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-41H

Location Code: WMWGREAP
Collected: 4/6/22 11:58
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06984

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 14:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/8/22 12:07	4/11/22 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	0.00165	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	0.134	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	0.000231	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	0.0181	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/11/22 15:57		5.075	3.93	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	0.000103	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	6.18	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/8/22 14:41	4/8/22 18:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/11/22 16:17	4/11/22 16:17		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	148	mg/L		0.1	HT
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	488	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	148	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/12/22 09:48	4/12/22 09:48		1	1.62	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-41H

Location Code: WMWGREAP
Collected: 4/6/22 11:58
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06984

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:22	4/13/22 10:22		1	13.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:40	4/14/22 10:40		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 11:18	4/12/22 11:18		16	236	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/6/22 11:55	4/6/22 11:55			723.95	uS/cm			FA
pH	4/6/22 11:55	4/6/22 11:55			6.16	SU			FA
Temperature	4/6/22 11:55	4/6/22 11:55			18.60	C			FA
Turbidity	4/6/22 11:55	4/6/22 11:55			8.36	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:58
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC06984

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.106	0.109	0.102	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC06985	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0935	0.0955	0.0906	0.0850 to 0.115	93.5	70.0 to 130	2.12	20.0
BC06985	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0896	0.0925	0.0880	0.0850 to 0.115	89.6	70.0 to 130	3.19	20.0
BC06985	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.101	0.104	0.0962	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC06985	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.100	0.0996	0.0995	0.0850 to 0.115	99.9	70.0 to 130	0.401	20.0
BC06985	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.134	0.133	0.0938	0.0850 to 0.115	96.9	70.0 to 130	0.749	20.0
BC06985	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.131	0.133	0.0946	0.0850 to 0.115	92.5	70.0 to 130	1.52	20.0
BC06985	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.101	0.101	0.0910	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06985	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0956	0.0945	0.0954	0.0850 to 0.115	95.6	70.0 to 130	1.16	20.0
BC06984	Boron, Dissolved	mg/L	0.00121	0.0650	1.00	1.64	1.61	1.03	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BC06985	Boron, Total	mg/L	-0.000114	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC06985	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.102	0.0966	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0987	0.0967	0.0997	0.0850 to 0.115	98.7	70.0 to 130	2.05	20.0
BC06984	Calcium, Dissolved	mg/L	-0.000892	0.152	5.00	97.5	108	5.16	4.25 to 5.75	-22.0	70.0 to 130	10.2	20.0
BC06985	Calcium, Total	mg/L	0.00612	0.152	5.00	27.5	27.3	4.84	4.25 to 5.75	100	70.0 to 130	0.730	20.0
BC06985	Chloride	mg/L	-0.108	1.00	10.0	11.5	11.6	9.68	9.00 to 11.0	100	80.0 to 120	0.866	20.0
BC06985	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0979	0.100	0.0957	0.0850 to 0.115	97.5	70.0 to 130	2.12	20.0
BC06985	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.0975	0.0982	0.100	0.0850 to 0.115	97.0	70.0 to 130	0.715	20.0
BC06985	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.100	0.104	0.0980	0.0850 to 0.115	99.9	70.0 to 130	3.92	20.0
BC06985	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.105	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Fluoride	mg/L	-0.0171	0.125	2.50	2.63	2.72	2.60	2.25 to 2.75	105	80.0 to 120	3.36	20.0
BC06984	Iron, Dissolved	mg/L	0.000288	0.0176	0.2	8.19	9.04	0.203	0.170 to 0.230	-150	70.0 to 130	9.87	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:58
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC06984

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Iron, Total	mg/L	0.000379	0.0176	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC06985	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC06985	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.107	0.0997	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BC06984	Lithium, Dissolved	mg/L	7.250E-05	0.0154	0.200	0.312	0.303	0.200	0.170 to 0.230	111	70.0 to 130	2.93	20.0
BC06985	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.201	0.204	0.204	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC06984	Magnesium, Dissolved	mg/L	-0.000801	0.0462	5.00	19.5	19.2	5.32	4.25 to 5.75	112	70.0 to 130	1.55	20.0
BC06985	Magnesium, Total	mg/L	-0.00594	0.0462	5.00	8.09	8.15	5.21	4.25 to 5.75	103	70.0 to 130	0.739	20.0
BC06985	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.103	0.106	0.0993	0.0850 to 0.115	101	70.0 to 130	2.87	20.0
BC06985	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.0997	0.101	0.101	0.0850 to 0.115	97.7	70.0 to 130	1.30	20.0
BC06985	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00396	0.00396	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	0.00	20.0
BC06985	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.101	0.103	0.0981	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06985	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0953	0.0959	0.0983	0.0850 to 0.115	95.3	70.0 to 130	0.628	20.0
BC06985	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	11.3	11.6	9.93	8.50 to 11.5	98.8	70.0 to 130	2.62	20.0
BC06985	Potassium, Total	mg/L	0.0532	0.367	10.0	11.3	11.2	9.93	8.50 to 11.5	98.4	70.0 to 130	0.889	20.0
BC06985	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.108	0.111	0.0983	0.0850 to 0.115	104	70.0 to 130	2.74	20.0
BC06985	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	96.4	70.0 to 130	0.995	20.0
BC06984	Silicon, Dissolved	mg/L	-0.000373	0.0440	1.00	5.30	5.23	1.03	0.850 to 1.15	109	70.0 to 130	1.33	20.0
BC06985	Silicon, Total	mg/L	-0.000359	0.0440	1.00	4.30	4.28	1.00	0.850 to 1.15	100	70.0 to 130	0.466	20.0
BC06984	Sodium, Dissolved	mg/L	-0.000457	0.0660	5.00	36.0	35.6	5.15	4.25 to 5.75	120	70.0 to 130	1.12	20.0
BC06985	Sodium, Total	mg/L	0.00582	0.0660	5.00	7.26	7.35	5.26	4.25 to 5.75	104	70.0 to 130	1.23	20.0
BC06985	Sulfate	mg/L	-0.229	2.0	20.0	51.6	52.8	19.4	18.0 to 22.0	96.5	80.0 to 120	2.30	20.0
BC06985	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:58
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC06984

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.109	0.103	0.0850 to 0.115	102	70.0 to 130	6.64	20.0
BC06985	Total Organic Carbon	mg/L	0.250	1.00	10.0	8.81	9.99	21.6		88.1	80.0 to 120	12.6	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 11:58
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC06984

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06985	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.56	0.890	1.88	1.80 to 2.20	84.1	90.0 to 110	1.36	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-35H

Location Code: WMWGREAP
Collected: 4/6/22 15:19
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06985

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/11/22 14:00	4/12/22 11:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/11/22 14:00	4/12/22 11:39		1.015	22.5	mg/L	0.070035	0.406	
* Iron, Total	4/11/22 14:00	4/12/22 11:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/11/22 14:00	4/12/22 11:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/11/22 14:00	4/12/22 11:39		1.015	2.95	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/11/22 14:00	4/12/22 11:39		1	7.06	mg/L			
Silicon, Total	4/11/22 14:00	4/12/22 11:39		1.015	3.30	mg/L	0.02030	0.25375	
* Sodium, Total	4/11/22 14:00	4/12/22 11:39		1.015	2.05	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	23.7	mg/L	0.070035	0.406	
* Iron, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	2.93	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/11/22 15:57	4/12/22 11:35		1	7.15	mg/L			
Silicon, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	3.34	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/11/22 15:57	4/12/22 11:35		1.015	2.00	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/8/22 12:07	4/11/22 14:17		1.015	0.000129	mg/L	0.000081	0.000203	J
* Barium, Total	4/8/22 12:07	4/11/22 14:17		1.015	0.0385	mg/L	0.000102	0.000203	
* Beryllium, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/8/22 12:07	4/11/22 14:17		1.015	0.000514	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/8/22 12:07	4/11/22 14:17		1.015	0.0000755	mg/L	0.000068	0.000203	J
* Lead, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/8/22 12:07	4/11/22 14:17		1.015	0.00197	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/8/22 12:07	4/11/22 14:17		1.015	1.46	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-35H

Location Code: WMWGREAP
Collected: 4/6/22 15:19
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06985

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/8/22 12:07	4/11/22 14:17		1.015	0.00364	mg/L	0.000508	0.001015	
* Thallium, Total	4/8/22 12:07	4/11/22 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	0.0000911	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	0.0371	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	0.000382	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	0.0000820	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	0.00196	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	1.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	0.00392	mg/L	0.000508	0.001015	
* Thallium, Dissolved	4/8/22 14:41	4/8/22 18:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	4/8/22 16:43	4/8/22 21:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/11/22 16:18	4/11/22 16:18		1	0.878	mg/L as N	0.20	0.3	R
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	4/21/22 13:07	4/21/22 14:14		1	40.9	mg/L		0.1	HT
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/12/22 10:28	4/13/22 13:15		1	92.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	40.9	mg/L			
Carbonate Alkalinity, (calc.)	4/21/22 13:07	4/21/22 14:14		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 10:06	4/12/22 10:06		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-35H

Location Code: WMWGREAP
Collected: 4/6/22 15:19
Customer ID:
Submittal Date: 4/7/22 13:12

Laboratory ID Number: BC06985

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:23	4/13/22 10:23		1	1.48	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:41	4/14/22 10:41		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 11:19	4/12/22 11:19		1	32.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/6/22 15:16	4/6/22 15:16			150.13	uS/cm			FA
pH	4/6/22 15:16	4/6/22 15:16			5.24	SU			FA
Temperature	4/6/22 15:16	4/6/22 15:16			19.54	C			FA
Turbidity	4/6/22 15:16	4/6/22 15:16			1.06	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:19
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC06985

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Aluminum, Dissolved	mg/L	0.000329	0.010	0.100	0.106	0.109	0.102	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC06985	Aluminum, Total	mg/L	0.000618	0.010	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Antimony, Dissolved	mg/L	0.000320	0.00100	0.100	0.0935	0.0955	0.0906	0.0850 to 0.115	93.5	70.0 to 130	2.12	20.0
BC06985	Antimony, Total	mg/L	0.000292	0.00100	0.100	0.0896	0.0925	0.0880	0.0850 to 0.115	89.6	70.0 to 130	3.19	20.0
BC06985	Arsenic, Dissolved	mg/L	0.0000170	0.000176	0.100	0.101	0.104	0.0962	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC06985	Arsenic, Total	mg/L	0.0000097	0.000176	0.100	0.100	0.0996	0.0995	0.0850 to 0.115	99.9	70.0 to 130	0.401	20.0
BC06985	Barium, Dissolved	mg/L	-0.0000075	0.00100	0.100	0.134	0.133	0.0938	0.0850 to 0.115	96.9	70.0 to 130	0.749	20.0
BC06985	Barium, Total	mg/L	-0.0000225	0.00100	0.100	0.131	0.133	0.0946	0.0850 to 0.115	92.5	70.0 to 130	1.52	20.0
BC06985	Beryllium, Dissolved	mg/L	0.0000040	0.000880	0.100	0.101	0.101	0.0910	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06985	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0956	0.0945	0.0954	0.0850 to 0.115	95.6	70.0 to 130	1.16	20.0
BC06985	Boron, Dissolved	mg/L	0.00210	0.0650	1.00	1.05	1.05	1.02	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC06985	Boron, Total	mg/L	-0.000114	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC06985	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.102	0.0966	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0987	0.0967	0.0997	0.0850 to 0.115	98.7	70.0 to 130	2.05	20.0
BC06985	Calcium, Dissolved	mg/L	-0.000733	0.152	5.00	28.9	28.9	5.19	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC06985	Calcium, Total	mg/L	0.00612	0.152	5.00	27.5	27.3	4.84	4.25 to 5.75	100	70.0 to 130	0.730	20.0
BC06985	Chloride	mg/L	-0.108	1.00	10.0	11.5	11.6	9.68	9.00 to 11.0	100	80.0 to 120	0.866	20.0
BC06985	Chromium, Dissolved	mg/L	-0.000111	0.000440	0.100	0.0979	0.100	0.0957	0.0850 to 0.115	97.5	70.0 to 130	2.12	20.0
BC06985	Chromium, Total	mg/L	0.0000705	0.000440	0.100	0.0975	0.0982	0.100	0.0850 to 0.115	97.0	70.0 to 130	0.715	20.0
BC06985	Cobalt, Dissolved	mg/L	0.0000011	0.000147	0.100	0.100	0.104	0.0980	0.0850 to 0.115	99.9	70.0 to 130	3.92	20.0
BC06985	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.105	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC06985	Fluoride	mg/L	-0.0171	0.125	2.50	2.63	2.72	2.60	2.25 to 2.75	105	80.0 to 120	3.36	20.0
BC06985	Iron, Dissolved	mg/L	-2.090E-05	0.0176	0.2	0.202	0.202	0.203	0.170 to 0.230	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:19
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC06985

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Iron, Total	mg/L	0.000379	0.0176	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC06985	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC06985	Lead, Total	mg/L	0.00001	0.000147	0.100	0.102	0.107	0.0997	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BC06985	Lithium, Dissolved	mg/L	0.000121	0.0154	0.200	0.206	0.205	0.201	0.170 to 0.230	103	70.0 to 130	0.487	20.0
BC06985	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.201	0.204	0.204	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC06985	Magnesium, Dissolved	mg/L	0.00120	0.0462	5.00	8.23	8.21	5.35	4.25 to 5.75	106	70.0 to 130	0.243	20.0
BC06985	Magnesium, Total	mg/L	-0.00594	0.0462	5.00	8.09	8.15	5.21	4.25 to 5.75	103	70.0 to 130	0.739	20.0
BC06985	Manganese, Dissolved	mg/L	0.0000525	0.0002	0.100	0.103	0.106	0.0993	0.0850 to 0.115	101	70.0 to 130	2.87	20.0
BC06985	Manganese, Total	mg/L	0.0000218	0.0002	0.100	0.0997	0.101	0.101	0.0850 to 0.115	97.7	70.0 to 130	1.30	20.0
BC06985	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00396	0.00396	0.00397	0.00340 to 0.00460	99.0	70.0 to 130	0.00	20.0
BC06985	Molybdenum, Dissolved	mg/L	0.0000066	0.0002	0.100	0.101	0.103	0.0981	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC06985	Molybdenum, Total	mg/L	0.0000039	0.0002	0.100	0.0953	0.0959	0.0983	0.0850 to 0.115	95.3	70.0 to 130	0.628	20.0
BC06985	Potassium, Dissolved	mg/L	-0.0233	0.367	10.0	11.3	11.6	9.93	8.50 to 11.5	98.8	70.0 to 130	2.62	20.0
BC06985	Potassium, Total	mg/L	0.0532	0.367	10.0	11.3	11.2	9.93	8.50 to 11.5	98.4	70.0 to 130	0.889	20.0
BC06985	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.108	0.111	0.0983	0.0850 to 0.115	104	70.0 to 130	2.74	20.0
BC06985	Selenium, Total	mg/L	0.0000783	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	96.4	70.0 to 130	0.995	20.0
BC06985	Silicon, Dissolved	mg/L	0.00158	0.0440	1.00	4.38	4.38	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC06985	Silicon, Total	mg/L	-0.000359	0.0440	1.00	4.30	4.28	1.00	0.850 to 1.15	100	70.0 to 130	0.466	20.0
BC06985	Sodium, Dissolved	mg/L	-5.380E-05	0.0660	5.00	7.33	7.27	5.19	4.25 to 5.75	107	70.0 to 130	0.822	20.0
BC06985	Sodium, Total	mg/L	0.00582	0.0660	5.00	7.26	7.35	5.26	4.25 to 5.75	104	70.0 to 130	1.23	20.0
BC06985	Sulfate	mg/L	-0.229	2.0	20.0	51.6	52.8	19.4	18.0 to 22.0	96.5	80.0 to 120	2.30	20.0
BC06985	Thallium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:19
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC06985

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Thallium, Total	mg/L	-0.0000021	0.000147	0.100	0.102	0.109	0.103	0.0850 to 0.115	102	70.0 to 130	6.64	20.0
BC06985	Total Organic Carbon	mg/L	0.250	1.00	10.0	8.81	9.99	21.6		88.1	80.0 to 120	12.6	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:19
Customer ID:
Delivery Date: 4/7/22 13:12

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC06985

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06985	Alkalinity, Total as CaCO3	mg/L					41.8	51.4	45.0 to 55.0			2.18	10.0
BC06985	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.56	0.890	1.88	1.80 to 2.20	84.1	90.0 to 110	1.36	15.0
BC06984	Solids, Dissolved	mg/L	1.00	25.0			499	52.0	40.0 to 60.0			2.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/10/2022
Version: 3.5
COA_CCR

Definitions

Project Number: WMWGREAP_1358

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
HT	Analysis was performed outside of the analytical holding time.
J	Reported value is an estimate because concentration is less than reporting limit.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. LBM 3/29/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-31	03/28/2022	12:31	7	Groundwater		BC06397
MW-33	03/28/2022	13:28	7	Groundwater		BC06398
MW-32	03/28/2022	14:24	7	Groundwater		BC06399
MW-34HA	03/28/2022	15:35	7	Groundwater		BC06400
MW-2	03/28/2022	16:31	7	Groundwater		BC06401
MW-2 dup	03/28/2022	16:31	7	Sample Duplicate		BC06402
MW-7	03/29/2022	08:48	7	Groundwater		BC06403
FB-3	03/29/2022	09:05	5	Field Blank		BC06404
MW-8	03/29/2022	09:43	7	Groundwater		BC06405

Relinquished By	Received By	Date/Time
		03/29/2022 10:14
		03/29/2022 14:06

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.3 degrees C
Sample Event	1358	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56581-100-3 & 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. Correcting bottle count for FB-2 to 5. LBM 3/29/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-29	03/28/2022	11:52	7	Groundwater		BC06388
MW-29 DUP	03/28/2022	11:52	7	Groundwater		BC06389
FB-1	03/28/2022	12:22	5	Field Blank		BC06390
MW-30	03/28/2022	13:25	7	Groundwater		BC06391
MW-27	03/28/2022	14:14	7	Groundwater		BC06392
MW-28	03/28/2022	15:03	7	Groundwater		BC06393
MW-23	03/28/2022	16:18	7	Groundwater		BC06394
MW-37H	03/29/2022	09:07	7	Groundwater		BC06395
FB-2	03/29/2022	09:15	5	Field Blank		BC06396

Relinquished By	Received By	Date/Time
		03/29/2022 14:08

SmarTroll ID	7586-41442-5-1
Turbidity ID	4677-23343-4-2
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.3 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	9772-56581-100-3 & 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	250 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM 3/31/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9	03/29/2022	10:56	7	Groundwater		BC06491
MW-9 dup	03/29/2022	10:56	7	Sample Duplicate		BC06492
MW-25	03/29/2022	12:16	7	Groundwater		BC06493
MW-6	03/29/2022	13:46	7	Groundwater		BC06494
MW-12	03/29/2022	16:00	7	Groundwater		BC06495
MW-11	03/30/2022	08:53	7	Groundwater		BC06496
MW-11 dup	03/30/2022	08:53	7	Sample Duplicate		BC06497
MW-21	03/30/2022	10:00	7	Groundwater		BC06498
MW-48H	03/30/2022	11:17	7	Groundwater		BC06499
MW-49H	03/30/2022	12:11	7	Groundwater		BC06500

Relinquished By	Received By	Date/Time
Dallas Gentry		03/30/2022 16:06

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.3 degrees C
Sample Event	1358	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM 3/31/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-45H	03/29/2022	14:28	7	Groundwater		BC06485
MW-45H Dup	03/29/2022	14:28	7	Sample Duplicate		BC06486
MW-15	03/29/2022	16:00	7	Groundwater		BC06487
MW-36H	03/30/2022	09:23	7	Groundwater		BC06488
MW-38H	03/30/2022	10:38	7	Groundwater		BC06489
MW-40H	03/30/2022	11:52	7	Groundwater		BC06490

Relinquished By	Received By	Date/Time
		03/30/2022 16:05

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.0 degrees C
Sample Event	1358	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. LBM 4/5/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26	04/04/2022	13:05	7	Groundwater		BC06745
MW-1	04/04/2022	14:14	7	Groundwater		BC06746
MW-24	04/04/2022	15:30	7	Groundwater		BC06747
MW-44H	04/04/2022	17:14	7	Groundwater		BC06748
FB-4	04/04/2022	17:45	5	Field Blank		BC06749

Relinquished By	Received By	Date/Time
		04/05/2022 10:35

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20010-2-2
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.3 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. LBM 4/5/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-14	04/04/2022	12:28	7	Groundwater		BC06750
MW-10	04/04/2022	14:40	7	Groundwater		BC06751
MW-17	04/04/2022	16:18	7	Groundwater		BC06752
MW-5	04/04/2022	18:31	7	Groundwater		BC06753

Relinquished By	Received By	Date/Time
	Laura	04/05/2022 10:34

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.3 degrees C
Sample Event	1358	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. Correcting time for MW-42H to 08:33 per bottles and TJD. LBM 4/7/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-4	04/05/2022	17:00	7	Groundwater		BC06971
MW-3	04/05/2022	18:10	7	Groundwater		BC06972
MW-42H	04/06/2022	08:33	7	Groundwater		BC06973
MW-43H	04/06/2022	09:38	7	Groundwater		BC06974
MW-13	04/06/2022	11:10	7	Groundwater		BC06975
FB-5	04/06/2022	11:35	5	Field Blank		BC06976
MW-16	04/06/2022	12:07	7	Groundwater		BC06977
MW-18	04/06/2022	15:10	7	Groundwater		BC06978
EB-1	04/06/2022	15:30	5	Equipment Blank		BC06979

Relinquished By	Received By	Date/Time
		04/07/2022 10:26

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.3 degrees C
Sample Event	1358	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field Services

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Updating sample # to MW-39H per DFG. N/N & TOC bottles pH<2. LBM 4/7/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-57H	04/05/2022	16:47	7	Groundwater		BC06980
MW-54H	04/05/2022	17:50	7	Groundwater		BC06981
MW-53H	04/06/2022	08:10	7	Groundwater		BC06982
MW-39H	04/06/2022	09:27	7	Groundwater		BC06983
MW-41H	04/06/2022	11:58	7	Groundwater		BC06984
MW-35H	04/06/2022	15:19	7	Groundwater		BC06985

Relinquished By	Received By	Date/Time
		04/07/2022 10:48

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.3 degrees C
Sample Event	1358	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD collected at MW-32

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-31	03/28/2022	12:31	1	Groundwater		BC06415
MW-33	03/28/2022	13:28	1	Groundwater		BC06416
MW-32	03/28/2022	14:24	3	Groundwater		BC06417
MW-34HA	03/28/2022	15:35	1	Groundwater		BC06418
MW-2	03/28/2022	16:31	1	Groundwater		BC06419
MW-2 dup	03/28/2022	16:31	1	Sample Duplicate		BC06420
MW-7	03/29/2022	08:48	1	Groundwater		BC06421
FB-3	03/29/2022	09:05	1	Field Blank		BC06422
MW-8	03/29/2022	09:43	1	Groundwater		BC06423

Relinquished By	Received By	Date/Time
		03/29/2022 10:14
		03/29/2022 14:05

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20010-2-2
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	9772-56581-100-3 & 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-29	03/28/2022	11:52	1	Groundwater		BC06406
MW-29 DUP	03/28/2022	11:52	1	Groundwater		BC06407
FB-1	03/28/2022	12:22	1	Field Blank		BC06408
MW-30	03/28/2022	13:25	1	Groundwater		BC06409
MW-27	03/28/2022	14:14	1	Groundwater		BC06410
MW-28	03/28/2022	15:03	1	Groundwater		BC06411
MW-23	03/28/2022	16:18	1	Groundwater		BC06412
MW-37H	03/29/2022	09:07	1	Groundwater		BC06413
FB-2	03/29/2022	09:15	1	Field Blank		BC06414

Relinquished By	Received By	Date/Time
		03/29/2022 14:07

SmarTroll ID	7586-41442-5-1
Turbidity ID	4677-23343-4-2
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	9772-56581-100-3 & 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date: Routine
Collector: Dallas Gentry

Results To: Dustin Brooks, Greg Dyer
Requested By: Greg Dyer
Location: Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-25

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9	03/29/2022	10:56	1	Groundwater		BC06507
MW-9 dup	03/29/2022	10:56	1	Sample Duplicate		BC06508
MW-25	03/29/2022	12:16	3	Groundwater		BC06509
MW-6	03/29/2022	13:46	1	Groundwater		BC06510
MW-12	03/29/2022	16:00	1	Groundwater		BC06511
MW-11	03/30/2022	08:53	1	Groundwater		BC06512
MW-11 dup	03/30/2022	08:53	1	Sample Duplicate		BC06513
MW-21	03/30/2022	10:00	1	Groundwater		BC06514
MW-48H	03/30/2022	11:17	1	Groundwater		BC06515
MW-49H	03/30/2022	12:11	1	Groundwater		BC06516

Relinquished By	Received By	Date/Time
		03/30/2022 16:06

SmarTroll ID: 7586-41443-5-2
Turbidity ID: 3901-20010-2-2
Sample Event: 1358

All metals and radiological bottles have pH < 2 ☑
Cooler Temp: N/A
Thermometer ID: N/A
pH Strip ID: 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD collected @ MW-36H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-45H	03/29/2022	14:28	1	Groundwater		BC06501
MW-45H Dup	03/29/2022	14:28	1	Sample Duplicate		BC06502
MW-15	03/29/2022	16:00	1	Groundwater		BC06503
MW-36H	03/30/2022	09:23	3	Groundwater		BC06504
MW-38H	03/30/2022	10:38	1	Groundwater		BC06505
MW-40H	03/30/2022	11:52	1	Groundwater		BC06506

Relinquished By	Received By	Date/Time
		03/30/2022 16:05

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26	04/04/2022	13:05	1	Groundwater		BC06754
MW-1	04/04/2022	14:14	1	Groundwater		BC06755
MW-24	04/04/2022	15:30	1	Groundwater		BC06756
MW-44H	04/04/2022	17:14	1	Groundwater		BC06757
FB-4	04/04/2022	17:45	1	Field Blank		BC06758

Relinquished By	Received By	Date/Time
		04/05/2022 10:35

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20010-2-2
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-14	04/04/2022	12:28	1	Groundwater		BC06759
MW-10	04/04/2022	14:40	1	Groundwater		BC06760
MW-17	04/04/2022	16:18	1	Groundwater		BC06761
MW-5	04/04/2022	18:31	1	Groundwater		BC06762

Relinquished By	Received By	Date/Time
		04/05/2022 10:34

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Correcting time for MW-42H to 08:33 per bottles and TJD. LBM 4/7/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-4	04/05/2022	17:00	1	Groundwater		BC06986
MW-3	04/05/2022	18:10	1	Groundwater		BC06987
MW-42H	04/06/2022	08:33	1	Groundwater		BC06988
MW-43H	04/06/2022	09:38	1	Groundwater		BC06989
MW-13	04/06/2022	11:10	1	Groundwater		BC06990
FB-5	04/06/2022	11:35	1	Field Blank		BC06991
MW-16	04/06/2022	12:07	1	Groundwater		BC06992
MW-18	04/06/2022	15:10	1	Groundwater		BC06993
EB-1	04/06/2022	15:30	1	Equipment Blank		BC06994

Relinquished By	Received By	Date/Time
		04/07/2022 10:26

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1358

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Updating sample # to MW-39H per DFG. LBM 4/7/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-57H	04/05/2022	16:47	1	Groundwater		BC06995
MW-54H	04/05/2022	17:50	1	Groundwater		BC06996
MW-53H	04/06/2022	08:10	1	Groundwater		BC06997
MW-39H	04/06/2022	09:27	1	Groundwater		BC06998
MW-41H	04/06/2022	11:58	1	Groundwater		BC06999
MW-35H	04/06/2022	15:19	1	Groundwater		BC07000

Relinquished By	Received By	Date/Time
Dallas Gentry		04/07/2022 10:48

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1358	Thermometer ID	N/A
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 17, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGREAP_1358
Pace Project No.: 30480057

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on April 12, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

CERTIFICATIONS

Project: WMWGREAP_1358
Pace Project No.: 30480057

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30480057001	**BC06406 MW-29**	Water	03/28/22 11:52	04/12/22 10:25
30480057002	**BC06407 MW-29 DUP**	Water	03/28/22 11:52	04/12/22 10:25
30480057003	**BC06408 FB-1**	Water	03/28/22 12:22	04/12/22 10:25
30480057004	**BC06409 MW-30**	Water	03/28/22 13:25	04/12/22 10:25
30480057005	**BC06410 MW-27**	Water	03/28/22 14:14	04/12/22 10:25
30480057006	**BC06411 MW-28**	Water	03/28/22 15:03	04/12/22 10:25
30480057007	**BC06412 MW-23**	Water	03/28/22 16:18	04/12/22 10:25
30480057008	**BC06413 MW-37H**	Water	03/29/22 09:07	04/12/22 10:25
30480057009	**BC06414 FB-2**	Water	03/29/22 09:15	04/12/22 10:25
30480057010	**BC06415 MW-31**	Water	03/28/22 12:31	04/12/22 10:25
30480057011	**BC06416 MW-33**	Water	03/28/22 13:28	04/12/22 10:25
30480057012	**BC06417 MW-32**	Water	03/28/22 14:24	04/12/22 10:25
30480057013	**BC06417 MW-32 MS**	Water	03/28/22 14:24	04/12/22 10:25
30480057014	**BC06417 MW-32 MSD**	Water	03/28/22 14:24	04/12/22 10:25
30480057015	**BC06418 MW-34HA**	Water	03/28/22 15:35	04/12/22 10:25
30480057016	**BC06419 MW-2**	Water	03/28/22 16:31	04/12/22 10:25
30480057017	**BC06420 MW-2 DUP**	Water	03/28/22 16:31	04/12/22 10:25
30480057018	**BC06421 MW-7**	Water	03/29/22 08:48	04/12/22 10:25
30480057019	**BC06422 FB-3**	Water	03/29/22 09:05	04/12/22 10:25
30480057020	**BC06423 MW-8**	Water	03/29/22 09:43	04/12/22 10:25
30480057021	**BC06501 MW-45H**	Water	03/29/22 14:28	04/12/22 10:25
30480057022	**BC06502 MW-45H DUP**	Water	03/29/22 14:28	04/12/22 10:25
30480057023	**BC06503 MW-15**	Water	03/29/22 16:00	04/12/22 10:25
30480057024	**BC06504 MW-36H**	Water	03/30/22 09:23	04/12/22 10:25
30480057025	**BC06504 MW-36H MS**	Water	03/30/22 09:23	04/12/22 10:25
30480057026	**BC06504 MW-36H MSD**	Water	03/30/22 09:23	04/12/22 10:25
30480057027	**BC06505 MW-38H**	Water	03/30/22 10:38	04/12/22 10:25
30480057028	**BC06506 MW-40H**	Water	03/30/22 11:52	04/12/22 10:25
30480057029	**BC06507 MW-9**	Water	03/29/22 10:56	04/12/22 10:25
30480057030	**BC06508 MW-9 DUP**	Water	03/29/22 10:56	04/12/22 10:25
30480057031	**BC06509 MW-25**	Water	03/29/22 12:16	04/12/22 10:25
30480057032	**BC06509 MW-25 MS**	Water	03/29/22 12:16	04/12/22 10:25
30480057033	**BC06509 MW-25 MSD**	Water	03/29/22 12:16	04/12/22 10:25
30480057034	**BC06510 MW-6**	Water	03/29/22 13:46	04/12/22 10:25
30480057035	**BC06511 MW-12**	Water	03/29/22 16:00	04/12/22 10:25
30480057036	**BC06512 MW-11**	Water	03/30/22 08:53	04/12/22 10:25
30480057037	**BC06513 MW-11 DUP**	Water	03/30/22 08:53	04/12/22 10:25

SAMPLE SUMMARY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30480057038	**BC06514 MW-21**	Water	03/30/22 10:00	04/12/22 10:25
30480057039	**BC06515 MW-48H**	Water	03/30/22 11:17	04/12/22 10:25
30480057040	**BC06516 MW-49H**	Water	03/30/22 12:11	04/12/22 10:25
30480057041	**BC06754 MW-26**	Water	04/04/22 13:05	04/12/22 10:25
30480057042	**BC06755 MW-1**	Water	04/04/22 14:14	04/12/22 10:25
30480057043	**BC06756 MW-24**	Water	04/04/22 15:30	04/12/22 10:25
30480057044	**BC06757 MW-44H**	Water	04/04/22 17:14	04/12/22 10:25
30480057045	**BC06758 FB-4**	Water	04/04/22 17:45	04/12/22 10:25
30480057046	**BC06759 MW-14**	Water	04/04/22 12:28	04/12/22 10:25
30480057047	**BC06760 MW-10**	Water	04/04/22 14:40	04/12/22 10:25
30480057048	**BC06761 MW-17**	Water	04/04/22 16:18	04/12/22 10:25
30480057049	**BC06762 MW-5**	Water	04/04/22 18:31	04/12/22 10:25
30480057050	**BC06986 PZ-4**	Water	04/05/22 17:00	04/12/22 10:25
30480057051	**BC06987 MW-3**	Water	04/05/22 18:10	04/12/22 10:25
30480057052	**BC06988 MW-42H**	Water	04/06/22 08:33	04/12/22 10:25
30480057053	**BC06989 MW-43H**	Water	04/06/22 09:38	04/12/22 10:25
30480057054	**BC06990 MW-13**	Water	04/06/22 11:10	04/12/22 10:25
30480057055	**BC06991 FB-5**	Water	04/06/22 11:35	04/12/22 10:25
30480057056	**BC06992 MW-16**	Water	04/06/22 12:07	04/12/22 10:25
30480057057	**BC06993 MW-18**	Water	04/06/22 15:10	04/12/22 10:25
30480057058	**BC06994 EB-1**	Water	04/06/22 15:30	04/12/22 10:25
30480057059	**BC06995 MW-57H**	Water	04/05/22 16:47	04/12/22 10:25
30480057060	**BC06996 MW-54H**	Water	04/05/22 17:50	04/12/22 10:25
30480057061	**BC06997 MW-53H**	Water	04/06/22 08:10	04/12/22 10:25
30480057062	**BC06998 MW-39H**	Water	04/06/22 09:27	04/12/22 10:25
30480057063	**BC06999 MW-41H**	Water	04/06/22 11:58	04/12/22 10:25
30480057064	**BC07000 MW-35H**	Water	04/06/22 15:19	04/12/22 10:25

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30480057001	**BC06406 MW-29**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057002	**BC06407 MW-29 DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057003	**BC06408 FB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057004	**BC06409 MW-30**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057005	**BC06410 MW-27**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057006	**BC06411 MW-28**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057007	**BC06412 MW-23**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057008	**BC06413 MW-37H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057009	**BC06414 FB-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057010	**BC06415 MW-31**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057011	**BC06416 MW-33**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057012	**BC06417 MW-32**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057013	**BC06417 MW-32 MS**	EPA 9315	JC2	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
30480057014	**BC06417 MW-32 MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30480057015	**BC06418 MW-34HA**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057016	**BC06419 MW-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057017	**BC06420 MW-2 DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057018	**BC06421 MW-7**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057019	**BC06422 FB-3**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057020	**BC06423 MW-8**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057021	**BC06501 MW-45H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057022	**BC06502 MW-45H DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057023	**BC06503 MW-15**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057024	**BC06504 MW-36H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057025	**BC06504 MW-36H MS**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
30480057026	**BC06504 MW-36H MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30480057027	**BC06505 MW-38H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057028	**BC06506 MW-40H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057029	**BC06507 MW-9**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057030	**BC06508 MW-9 DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057031	**BC06509 MW-25**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057032	**BC06509 MW-25 MS**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30480057033	**BC06509 MW-25 MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30480057034	**BC06510 MW-6**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057035	**BC06511 MW-12**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057036	**BC06512 MW-11**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057037	**BC06513 MW-11 DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057038	**BC06514 MW-21**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057039	**BC06515 MW-48H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30480057040	**BC06516 MW-49H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057041	**BC06754 MW-26**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057042	**BC06755 MW-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057043	**BC06756 MW-24**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057044	**BC06757 MW-44H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057045	**BC06758 FB-4**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057046	**BC06759 MW-14**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057047	**BC06760 MW-10**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057048	**BC06761 MW-17**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057049	**BC06762 MW-5**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057050	**BC06986 PZ-4**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057051	**BC06987 MW-3**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057052	**BC06988 MW-42H**	EPA 9315	JC2	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057053	**BC06989 MW-43H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057054	**BC06990 MW-13**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057055	**BC06991 FB-5**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057056	**BC06992 MW-16**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057057	**BC06993 MW-18**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057058	**BC06994 EB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057059	**BC06995 MW-57H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057060	**BC06996 MW-54H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057061	**BC06997 MW-53H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057062	**BC06998 MW-39H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057063	**BC06999 MW-41H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30480057064	**BC07000 MW-35H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: May 17, 2022

General Information:
64 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: May 17, 2022

General Information:
64 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: WMWGREAP_1358
Pace Project No.: 30480057

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: May 17, 2022

General Information:
58 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06406 MW-29 **Lab ID: 30480057001** Collected: 03/28/22 11:52 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0734U ± 0.127 (0.285)** **C:100% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.456U ± 0.365 (0.723)** **C:70% T:91%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.529U ± 0.492 (1.01)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06407 MW-29 DUP **Lab ID: 30480057002** Collected: 03/28/22 11:52 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.183U ± 0.174 (0.325)** **C:97% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.844 ± 0.443 (0.768)** **C:60% T:89%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.03U ± 0.617 (1.09)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06408 FB-1 **Lab ID: 30480057003** Collected: 03/28/22 12:22 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**-0.0174U ± 0.122 (0.358)** **C:103% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.677U ± 0.400 (0.725)** **C:64% T:89%**	pCi/L	04/29/22 11:15	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.677U ± 0.522 (1.08)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06409 MW-30 **Lab ID: 30480057004** Collected: 03/28/22 13:25 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.321 ± 0.198 (0.274)** **C:99% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.393U ± 0.403 (0.831)** **C:66% T:82%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.714U ± 0.601 (1.11)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06410 MW-27 **Lab ID: 30480057005** Collected: 03/28/22 14:14 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.207U ± 0.176 (0.311)** **C:101% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.526U ± 0.392 (0.770)** **C:68% T:90%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.733U ± 0.568 (1.08)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06411 MW-28 **Lab ID: 30480057006** Collected: 03/28/22 15:03 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0927U ± 0.176 (0.405)** **C:102% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.461U ± 0.346 (0.673)** **C:74% T:86%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.554U ± 0.522 (1.08)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06412 MW-23 **Lab ID: 30480057007** Collected: 03/28/22 16:18 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.426 ± 0.217 (0.272)** **C:100% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.564U ± 0.401 (0.778)** **C:72% T:84%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.990U ± 0.618 (1.05)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06413 MW-37H **Lab ID: 30480057008** Collected: 03/29/22 09:07 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0795U ± 0.134 (0.298)** **C:97% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.325U ± 0.370 (0.774)** **C:67% T:83%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.405U ± 0.504 (1.07)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06414 FB-2 **Lab ID: 30480057009** Collected: 03/29/22 09:15 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.170U ± 0.169 (0.315)** **C:101% T:NA**	pCi/L	05/03/22 10:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.469U ± 0.324 (0.609)** **C:69% T:91%**	pCi/L	04/29/22 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.639U ± 0.493 (0.924)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06415 MW-31 **Lab ID: 30480057010** Collected: 03/28/22 12:31 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.239U ± 0.177 (0.281)** **C:102% T:NA**	pCi/L	05/03/22 10:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.174U ± 0.286 (0.622)** **C:69% T:91%**	pCi/L	04/29/22 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.413U ± 0.463 (0.903)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06416 MW-33 **Lab ID: 30480057011** Collected: 03/28/22 13:28 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.730 ± 0.297 (0.323)** **C:99% T:NA**	pCi/L	05/03/22 10:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.627U ± 0.361 (0.651)** **C:73% T:89%**	pCi/L	04/29/22 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.36 ± 0.658 (0.974)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06417 MW-32 **Lab ID: 30480057012** Collected: 03/28/22 14:24 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.143U ± 0.165 (0.327)** **C:95% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.539U ± 0.357 (0.671)** **C:71% T:87%**	pCi/L	04/29/22 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.682U ± 0.522 (0.998)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06417 MW-32 MS **Lab ID: 30480057013** Collected: 03/28/22 14:24 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**95.79 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**91.37 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/29/22 11:16	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06417 MW-32 MSD **Lab ID: 30480057014** Collected: 03/28/22 14:24 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**95.07 %REC 0.75RPD ± NA (NA) C:NA T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**91.35 %REC 0.02 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/29/22 11:16	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06418 MW-34HA **Lab ID: 30480057015** Collected: 03/28/22 15:35 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0930U ± 0.153 (0.340)** **C:101% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.373U ± 0.299 (0.588)** **C:78% T:90%**	pCi/L	04/29/22 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.466U ± 0.452 (0.928)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06419 MW-2 **Lab ID: 30480057016** Collected: 03/28/22 16:31 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.419 ± 0.205 (0.236)** **C:101% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.326U ± 0.347 (0.716)** **C:74% T:83%**	pCi/L	04/29/22 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.745U ± 0.552 (0.952)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06420 MW-2 DUP **Lab ID: 30480057017** Collected: 03/28/22 16:31 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.558 ± 0.255 (0.299)** **C:102% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.676U ± 0.409 (0.753)** **C:72% T:85%**	pCi/L	04/29/22 14:19	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**1.23 ± 0.664 (1.05)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06421 MW-7 **Lab ID: 30480057018** Collected: 03/29/22 08:48 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.236U ± 0.217 (0.425)** **C:102% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.339U ± 0.320 (0.648)** **C:68% T:91%**	pCi/L	04/29/22 14:17	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.575U ± 0.537 (1.07)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06422 FB-3 **Lab ID: 30480057019** Collected: 03/29/22 09:05 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.302 ± 0.191 (0.279)** **C:103% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.585U ± 0.338 (0.608)** **C:73% T:97%**	pCi/L	04/29/22 14:17	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.887 ± 0.529 (0.887)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06423 MW-8 **Lab ID: 30480057020** Collected: 03/29/22 09:43 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.348 ± 0.219 (0.326)** **C:100% T:NA**	pCi/L	05/03/22 12:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.273U ± 0.405 (0.873)** **C:71% T:71%**	pCi/L	04/29/22 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.621U ± 0.624 (1.20)**	pCi/L	05/03/22 17:34	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06501 MW-45H **Lab ID: 30480057021** Collected: 03/29/22 14:28 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.282U ± 0.194 (0.307)** **C:101% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.379U ± 0.379 (0.780)** **C:71% T:87%**	pCi/L	04/29/22 14:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.661U ± 0.573 (1.09)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06502 MW-45H DUP | **Lab ID: 30480057022** | Collected: 03/29/22 14:28 | Received: 04/12/22 10:25 | Matrix: Water
PWS: | Site ID: | Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.299U ± 0.201 (0.319)** **C:97% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.531U ± 0.407 (0.793)** **C:68% T:80%**	pCi/L	04/29/22 14:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.830U ± 0.608 (1.11)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06503 MW-15 **Lab ID: 30480057023** Collected: 03/29/22 16:00 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0530U ± 0.143 (0.348)** **C:102% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.220U ± 0.346 (0.750)** **C:72% T:80%**	pCi/L	04/29/22 14:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.273U ± 0.489 (1.10)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06504 MW-36H **Lab ID: 30480057024** Collected: 03/30/22 09:23 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0491U ± 0.118 (0.284)** **C:105% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.125U ± 0.367 (0.826)** **C:76% T:74%**	pCi/L	04/29/22 14:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.174U ± 0.485 (1.11)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06504 MW-36H MS **Lab ID: 30480057025** Collected: 03/30/22 09:23 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**103.49 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**82.18 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/29/22 14:20	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06504 MW-36H MSD **Lab ID: 30480057026** Collected: 03/30/22 09:23 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**89.62 %REC 14.37RPD ± NA (NA) C:NA T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**91.23 %REC 10.44 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/29/22 14:20	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06505 MW-38H **Lab ID: 30480057027** Collected: 03/30/22 10:38 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0349U ± 0.149 (0.387)** **C:101% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.213U ± 0.377 (0.824)** **C:72% T:80%**	pCi/L	04/29/22 14:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.248U ± 0.526 (1.21)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06506 MW-40H **Lab ID: 30480057028** Collected: 03/30/22 11:52 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.376 ± 0.229 (0.333)** **C:98% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.369U ± 0.362 (0.742)** **C:70% T:85%**	pCi/L	04/29/22 14:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.745U ± 0.591 (1.08)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06507 MW-9 **Lab ID: 30480057029** Collected: 03/29/22 10:56 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.616 ± 0.266 (0.287)** **C:100% T:NA**	pCi/L	05/03/22 13:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.635U ± 0.375 (0.672)** **C:70% T:83%**	pCi/L	04/29/22 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.25 ± 0.641 (0.959)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06508 MW-9 DUP **Lab ID: 30480057030** Collected: 03/29/22 10:56 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.510 ± 0.225 (0.240)** **C:102% T:NA**	pCi/L	05/03/22 13:51	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0764U ± 0.305 (0.698)** **C:69% T:84%**	pCi/L	04/29/22 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.586U ± 0.530 (0.938)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06509 MW-25 **Lab ID: 30480057031** Collected: 03/29/22 12:16 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0255U ± 0.119 (0.309)** **C:99% T:NA**	pCi/L	05/04/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.344U ± 0.377 (0.789)** **C:77% T:79%**	pCi/L	04/29/22 12:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.370U ± 0.496 (1.10)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06509 MW-25 MS **Lab ID: 30480057032** Collected: 03/29/22 12:16 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**101.07 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/04/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**90.31 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/29/22 12:18	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06509 MW-25 MSD **Lab ID: 30480057033** Collected: 03/29/22 12:16 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**104.47 %REC 3.31RPD ± NA (NA) C:NA T:NA**	pCi/L	05/04/22 09:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**97.26 %REC 7.42 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/29/22 12:18	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06510 MW-6 **Lab ID: 30480057034** Collected: 03/29/22 13:46 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.282U ± 0.194 (0.315)** **C:100% T:NA**	pCi/L	05/03/22 13:51	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.112U ± 0.337 (0.760)** **C:68% T:84%**	pCi/L	04/29/22 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.394U ± 0.531 (1.08)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06511 MW-12 **Lab ID: 30480057035** Collected: 03/29/22 16:00 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0666U ± 0.128 (0.295)** **C:101% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.30 ± 0.524 (0.799)** **C:67% T:82%**	pCi/L	04/29/22 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.37 ± 0.652 (1.09)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06512 MW-11 **Lab ID: 30480057036** Collected: 03/30/22 08:53 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.205U ± 0.177 (0.313)** **C:97% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.392U ± 0.369 (0.748)** **C:68% T:84%**	pCi/L	04/29/22 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.597U ± 0.546 (1.06)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06513 MW-11 DUP **Lab ID: 30480057037** Collected: 03/30/22 08:53 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.255U ± 0.188 (0.314)** **C:95% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.453U ± 0.433 (0.887)** **C:69% T:81%**	pCi/L	04/29/22 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.708U ± 0.621 (1.20)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06514 MW-21 **Lab ID: 30480057038** Collected: 03/30/22 10:00 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.199U ± 0.171 (0.311)** **C:98% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.839 ± 0.398 (0.668)** **C:83% T:76%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.04 ± 0.569 (0.979)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06515 MW-48H **Lab ID: 30480057039** Collected: 03/30/22 11:17 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.167U ± 0.148 (0.257)** **C:98% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.148U ± 0.288 (0.634)** **C:79% T:87%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.315U ± 0.436 (0.891)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06516 MW-49H **Lab ID: 30480057040** Collected: 03/30/22 12:11 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.254U ± 0.174 (0.273)** **C:100% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0281U ± 0.290 (0.686)** **C:77% T:84%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.254U ± 0.464 (0.959)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06754 MW-26 **Lab ID: 30480057041** Collected: 04/04/22 13:05 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.131U ± 0.186 (0.405)** **C:100% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.419U ± 0.277 (0.517)** **C:79% T:91%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.550U ± 0.463 (0.922)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06755 MW-1 **Lab ID: 30480057042** Collected: 04/04/22 14:14 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.516 ± 0.256 (0.315)** **C:96% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.383U ± 0.291 (0.561)** **C:78% T:87%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.899 ± 0.547 (0.876)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06756 MW-24 **Lab ID: 30480057043** Collected: 04/04/22 15:30 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.394 ± 0.217 (0.296)** **C:99% T:NA**	pCi/L	05/03/22 15:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.04 ± 0.475 (0.779)** **C:76% T:71%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.43 ± 0.692 (1.08)**	pCi/L	05/05/22 16:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06757 MW-44H **Lab ID: 30480057044** Collected: 04/04/22 17:14 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.291U ± 0.191 (0.302)** **C:105% T:NA**	pCi/L	05/04/22 09:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.504U ± 0.341 (0.643)** **C:70% T:88%**	pCi/L	04/29/22 12:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.795U ± 0.532 (0.945)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06758 FB-4 **Lab ID: 30480057045** Collected: 04/04/22 17:45 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00419U ± 0.142 (0.377) C:102% T:NA**	pCi/L	05/04/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.374U ± 0.316 (0.629) C:74% T:86%**	pCi/L	04/29/22 12:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.378U ± 0.458 (1.01)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06759 MW-14 **Lab ID: 30480057046** Collected: 04/04/22 12:28 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.390 ± 0.233 (0.347)** **C:97% T:NA**	pCi/L	05/04/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.639U ± 0.358 (0.645)** **C:78% T:87%**	pCi/L	04/29/22 12:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.03 ± 0.591 (0.992)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06760 MW-10 **Lab ID: 30480057047** Collected: 04/04/22 14:40 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.682 ± 0.290 (0.304)** **C:101% T:NA**	pCi/L	05/04/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.40 ± 0.489 (0.692)** **C:81% T:81%**	pCi/L	04/29/22 12:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.08 ± 0.779 (0.996)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06761 MW-17 **Lab ID: 30480057048** Collected: 04/04/22 16:18 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.05 ± 0.351 (0.300)** **C:100% T:NA**	pCi/L	05/04/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.12 ± 0.419 (0.597)** **C:74% T:89%**	pCi/L	04/29/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.17 ± 0.770 (0.897)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06762 MW-5 **Lab ID: 30480057049** Collected: 04/04/22 18:31 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.720 ± 0.302 (0.362)** **C:100% T:NA**	pCi/L	05/04/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.406U ± 0.305 (0.587)** **C:77% T:83%**	pCi/L	04/29/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.13 ± 0.607 (0.949)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06986 PZ-4 **Lab ID: 30480057050** Collected: 04/05/22 17:00 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.466 ± 0.220 (0.248)** **C:101% T:NA**	pCi/L	05/04/22 11:20	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**1.26 ± 0.453 (0.644)** **C:76% T:86%**	pCi/L	04/29/22 12:21	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**1.73 ± 0.673 (0.892)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06987 MW-3	**Lab ID: 30480057051**	Collected: 04/05/22 18:10	Received: 04/12/22 10:25	Matrix: Water		
PWS:	Site ID:	Sample Type:				

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.190U ± 0.181 (0.341)** **C:103% T:NA**	pCi/L	05/04/22 11:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.342U ± 0.302 (0.606)** **C:73% T:90%**	pCi/L	04/29/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.532U ± 0.483 (0.947)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06988 MW-42H **Lab ID: 30480057052** Collected: 04/06/22 08:33 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.431 ± 0.247 (0.342)** **C:97% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.575U ± 0.342 (0.622)** **C:76% T:85%**	pCi/L	04/29/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.01 ± 0.589 (0.964)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06989 MW-43H **Lab ID: 30480057053** Collected: 04/06/22 09:38 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.805 ± 0.328 (0.349)** **C:100% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**1.03 ± 0.428 (0.677)** **C:77% T:86%**	pCi/L	04/29/22 12:21	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**1.84 ± 0.756 (1.03)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06990 MW-13 **Lab ID: 30480057054** Collected: 04/06/22 11:10 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0317U ± 0.117 (0.362)** **C:99% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.338U ± 0.326 (0.666)** **C:74% T:84%**	pCi/L	04/29/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.338U ± 0.443 (1.03)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06991 FB-5 **Lab ID: 30480057055** Collected: 04/06/22 11:35 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0695U ± 0.141 (0.326)** **C:102% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0832U ± 0.309 (0.751)** **C:68% T:84%**	pCi/L	04/22/22 12:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0695U ± 0.450 (1.08)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06992 MW-16 **Lab ID: 30480057056** Collected: 04/06/22 12:07 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.508 ± 0.248 (0.286)** **C:102% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.495U ± 0.392 (0.770)** **C:70% T:86%**	pCi/L	04/22/22 12:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.00U ± 0.640 (1.06)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06993 MW-18 **Lab ID: 30480057057** Collected: 04/06/22 15:10 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.228U ± 0.209 (0.410)** **C:104% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.949 ± 0.464 (0.773)** **C:56% T:90%**	pCi/L	04/22/22 11:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.18U ± 0.673 (1.18)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06994 EB-1 **Lab ID: 30480057058** Collected: 04/06/22 15:30 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0875U ± 0.128 (0.274)** **C:102% T:NA**	pCi/L	05/04/22 10:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.309U ± 0.396 (0.840)** **C:65% T:86%**	pCi/L	04/22/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.397U ± 0.524 (1.11)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06995 MW-57H **Lab ID: 30480057059** Collected: 04/05/22 16:47 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.378 ± 0.218 (0.290)** **C:99% T:NA**	pCi/L	05/04/22 13:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.311U ± 0.389 (0.822)** **C:68% T:79%**	pCi/L	04/22/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.689U ± 0.607 (1.11)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06996 MW-54H **Lab ID: 30480057060** Collected: 04/05/22 17:50 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.448 ± 0.230 (0.312)** **C:101% T:NA**	pCi/L	05/04/22 13:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.515U ± 0.403 (0.794)** **C:70% T:85%**	pCi/L	04/22/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.963U ± 0.633 (1.11)**	pCi/L	05/05/22 16:52	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06997 MW-53H **Lab ID: 30480057061** Collected: 04/06/22 08:10 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.576 ± 0.255 (0.291)** **C:93% T:NA**	pCi/L	05/04/22 13:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.01 ± 0.436 (0.671)** **C:68% T:86%**	pCi/L	04/22/22 12:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.59 ± 0.691 (0.962)**	pCi/L	05/09/22 17:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC06998 MW-39H **Lab ID: 30480057062** Collected: 04/06/22 09:27 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.331 ± 0.191 (0.279)** **C:104% T:NA**	pCi/L	05/04/22 13:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.906 ± 0.415 (0.668)** **C:69% T:88%**	pCi/L	04/22/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24 ± 0.606 (0.947)**	pCi/L	05/09/22 17:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

Sample: BC06999 MW-41H **Lab ID: 30480057063** Collected: 04/06/22 11:58 Received: 04/12/22 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.597 ± 0.243 (0.236)** **C:98% T:NA**	pCi/L	05/04/22 13:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.520U ± 0.392 (0.763)** **C:65% T:90%**	pCi/L	04/22/22 12:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.12 ± 0.635 (0.999)**	pCi/L	05/09/22 17:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

Sample: BC07000 MW-35H | **Lab ID: 30480057064** | Collected: 04/06/22 15:19 | Received: 04/12/22 10:25 | Matrix: Water
PWS: | Site ID: | Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.108U ± 0.133 (0.271)** **C:101% T:NA**	pCi/L	05/04/22 13:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.177U ± 0.344 (0.845)** **C:66% T:87%**	pCi/L	04/22/22 12:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.108U ± 0.477 (1.12)**	pCi/L	05/09/22 17:21	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

QC Batch: 499034
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057001, 30480057002, 30480057003, 30480057004, 30480057005, 30480057006, 30480057007, 30480057008, 30480057009, 30480057010, 30480057011, 30480057012, 30480057013, 30480057014, 30480057015, 30480057016, 30480057017, 30480057018, 30480057019, 30480057020

METHOD BLANK: 2415357
Matrix: Water

Associated Lab Samples: 30480057001, 30480057002, 30480057003, 30480057004, 30480057005, 30480057006, 30480057007, 30480057008, 30480057009, 30480057010, 30480057011, 30480057012, 30480057013, 30480057014, 30480057015, 30480057016, 30480057017, 30480057018, 30480057019, 30480057020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0127 ± 0.0638 (0.168) C:102% T:NA	pCi/L	05/03/22 10:43	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

QC Batch: 497369
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057001, 30480057002, 30480057003, 30480057004, 30480057005, 30480057006, 30480057007, 30480057008, 30480057009, 30480057010, 30480057011, 30480057012, 30480057013, 30480057014

METHOD BLANK: 2407526
Matrix: Water

Associated Lab Samples: 30480057001, 30480057002, 30480057003, 30480057004, 30480057005, 30480057006, 30480057007, 30480057008, 30480057009, 30480057010, 30480057011, 30480057012, 30480057013, 30480057014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0537 ± 0.301 (0.691) C:76% T:81%	pCi/L	04/29/22 11:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

QC Batch: 499045
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057031, 30480057032, 30480057033, 30480057044, 30480057045, 30480057046, 30480057047, 30480057048, 30480057049, 30480057050, 30480057051, 30480057052, 30480057053, 30480057054, 30480057055, 30480057056, 30480057057, 30480057058, 30480057059, 30480057060

METHOD BLANK: 2415372 Matrix: Water

Associated Lab Samples: 30480057031, 30480057032, 30480057033, 30480057044, 30480057045, 30480057046, 30480057047, 30480057048, 30480057049, 30480057050, 30480057051, 30480057052, 30480057053, 30480057054, 30480057055, 30480057056, 30480057057, 30480057058, 30480057059, 30480057060

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0190 ± 0.0593 (0.149) C:100% T:NA	pCi/L	05/04/22 09:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

QC Batch: 497374
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057031, 30480057032, 30480057033, 30480057038, 30480057039, 30480057040, 30480057041, 30480057042, 30480057043, 30480057044, 30480057045, 30480057046, 30480057047, 30480057048, 30480057049, 30480057050, 30480057051, 30480057052, 30480057053, 30480057054

METHOD BLANK: 2407529
Matrix: Water

Associated Lab Samples: 30480057031, 30480057032, 30480057033, 30480057038, 30480057039, 30480057040, 30480057041, 30480057042, 30480057043, 30480057044, 30480057045, 30480057046, 30480057047, 30480057048, 30480057049, 30480057050, 30480057051, 30480057052, 30480057053, 30480057054

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.287 ± 0.318 (0.665) C:85% T:81%	pCi/L	04/29/22 12:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

QC Batch:	499047	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057061, 30480057062, 30480057063, 30480057064

METHOD BLANK: 2415377 Matrix: Water

Associated Lab Samples: 30480057061, 30480057062, 30480057063, 30480057064

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0174 ± 0.0623 (0.159) C:101% T:NA	pCi/L	05/04/22 13:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

QC Batch: 497370
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057015, 30480057016, 30480057017, 30480057018, 30480057019, 30480057020, 30480057021, 30480057022, 30480057023, 30480057024, 30480057025, 30480057026, 30480057027, 30480057028, 30480057029, 30480057030, 30480057034, 30480057035, 30480057036, 30480057037

METHOD BLANK: 2407527
Matrix: Water

Associated Lab Samples: 30480057015, 30480057016, 30480057017, 30480057018, 30480057019, 30480057020, 30480057021, 30480057022, 30480057023, 30480057024, 30480057025, 30480057026, 30480057027, 30480057028, 30480057029, 30480057030, 30480057034, 30480057035, 30480057036, 30480057037

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.306 ± 0.297 (0.607) C:80% T:92%	pCi/L	04/29/22 14:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1358
Pace Project No.:	30480057

QC Batch:	499040	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30480057021, 30480057022, 30480057023, 30480057024, 30480057025, 30480057026, 30480057027, 30480057028, 30480057029, 30480057030, 30480057034, 30480057035, 30480057036, 30480057037, 30480057038, 30480057039, 30480057040, 30480057041, 30480057042, 30480057043

METHOD BLANK: 2415365 Matrix: Water

Associated Lab Samples: 30480057021, 30480057022, 30480057023, 30480057024, 30480057025, 30480057026, 30480057027, 30480057028, 30480057029, 30480057030, 30480057034, 30480057035, 30480057036, 30480057037, 30480057038, 30480057039, 30480057040, 30480057041, 30480057042, 30480057043

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0125 ± 0.0630 (0.166) C:103% T:NA	pCi/L	05/03/22 13:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1358
Pace Project No.: 30480057

QC Batch: 497375
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30480057055, 30480057056, 30480057057, 30480057058, 30480057059, 30480057060, 30480057061, 30480057062, 30480057063, 30480057064

METHOD BLANK: 2407530
Matrix: Water
Associated Lab Samples: 30480057055, 30480057056, 30480057057, 30480057058, 30480057059, 30480057060, 30480057061, 30480057062, 30480057063, 30480057064

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.174 ± 0.342 (0.754) C:74% T:82%	pCi/L	04/22/22 12:08	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project: WMWGREAP_1358
Pace Project No.: 30480057

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30480057001	**BC06406 MW-29**	EPA 9315	499034		
30480057002	**BC06407 MW-29 DUP**	EPA 9315	499034		
30480057003	**BC06408 FB-1**	EPA 9315	499034		
30480057004	**BC06409 MW-30**	EPA 9315	499034		
30480057005	**BC06410 MW-27**	EPA 9315	499034		
30480057006	**BC06411 MW-28**	EPA 9315	499034		
30480057007	**BC06412 MW-23**	EPA 9315	499034		
30480057008	**BC06413 MW-37H**	EPA 9315	499034		
30480057009	**BC06414 FB-2**	EPA 9315	499034		
30480057010	**BC06415 MW-31**	EPA 9315	499034		
30480057011	**BC06416 MW-33**	EPA 9315	499034		
30480057012	**BC06417 MW-32**	EPA 9315	499034		
30480057013	**BC06417 MW-32 MS**	EPA 9315	499034		
30480057014	**BC06417 MW-32 MSD**	EPA 9315	499034		
30480057015	**BC06418 MW-34HA**	EPA 9315	499034		
30480057016	**BC06419 MW-2**	EPA 9315	499034		
30480057017	**BC06420 MW-2 DUP**	EPA 9315	499034		
30480057018	**BC06421 MW-7**	EPA 9315	499034		
30480057019	**BC06422 FB-3**	EPA 9315	499034		
30480057020	**BC06423 MW-8**	EPA 9315	499034		
30480057021	**BC06501 MW-45H**	EPA 9315	499040		
30480057022	**BC06502 MW-45H DUP**	EPA 9315	499040		
30480057023	**BC06503 MW-15**	EPA 9315	499040		
30480057024	**BC06504 MW-36H**	EPA 9315	499040		
30480057025	**BC06504 MW-36H MS**	EPA 9315	499040		
30480057026	**BC06504 MW-36H MSD**	EPA 9315	499040		
30480057027	**BC06505 MW-38H**	EPA 9315	499040		
30480057028	**BC06506 MW-40H**	EPA 9315	499040		
30480057029	**BC06507 MW-9**	EPA 9315	499040		
30480057030	**BC06508 MW-9 DUP**	EPA 9315	499040		
30480057031	**BC06509 MW-25**	EPA 9315	499045		
30480057032	**BC06509 MW-25 MS**	EPA 9315	499045		
30480057033	**BC06509 MW-25 MSD**	EPA 9315	499045		
30480057034	**BC06510 MW-6**	EPA 9315	499040		
30480057035	**BC06511 MW-12**	EPA 9315	499040		
30480057036	**BC06512 MW-11**	EPA 9315	499040		
30480057037	**BC06513 MW-11 DUP**	EPA 9315	499040		
30480057038	**BC06514 MW-21**	EPA 9315	499040		
30480057039	**BC06515 MW-48H**	EPA 9315	499040		
30480057040	**BC06516 MW-49H**	EPA 9315	499040		
30480057041	**BC06754 MW-26**	EPA 9315	499040		
30480057042	**BC06755 MW-1**	EPA 9315	499040		
30480057043	**BC06756 MW-24**	EPA 9315	499040		
30480057044	**BC06757 MW-44H**	EPA 9315	499045		
30480057045	**BC06758 FB-4**	EPA 9315	499045		
30480057046	**BC06759 MW-14**	EPA 9315	499045		
30480057047	**BC06760 MW-10**	EPA 9315	499045		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30480057048	**BC06761 MW-17**	EPA 9315	499045		
30480057049	**BC06762 MW-5**	EPA 9315	499045		
30480057050	**BC06986 PZ-4**	EPA 9315	499045		
30480057051	**BC06987 MW-3**	EPA 9315	499045		
30480057052	**BC06988 MW-42H**	EPA 9315	499045		
30480057053	**BC06989 MW-43H**	EPA 9315	499045		
30480057054	**BC06990 MW-13**	EPA 9315	499045		
30480057055	**BC06991 FB-5**	EPA 9315	499045		
30480057056	**BC06992 MW-16**	EPA 9315	499045		
30480057057	**BC06993 MW-18**	EPA 9315	499045		
30480057058	**BC06994 EB-1**	EPA 9315	499045		
30480057059	**BC06995 MW-57H**	EPA 9315	499045		
30480057060	**BC06996 MW-54H**	EPA 9315	499045		
30480057061	**BC06997 MW-53H**	EPA 9315	499047		
30480057062	**BC06998 MW-39H**	EPA 9315	499047		
30480057063	**BC06999 MW-41H**	EPA 9315	499047		
30480057064	**BC07000 MW-35H**	EPA 9315	499047		
30480057001	**BC06406 MW-29**	EPA 9320	497369		
30480057002	**BC06407 MW-29 DUP**	EPA 9320	497369		
30480057003	**BC06408 FB-1**	EPA 9320	497369		
30480057004	**BC06409 MW-30**	EPA 9320	497369		
30480057005	**BC06410 MW-27**	EPA 9320	497369		
30480057006	**BC06411 MW-28**	EPA 9320	497369		
30480057007	**BC06412 MW-23**	EPA 9320	497369		
30480057008	**BC06413 MW-37H**	EPA 9320	497369		
30480057009	**BC06414 FB-2**	EPA 9320	497369		
30480057010	**BC06415 MW-31**	EPA 9320	497369		
30480057011	**BC06416 MW-33**	EPA 9320	497369		
30480057012	**BC06417 MW-32**	EPA 9320	497369		
30480057013	**BC06417 MW-32 MS**	EPA 9320	497369		
30480057014	**BC06417 MW-32 MSD**	EPA 9320	497369		
30480057015	**BC06418 MW-34HA**	EPA 9320	497370		
30480057016	**BC06419 MW-2**	EPA 9320	497370		
30480057017	**BC06420 MW-2 DUP**	EPA 9320	497370		
30480057018	**BC06421 MW-7**	EPA 9320	497370		
30480057019	**BC06422 FB-3**	EPA 9320	497370		
30480057020	**BC06423 MW-8**	EPA 9320	497370		
30480057021	**BC06501 MW-45H**	EPA 9320	497370		
30480057022	**BC06502 MW-45H DUP**	EPA 9320	497370		
30480057023	**BC06503 MW-15**	EPA 9320	497370		
30480057024	**BC06504 MW-36H**	EPA 9320	497370		
30480057025	**BC06504 MW-36H MS**	EPA 9320	497370		
30480057026	**BC06504 MW-36H MSD**	EPA 9320	497370		
30480057027	**BC06505 MW-38H**	EPA 9320	497370		
30480057028	**BC06506 MW-40H**	EPA 9320	497370		
30480057029	**BC06507 MW-9**	EPA 9320	497370		
30480057030	**BC06508 MW-9 DUP**	EPA 9320	497370		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30480057031	**BC06509 MW-25**	EPA 9320	497374		
30480057032	**BC06509 MW-25 MS**	EPA 9320	497374		
30480057033	**BC06509 MW-25 MSD**	EPA 9320	497374		
30480057034	**BC06510 MW-6**	EPA 9320	497370		
30480057035	**BC06511 MW-12**	EPA 9320	497370		
30480057036	**BC06512 MW-11**	EPA 9320	497370		
30480057037	**BC06513 MW-11 DUP**	EPA 9320	497370		
30480057038	**BC06514 MW-21**	EPA 9320	497374		
30480057039	**BC06515 MW-48H**	EPA 9320	497374		
30480057040	**BC06516 MW-49H**	EPA 9320	497374		
30480057041	**BC06754 MW-26**	EPA 9320	497374		
30480057042	**BC06755 MW-1**	EPA 9320	497374		
30480057043	**BC06756 MW-24**	EPA 9320	497374		
30480057044	**BC06757 MW-44H**	EPA 9320	497374		
30480057045	**BC06758 FB-4**	EPA 9320	497374		
30480057046	**BC06759 MW-14**	EPA 9320	497374		
30480057047	**BC06760 MW-10**	EPA 9320	497374		
30480057048	**BC06761 MW-17**	EPA 9320	497374		
30480057049	**BC06762 MW-5**	EPA 9320	497374		
30480057050	**BC06986 PZ-4**	EPA 9320	497374		
30480057051	**BC06987 MW-3**	EPA 9320	497374		
30480057052	**BC06988 MW-42H**	EPA 9320	497374		
30480057053	**BC06989 MW-43H**	EPA 9320	497374		
30480057054	**BC06990 MW-13**	EPA 9320	497374		
30480057055	**BC06991 FB-5**	EPA 9320	497375		
30480057056	**BC06992 MW-16**	EPA 9320	497375		
30480057057	**BC06993 MW-18**	EPA 9320	497375		
30480057058	**BC06994 EB-1**	EPA 9320	497375		
30480057059	**BC06995 MW-57H**	EPA 9320	497375		
30480057060	**BC06996 MW-54H**	EPA 9320	497375		
30480057061	**BC06997 MW-53H**	EPA 9320	497375		
30480057062	**BC06998 MW-39H**	EPA 9320	497375		
30480057063	**BC06999 MW-41H**	EPA 9320	497375		
30480057064	**BC07000 MW-35H**	EPA 9320	497375		
30480057001	**BC06406 MW-29**	Total Radium Calculation	501806		
30480057002	**BC06407 MW-29 DUP**	Total Radium Calculation	501806		
30480057003	**BC06408 FB-1**	Total Radium Calculation	501806		
30480057004	**BC06409 MW-30**	Total Radium Calculation	501806		
30480057005	**BC06410 MW-27**	Total Radium Calculation	501806		
30480057006	**BC06411 MW-28**	Total Radium Calculation	501806		
30480057007	**BC06412 MW-23**	Total Radium Calculation	501806		
30480057008	**BC06413 MW-37H**	Total Radium Calculation	501806		
30480057009	**BC06414 FB-2**	Total Radium Calculation	501806		
30480057010	**BC06415 MW-31**	Total Radium Calculation	501806		
30480057011	**BC06416 MW-33**	Total Radium Calculation	501806		
30480057012	**BC06417 MW-32**	Total Radium Calculation	501806		
30480057015	**BC06418 MW-34HA**	Total Radium Calculation	501806		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1358
Pace Project No.: 30480057

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30480057016	**BC06419 MW-2**	Total Radium Calculation	501806		
30480057017	**BC06420 MW-2 DUP**	Total Radium Calculation	501806		
30480057018	**BC06421 MW-7**	Total Radium Calculation	501806		
30480057019	**BC06422 FB-3**	Total Radium Calculation	501806		
30480057020	**BC06423 MW-8**	Total Radium Calculation	501806		
30480057021	**BC06501 MW-45H**	Total Radium Calculation	502489		
30480057022	**BC06502 MW-45H DUP**	Total Radium Calculation	502489		
30480057023	**BC06503 MW-15**	Total Radium Calculation	502489		
30480057024	**BC06504 MW-36H**	Total Radium Calculation	502489		
30480057027	**BC06505 MW-38H**	Total Radium Calculation	502489		
30480057028	**BC06506 MW-40H**	Total Radium Calculation	502489		
30480057029	**BC06507 MW-9**	Total Radium Calculation	502489		
30480057030	**BC06508 MW-9 DUP**	Total Radium Calculation	502489		
30480057031	**BC06509 MW-25**	Total Radium Calculation	502488		
30480057034	**BC06510 MW-6**	Total Radium Calculation	502489		
30480057035	**BC06511 MW-12**	Total Radium Calculation	502489		
30480057036	**BC06512 MW-11**	Total Radium Calculation	502489		
30480057037	**BC06513 MW-11 DUP**	Total Radium Calculation	502489		
30480057038	**BC06514 MW-21**	Total Radium Calculation	502489		
30480057039	**BC06515 MW-48H**	Total Radium Calculation	502489		
30480057040	**BC06516 MW-49H**	Total Radium Calculation	502489		
30480057041	**BC06754 MW-26**	Total Radium Calculation	502489		
30480057042	**BC06755 MW-1**	Total Radium Calculation	502489		
30480057043	**BC06756 MW-24**	Total Radium Calculation	502489		
30480057044	**BC06757 MW-44H**	Total Radium Calculation	502488		
30480057045	**BC06758 FB-4**	Total Radium Calculation	502488		
30480057046	**BC06759 MW-14**	Total Radium Calculation	502488		
30480057047	**BC06760 MW-10**	Total Radium Calculation	502488		
30480057048	**BC06761 MW-17**	Total Radium Calculation	502488		
30480057049	**BC06762 MW-5**	Total Radium Calculation	502488		
30480057050	**BC06986 PZ-4**	Total Radium Calculation	502488		
30480057051	**BC06987 MW-3**	Total Radium Calculation	502488		
30480057052	**BC06988 MW-42H**	Total Radium Calculation	502488		
30480057053	**BC06989 MW-43H**	Total Radium Calculation	502488		
30480057054	**BC06990 MW-13**	Total Radium Calculation	502488		
30480057055	**BC06991 FB-5**	Total Radium Calculation	502488		
30480057056	**BC06992 MW-16**	Total Radium Calculation	502488		
30480057057	**BC06993 MW-18**	Total Radium Calculation	502488		
30480057058	**BC06994 EB-1**	Total Radium Calculation	502488		
30480057059	**BC06995 MW-57H**	Total Radium Calculation	502488		
30480057060	**BC06996 MW-54H**	Total Radium Calculation	502488		
30480057061	**BC06997 MW-53H**	Total Radium Calculation	503153		
30480057062	**BC06998 MW-39H**	Total Radium Calculation	503153		
30480057063	**BC06999 MW-41H**	Total Radium Calculation	503153		
30480057064	**BC07000 MW-35H**	Total Radium Calculation	503153		

WO#: 30480057

30480057

CH cument

The C be completed accurately.

Page : 1 Of 8

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1358

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06406	MW-29	APCO-GC-AP-MW-29	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	11:52	1			X		X	X	X			001
2	BC06407	MW-29 DUP	APCO-GC-AP-MW-29	APCO_GreeneCounty_AshPond	X			GW	G	3/28/2022	11:52	1			X		X	X	X			002
3	BC06408	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	12:22	1			X		X	X	X			003
4	BC06409	MW-30	APCO-GC-AP-MW-30	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	13:25	1			X		X	X	X			004
5	BC06410	MW-27	APCO-GC-AP-MW-27	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	14:14	1			X		X	X	X			005
6	BC06411	MW-28	APCO-GC-AP-MW-28	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	15:03	1			X		X	X	X			006
7	BC06412	MW-23	APCO-GC-AP-MW-23	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	16:18	1			X		X	X	X			007
8	BC06413	MW-37H	APCO-GC-AP-MW-37H	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	9:07	1			X		X	X	X			008
9	BC06414	FB-2	APCO-GC-AP-FB-02	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	9:15	1			X		X	X	X			009
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	4/7/2022	16:00	[illegible]	4/12/22	1025	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Goggins

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30480057

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 8

Section A
Required Client Information:

Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: lbmidkif@southernco.com
Phone: 205-664-6197 Fax:
Requested Due Date: Normal

Section B
Required Project Information:

Report To: Laura Midkiff
Copy To: Brooke Caton & Renee Jernigan
Purchase Order #: APC10755638
Project Name: Plant Greene County Ash Pond
Project Number: WMWGREAP_1358

Section C
Invoice Information:

Attention: Laura Midkiff
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 16788

Regulatory Agency:
State / Location: AL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06415	MW-31	APCO-GC-AP-MW-31	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	12:31	1			X		X	X	X			010
2	BC06416	MW-33	APCO-GC-AP-MW-33	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	13:28	1			X		X	X	X			011
3	BC06417	MW-32	APCO-GC-AP-MW-32	APCO_GreeneCounty_AshPond		X		GW	G	3/28/2022	14:24	3			X		X	X	X			012,013014
4	BC06418	MW-34HA	APCO-GC-AP-MW-34HA	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	15:35	1			X		X	X	X			015
5	BC06419	MW-2	APCO-GC-AP-MW-2	APCO_GreeneCounty_AshPond				GW	G	3/28/2022	16:31	1			X		X	X	X			016
6	BC06420	MW-2 DUP	APCO-GC-AP-MW-2	APCO_GreeneCounty_AshPond	X			GW	G	3/28/2022	16:31	1			X		X	X	X			017
7	BC06421	MW-7	APCO-GC-AP-MW-7	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	8:48	1			X		X	X	X			018
8	BC06422	FB-3	APCO-GC-AP-FB-03	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	9:05	1			X		X	X	X			019
9	BC06423	MW-8	APCO-GC-AP-MW-8	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	9:43	1			X		X	X	X			020
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	4/7/2022	16:00	RMJ Rdb	4/12/22	1025				

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dallas Gentry
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30480057

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 3 **Of** 8

Section A
Required Client Information:
Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: lbmidkif@southernco.com
Phone: 205-664-6197 Fax:
Requested Due Date: Normal

Section B
Required Project Information:
Report To: Laura Midkiff
Copy To: Brooke Caton & Renee Jernigan
Purchase Order #: APC10755638
Project Name: Plant Greene County Ash Pond
Project Number: WMWGREAP_1358

Section C
Invoice Information:
Attention: Laura Midkiff
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 16788

Regulatory Agency

State / Location
AL

SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Preservatives	Preservatives	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BC06501	MW-45H	APCO-GC-AP-MW-45H	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	14:28	1			X				X	X	X				021
2	BC06502	MW-45H DUP	APCO-GC-AP-MW-45H	APCO_GreeneCounty_AshPond	X			GW	G	3/29/2022	14:28	1			X				X	X	X				022
3	BC06503	MW-15	APCO-GC-AP-MW-15	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	16:00	1			X				X	X	X				023
4	BC06504	MW-36H	APCO-GC-AP-MW-36H	APCO_GreeneCounty_AshPond		X		GW	G	3/30/2022	9:23	3			X				X	X	X				024,025,026
5	BC06505	MW-38H	APCO-GC-AP-MW-38H	APCO_GreeneCounty_AshPond				GW	G	3/30/2022	10:38	1			X				X	X	X				027
6	BC06506	MW-40H	APCO-GC-AP-MW-40H	APCO_GreeneCounty_AshPond				GW	G	3/30/2022	11:52	1			X				X	X	X				028
7																									
8																									
9																									
10																									
11																									
12																									

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	4/7/2022	16:00		4/12/22	1025				

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: TJ Daugherty
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30480057 mJS
4-12-22

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 4 Of 8

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1358

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06507	MW-9	APCO-GC-AP-MW-9	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	10:56	1			X		X	X	X			029
2	BC06508	MW-9 DUP	APCO-GC-AP-MW-9	APCO_GreeneCounty_AshPond	X			GW	G	3/29/2022	10:56	1			X		X	X	X			030
3	BC06509	MW-25	APCO-GC-AP-MW-25	APCO_GreeneCounty_AshPond		X		GW	G	3/29/2022	12:16	3			X		X	X	X			031,032,033
4	BC06510	MW-6	APCO-GC-AP-MW-6	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	13:46	1			X		X	X	X			034
5	BC06511	MW-12	APCO-GC-AP-MW-12	APCO_GreeneCounty_AshPond				GW	G	3/29/2022	16:00	1			X		X	X	X			035
6	BC06512	MW-11	APCO-GC-AP-MW-11	APCO_GreeneCounty_AshPond				GW	G	3/30/2022	8:53	1			X		X	X	X			036
7	BC06513	MW-11 DUP	APCO-GC-AP-MW-11	APCO_GreeneCounty_AshPond	X			GW	G	3/30/2022	8:53	1			X		X	X	X			037
8	BC06514	MW-21	APCO-GC-AP-MW-21	APCO_GreeneCounty_AshPond				GW	G	3/30/2022	10:00	1			X		X	X	X			038
9	BC06515	MW-48H	APCO-GC-AP-MW-48H	APCO_GreeneCounty_AshPond				GW	G	3/30/2022	11:17	1			X		X	X	X			039
10	BC06516	MW-49H	APCO-GC-AP-MW-49H	APCO_GreeneCounty_AshPond				GW	G	3/30/2022	12:11	1			X		X	X	X			040
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	4/7/2022	16:00		4/12/22	1025	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dallas Gentry
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

3048057

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 5 Of 8

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1358

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BC06754	MW-26	APCO-GC-AP-MW-26	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	13:05	1			X				X	X	X				041
2	BC06755	MW-1	APCO-GC-AP-MW-1	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	14:14	1			X				X	X	X				042
3	BC06756	MW-24	APCO-GC-AP-MW-24	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	15:30	1			X				X	X	X				043
4	BC06757	MW-44H	APCO-GC-AP-MW-44H	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	17:14	1			X				X	X	X				044
5	BC06758	FB-4	APCO-GC-AP-FB-04	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	17:45	1			X				X	X	X				045
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	4/7/2022	16:00		4/12/22	1025	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

3048057

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 6 Of 8

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1358

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06759	MW-14	APCO-GC-AP-MW-14	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	12:28	1			X		X	X	X			046
2	BC06760	MW-10	APCO-GC-AP-MW-10	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	14:40	1			X		X	X	X			~~046~~ 047 mJS 4-12-22
3	BC06761	MW-17	APCO-GC-AP-MW-17	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	16:18	1			X		X	X	X			048
4	BC06762	MW-5	APCO-GC-AP-MW-5	APCO_GreeneCounty_AshPond				GW	G	4/4/2022	18:31	1			X		X	X	X			049
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	4/7/2022	16:00		4/12/22	1025	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TJ Daugherty

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30480057

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 7 Of 8

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1358

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06986	PZ-4	APCO-GC-AP-PZ-4	APCO_GreeneCounty_AshPond				GW	G	4/5/2022	17:00	1			X		X	X	X			050
2	BC06987	MW-3	APCO-GC-AP-MW-3	APCO_GreeneCounty_AshPond				GW	G	4/5/2022	18:10	1			X		X	X	X			051
3	BC06988	MW-42H	APCO-GC-AP-MW-42H	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	8:33	1			X		X	X	X			052
4	BC06989	MW-43H	APCO-GC-AP-MW-43H	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	9:38	1			X		X	X	X			053
5	BC06990	MW-13	APCO-GC-AP-MW-13	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	11:10	1			X		X	X	X			054
6	BC06991	FB-5	APCO-GC-AP-FB-05	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	11:35	1			X		X	X	X			055
7	BC06992	MW-16	APCO-GC-AP-MW-16	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	12:07	1			X		X	X	X			056
8	BC06993	MW-18	APCO-GC-AP-MW-18	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	15:10	1			X		X	X	X			057
9	BC06994	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	15:30	1			X		X	X	X			058
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	4/7/2022	16:00		4/12/22	1025	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TJ Daugherty

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30486057

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 8 Of 8

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197
Fax:	
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1358

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME		# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BC06995	MW-57H	APCO-GC-AP-MW-57H	APCO_GreeneCounty_AshPond				GW	G	4/5/2022	16:47		1			X				X	X	X				059
2	BC06996	MW-54H	APCO-GC-AP-MW-54H	APCO_GreeneCounty_AshPond				GW	G	4/5/2022	17:50		1			X				X	X	X				060
3	BC06997	MW-53H	APCO-GC-AP-MW-53H	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	8:10		1			X				X	X	X				061
4	BC06998	MW-39H	APCO-GC-AP-MW-39H	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	9:27		1			X				X	X	X				062
5	BC06999	MW-41H	APCO-GC-AP-MW-41H	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	11:58		1			X				X	X	X				063
6	BC07000	MW-35H	APCO-GC-AP-MW-35H	APCO_GreeneCounty_AshPond				GW	G	4/6/2022	15:19		1			X				X	X	X				064
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	4/7/2022	16:00		4/12/22	1025				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Alabama Power Project # 30480057

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ______

Tracking #: 570165848691

Label MJS

LIMS Login MJS

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Thermometer Used N/A **Type of Ice:** Wet Blue [✓ None]

Cooler Temperature **Observed Temp** — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot# 10D2811

Date and Initials of person examining contents: MJS 4-13-22

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. No Signature
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation.	✓		✓	16. MJS 4-13-22 pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix				
All containers meet method preservation requirements.	✓			Initial when completed MJS Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: MJS Date: 4-13-22 Survey Meter SN: 1563

Client Notification/ Resolution:

Person Contacted: ______ Date/Time: ______ Contacted By: ______

Comments/ Resolution: ______

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 4/26/2022
Worklist: 66270
Matrix: DW

Method Blank Assessment	
MB Sample ID	2415357
MB concentration:	0.013
M/B Counting Uncertainty:	0.064
MB MDC:	0.168
MB Numerical Performance Indicator:	0.39
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS66270	**LCSD66270**
Count Date:	5/3/2022	5/3/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.027	24.027
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.501
Target Conc. (pCi/L, g, F):	4.800	4.792
Uncertainty (Calculated):	0.058	0.058
Result (pCi/L, g, F):	4.715	4.178
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.478	0.441
Numerical Performance Indicator:	-0.35	-2.70
Percent Recovery:	98.23%	87.19%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/28/2022	
Sample I.D.	30480057012	
Sample MS I.D.	30480057013	
Sample MSD I.D.	30480057014	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.029	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.321	
MS Target Conc.(pCi/L, g, F):	14.977	
MSD Aliquot (L, g, F):	0.316	
MSD Target Conc. (pCi/L, g, F):	15.190	
MS Spike Uncertainty (calculated):	0.180	
MSD Spike Uncertainty (calculated):	0.182	
Sample Result:	0.143	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.164	
Sample Matrix Spike Result:	14.489	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.043	
Sample Matrix Spike Duplicate Result:	14.584	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.071	
MS Numerical Performance Indicator:	-1.155	
MSD Numerical Performance Indicator:	-1.337	
MS Percent Recovery:	95.79%	
MSD Percent Recovery:	95.07%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS66270	
Duplicate Sample I.D.	LCSD66270	
Sample Result (pCi/L, g, F):	4.715	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.478	
Sample Duplicate Result (pCi/L, g, F):	4.178	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.441	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.616	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.90%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30480057012	
Sample MS I.D.	30480057013	
Sample MSD I.D.	30480057014	
Sample Matrix Spike Result:	14.489	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.043	
Sample Matrix Spike Duplicate Result:	14.584	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.071	
Duplicate Numerical Performance Indicator:	-0.125	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	0.75%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/3/2022

LAM 5/3/22

Pace Analytical™
www.pacelabs.com

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 4/22/2022
Worklist: 66133
Matrix: WT

Method Blank Assessment	
MB Sample ID	2407526
MB concentration:	0.054
M/B 2 Sigma CSU:	0.301
MB MDC:	0.691
MB Numerical Performance Indicator:	0.35
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS66133	**LCSD66133**
Count Date:	4/29/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.933	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	4.384	
Uncertainty (Calculated):	0.215	
Result (pCi/L, g, F):	2.842	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.720	
Numerical Performance Indicator:	-4.02	
Percent Recovery:	64.83%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/28/2022
Sample I.D.	30476472001	30480057012
Sample MS I.D.	30476472002	30480057013
Sample MSD I.D.	30476472003	30480057014
Spike I.D.:	22-016	22-016
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.376	36.376
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.819	0.799
MS Target Conc.(pCi/L, g, F):	8.878	9.105
MSD Aliquot (L, g, F):	0.801	0.798
MSD Target Conc. (pCi/L, g, F):	9.083	9.122
MS Spike Uncertainty (calculated):	0.435	0.446
MSD Spike Uncertainty (calculated):	0.445	0.447
Sample Result:	0.662	0.539
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.400	0.357
Sample Matrix Spike Result:	9.075	8.858
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.845	1.779
Sample Matrix Spike Duplicate Result:	9.982	8.872
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.995	1.797
MS Numerical Performance Indicator:	-0.470	-0.824
MSD Numerical Performance Indicator:	0.223	-0.820
MS Percent Recovery:	94.76%	91.37%
MSD Percent Recovery:	102.61%	91.35%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476472001	30480057012
Sample MS I.D.	30476472002	30480057013
Sample MSD I.D.	30476472003	30480057014
Sample Matrix Spike Result:	9.075	8.858
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.845	1.779
Sample Matrix Spike Duplicate Result:	9.982	8.872
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.995	1.797
Duplicate Numerical Performance Indicator:	-0.654	-0.011
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	7.95%	0.02%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/3/2022

VAL
5/2/22

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JSM
Date:	4/22/2022
Worklist:	66134
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2407527
MB concentration:	0.306
M/B 2 Sigma CSU:	0.297
MB MDC:	0.607
MB Numerical Performance Indicator:	2.02
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS66134	**LCSD66134**
Count Date:	4/29/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.931	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.813	
Target Conc. (pCi/L, g, F):	4.422	
Uncertainty (Calculated):	0.217	
Result (pCi/L, g, F):	3.860	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.925	
Numerical Performance Indicator:	-1.16	
Percent Recovery:	87.28%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/30/2022	
Sample I.D.	30480057024	
Sample MS I.D.	30480057025	
Sample MSD I.D.	30480057026	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.292	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.802	
MS Target Conc.(pCi/L, g, F):	9.055	
MSD Aliquot (L, g, F):	0.799	
MSD Target Conc. (pCi/L, g, F):	9.082	
MS Spike Uncertainty (calculated):	0.444	
MSD Spike Uncertainty (calculated):	0.445	
Sample Result:	0.125	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.367	
Sample Matrix Spike Result:	7.566	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.562	
Sample Matrix Spike Duplicate Result:	8.411	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.705	
MS Numerical Performance Indicator:	-1.900	
MSD Numerical Performance Indicator:	-0.867	
MS Percent Recovery:	82.18%	
MSD Percent Recovery:	91.23%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30480057024	
Sample MS I.D.	30480057025	
Sample MSD I.D.	30480057026	
Sample Matrix Spike Result:	7.566	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.562	
Sample Matrix Spike Duplicate Result:	8.411	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.705	
Duplicate Numerical Performance Indicator:	-0.716	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	10.44%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/13/2022

5/2/22

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test: Ra-226
Analyst: JC2
Date: 4/26/2022
Worklist: 66274
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2415365
MB concentration:	0.013
M/B Counting Uncertainty:	0.063
MB MDC:	0.166
MB Numerical Performance Indicator:	0.39
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS66274	**LCSD66274**
Count Date:	5/3/2022	5/3/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.027	24.027
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.504
Target Conc. (pCi/L, g, F):	4.780	4.771
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.087	4.550
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.497	0.465
Numerical Performance Indicator:	1.20	-0.92
Percent Recovery:	106.41%	95.38%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS66274	
Duplicate Sample I.D.	LCSD66274	
Sample Result (pCi/L, g, F):	5.087	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.497	
Sample Duplicate Result (pCi/L, g, F):	4.550	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.465	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.544	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.93%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/30/2022	
Sample I.D.	30480057024	
Sample MS I.D.	30480057025	
Sample MSD I.D.	30480057026	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.028	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.298	
MS Target Conc.(pCi/L, g, F):	16.151	
MSD Aliquot (L, g, F):	0.306	
MSD Target Conc. (pCi/L, g, F):	15.682	
MS Spike Uncertainty (calculated):	0.194	
MSD Spike Uncertainty (calculated):	0.188	
Sample Result:	0.049	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.118	
Sample Matrix Spike Result:	16.764	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.160	
Sample Matrix Spike Duplicate Result:	14.103	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.055	
MS Numerical Performance Indicator:	0.934	
MSD Numerical Performance Indicator:	-2.961	
MS Percent Recovery:	103.49%	
MSD Percent Recovery:	89.62%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30480057024	
Sample MS I.D.	30480057025	
Sample MSD I.D.	30480057026	
Sample Matrix Spike Result:	16.764	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.160	
Sample Matrix Spike Duplicate Result:	14.103	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.055	
Duplicate Numerical Performance Indicator:	3.325	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	14.37%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

OM 5/5/2022

LAM 5/5/22

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	4/22/2022
Worklist:	66135
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2407529
MB concentration:	0.287
M/B 2 Sigma CSU:	0.318
MB MDC:	0.665
MB Numerical Performance Indicator:	1.77
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS66135	**LCSD66135**
Count Date:	4/29/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.933	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.813	
Target Conc. (pCi/L, g, F):	4.422	
Uncertainty (Calculated):	0.217	
Result (pCi/L, g, F):	4.764	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.046	
Numerical Performance Indicator:	0.63	
Percent Recovery:	107.72%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/29/2022	
Sample I.D.	30480057031	
Sample MS I.D.	30480057032	
Sample MSD I.D.	30480057033	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.302	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.806	
MS Target Conc.(pCi/L, g, F):	9.011	
MSD Aliquot (L, g, F):	0.805	
MSD Target Conc. (pCi/L, g, F):	9.017	
MS Spike Uncertainty (calculated):	0.442	
MSD Spike Uncertainty (calculated):	0.442	
Sample Result:	0.344	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.377	
Sample Matrix Spike Result:	8.481	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.715	
Sample Matrix Spike Duplicate Result:	9.114	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.829	
MS Numerical Performance Indicator:	-0.945	
MSD Numerical Performance Indicator:	-0.252	
MS Percent Recovery:	90.31%	
MSD Percent Recovery:	97.26%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30480057031	
Sample MS I.D.	30480057032	
Sample MSD I.D.	30480057033	
Sample Matrix Spike Result:	8.481	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.715	
Sample Matrix Spike Duplicate Result:	9.114	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.829	
Duplicate Numerical Performance Indicator:	-0.494	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	7.42%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

\## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/3/2022

VAL
5/2/22

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 4/26/2022
Worklist: 66275
Matrix: DW

Method Blank Assessment	
MB Sample ID	2415372
MB concentration:	0.019
M/B Counting Uncertainty:	0.059
MB MDC:	0.149
MB Numerical Performance Indicator:	0.63
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS66275	**LCSD66275**
Count Date:	5/4/2022	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.027	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.506	
Target Conc. (pCi/L, g, F):	4.744	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.677	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.466	
Numerical Performance Indicator:	-0.28	
Percent Recovery:	98.58%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/29/2022	
Sample I.D.	30480057031	
Sample MS I.D.	30480057032	
Sample MSD I.D.	30480057033	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.028	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.300	
MS Target Conc.(pCi/L, g, F):	16.029	
MSD Aliquot (L, g, F):	0.318	
MSD Target Conc. (pCi/L, g, F):	15.108	
MS Spike Uncertainty (calculated):	0.192	
MSD Spike Uncertainty (calculated):	0.181	
Sample Result:	0.025	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.119	
Sample Matrix Spike Result:	16.226	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.175	
Sample Matrix Spike Duplicate Result:	15.810	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.084	
MS Numerical Performance Indicator:	0.280	
MSD Numerical Performance Indicator:	1.198	
MS Percent Recovery:	101.07%	
MSD Percent Recovery:	104.47%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30480057031	
Sample MS I.D.	30480057032	
Sample MSD I.D.	30480057033	
Sample Matrix Spike Result:	16.226	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.175	
Sample Matrix Spike Duplicate Result:	15.810	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.084	
Duplicate Numerical Performance Indicator:	0.510	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	3.31%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/5/2022

lam 5/5/22

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JSM
Date: 4/18/2022
Worklist: 66136
Matrix: WT

Method Blank Assessment	
MB Sample ID	2407530
MB concentration:	0.174
M/B 2 Sigma CSU:	0.342
MB MDC:	0.754
MB Numerical Performance Indicator:	1.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS66136	**LCSD66136**
Count Date:	4/22/2022	4/22/2022
Spike I.D.:	22-016	22-016
Decay Corrected Spike Concentration (pCi/mL):	36.016	36.016
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.807	0.805
Target Conc. (pCi/L, g, F):	4.465	4.473
Uncertainty (Calculated):	0.219	0.219
Result (pCi/L, g, F):	3.390	3.720
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.871	0.937
Numerical Performance Indicator:	-2.35	-1.53
Percent Recovery:	75.92%	83.18%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS66136	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD66136	
Sample Result (pCi/L, g, F):	3.390	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.871	
Sample Duplicate Result (pCi/L, g, F):	3.720	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.937	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.506	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.12%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test: Ra-226
Analyst: JC2
Date: 4/26/2022
Worklist: 66277
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2415377
MB concentration:	0.017
M/B Counting Uncertainty:	0.062
MB MDC:	0.159
MB Numerical Performance Indicator:	0.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS66277	**LCSD66277**
Count Date:	5/6/2022	5/6/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.027	24.027
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.505
Target Conc. (pCi/L, g, F):	4.797	4.754
Uncertainty (Calculated):	0.058	0.057
Result (pCi/L, g, F):	5.749	4.912
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.513	0.477
Numerical Performance Indicator:	3.62	0.64
Percent Recovery:	119.86%	103.32%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	4/13/2022	
Sample I.D.	30481832006	
Sample MS I.D.	30481832007	
Sample MSD I.D.	30481832008	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.028	
Spike Volume Used in MS (mL):	0.40	
Spike Volume Used in MSD (mL):	0.40	
MS Aliquot (L, g, F):	0.202	
MS Target Conc.(pCi/L, g, F):	47.517	
MSD Aliquot (L, g, F):	0.205	
MSD Target Conc. (pCi/L, g, F):	46.816	
MS Spike Uncertainty (calculated):	0.570	
MSD Spike Uncertainty (calculated):	0.562	
Sample Result:	-0.074	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.107	
Sample Matrix Spike Result:	47.525	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	2.447	
Sample Matrix Spike Duplicate Result:	47.030	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	2.320	
MS Numerical Performance Indicator:	0.064	
MSD Numerical Performance Indicator:	0.236	
MS Percent Recovery:	100.17%	
MSD Percent Recovery:	100.62%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS66277	
Duplicate Sample I.D.	LCSD66277	
Sample Result (pCi/L, g, F):	5.749	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.513	
Sample Duplicate Result (pCi/L, g, F):	4.912	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.477	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.342	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	14.82%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30481832006	
Sample MS I.D.	30481832007	
Sample MSD I.D.	30481832008	
Sample Matrix Spike Result:	47.525	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	2.447	
Sample Matrix Spike Duplicate Result:	47.030	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	2.320	
Duplicate Numerical Performance Indicator:	0.288	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	0.44%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/6/2022

VAM 5/6/22

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Additional Request Event

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Suspected iron bacteria was present during initial pumping of well MW-1 and MW-44H.

A light rain occurred when pumping and sampling well MW-39H.

A significant amount of ants were inside the locking well cap lid of wells MW-53H and MW-42H.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group :	WMWGREAP_1361
Project/Site :	Greene County Ash Pond Demopolis, AL 36732
For :	Southern Company Services 3535 Colonnade Parkway Birmingham, AL 35243
Attention :	Dustin Brooks & Greg Dyer
Released By :	Brooke Caton tbwill@southernco.com (205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

May 18, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between April 05, 2022 and April 07, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.05.18
11:11:04 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US
United States l=US United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-05-18 12:40-05:00

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1361

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06763	723718, 723719	WMWGREAP_1361
BC06764	723718, 723719	WMWGREAP_1361
BC06765	723718, 723719	WMWGREAP_1361
BC06766	723718, 723719	WMWGREAP_1361
BC06767	723718, 723719	WMWGREAP_1361
BC07001	723831, 723832	WMWGREAP_1361
BC07002	723831, 723832	WMWGREAP_1361
BC07003	723831, 723832	WMWGREAP_1361
BC07004	723831, 723832	WMWGREAP_1361
BC07005	723831, 723832	WMWGREAP_1361
BC07006	723831, 723832	WMWGREAP_1361
BC07007	723831, 723832	WMWGREAP_1361
BC07008	723831, 723832	WMWGREAP_1361
BC07009	723831, 723832	WMWGREAP_1361
BC07010	723831, 723832	WMWGREAP_1361

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:

- BC06763

- BC06764
- BC06765
- BC06767
- BC07001
- BC07004

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1361

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06763	722875, 722877, & 723500	WMWGREAP_1361
BC06764	722875, 722877, & 723500	WMWGREAP_1361
BC06765	722875, 722877, & 723500	WMWGREAP_1361
BC06766	722875, 722877, & 723500	WMWGREAP_1361
BC06767	722875, 722877, & 723500	WMWGREAP_1361
BC07001	723568, 723688, & 723503	WMWGREAP_1361
BC07002	723568, 723688, & 723503	WMWGREAP_1361
BC07003	723568, 723688, & 723503	WMWGREAP_1361
BC07004	723568, 723688, & 723503	WMWGREAP_1361
BC07005	723568, 723688, & 723503	WMWGREAP_1361
BC07006	723568, 723688, & 723503	WMWGREAP_1361
BC07007	723568, 723688, & 723503	WMWGREAP_1361
BC07008	723568, 723688, & 723503	WMWGREAP_1361
BC07009	723568, 723688, & 723503	WMWGREAP_1361
BC07010	723568, 723688, & 723503	WMWGREAP_1361

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range,

any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06763	Chloride & Sulfate	8 & 40
BC06764	Sulfate	20
BC06765	Sulfate	10
BC06766	Sulfate	5
BC06767	Sulfate	8
BC07001	Sulfate	40
BC07002	Chloride	2
BC07003	Sulfate	4
BC07004	Chloride & Sulfate	2 & 4
BC07005	Sulfate	2
BC07006	Chloride	2
BC07007	Sulfate	2
BC07008	Sulfate	5
BC07009	Sulfate	5

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Mercury

Greene Co. Ash Pond

WMWGREAP_1361

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06763	722923	WMWGREAP_1361
BC06764	722923	WMWGREAP_1361
BC06765	722923	WMWGREAP_1361
BC06766	722923	WMWGREAP_1361
BC06767	722923	WMWGREAP_1361
BC07001	723170	WMWGREAP_1361
BC07002	723170	WMWGREAP_1361
BC07003	723170	WMWGREAP_1361
BC07004	723170	WMWGREAP_1361
BC07005	723170	WMWGREAP_1361
BC07006	723170	WMWGREAP_1361
BC07007	723170	WMWGREAP_1361
BC07008	723170	WMWGREAP_1361
BC07009	723170	WMWGREAP_1361
BC07010	723170	WMWGREAP_1361

4. All of the above samples were analyzed and prepared by EPA 245.1 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were digested and analyzed with the samples in each batch.
- All laboratory control sample criteria were met.

Revision 5

- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1361

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06763	723706	WMWGREAP_1361
BC06764	723706	WMWGREAP_1361
BC06765	723706	WMWGREAP_1361
BC06766	723706	WMWGREAP_1361
BC06767	723706	WMWGREAP_1361
BC07001	723706	WMWGREAP_1361
BC07002	723706	WMWGREAP_1361
BC07003	723706	WMWGREAP_1361
BC07004	723706	WMWGREAP_1361
BC07005	723706	WMWGREAP_1361
BC07006	723707	WMWGREAP_1361
BC07007	723707	WMWGREAP_1361
BC07008	723707	WMWGREAP_1361
BC07009	723707	WMWGREAP_1361
BC07010	723707	WMWGREAP_1361

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1361

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06763	722852	WMWGREAP_1361
BC06764	722852	WMWGREAP_1361
BC06765	722852	WMWGREAP_1361
BC06766	722852	WMWGREAP_1361
BC06767	722852	WMWGREAP_1361
BC07001	723172	WMWGREAP_1361
BC07002	723172	WMWGREAP_1361
BC07003	723172	WMWGREAP_1361
BC07004	723172	WMWGREAP_1361
BC07005	723172	WMWGREAP_1361
BC07006	723172	WMWGREAP_1361
BC07007	723172	WMWGREAP_1361
BC07008	723172	WMWGREAP_1361
BC07009	723172	WMWGREAP_1361
BC07010	723172	WMWGREAP_1361

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1361

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06763	723067	WMWGREAP_1361
BC06764	723067	WMWGREAP_1361
BC06765	723067	WMWGREAP_1361
BC06766	723067	WMWGREAP_1361
BC06767	723067	WMWGREAP_1361
BC07001	723559	WMWGREAP_1361
BC07002	723559	WMWGREAP_1361
BC07003	723559	WMWGREAP_1361
BC07004	723559	WMWGREAP_1361
BC07005	723559	WMWGREAP_1361
BC07006	723559	WMWGREAP_1361
BC07007	723559	WMWGREAP_1361
BC07008	723559	WMWGREAP_1361
BC07009	723559	WMWGREAP_1361
BC07010	723559	WMWGREAP_1361

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1 DIS

Location Code: WMWGREAP
Collected: 4/4/22 14:14
Customer ID:
Submittal Date: 4/5/22 12:59

Laboratory ID Number: BC06763

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Dissolved by CVAA	4/7/22 14:37	4/7/22 19:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/14/22 12:25	4/14/22 12:25		1	0.300	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		***Analyst: ALH***							
Alkalinity, Total as CaCO3	4/14/22 11:25	4/14/22 14:14		1	54.4	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	1340	mg/L		75.8	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
Bicarbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	54.4	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/8/22 01:35	4/7/22 01:35		1	2.88	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	4/6/22 13:13	4/6/22 13:13		8	42.3	mg/L	4.00	8	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	4/6/22 14:21	4/6/22 14:21		1	0.087	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	4/12/22 09:47	4/12/22 09:47		40	824	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	4/4/22 14:11	4/4/22 14:11			1465.42	uS/cm			FA
pH	4/4/22 14:11	4/4/22 14:11			5.17	SU			FA
Temperature	4/4/22 14:11	4/4/22 14:11			20.06	C			FA
Turbidity	4/4/22 14:11	4/4/22 14:11			4.22	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:14
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-1 DIS

Laboratory ID Number: BC06763

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Chloride	mg/L	-0.00935	1.00	10.0	18.6	18.3	9.76	9.00 to 11.0	105	80.0 to 120	1.63	20.0
BC06767	Fluoride	mg/L	-0.0195	0.125	2.50	3.13	3.12	2.53	2.25 to 2.75	101	80.0 to 120	0.320	20.0
BC06767	Mercury, Dissolved by	mg/L	-0.00018	0.000500	0.004	0.00386	0.00389	0.00387	0.00340 to 0.00460	96.5	70.0 to 130	0.774	20.0
BC06767	Sulfate	mg/L	0.296	2.0	160	247	230	19.7	18.0 to 22.0	109	80.0 to 120	7.13	20.0
BC06767	Total Organic Carbon	mg/L	0.410	1.00	10.0	11.9	11.9	25.1		96.4	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:14
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-1 DIS

Laboratory ID Number: BC06763

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Alkalinity, Total as CaCO3	mg/L					467	50.7	45.0 to 55.0			2.33	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC06767	Solids, Dissolved	mg/L	1.00	25.0			536	46.0	40.0 to 60.0			2.58	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-44H DIS

Location Code: WMWGREAP
Collected: 4/4/22 17:14
Customer ID:
Submittal Date: 4/5/22 12:59

Laboratory ID Number: BC06764

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Dissolved by CVAA	4/7/22 14:37	4/7/22 19:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/14/22 12:27	4/14/22 12:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
Alkalinity, Total as CaCO3	4/14/22 11:25	4/14/22 14:14		1	93.6	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	614	mg/L		50	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
Bicarbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	93.6	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/8/22 01:51	4/7/22 01:51		1	1.45	mg/L	1.00	2	J
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	4/6/22 13:06	4/6/22 13:06		1	13.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	4/6/22 14:23	4/6/22 14:23		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	4/12/22 09:48	4/12/22 09:48		20	376	mg/L	12.0	40	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 17:14
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-44H DIS

Laboratory ID Number: BC06764

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Chloride	mg/L	-0.00935	1.00	10.0	18.6	18.3	9.76	9.00 to 11.0	105	80.0 to 120	1.63	20.0
BC06767	Fluoride	mg/L	-0.0195	0.125	2.50	3.13	3.12	2.53	2.25 to 2.75	101	80.0 to 120	0.320	20.0
BC06767	Mercury, Dissolved by	mg/L	-0.00018	0.000500	0.004	0.00386	0.00389	0.00387	0.00340 to 0.00460	96.5	70.0 to 130	0.774	20.0
BC06767	Sulfate	mg/L	0.296	2.0	160	247	230	19.7	18.0 to 22.0	109	80.0 to 120	7.13	20.0
BC06767	Total Organic Carbon	mg/L	0.410	1.00	10.0	11.9	11.9	25.1		96.4	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 17:14
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-44H DIS

Laboratory ID Number: BC06764

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Alkalinity, Total as CaCO3	mg/L					467	50.7	45.0 to 55.0			2.33	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC06767	Solids, Dissolved	mg/L	1.00	25.0			536	46.0	40.0 to 60.0			2.58	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14 DIS

Location Code: WMWGREAP
Collected: 4/4/22 12:28
Customer ID:
Submittal Date: 4/5/22 12:59

Laboratory ID Number: BC06765

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Dissolved by CVAA	4/7/22 14:37	4/7/22 19:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:28	4/14/22 12:28		1	0.230	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/14/22 11:25	4/14/22 14:14		1	382	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	658	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	382	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/8/22 02:06	4/7/22 02:06		1	2.69	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/6/22 13:07	4/6/22 13:07		1	10.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/6/22 14:24	4/6/22 14:24		1	0.207	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 09:49	4/12/22 09:49		10	199	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/4/22 12:25	4/4/22 12:25			891.38	uS/cm			FA
pH	4/4/22 12:25	4/4/22 12:25			6.39	SU			FA
Temperature	4/4/22 12:25	4/4/22 12:25			23.40	C			FA
Turbidity	4/4/22 12:25	4/4/22 12:25			0.96	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 12:28
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-14 DIS

Laboratory ID Number: BC06765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Chloride	mg/L	-0.00935	1.00	10.0	18.6	18.3	9.76	9.00 to 11.0	105	80.0 to 120	1.63	20.0
BC06767	Fluoride	mg/L	-0.0195	0.125	2.50	3.13	3.12	2.53	2.25 to 2.75	101	80.0 to 120	0.320	20.0
BC06767	Mercury, Dissolved by	mg/L	-0.00018	0.000500	0.004	0.00386	0.00389	0.00387	0.00340 to 0.00460	96.5	70.0 to 130	0.774	20.0
BC06767	Sulfate	mg/L	0.296	2.0	160	247	230	19.7	18.0 to 22.0	109	80.0 to 120	7.13	20.0
BC06767	Total Organic Carbon	mg/L	0.410	1.00	10.0	11.9	11.9	25.1		96.4	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 12:28
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-14 DIS

Laboratory ID Number: BC06765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Alkalinity, Total as CaCO3	mg/L					467	50.7	45.0 to 55.0			2.33	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC06767	Solids, Dissolved	mg/L	1.00	25.0			536	46.0	40.0 to 60.0			2.58	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10 DIS

Location Code: WMWGREAP
Collected: 4/4/22 14:40
Customer ID:
Submittal Date: 4/5/22 12:59

Laboratory ID Number: BC06766

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Dissolved by CVAA	4/7/22 14:37	4/7/22 19:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/14/22 12:30	4/14/22 12:30		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
Alkalinity, Total as CaCO3	4/14/22 11:25	4/14/22 14:14		1	289	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	452	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
Bicarbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	288	mg/L			
Carbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	0.681	mg/L			
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/8/22 02:25	4/7/22 02:25		1	2.74	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	4/6/22 13:08	4/6/22 13:08		1	16.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	4/6/22 14:25	4/6/22 14:25		1	0.281	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	4/12/22 09:50	4/12/22 09:50		5	122	mg/L	3.0	10	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	4/4/22 14:38	4/4/22 14:38			627.33	uS/cm			FA
pH	4/4/22 14:38	4/4/22 14:38			6.21	SU			FA
Temperature	4/4/22 14:38	4/4/22 14:38			25.50	C			FA
Turbidity	4/4/22 14:38	4/4/22 14:38			0.4	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:40
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-10 DIS

Laboratory ID Number: BC06766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Chloride	mg/L	-0.00935	1.00	10.0	18.6	18.3	9.76	9.00 to 11.0	105	80.0 to 120	1.63	20.0
BC06767	Fluoride	mg/L	-0.0195	0.125	2.50	3.13	3.12	2.53	2.25 to 2.75	101	80.0 to 120	0.320	20.0
BC06767	Mercury, Dissolved by	mg/L	-0.00018	0.000500	0.004	0.00386	0.00389	0.00387	0.00340 to 0.00460	96.5	70.0 to 130	0.774	20.0
BC06767	Sulfate	mg/L	0.296	2.0	160	247	230	19.7	18.0 to 22.0	109	80.0 to 120	7.13	20.0
BC06767	Total Organic Carbon	mg/L	0.410	1.00	10.0	11.9	11.9	25.1		96.4	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 14:40
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-10 DIS

Laboratory ID Number: BC06766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Alkalinity, Total as CaCO3	mg/L					467	50.7	45.0 to 55.0			2.33	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC06767	Solids, Dissolved	mg/L	1.00	25.0			536	46.0	40.0 to 60.0			2.58	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17 DIS

Location Code: WMWGREAP
Collected: 4/4/22 16:18
Customer ID:
Submittal Date: 4/5/22 12:59

Laboratory ID Number: BC06767

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Dissolved by CVAA	4/7/22 14:37	4/7/22 19:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: ELH***							
* Nitrogen, Nitrate/Nitrite	4/14/22 12:32	4/14/22 12:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
Alkalinity, Total as CaCO3	4/14/22 11:25	4/14/22 14:14		1	478	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	4/6/22 10:00	4/7/22 14:30		1	550	mg/L		50	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
Bicarbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	478	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/14/22 11:25	4/14/22 14:14		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	4/8/22 02:47	4/7/22 02:47		1	2.26	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	4/6/22 13:09	4/6/22 13:09		1	8.06	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	4/6/22 14:26	4/6/22 14:26		1	0.607	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	4/12/22 09:51	4/12/22 09:51		8	72.3	mg/L	4.8	16	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	4/4/22 16:14	4/4/22 16:14			773.09	uS/cm			FA
pH	4/4/22 16:14	4/4/22 16:14			6.71	SU			FA
Temperature	4/4/22 16:14	4/4/22 16:14			26.47	C			FA
Turbidity	4/4/22 16:14	4/4/22 16:14			2.05	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 16:18
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-17 DIS

Laboratory ID Number: BC06767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Chloride	mg/L	-0.00935	1.00	10.0	18.6	18.3	9.76	9.00 to 11.0	105	80.0 to 120	1.63	20.0
BC06767	Fluoride	mg/L	-0.0195	0.125	2.50	3.13	3.12	2.53	2.25 to 2.75	101	80.0 to 120	0.320	20.0
BC06767	Mercury, Dissolved by	mg/L	-0.00018	0.000500	0.004	0.00386	0.00389	0.00387	0.00340 to 0.00460	96.5	70.0 to 130	0.774	20.0
BC06767	Sulfate	mg/L	0.296	2.0	160	247	230	19.7	18.0 to 22.0	109	80.0 to 120	7.13	20.0
BC06767	Total Organic Carbon	mg/L	0.410	1.00	10.0	11.9	11.9	25.1		96.4	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/4/22 16:18
Customer ID:
Delivery Date: 4/5/22 12:59

Description: Greene County Ash Pond - MW-17 DIS

Laboratory ID Number: BC06767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06767	Alkalinity, Total as CaCO3	mg/L					467	50.7	45.0 to 55.0			2.33	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC06767	Solids, Dissolved	mg/L	1.00	25.0			536	46.0	40.0 to 60.0			2.58	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4 DIS

Location Code: WMWGREAP
Collected: 4/5/22 17:00
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07001

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:34	4/14/22 12:34		1	0.406	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	66.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	1240	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	66.4	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 14:06	4/12/22 14:06		1	1.65	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:35	4/13/22 10:35		1	7.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:54	4/14/22 10:54		1	0.0841	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:05	4/12/22 12:05		40	812	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/5/22 16:56	4/5/22 16:56			1260.99	uS/cm			FA
pH	4/5/22 16:56	4/5/22 16:56			5.95	SU			FA
Temperature	4/5/22 16:56	4/5/22 16:56			27.79	C			FA
Turbidity	4/5/22 16:56	4/5/22 16:56			4.61	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:00
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - PZ-4 DIS

Laboratory ID Number: BC07001

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:00
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - PZ-4 DIS

Laboratory ID Number: BC07001

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-3 DIS

Location Code: WMWGREAP
Collected: 4/5/22 18:10
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07002

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:36	4/14/22 12:36		1	0.431	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	277	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	337	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	277	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 14:23	4/12/22 14:23		1	10.1	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:49	4/13/22 10:49		2	20.9	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:55	4/14/22 10:55		1	0.107	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:06	4/12/22 12:06		1	14.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/5/22 18:08	4/5/22 18:08			532.06	uS/cm			FA
pH	4/5/22 18:08	4/5/22 18:08			6.27	SU			FA
Temperature	4/5/22 18:08	4/5/22 18:08			26.33	C			FA
Turbidity	4/5/22 18:08	4/5/22 18:08			1.8	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 18:10
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-3 DIS

Laboratory ID Number: BC07002

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 18:10
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-3 DIS

Laboratory ID Number: BC07002

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-42H DIS

Location Code: WMWGREAP
Collected: 4/6/22 08:33
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07003

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:38	4/14/22 12:38		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	234	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	368	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	234	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 14:42	4/12/22 14:42		1	2.71	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:37	4/13/22 10:37		1	15.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:56	4/14/22 10:56		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:07	4/12/22 12:07		4	94.3	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 08:30	4/6/22 08:30			577.97	uS/cm			FA
pH	4/6/22 08:30	4/6/22 08:30			6.10	SU			FA
Temperature	4/6/22 08:30	4/6/22 08:30			24.82	C			FA
Turbidity	4/6/22 08:30	4/6/22 08:30			3.33	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:33
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-42H DIS

Laboratory ID Number: BC07003

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:33
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-42H DIS

Laboratory ID Number: BC07003

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H DIS

Location Code: WMWGREAP
Collected: 4/6/22 09:38
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07004

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:40	4/14/22 12:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	400	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	562	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	398	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	1.56	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 15:01	4/12/22 15:01		1	2.13	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:51	4/13/22 10:51		2	38.3	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:57	4/14/22 10:57		1	0.0977	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:08	4/12/22 12:08		4	105	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 09:34	4/6/22 09:34			839.57	uS/cm			FA
pH	4/6/22 09:34	4/6/22 09:34			6.43	SU			FA
Temperature	4/6/22 09:34	4/6/22 09:34			25.25	C			FA
Turbidity	4/6/22 09:34	4/6/22 09:34			4.25	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:38
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-43H DIS

Laboratory ID Number: BC07004

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:38
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-43H DIS

Laboratory ID Number: BC07004

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-16 DIS

Location Code: WMWGREAP
Collected: 4/6/22 12:07
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07005

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:41	4/14/22 12:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	504	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	456	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	504	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 15:22	4/12/22 15:22		1	2.04	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:40	4/13/22 10:40		1	11.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 10:58	4/14/22 10:58		1	0.213	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:10	4/12/22 12:10		2	45.3	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 12:04	4/6/22 12:04			746.84	uS/cm			FA
pH	4/6/22 12:04	4/6/22 12:04			6.42	SU			FA
Temperature	4/6/22 12:04	4/6/22 12:04			26.29	C			FA
Turbidity	4/6/22 12:04	4/6/22 12:04			4.33	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 12:07
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-16 DIS

Laboratory ID Number: BC07005

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 12:07
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-16 DIS

Laboratory ID Number: BC07005

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07005	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.21	0.065	2.02	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18 DIS

Location Code: WMWGREAP
Collected: 4/6/22 15:10
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07006

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:51	4/14/22 12:51		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	388	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	413	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	388	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 15:41	4/12/22 15:41		1	2.37	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:52	4/13/22 10:52		2	24.0	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 11:00	4/14/22 11:00		1	0.115	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:11	4/12/22 12:11		1	15.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	4/6/22 15:06	4/6/22 15:06			636.34	uS/cm			FA
pH	4/6/22 15:06	4/6/22 15:06			6.29	SU			FA
Temperature	4/6/22 15:06	4/6/22 15:06			27.48	C			FA
Turbidity	4/6/22 15:06	4/6/22 15:06			2.48	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:10
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-18 DIS

Laboratory ID Number: BC07006

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 15:10
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-18 DIS

Laboratory ID Number: BC07006

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07010	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.17	0.111	2.10	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H DIS

Location Code: WMWGREAP
Collected: 4/5/22 16:47
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07007

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:51	4/14/22 12:51		1	0.429	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	58.6	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	152	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	58.6	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 15:57	4/12/22 15:57		1	5.07	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:42	4/13/22 10:42		1	19.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 11:01	4/14/22 11:01		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:12	4/12/22 12:12		2	49.5	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/5/22 16:44	4/5/22 16:44			251.21	uS/cm			FA
pH	4/5/22 16:44	4/5/22 16:44			5.41	SU			FA
Temperature	4/5/22 16:44	4/5/22 16:44			16.57	C			FA
Turbidity	4/5/22 16:44	4/5/22 16:44			4.92	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 16:47
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-57H DIS

Laboratory ID Number: BC07007

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 16:47
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-57H DIS

Laboratory ID Number: BC07007

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07010	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.17	0.111	2.10	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-54H DIS

Location Code: WMWGREAP
Collected: 4/5/22 17:50
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07008

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:52	4/14/22 12:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	243	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	419	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	243	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 16:13	4/12/22 16:13		1	2.46	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:43	4/13/22 10:43		1	8.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 11:02	4/14/22 11:02		1	0.219	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:13	4/12/22 12:13		5	124	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/5/22 17:47	4/5/22 17:47			693.20	uS/cm			FA
pH	4/5/22 17:47	4/5/22 17:47			6.59	SU			FA
Temperature	4/5/22 17:47	4/5/22 17:47			16.80	C			FA
Turbidity	4/5/22 17:47	4/5/22 17:47			4.62	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 5/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:50
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-54H DIS

Laboratory ID Number: BC07008

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/5/22 17:50
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-54H DIS

Laboratory ID Number: BC07008

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07010	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.17	0.111	2.10	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-53H DIS

Location Code: WMWGREAP
Collected: 4/6/22 08:10
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07009

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:53	4/14/22 12:53		1	0.203	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	255	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	428	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	255	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 16:29	4/12/22 16:29		1	5.85	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:45	4/13/22 10:45		1	8.11	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 11:03	4/14/22 11:03		1	0.0882	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:14	4/12/22 12:14		5	123	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/6/22 08:07	4/6/22 08:07			715.12	uS/cm			FA
pH	4/6/22 08:07	4/6/22 08:07			6.23	SU			FA
Temperature	4/6/22 08:07	4/6/22 08:07			16.97	C			FA
Turbidity	4/6/22 08:07	4/6/22 08:07			4.15	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 5/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:10
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-53H DIS

Laboratory ID Number: BC07009

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 08:10
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-53H DIS

Laboratory ID Number: BC07009

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07010	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.17	0.111	2.10	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H DIS

Location Code: WMWGREAP
Collected: 4/6/22 09:27
Customer ID:
Submittal Date: 4/7/22 13:23

Laboratory ID Number: BC07010

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	4/8/22 16:43	4/8/22 22:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/14/22 12:54	4/14/22 12:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/19/22 10:05	4/19/22 13:42		1	461	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	4/8/22 11:03	4/11/22 14:03		1	452	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	461	mg/L			
Carbonate Alkalinity, (calc.)	4/19/22 10:05	4/19/22 13:42		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	4/12/22 16:48	4/12/22 16:48		1	2.10	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	4/13/22 10:46	4/13/22 10:46		1	8.35	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	4/14/22 11:04	4/14/22 11:04		1	0.363	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/12/22 12:16	4/12/22 12:16		1	31.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	4/6/22 09:24	4/6/22 09:24			805.88	uS/cm			FA
pH	4/6/22 09:24	4/6/22 09:24			6.31	SU			FA
Temperature	4/6/22 09:24	4/6/22 09:24			19.59	C			FA
Turbidity	4/6/22 09:24	4/6/22 09:24			2.32	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:27
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-39H DIS

Laboratory ID Number: BC07010

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Chloride	mg/L	-0.0393	1.00	10.0	18.2	18.4	9.71	9.00 to 11.0	98.5	80.0 to 120	1.09	20.0
BC07010	Fluoride	mg/L	-0.0903	0.125	2.50	3.16	3.16	2.66	2.25 to 2.75	112	80.0 to 120	0.00	20.0
BC07010	Mercury, Dissolved by	mg/L	-1.000E-05	0.000500	0.004	0.00395	0.004	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.26	20.0
BC07010	Sulfate	mg/L	0.256	2.0	20.0	52.5	51.7	19.4	18.0 to 22.0	108	80.0 to 120	1.54	20.0
BC07010	Total Organic Carbon	mg/L	0.310	1.00	10.0	11.8	11.8	24.7		97.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 4/6/22 09:27
Customer ID:
Delivery Date: 4/7/22 13:23

Description: Greene County Ash Pond - MW-39H DIS

Laboratory ID Number: BC07010

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07010	Alkalinity, Total as CaCO3	mg/L					457	50.4	45.0 to 55.0			0.871	10.0
BC07010	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.17	0.111	2.10	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC07010	Solids, Dissolved	mg/L	0.0000	25.0			458	51.0	40.0 to 60.0			1.32	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Definitions

Project Number: WMWGREAP_1361

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date: Routine

Collector: Dallas Gentry

Results To: Dustin Brooks, Greg Dyer

Requested By: Greg Dyer

Location: Greene Ash Pond

Bottles

1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
2	Nitrate/Nitrite; TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. Adding DIS to sample descriptions. LBM 4/5/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1 DIS	04/04/2022	14:14	5	Field Filtered		BC06763
MW-44H DIS	04/04/2022	17:14	5	Field Filtered		BC06754

Relinquished By	Received By	Date/Time
		04/05/2022 10:33

SmarTroll ID: 7586-41443-5-2

Turbidity ID: 3901-20010-2-2

Sample Event: 1361

All metals and radiological bottles have pH < 2 ☑

Cooler Temp: 0.3 degrees C

Thermometer ID: 5408-27568-2-2

pH Strip ID: 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
2	Nitrates/Nitrites, TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. Adding DIS to sample descriptions. LBM 4/5/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-14 DIS	04/04/2022	12:28	5	Field Filtered		BC06765
MW-10 DIS	04/04/2022	14:40	5	Field Filtered		BC06766
MW-17 DIS	04/04/2022	16:18	5	Field Filtered		BC06767

Relinquished By	Received By	Date/Time
		04/05/2022 10:36

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1361

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.3 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☐ Outside Lab

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
2	Nitrates/Nitrites, TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: N/N & TOC bottles pH<2. LBM 4/7/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-4 Dis	04/05/2022	17:00	5	Field Filtered		BC07001
MW-3 Dis	04/05/2022	18:10	5	Field Filtered		BC07002
MW-42H Dis	04/06/2022	08:33	5	Field Filtered		BC07003
MW-43H Dis	04/06/2022	09:38	5	Field Filtered		BC07004
MW-16 Dis	04/06/2022	12:07	5	Field Filtered		BC07005
MW-18 Dis	04/06/2022	15:10	5	Field Filtered		BC07006

Relinquished By	Received By	Date/Time
	Laura	04/07/2022 10:27

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.3 degrees C
Sample Event	1361	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
2	Nitrate/Nitrite; TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments
Updating Sample Event # to 1361. N/N & TOC bottles pH<2. LBM 4/7/22
Updating sample # to MW-57H DIS from MA-57HDIS. LBM 4/8/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-57H dis	04/05/2022	16:47	5	Field Filtered		BC07007
MW-54H dis	04/05/2022	17:50	5	Field Filtered		BC07008
MW-53H dis	04/06/2022	08:10	5	Field Filtered		BC07009
MW-39H dis	04/06/2022	09:27	5	Field Filtered		BC07010

Relinquished By	Received By	Date/Time
Dallas Gentry	Lauren Melby	04/07/2022 10:48

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.3 degrees C
Sample Event	1361	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 MW-52HO (Land Trust) Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Sample water was an orange color during initial pumping. There was a heavy rainfall on-site 24 hours earlier.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - Field Blank 1 (FB-1) had results greater than the reporting limit (RL) for Manganese.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1357

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Renee Jernigan
rgarner@southernco.com
(205) 664-6247

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

May 05, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on March 24, 2022.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Renee Jernigan

Digitally signed by Renee Jernigan
Date: 2022.05.05
14:01:08 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske
c=US United States l=US United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-05-05 15:28-05:00

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	722512	WMWGREAP_1357
BC06189	722512	WMWGREAP_1357
BC06190	722512	WMWGREAP_1357
BC06191	722512	WMWGREAP_1357

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Case Narrative

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06188	Calcium, Sodium	10.15
BC06189	Calcium, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06188	722125	WMWGREAP_1357
BC06189	722125	WMWGREAP_1357

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06189 Calcium and Sodium MS/MSD spike levels were <30% of the sample concentration.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06188	Calcium, Sodium	10.15
BC06189	Calcium, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	722396	WMWGREAP_1357
BC06189	722396	WMWGREAP_1357
BC06190	722396	WMWGREAP_1357
BC06191	722396	WMWGREAP_1357

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06188	Manganese	10.15
BC06189	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06188	722319	WMWGREAP_1357
BC06189	722319	WMWGREAP_1357

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

Revision 5

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06189 Manganese MS/MSD spike level was <30% of the sample concentration.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06188	Manganese	10.15
BC06189	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	721865	WMWGREAP_1357
BC06189	721865	WMWGREAP_1357
BC06190	721865	WMWGREAP_1357
BC06191	721865	WMWGREAP_1357

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	721983	WMWGREAP_1357
BC06189	721983	WMWGREAP_1357
BC06190	721983	WMWGREAP_1357
BC06191	721983	WMWGREAP_1357

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	722012	WMWGREAP_1357
BC06189	722012	WMWGREAP_1357
BC06190	722012	WMWGREAP_1357
BC06191	722012	WMWGREAP_1357

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	722000	WMWGREAP_1357
BC06189	722000	WMWGREAP_1357
BC06190	722000	WMWGREAP_1357
BC06191	722000	WMWGREAP_1357

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
  - ○ BC06190
  - ○ BC06191

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	721871, 721955, & 722005	WMWGREAP_1357
BC06189	721871, 721955, & 722005	WMWGREAP_1357
BC06190	721871, 721955, & 722005	WMWGREAP_1357
BC06191	721871, 721955, & 722005	WMWGREAP_1357

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06188	Chloride	8
BC06189	Chloride	8

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1357

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06188	722676, 722677	WMWGREAP_1357
BC06189	722676, 722677	WMWGREAP_1357

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
   - BC06188

Revision 5

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO

Location Code: WMWGREAP
Collected: 3/23/22 09:38
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06188

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 11:01		1.015	1.33	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 11:52		10.15	66.0	mg/L	0.70035	4.06	
* Iron, Total	4/5/22 07:00	4/7/22 11:01		1.015	0.570	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 11:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 11:01		1.015	23.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 11:01		1	9.54	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 11:01		1.015	4.46	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 11:52		10.15	71.6	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:23	4/5/22 09:23		1.015	1.26	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:23	4/5/22 09:54		10.15	68.6	mg/L	0.70035	4.06	
* Iron, Dissolved	4/4/22 08:23	4/5/22 09:23		1.015	0.288	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:23	4/5/22 09:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:23	4/5/22 09:23		1.015	22.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:23	4/5/22 09:23		1	9.24	mg/L			
Silicon, Dissolved	4/4/22 08:23	4/5/22 09:23		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:23	4/5/22 09:54		10.15	76.7	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:36	3/30/22 13:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:36	3/30/22 13:36		1.015	0.0218	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:36	3/30/22 13:36		1.015	0.000262	mg/L	0.000081	0.000203	
* Barium, Total	3/29/22 14:36	3/30/22 13:36		1.015	0.149	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:36	3/30/22 13:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:36	3/30/22 13:36		1.015	0.000141	mg/L	0.000068	0.000203	J
* Chromium, Total	3/29/22 14:36	3/30/22 13:36		1.015	0.000352	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:36	3/30/22 13:36		1.015	0.0164	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:36	3/30/22 13:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:36	3/30/22 14:02		10.15	10.7	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:36	3/30/22 13:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:36	3/30/22 13:36		1.015	4.16	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO

Location Code: WMWGREAP
Collected: 3/23/22 09:38
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06188

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:36	3/30/22 13:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:36	3/30/22 13:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	0.000104	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	0.151	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	0.000141	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	0.000261	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	0.0158	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:59	3/31/22 12:57		10.15	11.1	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	4.16	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:59	3/29/22 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 21:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/1/22 15:42	4/1/22 15:42		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/4/22 13:40	4/4/22 14:35		1	265	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/22 11:23	3/30/22 12:58		1	518	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/4/22 13:40	4/4/22 14:35		1	264	mg/L		1	A
Carbonate Alkalinity, (calc.)	4/4/22 13:40	4/4/22 14:35		1	0.768	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 21:32	3/29/22 21:32		1	1.66	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO

Location Code: WMWGREAP
Collected: 3/23/22 09:38
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06188

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:56	3/28/22 11:56		8	123	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 15:04	3/28/22 15:04		1	0.0894	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:19	3/29/22 13:19		1	38.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/23/22 09:34	3/23/22 09:34			850.17	uS/cm			FA
pH	3/23/22 09:34	3/23/22 09:34			6.14	SU			FA
Temperature	3/23/22 09:34	3/23/22 09:34			17.45	C			FA
Turbidity	3/23/22 09:34	3/23/22 09:34			4.36	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC06188

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06189	Aluminum, Dissolved	mg/L	-0.000233	0.010	0.100	0.103	0.100	0.103	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC06191	Aluminum, Total	mg/L	0.000484	0.010	0.100	0.0971	0.0998	0.104	0.0850 to 0.115	97.1	70.0 to 130	2.74	20.0
BC06189	Antimony, Dissolved	mg/L	0.000296	0.00100	0.100	0.0895	0.0910	0.0994	0.0850 to 0.115	89.5	70.0 to 130	1.66	20.0
BC06191	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0968	0.0990	0.0986	0.0850 to 0.115	96.8	70.0 to 130	2.25	20.0
BC06189	Arsenic, Dissolved	mg/L	0.0000073	0.000176	0.100	0.0994	0.0970	0.0994	0.0850 to 0.115	99.3	70.0 to 130	2.44	20.0
BC06191	Arsenic, Total	mg/L	-0.0000254	0.000176	0.100	0.100	0.101	0.105	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06189	Barium, Dissolved	mg/L	-0.0000331	0.00100	0.100	0.257	0.252	0.108	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06191	Barium, Total	mg/L	0.0000209	0.00100	0.100	0.0924	0.0967	0.0965	0.0850 to 0.115	92.4	70.0 to 130	4.55	20.0
BC06189	Beryllium, Dissolved	mg/L	0.0000834	0.000880	0.100	0.0865	0.0910	0.0918	0.0850 to 0.115	86.5	70.0 to 130	5.07	20.0
BC06191	Beryllium, Total	mg/L	0.0000818	0.000880	0.100	0.0933	0.0924	0.0944	0.0850 to 0.115	93.3	70.0 to 130	0.969	20.0
BC06189	Boron, Dissolved	mg/L	-0.000364	0.0650	1.00	2.25	2.25	0.989	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC06191	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.04	1.03	1.03	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06189	Cadmium, Dissolved	mg/L	0.0000083	0.000147	0.100	0.0978	0.0947	0.102	0.0850 to 0.115	97.7	70.0 to 130	3.22	20.0
BC06191	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0994	0.102	0.0850 to 0.115	100	70.0 to 130	0.602	20.0
BC06189	Calcium, Dissolved	mg/L	-0.0109	0.152	5.00	71.2	76.6	4.82	4.25 to 5.75	46.0	70.0 to 130	7.31	20.0
BC06191	Calcium, Total	mg/L	-0.00570	0.152	5.00	4.97	5.07	5.00	4.25 to 5.75	99.4	70.0 to 130	1.99	20.0
BC06191	Chloride	mg/L	0.0429	1.00	10.0	10.2	10.5	10.2	9.00 to 11.0	102	80.0 to 120	2.90	20.0
BC06189	Chromium, Dissolved	mg/L	-0.0000044	0.000440	0.100	0.0974	0.0935	0.0989	0.0850 to 0.115	97.2	70.0 to 130	4.09	20.0
BC06191	Chromium, Total	mg/L	0.0000267	0.000440	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC06189	Cobalt, Dissolved	mg/L	0.0000014	0.000147	0.100	0.113	0.109	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.60	20.0
BC06191	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.102	0.102	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06191	Fluoride	mg/L	-0.0197	0.125	2.50	2.59	2.54	2.58	2.25 to 2.75	104	80.0 to 120	1.95	20.0
BC06189	Iron, Dissolved	mg/L	-0.000299	0.0176	0.2	0.465	0.464	0.199	0.170 to 0.230	95.0	70.0 to 130	0.215	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC06188

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Iron, Total	mg/L	0.00021	0.0176	0.2	0.201	0.201	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BC06189	Lead, Dissolved	mg/L	0.0000103	0.000147	0.100	0.104	0.101	0.101	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BC06191	Lead, Total	mg/L	0.0000047	0.000147	0.100	0.0987	0.0980	0.0999	0.0850 to 0.115	98.7	70.0 to 130	0.712	20.0
BC06189	Lithium, Dissolved	mg/L	0.000174	0.0154	0.200	0.195	0.189	0.204	0.170 to 0.230	97.5	70.0 to 130	3.12	20.0
BC06191	Lithium, Total	mg/L	0.000029	0.0154	0.200	0.209	0.208	0.205	0.170 to 0.230	104	70.0 to 130	0.480	20.0
BC06189	Magnesium, Dissolved	mg/L	-0.00346	0.0462	5.00	27.0	26.6	5.22	4.25 to 5.75	96.0	70.0 to 130	1.49	20.0
BC06191	Magnesium, Total	mg/L	-0.0180	0.0462	5.00	5.37	5.34	5.37	4.25 to 5.75	107	70.0 to 130	0.560	20.0
BC06189	Manganese, Dissolved	mg/L	0.0000593	0.0002	0.100	11.3	11.4	0.101	0.0850 to 0.115	200	70.0 to 130	0.881	20.0
BC06191	Manganese, Total	mg/L	-0.0000365	0.0002	0.100	0.0994	0.0998	0.103	0.0850 to 0.115	99.4	70.0 to 130	0.402	20.0
BC06191	Mercury, Total by CVAA	mg/L	-0.00012	0.000500	0.004	0.00389	0.00396	0.004	0.00340 to 0.00460	97.2	70.0 to 130	1.78	20.0
BC06189	Molybdenum, Dissolved	mg/L	0.0000110	0.0002	0.100	0.0966	0.0959	0.0993	0.0850 to 0.115	96.6	70.0 to 130	0.727	20.0
BC06191	Molybdenum, Total	mg/L	0.0000066	0.0002	0.100	0.0990	0.0962	0.0982	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BC06189	Potassium, Dissolved	mg/L	0.0254	0.367	10.0	14.6	13.9	10.2	8.50 to 11.5	103	70.0 to 130	4.91	20.0
BC06191	Potassium, Total	mg/L	-0.00856	0.367	10.0	10.0	10.1	10.6	8.50 to 11.5	100	70.0 to 130	0.995	20.0
BC06189	Selenium, Dissolved	mg/L	0.0000821	0.00100	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06191	Selenium, Total	mg/L	0.0000174	0.00100	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06189	Silicon, Dissolved	mg/L	0.000306	0.0440	1.00	5.27	5.25	1.01	0.850 to 1.15	96.0	70.0 to 130	0.380	20.0
BC06191	Silicon, Total	mg/L	0.000581	0.0440	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06189	Sodium, Dissolved	mg/L	0.00424	0.0660	5.00	77.6	80.2	5.28	4.25 to 5.75	60.0	70.0 to 130	3.30	20.0
BC06191	Sodium, Total	mg/L	0.00297	0.0660	5.00	5.34	5.32	5.28	4.25 to 5.75	107	70.0 to 130	0.375	20.0
BC06191	Sulfate	mg/L	0.378	2.0	20.0	21.4	21.1	20.6	18.0 to 22.0	104	80.0 to 120	1.41	20.0
BC06189	Thallium, Dissolved	mg/L	0.0000076	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC06188

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Thallium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0986	0.100	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC06191	Total Organic Carbon	mg/L	0.300	1.00	10.0	10.1	10.0	9.85		101	80.0 to 120	0.995	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC06188

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06189	Alkalinity, Total as CaCO3	mg/L					261	51.0	45.0 to 55.0			3.76	10.0
BC06191	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.09	0.200	2.00	1.84	-0.117	1.90	1.80 to 2.20	92.0	90.0 to 110	0.00	15.0
BC06189	Solids, Dissolved	mg/L	2.00	25.0			476	59.0	40.0 to 60.0			4.52	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 09:38
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06189

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 11:04		1.015	1.32	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 11:55		10.15	63.2	mg/L	0.70035	4.06	
* Iron, Total	4/5/22 07:00	4/7/22 11:04		1.015	0.616	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 11:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 11:04		1.015	23.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 11:04		1	9.52	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 11:04		1.015	4.45	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 11:55		10.15	69.6	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:23	4/5/22 09:25		1.015	1.26	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:23	4/5/22 09:56		10.15	68.9	mg/L	0.70035	4.06	RA
* Iron, Dissolved	4/4/22 08:23	4/5/22 09:25		1.015	0.275	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:23	4/5/22 09:25		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:23	4/5/22 09:25		1.015	22.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:23	4/5/22 09:25		1	9.22	mg/L			
Silicon, Dissolved	4/4/22 08:23	4/5/22 09:25		1.015	4.31	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:23	4/5/22 09:56		10.15	74.6	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:36	3/30/22 13:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.0239	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.000236	mg/L	0.000081	0.000203	
* Barium, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.153	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:36	3/30/22 13:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.000204	mg/L	0.000068	0.000203	
* Chromium, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.000381	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.0167	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:36	3/30/22 13:40		1.015	0.0000839	mg/L	0.000068	0.000203	J
* Manganese, Total	3/29/22 14:36	3/30/22 14:06		10.15	11.1	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:36	3/30/22 13:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:36	3/30/22 13:40		1.015	4.19	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 09:38
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06189

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:36	3/30/22 13:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:36	3/30/22 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	0.0000879	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	0.157	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	0.0000923	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	0.000250	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	0.0157	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:59	3/31/22 13:01		10.15	11.1	mg/L	0.001522	0.00203	RA
* Molybdenum, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	4.28	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:59	3/29/22 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 21:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/1/22 15:42	4/1/22 15:42		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/4/22 13:40	4/4/22 14:35		1	271	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/22 11:23	3/30/22 12:58		1	498	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/4/22 13:40	4/4/22 14:35		1	268	mg/L			
Carbonate Alkalinity, (calc.)	4/4/22 13:40	4/4/22 14:35		1	2.89	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 21:53	3/29/22 21:53		1	1.87	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 09:38
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06189

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:57	3/28/22 11:57		8	119	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 15:05	3/28/22 15:05		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:20	3/29/22 13:20		1	38.4	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/23/22 09:34	3/23/22 09:34			850.17	uS/cm			FA
pH	3/23/22 09:34	3/23/22 09:34			6.14	SU			FA
Temperature	3/23/22 09:34	3/23/22 09:34			17.45	C			FA
Turbidity	3/23/22 09:34	3/23/22 09:34			4.36	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO DUP

Laboratory ID Number: BC06189

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06189	Aluminum, Dissolved	mg/L	-0.000233	0.010	0.100	0.103	0.100	0.103	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC06191	Aluminum, Total	mg/L	0.000484	0.010	0.100	0.0971	0.0998	0.104	0.0850 to 0.115	97.1	70.0 to 130	2.74	20.0
BC06189	Antimony, Dissolved	mg/L	0.000296	0.00100	0.100	0.0895	0.0910	0.0994	0.0850 to 0.115	89.5	70.0 to 130	1.66	20.0
BC06191	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0968	0.0990	0.0986	0.0850 to 0.115	96.8	70.0 to 130	2.25	20.0
BC06189	Arsenic, Dissolved	mg/L	0.0000073	0.000176	0.100	0.0994	0.0970	0.0994	0.0850 to 0.115	99.3	70.0 to 130	2.44	20.0
BC06191	Arsenic, Total	mg/L	-0.0000254	0.000176	0.100	0.100	0.101	0.105	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06189	Barium, Dissolved	mg/L	-0.0000331	0.00100	0.100	0.257	0.252	0.108	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06191	Barium, Total	mg/L	0.0000209	0.00100	0.100	0.0924	0.0967	0.0965	0.0850 to 0.115	92.4	70.0 to 130	4.55	20.0
BC06189	Beryllium, Dissolved	mg/L	0.0000834	0.000880	0.100	0.0865	0.0910	0.0918	0.0850 to 0.115	86.5	70.0 to 130	5.07	20.0
BC06191	Beryllium, Total	mg/L	0.0000818	0.000880	0.100	0.0933	0.0924	0.0944	0.0850 to 0.115	93.3	70.0 to 130	0.969	20.0
BC06189	Boron, Dissolved	mg/L	-0.000364	0.0650	1.00	2.25	2.25	0.989	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC06191	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.04	1.03	1.03	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06189	Cadmium, Dissolved	mg/L	0.0000083	0.000147	0.100	0.0978	0.0947	0.102	0.0850 to 0.115	97.7	70.0 to 130	3.22	20.0
BC06191	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0994	0.102	0.0850 to 0.115	100	70.0 to 130	0.602	20.0
BC06189	Calcium, Dissolved	mg/L	-0.0109	0.152	5.00	71.2	76.6	4.82	4.25 to 5.75	46.0	70.0 to 130	7.31	20.0
BC06191	Calcium, Total	mg/L	-0.00570	0.152	5.00	4.97	5.07	5.00	4.25 to 5.75	99.4	70.0 to 130	1.99	20.0
BC06191	Chloride	mg/L	0.0429	1.00	10.0	10.2	10.5	10.2	9.00 to 11.0	102	80.0 to 120	2.90	20.0
BC06189	Chromium, Dissolved	mg/L	-0.0000044	0.000440	0.100	0.0974	0.0935	0.0989	0.0850 to 0.115	97.2	70.0 to 130	4.09	20.0
BC06191	Chromium, Total	mg/L	0.0000267	0.000440	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC06189	Cobalt, Dissolved	mg/L	0.0000014	0.000147	0.100	0.113	0.109	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.60	20.0
BC06191	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.102	0.102	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06191	Fluoride	mg/L	-0.0197	0.125	2.50	2.59	2.54	2.58	2.25 to 2.75	104	80.0 to 120	1.95	20.0
BC06189	Iron, Dissolved	mg/L	-0.000299	0.0176	0.2	0.465	0.464	0.199	0.170 to 0.230	95.0	70.0 to 130	0.215	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO DUP

Laboratory ID Number: BC06189

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Iron, Total	mg/L	0.00021	0.0176	0.2	0.201	0.201	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BC06189	Lead, Dissolved	mg/L	0.0000103	0.000147	0.100	0.104	0.101	0.101	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BC06191	Lead, Total	mg/L	0.0000047	0.000147	0.100	0.0987	0.0980	0.0999	0.0850 to 0.115	98.7	70.0 to 130	0.712	20.0
BC06189	Lithium, Dissolved	mg/L	0.000174	0.0154	0.200	0.195	0.189	0.204	0.170 to 0.230	97.5	70.0 to 130	3.12	20.0
BC06191	Lithium, Total	mg/L	0.000029	0.0154	0.200	0.209	0.208	0.205	0.170 to 0.230	104	70.0 to 130	0.480	20.0
BC06189	Magnesium, Dissolved	mg/L	-0.00346	0.0462	5.00	27.0	26.6	5.22	4.25 to 5.75	96.0	70.0 to 130	1.49	20.0
BC06191	Magnesium, Total	mg/L	-0.0180	0.0462	5.00	5.37	5.34	5.37	4.25 to 5.75	107	70.0 to 130	0.560	20.0
BC06189	Manganese, Dissolved	mg/L	0.0000593	0.0002	0.100	11.3	11.4	0.101	0.0850 to 0.115	200	70.0 to 130	0.881	20.0
BC06191	Manganese, Total	mg/L	-0.0000365	0.0002	0.100	0.0994	0.0998	0.103	0.0850 to 0.115	99.4	70.0 to 130	0.402	20.0
BC06191	Mercury, Total by CVAA	mg/L	-0.00012	0.000500	0.004	0.00389	0.00396	0.004	0.00340 to 0.00460	97.2	70.0 to 130	1.78	20.0
BC06189	Molybdenum, Dissolved	mg/L	0.0000110	0.0002	0.100	0.0966	0.0959	0.0993	0.0850 to 0.115	96.6	70.0 to 130	0.727	20.0
BC06191	Molybdenum, Total	mg/L	0.0000066	0.0002	0.100	0.0990	0.0962	0.0982	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BC06189	Potassium, Dissolved	mg/L	0.0254	0.367	10.0	14.6	13.9	10.2	8.50 to 11.5	103	70.0 to 130	4.91	20.0
BC06191	Potassium, Total	mg/L	-0.00856	0.367	10.0	10.0	10.1	10.6	8.50 to 11.5	100	70.0 to 130	0.995	20.0
BC06189	Selenium, Dissolved	mg/L	0.0000821	0.00100	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06191	Selenium, Total	mg/L	0.0000174	0.00100	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06189	Silicon, Dissolved	mg/L	0.000306	0.0440	1.00	5.27	5.25	1.01	0.850 to 1.15	96.0	70.0 to 130	0.380	20.0
BC06191	Silicon, Total	mg/L	0.000581	0.0440	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06189	Sodium, Dissolved	mg/L	0.00424	0.0660	5.00	77.6	80.2	5.28	4.25 to 5.75	60.0	70.0 to 130	3.30	20.0
BC06191	Sodium, Total	mg/L	0.00297	0.0660	5.00	5.34	5.32	5.28	4.25 to 5.75	107	70.0 to 130	0.375	20.0
BC06191	Sulfate	mg/L	0.378	2.0	20.0	21.4	21.1	20.6	18.0 to 22.0	104	80.0 to 120	1.41	20.0
BC06189	Thallium, Dissolved	mg/L	0.0000076	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO DUP

Laboratory ID Number: BC06189

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Thallium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0986	0.100	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC06191	Total Organic Carbon	mg/L	0.300	1.00	10.0	10.1	10.0	9.85		101	80.0 to 120	0.995	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:38
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond - MW-52HO DUP

Laboratory ID Number: BC06189

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06189	Alkalinity, Total as CaCO3	mg/L					261	51.0	45.0 to 55.0			3.76	10.0
BC06191	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.09	0.200	2.00	1.84	-0.117	1.90	1.80 to 2.20	92.0	90.0 to 110	0.00	15.0
BC06189	Solids, Dissolved	mg/L	2.00	25.0			476	59.0	40.0 to 60.0			4.52	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. Dissolved Calcium, Sodium and Manganese MS/MSD recovery did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/23/22 10:10
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06190

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/7/22 11:06		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/7/22 11:06		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:36	3/30/22 13:44		1.015	0.000314	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:36	3/30/22 13:44		1.015	0.000404	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:36	3/30/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 21:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/1/22 15:43	4/1/22 15:43		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/22 11:23	3/30/22 12:58		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/23/22 10:10
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06190

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 22:12	3/29/22 22:12		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:59	3/28/22 11:59		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 15:06	3/28/22 15:06		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:22	3/29/22 13:22		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06190

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Aluminum, Total	mg/L	0.000484	0.010	0.100	0.0971	0.0998	0.104	0.0850 to 0.115	97.1	70.0 to 130	2.74	20.0
BC06191	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0968	0.0990	0.0986	0.0850 to 0.115	96.8	70.0 to 130	2.25	20.0
BC06191	Arsenic, Total	mg/L	-0.0000254	0.000176	0.100	0.100	0.101	0.105	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06191	Barium, Total	mg/L	0.0000209	0.00100	0.100	0.0924	0.0967	0.0965	0.0850 to 0.115	92.4	70.0 to 130	4.55	20.0
BC06191	Beryllium, Total	mg/L	0.0000818	0.000880	0.100	0.0933	0.0924	0.0944	0.0850 to 0.115	93.3	70.0 to 130	0.969	20.0
BC06191	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.04	1.03	1.03	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06191	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0994	0.102	0.0850 to 0.115	100	70.0 to 130	0.602	20.0
BC06191	Calcium, Total	mg/L	-0.00570	0.152	5.00	4.97	5.07	5.00	4.25 to 5.75	99.4	70.0 to 130	1.99	20.0
BC06191	Chloride	mg/L	0.0429	1.00	10.0	10.2	10.5	10.2	9.00 to 11.0	102	80.0 to 120	2.90	20.0
BC06191	Chromium, Total	mg/L	0.0000267	0.000440	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC06191	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.102	0.102	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06191	Fluoride	mg/L	-0.0197	0.125	2.50	2.59	2.54	2.58	2.25 to 2.75	104	80.0 to 120	1.95	20.0
BC06191	Iron, Total	mg/L	0.00021	0.0176	0.2	0.201	0.201	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BC06191	Lead, Total	mg/L	0.0000047	0.000147	0.100	0.0987	0.0980	0.0999	0.0850 to 0.115	98.7	70.0 to 130	0.712	20.0
BC06191	Lithium, Total	mg/L	0.000029	0.0154	0.200	0.209	0.208	0.205	0.170 to 0.230	104	70.0 to 130	0.480	20.0
BC06191	Magnesium, Total	mg/L	-0.0180	0.0462	5.00	5.37	5.34	5.37	4.25 to 5.75	107	70.0 to 130	0.560	20.0
BC06191	Manganese, Total	mg/L	-0.0000365	0.0002	0.100	0.0994	0.0998	0.103	0.0850 to 0.115	99.4	70.0 to 130	0.402	20.0
BC06191	Mercury, Total by CVAA	mg/L	-0.00012	0.000500	0.004	0.00389	0.00396	0.004	0.00340 to 0.00460	97.2	70.0 to 130	1.78	20.0
BC06191	Molybdenum, Total	mg/L	0.0000066	0.0002	0.100	0.0990	0.0962	0.0982	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BC06191	Potassium, Total	mg/L	-0.00856	0.367	10.0	10.0	10.1	10.6	8.50 to 11.5	100	70.0 to 130	0.995	20.0
BC06191	Selenium, Total	mg/L	0.0000174	0.00100	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06191	Silicon, Total	mg/L	0.000581	0.0440	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06191	Sodium, Total	mg/L	0.00297	0.0660	5.00	5.34	5.32	5.28	4.25 to 5.75	107	70.0 to 130	0.375	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06190

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Sulfate	mg/L	0.378	2.0	20.0	21.4	21.1	20.6	18.0 to 22.0	104	80.0 to 120	1.41	20.0
BC06191	Thallium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0986	0.100	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC06191	Total Organic Carbon	mg/L	0.300	1.00	10.0	10.1	10.0	9.85		101	80.0 to 120	0.995	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06190

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.09	0.200	2.00	1.84	-0.117	1.90	1.80 to 2.20	92.0	90.0 to 110	0.00	15.0
BC06189	Solids, Dissolved	mg/L	2.00	25.0			476	59.0	40.0 to 60.0			4.52	10.0

Comments:

Reported: 5/5/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 3/23/22 10:15
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06191

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/7/22 11:09		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/7/22 11:09		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:36	3/30/22 13:47		1.015	0.000332	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:36	3/30/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 21:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: ELH***								
* Nitrogen, Nitrate/Nitrite	4/1/22 15:44	4/1/22 15:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/22 11:23	3/30/22 12:58		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 3/23/22 10:15
Customer ID:
Submittal Date: 3/24/22 11:42

Laboratory ID Number: BC06191

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 22:26	3/29/22 22:26		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 12:00	3/28/22 12:00		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 15:07	3/28/22 15:07		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:23	3/29/22 13:23		1	0.605	mg/L	0.6	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 10:15
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06191

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Aluminum, Total	mg/L	0.000484	0.010	0.100	0.0971	0.0998	0.104	0.0850 to 0.115	97.1	70.0 to 130	2.74	20.0
BC06191	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0968	0.0990	0.0986	0.0850 to 0.115	96.8	70.0 to 130	2.25	20.0
BC06191	Arsenic, Total	mg/L	-0.0000254	0.000176	0.100	0.100	0.101	0.105	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06191	Barium, Total	mg/L	0.0000209	0.00100	0.100	0.0924	0.0967	0.0965	0.0850 to 0.115	92.4	70.0 to 130	4.55	20.0
BC06191	Beryllium, Total	mg/L	0.0000818	0.000880	0.100	0.0933	0.0924	0.0944	0.0850 to 0.115	93.3	70.0 to 130	0.969	20.0
BC06191	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.04	1.03	1.03	0.850 to 1.15	104	70.0 to 130	0.966	20.0
BC06191	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0994	0.102	0.0850 to 0.115	100	70.0 to 130	0.602	20.0
BC06191	Calcium, Total	mg/L	-0.00570	0.152	5.00	4.97	5.07	5.00	4.25 to 5.75	99.4	70.0 to 130	1.99	20.0
BC06191	Chloride	mg/L	0.0429	1.00	10.0	10.2	10.5	10.2	9.00 to 11.0	102	80.0 to 120	2.90	20.0
BC06191	Chromium, Total	mg/L	0.0000267	0.000440	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC06191	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.102	0.102	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06191	Fluoride	mg/L	-0.0197	0.125	2.50	2.59	2.54	2.58	2.25 to 2.75	104	80.0 to 120	1.95	20.0
BC06191	Iron, Total	mg/L	0.00021	0.0176	0.2	0.201	0.201	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BC06191	Lead, Total	mg/L	0.0000047	0.000147	0.100	0.0987	0.0980	0.0999	0.0850 to 0.115	98.7	70.0 to 130	0.712	20.0
BC06191	Lithium, Total	mg/L	0.000029	0.0154	0.200	0.209	0.208	0.205	0.170 to 0.230	104	70.0 to 130	0.480	20.0
BC06191	Magnesium, Total	mg/L	-0.0180	0.0462	5.00	5.37	5.34	5.37	4.25 to 5.75	107	70.0 to 130	0.560	20.0
BC06191	Manganese, Total	mg/L	-0.0000365	0.0002	0.100	0.0994	0.0998	0.103	0.0850 to 0.115	99.4	70.0 to 130	0.402	20.0
BC06191	Mercury, Total by CVAA	mg/L	-0.00012	0.000500	0.004	0.00389	0.00396	0.004	0.00340 to 0.00460	97.2	70.0 to 130	1.78	20.0
BC06191	Molybdenum, Total	mg/L	0.0000066	0.0002	0.100	0.0990	0.0962	0.0982	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BC06191	Potassium, Total	mg/L	-0.00856	0.367	10.0	10.0	10.1	10.6	8.50 to 11.5	100	70.0 to 130	0.995	20.0
BC06191	Selenium, Total	mg/L	0.0000174	0.00100	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06191	Silicon, Total	mg/L	0.000581	0.0440	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC06191	Sodium, Total	mg/L	0.00297	0.0660	5.00	5.34	5.32	5.28	4.25 to 5.75	107	70.0 to 130	0.375	20.0

Comments:

Batch QC Summary

Alabama Power

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 10:15
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06191

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Sulfate	mg/L	0.378	2.0	20.0	21.4	21.1	20.6	18.0 to 22.0	104	80.0 to 120	1.41	20.0
BC06191	Thallium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.0986	0.100	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC06191	Total Organic Carbon	mg/L	0.300	1.00	10.0	10.1	10.0	9.85		101	80.0 to 120	0.995	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 10:15
Customer ID:
Delivery Date: 3/24/22 11:42

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06191

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06191	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.09	0.200	2.00	1.84	-0.117	1.90	1.80 to 2.20	92.0	90.0 to 110	0.00	15.0
BC06189	Solids, Dissolved	mg/L	2.00	25.0			476	59.0	40.0 to 60.0			4.52	10.0

Comments:

Reported: 5/5/2022
Version: 3.5
COA_CCR

Definitions

Project Number: WMWGREAP_1357

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-52HO	03/23/2022	09:38	7	Groundwater		BC06188
MW-52HO DUP	03/23/2022	09:38	7	Sample Duplicate		BC06189
FB-1	03/23/2022	10:10	5	Field Blank		BC06190
EB-1	03/23/2022	10:15	5	Equipment Blank		BC06191

Relinquished By	Received By	Date/Time
		03/24/2022 09:49

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.0 degrees C
Sample Event	1357	Thermometer ID	6603-34819-1-1
		pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date: Routine
Collector: Anthony Goggins
Results To: Dustin Brooks, Greg Dyer
Requested By: Greg Dyer
Location: Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Sulfide	250 mL	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD collected @ MW-52HO. Sulfide bottles pH>9. LBM 3/24/22
Correcting bottle count to 4 for MW-52HO. LBM 4/8/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-52HO	03/23/2022	09:38	4	Groundwater		BC06192
MW-52HO DUP	03/23/2022	09:38	2	Sample Duplicate		BC06193
FB-1	03/23/2022	10:10	2	Field Blank		BC06194
EB-1	03/23/2022	10:15	2	Equipment Blank		BC06195

Relinquished By	Received By	Date/Time
		03/24/2022 09:48

SmarTroll ID: 7586-41442-5-1
Turbidity ID: 4677-23343-
Sample Event: 1357

All metals and radiological bottles have pH < 2 ☑
Cooler Temp: 1.0 degrees C
Thermometer ID: 6603-34819-1-1
pH Strip ID: 9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

April 01, 2022

Laura Midkiff
Alabama Power
744 Highway 87
GSC 8
Calera, AL 35040

RE: Project: WMWGREAP_1357
Pace Project No.: 20238671

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - New Orleans

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen H Brown

Karen Brown
karen.brown@pacelabs.com
(504)469-0333
Project Manager

Enclosures

cc: Renee Jernigan, Alabama Power
Trinity B. Williams, Alabama Power

CERTIFICATIONS

Project:	WMWGREAP_1357
Pace Project No.:	20238671

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

SAMPLE SUMMARY

Project: WMWGREAP_1357
Pace Project No.: 20238671

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20238671001	**BC06192 MW-52HO**	Water	03/23/22 09:38	03/26/22 04:00
20238671002	**BC06193 MW-52HO DUP**	Water	03/23/22 09:38	03/26/22 04:00
20238671003	**BC06194 FB-1**	Water	03/23/22 10:10	03/26/22 04:00
20238671004	**BC06195 EB-1**	Water	03/23/22 10:15	03/26/22 04:00

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1357
Pace Project No.: 20238671

Lab ID	Sample ID	Method	Analysts	Analytes Reported
20238671001	**BC06192 MW-52HO**	SM 4500-S-2 D	RVJ	1
20238671002	**BC06193 MW-52HO DUP**	SM 4500-S-2 D	RVJ	1
20238671003	**BC06194 FB-1**	SM 4500-S-2 D	RVJ	1
20238671004	**BC06195 EB-1**	SM 4500-S-2 D	RVJ	1

PASI-N = Pace Analytical Services - New Orleans

PROJECT NARRATIVE

Project: WMWGREAP_1357
Pace Project No.: 20238671

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Alabama Power
Date: April 01, 2022

General Information:
4 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services New Orleans. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 251121

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20238671001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1193180)
  - Sulfide, Total

QC Batch: 251511

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20238671002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1194666)
  - Sulfide, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: WMWGREAP_1357
Pace Project No.: 20238671

Sample: BC06192 MW-52HO **Lab ID: 20238671001** Collected: 03/23/22 09:38 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/27/22 11:54	18496-25-8	M1

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: WMWGREAP_1357
Pace Project No.: 20238671

Sample: BC06193 MW-52HO DUP **Lab ID: 20238671002** Collected: 03/23/22 09:38 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 13:32	18496-25-8	M1

ANALYTICAL RESULTS

Project: WMWGREAP_1357
Pace Project No.: 20238671

Sample: BC06194 FB-1 **Lab ID: 20238671003** Collected: 03/23/22 10:10 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 13:34	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1357
Pace Project No.: 20238671

Sample: BC06195 EB-1 **Lab ID: 20238671004** Collected: 03/23/22 10:15 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:01	18496-25-8	

QUALITY CONTROL DATA

Project: WMWGREAP_1357
Pace Project No.: 20238671

QC Batch:	251121	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
		Laboratory:	Pace Analytical Services - New Orleans

Associated Lab Samples: 20238671001

METHOD BLANK: 1193177 Matrix: Water
Associated Lab Samples: 20238671001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.020	0.012	03/27/22 11:54	

LABORATORY CONTROL SAMPLE: 1193178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.2	0.20	101	90-110	

MATRIX SPIKE SAMPLE: 1193180

Parameter	Units	20238671001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	0.2	0.11	54	75-125	M1

SAMPLE DUPLICATE: 1193179

Parameter	Units	20238671001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL DATA

Project: WMWGREAP_1357
Pace Project No.: 20238671

QC Batch: 251511
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20238671002, 20238671003, 20238671004

METHOD BLANK: 1194663 Matrix: Water
Associated Lab Samples: 20238671002, 20238671003, 20238671004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.020	0.012	03/30/22 13:20	

LABORATORY CONTROL SAMPLE: 1194664

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.2	0.20	98	90-110	

MATRIX SPIKE SAMPLE: 1194666

Parameter	Units	20238671002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	0.2	0.11	54	75-125	M1

SAMPLE DUPLICATE: 1194665

Parameter	Units	20238671002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGREAP_1357
Pace Project No.:	20238671

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1357
Pace Project No.: 20238671

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20238671001	**BC06192 MW-52HO**	SM 4500-S-2 D	251121		
20238671002	**BC06193 MW-52HO DUP**	SM 4500-S-2 D	251511		
20238671003	**BC06194 FB-1**	SM 4500-S-2 D	251511		
20238671004	**BC06195 EB-1**	SM 4500-S-2 D	251511		

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 20238671

20238671

1

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1357

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Karen Brown
Pace Profile #:	17210

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)
1	BC06192	MW-52HO	APCO-GC-AP-MW-52HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	9:38	1		X								X		
2	BC06193	MW-52HO DUP	APCO-GC-AP-MW-52HO	APCO_GreeneCounty_AshPond	X			GW	G	3/23/2022	9:38	1		X								X		
3	BC06194	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:10	1		X								X		
4	BC06195	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:15	1		X								X		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/24/2022	13:36							
	G.H.	3/26/2022	0920	G.H.	3/26/2022	0900	1.5	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Goggins

SIGNATURE of SAMPLER:

DATE Signed:

Pace Analytical

Sample Condition Upo

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

P

WO#: 20238671

PM: KHB Due Date: 04/07/22
CLIENT: 20-Alabama

Courier: ☐ Pace Courier ☑ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 7 ☑ Therm Fisher IR 10

Type of Ice: [✓ Wet] Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/26/2022 laws

Temp must be measured from Temperature blank when present

		Comments:
Temperature Blank Present"?	☐Yes ☐No ☑N/A	1
Chain of Custody Present:	☑Yes ☐No ☐N/A	2
Chain of Custody Complete:	☑Yes ☐No ☐N/A	3
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	4
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	5
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	6
Sufficient Volume:	☑Yes ☐No ☐N/A	7
Correct Containers Used:	☑Yes ☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☑N/A	9
Sample Labels match COC:	☑Yes ☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes ☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes ☐No ☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	13 If No, was preservative added? ☐Yes ☐No If added record lot no.: HNO3 ______ H2SO4 ______
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	14
Trip Blank Present:	☐Yes ☑No	15

Client Notification/ Resolution:

Person Contacted: ________________ Date/Time: ________

Comments/ Resolution: ________________

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 02, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGREAP_1357
Pace Project No.: 30476470

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power
Laura Midkiff, Alabama Power

CERTIFICATIONS

Project:	WMWGREAP_1357
Pace Project No.:	30476470

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGREAP_1357
Pace Project No.: 30476470

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30476470001	**BC06192 MW-52HO**	Water	03/23/22 09:38	03/29/22 22:00
30476470002	**BC06192 MW-52HO MS**	Water	03/23/22 09:38	03/29/22 22:00
30476470003	**BC06192 MW-52HO MSD**	Water	03/23/22 09:38	03/29/22 22:00
30476470004	**BC06193 MW-52HO DUP**	Water	03/23/22 09:38	03/29/22 22:00
30476470005	**BC06194 FB-1**	Water	03/23/22 10:10	03/29/22 22:00
30476470006	**BC06195 EB-1**	Water	03/23/22 10:15	03/29/22 22:00

SAMPLE ANALYTE COUNT

Project:	WMWGREAP_1357
Pace Project No.:	30476470

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30476470001	**BC06192 MW-52HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476470002	**BC06192 MW-52HO MS**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30476470003	**BC06192 MW-52HO MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30476470004	**BC06193 MW-52HO DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476470005	**BC06194 FB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476470006	**BC06195 EB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGREAP_1357
Pace Project No.:	30476470

Method:	**EPA 9315**
Description:	9315 Total Radium
Client:	Alabama Power
Date:	May 02, 2022

General Information:
6 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1357
Pace Project No.:	30476470

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: May 02, 2022

General Information:
6 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1357
Pace Project No.:	30476470

Method:	**Total Radium Calculation**
Description:	Total Radium 228+226
Client:	Alabama Power
Date:	May 02, 2022

General Information:
4 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1357
Pace Project No.: 30476470

Sample: BC06192 MW-52HO **Lab ID: 30476470001** Collected: 03/23/22 09:38 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.560 ± 0.245 (0.270)** **C:101% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.439U ± 0.327 (0.629)** **C:72% T:87%**	pCi/L	04/18/22 15:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.999 ± 0.572 (0.899)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1357
Pace Project No.: 30476470

Sample: BC06192 MW-52HO MS **Lab ID: 30476470002** Collected: 03/23/22 09:38 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**99.21 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**96.87 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/18/22 15:56	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1357
Pace Project No.: 30476470

Sample: BC06192 MW-52HO MSD **Lab ID: 30476470003** Collected: 03/23/22 09:38 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**110.06 %REC 10.37RPD ± NA (NA) C:NA T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**92.00 %REC 5.16 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/18/22 15:56	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1357
Pace Project No.:	30476470

Sample: BC06193 MW-52HO DUP **Lab ID: 30476470004** Collected: 03/23/22 09:38 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	**0.671 ± 0.281 (0.303)** **C:98% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	**0.506U ± 0.383 (0.749)** **C:71% T:84%**	pCi/L	04/18/22 15:56	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	**1.18 ± 0.664 (1.05)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1357
Pace Project No.: 30476470

Sample: BC06194 FB-1 **Lab ID: 30476470005** Collected: 03/23/22 10:10 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0115U ± 0.0973 (0.267)** **C:99% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.428U ± 0.318 (0.608)** **C:73% T:89%**	pCi/L	04/18/22 15:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.440U ± 0.415 (0.875)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1357
Pace Project No.: 30476470

Sample: BC06195 EB-1 **Lab ID: 30476470006** Collected: 03/23/22 10:15 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.141U ± 0.150 (0.291)** **C:101% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.243U ± 0.324 (0.690)** **C:77% T:84%**	pCi/L	04/18/22 15:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.384U ± 0.474 (0.981)**	pCi/L	04/27/22 12:45	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1357
Pace Project No.:	30476470

QC Batch:	494964	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30476470001, 30476470002, 30476470003, 30476470004, 30476470005, 30476470006

METHOD BLANK: 2394282 Matrix: Water

Associated Lab Samples: 30476470001, 30476470002, 30476470003, 30476470004, 30476470005, 30476470006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.432 ± 0.355 (0.710) C:74% T:87%	pCi/L	04/18/22 12:55	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1357
Pace Project No.: 30476470

QC Batch: 494692
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30476470001, 30476470002, 30476470003, 30476470004, 30476470005, 30476470006

METHOD BLANK: 2393433
Matrix: Water
Associated Lab Samples: 30476470001, 30476470002, 30476470003, 30476470004, 30476470005, 30476470006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.118 ± 0.0948 (0.171) C:101% T:NA	pCi/L	04/26/22 09:41	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGREAP_1357
Pace Project No.:	30476470

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1357
Pace Project No.: 30476470

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30476470001	**BC06192 MW-52HO**	EPA 9315	494692		
30476470002	**BC06192 MW-52HO MS**	EPA 9315	494692		
30476470003	**BC06192 MW-52HO MSD**	EPA 9315	494692		
30476470004	**BC06193 MW-52HO DUP**	EPA 9315	494692		
30476470005	**BC06194 FB-1**	EPA 9315	494692		
30476470006	**BC06195 EB-1**	EPA 9315	494692		
30476470001	**BC06192 MW-52HO**	EPA 9320	494964		
30476470002	**BC06192 MW-52HO MS**	EPA 9320	494964		
30476470003	**BC06192 MW-52HO MSD**	EPA 9320	494964		
30476470004	**BC06193 MW-52HO DUP**	EPA 9320	494964		
30476470005	**BC06194 FB-1**	EPA 9320	494964		
30476470006	**BC06195 EB-1**	EPA 9320	494964		
30476470001	**BC06192 MW-52HO**	Total Radium Calculation	500399		
30476470004	**BC06193 MW-52HO DUP**	Total Radium Calculation	500399		
30476470005	**BC06194 FB-1**	Total Radium Calculation	500399		
30476470006	**BC06195 EB-1**	Total Radium Calculation	500399		

CHAIN-OF-CUSTODY / Analytical Request Docum

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be con

WO# : 30476470

30476470

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1357

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	13805

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06192	MW-52HO	APCO-GC-AP-MW-52HO	APCO_GreeneCounty_AshPond		X		GW	G	3/23/2022	9:38	3			X		X	X	X			001,002,003
2	BC06193	MW-52HO DUP	APCO-GC-AP-MW-52HO	APCO_GreeneCounty_AshPond	X			GW	G	3/23/2022	9:38	1			X		X	X	X			004
3	BC06194	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:10	1			X		X	X	X			005
4	BC06195	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:15	1			X		X	X	X			006
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	3/25/2022	9:38		3-30-22	9:25	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Goggins

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Alabama Pow

Project #:

WO#:30476470
Due Date: 04/20/22
PM: SCR
CLIENT: ALABAMA PWR

Label: AF
LIMS Login: VPINC

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 5701 6584 7599

Custody Seal on Cooler/Box Present: ☐ yes ☑ no   Seals intact: ☐ yes ☑ no

Thermometer Used: Type of Ice: Wet Blue [✓ None]

Cooler Temperature   Observed Temp: – °C   Correction Factor: – °C   Final Temp: – °C

Temp should be above freezing to 6°C

pH paper Lot#: 1002811

Date and Initials of person examining contents: 04/01/22 AF

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:		✓		3. No Signature
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed: AF Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: AF Date: 04/01/22 Survey Meter SN 5603

Client Notification/ Resolution:

Person Contacted: ____ Date/Time: ____ Contacted By: ____

Comments/ Resolution: ____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical™
www.pacelabs.com

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 4/4/2022
Worklist: 65909
Matrix: DW

Method Blank Assessment	
MB Sample ID	2393433
MB concentration:	0.118
M/B Counting Uncertainty:	0.093
MB MDC:	0.171
MB Numerical Performance Indicator:	2.49
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65909	**LCSD65909**
Count Date:	4/26/2022	4/26/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.028	24.028
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.515
Target Conc. (pCi/L, g, F):	4.805	4.667
Uncertainty (Calculated):	0.058	0.056
Result (pCi/L, g, F):	5.079	4.651
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.464	0.438
Numerical Performance Indicator:	1.15	-0.07
Percent Recovery:	105.70%	99.64%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/23/2022
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.029	24.029
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.253	0.255
MS Target Conc.(pCi/L, g, F):	18.994	18.818
MSD Aliquot (L, g, F):	0.254	0.254
MSD Target Conc. (pCi/L, g, F):	18.934	18.884
MS Spike Uncertainty (calculated):	0.228	0.226
MSD Spike Uncertainty (calculated):	0.227	0.227
Sample Result:	0.469	0.560
Sample Result Counting Uncertainty (pCi/L, g, F):	0.229	0.231
Sample Matrix Spike Result:	18.357	19.229
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237	1.250
Sample Matrix Spike Duplicate Result:	19.508	21.343
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.257	1.330
MS Numerical Performance Indicator:	-1.697	-0.226
MSD Numerical Performance Indicator:	0.158	2.719
MS Percent Recovery:	94.18%	99.21%
MSD Percent Recovery:	100.55%	110.06%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS65909	
Duplicate Sample I.D.	LCSD65909	
Sample Result (pCi/L, g, F):	5.079	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.464	
Sample Duplicate Result (pCi/L, g, F):	4.651	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.438	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.314	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.90%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Sample Matrix Spike Result:	18.357	19.229
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237	1.250
Sample Matrix Spike Duplicate Result:	19.508	21.343
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.257	1.330
Duplicate Numerical Performance Indicator:	-1.279	-2.270
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.55%	10.37%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4/27/22

UAM 4/27/22

PaceAnalytical™
www.pacelabs.com

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 4/13/2022
Worklist: 65978
Matrix: WI

Method Blank Assessment	
MB Sample ID	2394282
MB concentration:	0.432
M/B 2 Sigma CSU:	0.355
MB MDC:	0.710
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS65978	LCSD65978
Count Date:	4/18/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	36.063	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.807	
Target Conc. (pCi/L, g, F):	4.468	
Uncertainty (Calculated):	0.219	
Result (pCi/L, g, F):	5.259	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.189	
Numerical Performance Indicator:	1.28	
Percent Recovery:	117.70%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/23/2022
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Spike I.D.:	22-016	22-016
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.376	36.376
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.808	0.817
MS Target Conc.(pCi/L, g, F):	9.001	8.908
MSD Aliquot (L, g, F):	0.812	0.821
MSD Target Conc. (pCi/L, g, F):	8.962	8.867
MS Spike Uncertainty (calculated):	0.441	0.437
MSD Spike Uncertainty (calculated):	0.439	0.434
Sample Result:	0.565	0.439
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.325	0.327
Sample Matrix Spike Result:	9.021	9.068
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.800	1.822
Sample Matrix Spike Duplicate Result:	9.401	8.596
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.877	1.753
MS Numerical Performance Indicator:	-0.568	-0.288
MSD Numerical Performance Indicator:	-0.127	-0.758
MS Percent Recovery:	93.94%	96.87%
MSD Percent Recovery:	98.58%	92.00%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Sample Matrix Spike Result:	9.021	9.068
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.800	1.822
Sample Matrix Spike Duplicate Result:	9.401	8.596
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.877	1.753
Duplicate Numerical Performance Indicator:	-0.286	0.366
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	4.82%	5.16%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4/19/22

4/25/22

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Strong Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - Field Blank 1 (FB-1) had results above the Reporting Limit (RL) for Barium.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1356

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

April 27, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on March 24, 2022.
All results reported herein conform to the laboratory’s most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke
Caton
Date: 2022.04.27
12:43:13 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US
United States l=US United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-04-27 14:20-05:00

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	722503	WMWGREAP_1356
BC06179	722503	WMWGREAP_1356
BC06180	722503	WMWGREAP_1356
BC06181	722503	WMWGREAP_1356
BC06182	722503	WMWGREAP_1356

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06178	Calcium	10.15
BC06180	Calcium	10.15
BC06181	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	722116	WMWGREAP_1356
BC06180	722116	WMWGREAP_1356
BC06181	722116	WMWGREAP_1356

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06181 Calcium MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC06178	Calcium	10.15
BC06180	Calcium	10.15
BC06181	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	722381	WMWGREAP_1356
BC06179	722381	WMWGREAP_1356
BC06180	722381	WMWGREAP_1356
BC06181	722381	WMWGREAP_1356
BC06182	722381	WMWGREAP_1356

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06178	Manganese	10.15
BC06180	Manganese	10.15
BC06181	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06178	722298	WMWGREAP_1356
BC06180	722298	WMWGREAP_1356
BC06181	722298	WMWGREAP_1356

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC06181 Manganese MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06178	Manganese	10.15
BC06180	Manganese	10.15
BC06181	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	721864	WMWGREAP_1356
BC06179	721864	WMWGREAP_1356
BC06180	721864	WMWGREAP_1356
BC06181	721864	WMWGREAP_1356
BC06182	721864	WMWGREAP_1356

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	721695	WMWGREAP_1356
BC06179	721695	WMWGREAP_1356
BC06180	721695	WMWGREAP_1356
BC06181	721695	WMWGREAP_1356
BC06182	721695	WMWGREAP_1356

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BC06179
    - BC06182

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	721870, 721954, & 722004	WMWGREAP_1356
BC06179	721870, 721954, & 722004	WMWGREAP_1356
BC06180	721870, 721954, & 722004	WMWGREAP_1356
BC06181	721870, 721954, & 722004	WMWGREAP_1356
BC06182	721870, 721954, & 722004	WMWGREAP_1356

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC06178	Sulfate	10
BC06180	Sulfate	8
BC06181	Sulfate	8

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	722674, 722675	WMWGREAP_1356
BC06180	722674, 722675	WMWGREAP_1356
BC06181	722674, 722675	WMWGREAP_1356

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	721982	WMWGREAP_1356
BC06179	721982	WMWGREAP_1356
BC06180	721982	WMWGREAP_1356
BC06181	721982	WMWGREAP_1356
BC06182	721982	WMWGREAP_1356

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Revision 5

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1356

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06178	722011	WMWGREAP_1356
BC06179	722011	WMWGREAP_1356
BC06180	722011	WMWGREAP_1356
BC06181	722011	WMWGREAP_1356
BC06182	722011	WMWGREAP_1356

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Revision 5

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO

Location Code: WMWGREAP
Collected: 3/23/22 08:52
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06178

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 10:29		1.015	0.567	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 11:44		10.15	63.2	mg/L	0.70035	4.06	
* Iron, Total	4/5/22 07:00	4/7/22 10:29		1.015	0.142	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 10:29		1.015	0.159	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/7/22 10:29		1.015	22.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 10:29		1	6.55	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 10:29		1.015	3.06	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 10:29		1.015	24.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:20	4/5/22 09:07		1.015	0.549	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:20	4/5/22 09:45		10.15	63.0	mg/L	0.70035	4.06	
* Iron, Dissolved	4/4/22 08:20	4/5/22 09:07		1.015	0.0396	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/4/22 08:20	4/5/22 09:43		1.015	0.152	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:20	4/5/22 09:43		1.015	21.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:20	4/5/22 09:07		1	6.33	mg/L			
Silicon, Dissolved	4/4/22 08:20	4/5/22 09:07		1.015	2.96	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:20	4/5/22 09:43		1.015	23.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:27	3/30/22 12:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.0956	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.000300	mg/L	0.000081	0.000203	
* Barium, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.0940	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:27	3/30/22 12:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.000131	mg/L	0.000068	0.000203	J
* Chromium, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.000614	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.00419	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.000157	mg/L	0.000068	0.000203	J
* Manganese, Total	3/29/22 14:27	3/30/22 13:01		10.15	5.42	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.0639	mg/L	0.000102	0.000203	
* Potassium, Total	3/29/22 14:27	3/30/22 12:32		1.015	5.66	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO

Location Code: WMWGREAP
Collected: 3/23/22 08:52
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06178

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:27	3/30/22 12:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:27	3/30/22 12:32		1.015	0.0000941	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	0.000291	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	0.0934	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	0.00397	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:50	3/31/22 12:39		10.15	5.56	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	0.0650	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	5.71	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:50	3/29/22 15:57		1.015	0.0000951	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 14:11	3/29/22 14:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/4/22 12:50	4/4/22 13:40		1	142	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	373	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/4/22 12:50	4/4/22 13:40		1	141	mg/L			
Carbonate Alkalinity, (calc.)	4/4/22 12:50	4/4/22 13:40		1	0.78	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 18:57	3/29/22 18:57		1	1.07	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO

Location Code: WMWGREAP
Collected: 3/23/22 08:52
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06178

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:31	3/28/22 11:31		1	16.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:47	3/28/22 14:47		1	0.251	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:04	3/29/22 13:04		10	156	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/22 08:49	3/23/22 08:49			581.15	uS/cm			FA
pH	3/23/22 08:49	3/23/22 08:49			6.92	SU			FA
Temperature	3/23/22 08:49	3/23/22 08:49			19.49	C			FA
Turbidity	3/23/22 08:49	3/23/22 08:49			4.84	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:52
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC06178

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06181	Aluminum, Dissolved	mg/L	-0.000185	0.010	0.100	0.0974	0.101	0.103	0.0850 to 0.115	97.4	70.0 to 130	3.63	20.0
BC06182	Aluminum, Total	mg/L	0.000625	0.010	0.100	0.0995	0.0991	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.403	20.0
BC06181	Antimony, Dissolved	mg/L	0.000264	0.00100	0.100	0.0933	0.0895	0.0961	0.0850 to 0.115	93.3	70.0 to 130	4.16	20.0
BC06182	Antimony, Total	mg/L	0.000337	0.00100	0.100	0.0973	0.100	0.0985	0.0850 to 0.115	97.3	70.0 to 130	2.74	20.0
BC06181	Arsenic, Dissolved	mg/L	-0.0000221	0.000176	0.100	0.0938	0.0925	0.0970	0.0850 to 0.115	93.7	70.0 to 130	1.40	20.0
BC06182	Arsenic, Total	mg/L	-0.0000454	0.000176	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BC06181	Barium, Dissolved	mg/L	-0.0000222	0.000200	0.100	0.163	0.152	0.103	0.0850 to 0.115	103	70.0 to 130	6.98	20.0
BC06182	Barium, Total	mg/L	0.0000111	0.000200	0.100	0.0941	0.0976	0.0961	0.0850 to 0.115	94.1	70.0 to 130	3.65	20.0
BC06181	Beryllium, Dissolved	mg/L	0.0000623	0.000880	0.100	0.0829	0.0840	0.0915	0.0850 to 0.115	82.9	70.0 to 130	1.32	20.0
BC06182	Beryllium, Total	mg/L	0.0000839	0.000880	0.100	0.0931	0.0933	0.0962	0.0850 to 0.115	93.1	70.0 to 130	0.215	20.0
BC06181	Boron, Dissolved	mg/L	-0.000299	0.0650	1.00	1.34	1.34	1.01	0.850 to 1.15	99.9	70.0 to 130	0.00	20.0
BC06182	Boron, Total	mg/L	-0.000107	0.0650	1.00	1.01	1.02	1.03	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC06181	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0936	0.0949	0.0997	0.0850 to 0.115	93.6	70.0 to 130	1.38	20.0
BC06182	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.101	0.100	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06181	Calcium, Dissolved	mg/L	-0.0123	0.152	5.00	52.4	52.7	4.83	4.25 to 5.75	136	70.0 to 130	0.571	20.0
BC06182	Calcium, Total	mg/L	-0.0108	0.152	5.00	4.87	4.91	5.01	4.25 to 5.75	97.4	70.0 to 130	0.818	20.0
BC06182	Chloride	mg/L	0.0443	1.00	10.0	10.2	10.2	10.2	9.00 to 11.0	102	80.0 to 120	0.00	20.0
BC06181	Chromium, Dissolved	mg/L	-0.0000155	0.000440	0.100	0.0913	0.0933	0.0959	0.0850 to 0.115	91.3	70.0 to 130	2.17	20.0
BC06182	Chromium, Total	mg/L	0.0000733	0.000440	0.100	0.100	0.0994	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BC06181	Cobalt, Dissolved	mg/L	0.0000038	0.000147	0.100	0.0969	0.0990	0.0988	0.0850 to 0.115	92.0	70.0 to 130	2.14	20.0
BC06182	Cobalt, Total	mg/L	-0.0000072	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06182	Fluoride	mg/L	0.0025	0.125	2.50	2.59	2.61	2.54	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BC06181	Iron, Dissolved	mg/L	-0.000628	0.0176	0.2	0.195	0.198	0.200	0.170 to 0.230	97.5	70.0 to 130	1.53	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:52
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC06178

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Iron, Total	mg/L	0.000062	0.0176	0.2	0.200	0.201	0.201	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC06181	Lead, Dissolved	mg/L	0.0000147	0.000147	0.100	0.100	0.0980	0.0988	0.0850 to 0.115	100	70.0 to 130	2.02	20.0
BC06182	Lead, Total	mg/L	0.0000097	0.000147	0.100	0.0984	0.0985	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.102	20.0
BC06181	Lithium, Dissolved	mg/L	0.000086	0.0154	0.200	0.297	0.304	0.199	0.170 to 0.230	91.5	70.0 to 130	2.33	20.0
BC06182	Lithium, Total	mg/L	0.000041	0.0154	0.200	0.212	0.205	0.205	0.170 to 0.230	106	70.0 to 130	3.36	20.0
BC06181	Magnesium, Dissolved	mg/L	-0.00141	0.0462	5.00	23.3	23.7	5.11	4.25 to 5.75	94.0	70.0 to 130	1.70	20.0
BC06182	Magnesium, Total	mg/L	-0.0105	0.0462	5.00	5.24	5.20	5.23	4.25 to 5.75	105	70.0 to 130	0.766	20.0
BC06181	Manganese, Dissolved	mg/L	0.0000254	0.0002	0.100	5.13	5.21	0.0986	0.0850 to 0.115	-50.0	70.0 to 130	1.55	20.0
BC06182	Manganese, Total	mg/L	-0.0000815	0.0002	0.100	0.100	0.0990	0.103	0.0850 to 0.115	100	70.0 to 130	1.01	20.0
BC06182	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00392	0.00402	0.00399	0.00340 to 0.00460	98.0	70.0 to 130	2.52	20.0
BC06181	Molybdenum, Dissolved	mg/L	-0.0000036	0.0002	0.100	0.143	0.140	0.0979	0.0850 to 0.115	95.7	70.0 to 130	2.12	20.0
BC06182	Molybdenum, Total	mg/L	0.0000190	0.0002	0.100	0.0983	0.0967	0.0987	0.0850 to 0.115	98.3	70.0 to 130	1.64	20.0
BC06181	Potassium, Dissolved	mg/L	0.0238	0.367	10.0	15.1	15.5	9.92	8.50 to 11.5	96.6	70.0 to 130	2.61	20.0
BC06182	Potassium, Total	mg/L	-0.0247	0.367	10.0	10.2	10.0	10.4	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC06181	Selenium, Dissolved	mg/L	0.000184	0.00100	0.100	0.0938	0.0924	0.0968	0.0850 to 0.115	93.8	70.0 to 130	1.50	20.0
BC06182	Selenium, Total	mg/L	0.0000464	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06181	Silicon, Dissolved	mg/L	-0.000515	0.0440	1.00	3.26	3.26	1.01	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06182	Silicon, Total	mg/L	0.000356	0.0440	1.00	0.999	1.00	1.02	0.850 to 1.15	99.9	70.0 to 130	0.100	20.0
BC06181	Sodium, Dissolved	mg/L	0.00285	0.0660	5.00	18.6	19.1	5.13	4.25 to 5.75	88.0	70.0 to 130	2.65	20.0
BC06182	Sodium, Total	mg/L	0.00275	0.0660	5.00	5.40	5.21	5.18	4.25 to 5.75	108	70.0 to 130	3.58	20.0
BC06182	Sulfate	mg/L	0.369	2.0	20.0	21.2	20.7	20.6	18.0 to 22.0	106	80.0 to 120	2.39	20.0
BC06181	Thallium, Dissolved	mg/L	0.0000095	0.000147	0.100	0.101	0.0980	0.0990	0.0850 to 0.115	101	70.0 to 130	3.02	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:52
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC06178

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Thallium, Total	mg/L	0.0000020	0.000147	0.100	0.0992	0.0972	0.101	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BC06182	Total Organic Carbon	mg/L	0.310	1.00	10.0	10.1	10.1	10.0		101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:52
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC06178

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06181	Alkalinity, Total as CaCO3	mg/L					113	51.0	45.0 to 55.0			0.00	10.0
BC06182	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.08	0.200	2.00	1.94	-0.064	1.90	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC06181	Solids, Dissolved	mg/L	0.0000	25.0			298	49.0	40.0 to 60.0			0.336	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/23/22 09:15
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06179

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/7/22 10:32		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/7/22 10:32		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:27	3/30/22 12:36		1.015	0.000226	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:27	3/30/22 12:36		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:27	3/30/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 14:12	3/29/22 14:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/23/22 09:15
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06179

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 19:16	3/29/22 19:16		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:33	3/28/22 11:33		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:48	3/28/22 14:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:59	3/29/22 12:59		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 09:15
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06179

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Aluminum, Total	mg/L	0.000625	0.010	0.100	0.0995	0.0991	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.403	20.0
BC06182	Antimony, Total	mg/L	0.000337	0.00100	0.100	0.0973	0.100	0.0985	0.0850 to 0.115	97.3	70.0 to 130	2.74	20.0
BC06182	Arsenic, Total	mg/L	-0.0000454	0.000176	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BC06182	Barium, Total	mg/L	0.0000111	0.000200	0.100	0.0941	0.0976	0.0961	0.0850 to 0.115	94.1	70.0 to 130	3.65	20.0
BC06182	Beryllium, Total	mg/L	0.0000839	0.000880	0.100	0.0931	0.0933	0.0962	0.0850 to 0.115	93.1	70.0 to 130	0.215	20.0
BC06182	Boron, Total	mg/L	-0.000107	0.0650	1.00	1.01	1.02	1.03	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC06182	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.101	0.100	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06182	Calcium, Total	mg/L	-0.0108	0.152	5.00	4.87	4.91	5.01	4.25 to 5.75	97.4	70.0 to 130	0.818	20.0
BC06182	Chloride	mg/L	0.0443	1.00	10.0	10.2	10.2	10.2	9.00 to 11.0	102	80.0 to 120	0.00	20.0
BC06182	Chromium, Total	mg/L	0.0000733	0.000440	0.100	0.100	0.0994	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BC06182	Cobalt, Total	mg/L	-0.0000072	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06182	Fluoride	mg/L	0.0025	0.125	2.50	2.59	2.61	2.54	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BC06182	Iron, Total	mg/L	0.000062	0.0176	0.2	0.200	0.201	0.201	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC06182	Lead, Total	mg/L	0.0000097	0.000147	0.100	0.0984	0.0985	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.102	20.0
BC06182	Lithium, Total	mg/L	0.000041	0.0154	0.200	0.212	0.205	0.205	0.170 to 0.230	106	70.0 to 130	3.36	20.0
BC06182	Magnesium, Total	mg/L	-0.0105	0.0462	5.00	5.24	5.20	5.23	4.25 to 5.75	105	70.0 to 130	0.766	20.0
BC06182	Manganese, Total	mg/L	-0.0000815	0.0002	0.100	0.100	0.0990	0.103	0.0850 to 0.115	100	70.0 to 130	1.01	20.0
BC06182	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00392	0.00402	0.00399	0.00340 to 0.00460	98.0	70.0 to 130	2.52	20.0
BC06182	Molybdenum, Total	mg/L	0.0000190	0.0002	0.100	0.0983	0.0967	0.0987	0.0850 to 0.115	98.3	70.0 to 130	1.64	20.0
BC06182	Potassium, Total	mg/L	-0.0247	0.367	10.0	10.2	10.0	10.4	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC06182	Selenium, Total	mg/L	0.0000464	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06182	Silicon, Total	mg/L	0.000356	0.0440	1.00	0.999	1.00	1.02	0.850 to 1.15	99.9	70.0 to 130	0.100	20.0
BC06182	Sodium, Total	mg/L	0.00275	0.0660	5.00	5.40	5.21	5.18	4.25 to 5.75	108	70.0 to 130	3.58	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 09:15
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06179

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Sulfate	mg/L	0.369	2.0	20.0	21.2	20.7	20.6	18.0 to 22.0	106	80.0 to 120	2.39	20.0
BC06182	Thallium, Total	mg/L	0.0000020	0.000147	0.100	0.0992	0.0972	0.101	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BC06182	Total Organic Carbon	mg/L	0.310	1.00	10.0	10.1	10.1	10.0		101	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 09:15
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06179

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.08	0.200	2.00	1.94	-0.064	1.90	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC06181	Solids, Dissolved	mg/L	0.0000	25.0			298	49.0	40.0 to 60.0			0.336	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO

Location Code: WMWGREAP
Collected: 3/23/22 09:53
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06180

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 10:34		1.015	0.355	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 11:47		10.15	53.1	mg/L	0.70035	4.06	
* Iron, Total	4/5/22 07:00	4/7/22 10:34		1.015	0.0155	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 10:34		1.015	0.122	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/7/22 10:34		1.015	19.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 10:34		1	4.92	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 10:34		1.015	2.30	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 10:34		1.015	15.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:20	4/5/22 09:08		1.015	0.345	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:20	4/5/22 09:46		10.15	49.0	mg/L	0.70035	4.06	
* Iron, Dissolved	4/4/22 08:20	4/5/22 09:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:20	4/5/22 09:08		1.015	0.115	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:20	4/5/22 09:08		1.015	18.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:20	4/5/22 09:08		1	4.88	mg/L			
Silicon, Dissolved	4/4/22 08:20	4/5/22 09:08		1.015	2.28	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:20	4/5/22 09:08		1.015	14.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:27	3/30/22 12:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.0164	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.000166	mg/L	0.000081	0.000203	J
* Barium, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.0595	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:27	3/30/22 12:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:27	3/30/22 12:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.000317	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.00530	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:27	3/30/22 12:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:27	3/30/22 13:05		10.15	5.17	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.0489	mg/L	0.000102	0.000203	
* Potassium, Total	3/29/22 14:27	3/30/22 12:40		1.015	5.50	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO

Location Code: WMWGREAP
Collected: 3/23/22 09:53
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06180

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:27	3/30/22 12:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:27	3/30/22 12:40		1.015	0.0000696	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	0.000182	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	0.0621	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	0.0000726	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	0.00484	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:50	3/31/22 12:43		10.15	5.00	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	0.0501	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	5.43	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:50	3/29/22 16:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 14:13	3/29/22 14:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/4/22 12:50	4/4/22 13:40		1	103	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	300	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/4/22 12:50	4/4/22 13:40		1	102	mg/L			
Carbonate Alkalinity, (calc.)	4/4/22 12:50	4/4/22 13:40		1	0.58	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 19:31	3/29/22 19:31		1	1.06	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO

Location Code: WMWGREAP
Collected: 3/23/22 09:53
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06180

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:34	3/28/22 11:34		1	7.84	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:50	3/28/22 14:50		1	0.158	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:05	3/29/22 13:05		8	131	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/22 09:50	3/23/22 09:50			464.00	uS/cm			FA
pH	3/23/22 09:50	3/23/22 09:50			6.55	SU			FA
Temperature	3/23/22 09:50	3/23/22 09:50			19.20	C			FA
Turbidity	3/23/22 09:50	3/23/22 09:50			2.24	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC06180

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06181	Aluminum, Dissolved	mg/L	-0.000185	0.010	0.100	0.0974	0.101	0.103	0.0850 to 0.115	97.4	70.0 to 130	3.63	20.0
BC06182	Aluminum, Total	mg/L	0.000625	0.010	0.100	0.0995	0.0991	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.403	20.0
BC06181	Antimony, Dissolved	mg/L	0.000264	0.00100	0.100	0.0933	0.0895	0.0961	0.0850 to 0.115	93.3	70.0 to 130	4.16	20.0
BC06182	Antimony, Total	mg/L	0.000337	0.00100	0.100	0.0973	0.100	0.0985	0.0850 to 0.115	97.3	70.0 to 130	2.74	20.0
BC06181	Arsenic, Dissolved	mg/L	-0.0000221	0.000176	0.100	0.0938	0.0925	0.0970	0.0850 to 0.115	93.7	70.0 to 130	1.40	20.0
BC06182	Arsenic, Total	mg/L	-0.0000454	0.000176	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BC06181	Barium, Dissolved	mg/L	-0.0000222	0.000200	0.100	0.163	0.152	0.103	0.0850 to 0.115	103	70.0 to 130	6.98	20.0
BC06182	Barium, Total	mg/L	0.0000111	0.000200	0.100	0.0941	0.0976	0.0961	0.0850 to 0.115	94.1	70.0 to 130	3.65	20.0
BC06181	Beryllium, Dissolved	mg/L	0.0000623	0.000880	0.100	0.0829	0.0840	0.0915	0.0850 to 0.115	82.9	70.0 to 130	1.32	20.0
BC06182	Beryllium, Total	mg/L	0.0000839	0.000880	0.100	0.0931	0.0933	0.0962	0.0850 to 0.115	93.1	70.0 to 130	0.215	20.0
BC06181	Boron, Dissolved	mg/L	-0.000299	0.0650	1.00	1.34	1.34	1.01	0.850 to 1.15	99.9	70.0 to 130	0.00	20.0
BC06182	Boron, Total	mg/L	-0.000107	0.0650	1.00	1.01	1.02	1.03	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC06181	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0936	0.0949	0.0997	0.0850 to 0.115	93.6	70.0 to 130	1.38	20.0
BC06182	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.101	0.100	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06181	Calcium, Dissolved	mg/L	-0.0123	0.152	5.00	52.4	52.7	4.83	4.25 to 5.75	136	70.0 to 130	0.571	20.0
BC06182	Calcium, Total	mg/L	-0.0108	0.152	5.00	4.87	4.91	5.01	4.25 to 5.75	97.4	70.0 to 130	0.818	20.0
BC06182	Chloride	mg/L	0.0443	1.00	10.0	10.2	10.2	10.2	9.00 to 11.0	102	80.0 to 120	0.00	20.0
BC06181	Chromium, Dissolved	mg/L	-0.0000155	0.000440	0.100	0.0913	0.0933	0.0959	0.0850 to 0.115	91.3	70.0 to 130	2.17	20.0
BC06182	Chromium, Total	mg/L	0.0000733	0.000440	0.100	0.100	0.0994	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BC06181	Cobalt, Dissolved	mg/L	0.0000038	0.000147	0.100	0.0969	0.0990	0.0988	0.0850 to 0.115	92.0	70.0 to 130	2.14	20.0
BC06182	Cobalt, Total	mg/L	-0.0000072	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06182	Fluoride	mg/L	0.0025	0.125	2.50	2.59	2.61	2.54	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BC06181	Iron, Dissolved	mg/L	-0.000628	0.0176	0.2	0.195	0.198	0.200	0.170 to 0.230	97.5	70.0 to 130	1.53	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC06180

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Iron, Total	mg/L	0.000062	0.0176	0.2	0.200	0.201	0.201	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC06181	Lead, Dissolved	mg/L	0.0000147	0.000147	0.100	0.100	0.0980	0.0988	0.0850 to 0.115	100	70.0 to 130	2.02	20.0
BC06182	Lead, Total	mg/L	0.0000097	0.000147	0.100	0.0984	0.0985	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.102	20.0
BC06181	Lithium, Dissolved	mg/L	0.000086	0.0154	0.200	0.297	0.304	0.199	0.170 to 0.230	91.5	70.0 to 130	2.33	20.0
BC06182	Lithium, Total	mg/L	0.000041	0.0154	0.200	0.212	0.205	0.205	0.170 to 0.230	106	70.0 to 130	3.36	20.0
BC06181	Magnesium, Dissolved	mg/L	-0.00141	0.0462	5.00	23.3	23.7	5.11	4.25 to 5.75	94.0	70.0 to 130	1.70	20.0
BC06182	Magnesium, Total	mg/L	-0.0105	0.0462	5.00	5.24	5.20	5.23	4.25 to 5.75	105	70.0 to 130	0.766	20.0
BC06181	Manganese, Dissolved	mg/L	0.0000254	0.0002	0.100	5.13	5.21	0.0986	0.0850 to 0.115	-50.0	70.0 to 130	1.55	20.0
BC06182	Manganese, Total	mg/L	-0.0000815	0.0002	0.100	0.100	0.0990	0.103	0.0850 to 0.115	100	70.0 to 130	1.01	20.0
BC06182	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00392	0.00402	0.00399	0.00340 to 0.00460	98.0	70.0 to 130	2.52	20.0
BC06181	Molybdenum, Dissolved	mg/L	-0.0000036	0.0002	0.100	0.143	0.140	0.0979	0.0850 to 0.115	95.7	70.0 to 130	2.12	20.0
BC06182	Molybdenum, Total	mg/L	0.0000190	0.0002	0.100	0.0983	0.0967	0.0987	0.0850 to 0.115	98.3	70.0 to 130	1.64	20.0
BC06181	Potassium, Dissolved	mg/L	0.0238	0.367	10.0	15.1	15.5	9.92	8.50 to 11.5	96.6	70.0 to 130	2.61	20.0
BC06182	Potassium, Total	mg/L	-0.0247	0.367	10.0	10.2	10.0	10.4	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC06181	Selenium, Dissolved	mg/L	0.000184	0.00100	0.100	0.0938	0.0924	0.0968	0.0850 to 0.115	93.8	70.0 to 130	1.50	20.0
BC06182	Selenium, Total	mg/L	0.0000464	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06181	Silicon, Dissolved	mg/L	-0.000515	0.0440	1.00	3.26	3.26	1.01	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06182	Silicon, Total	mg/L	0.000356	0.0440	1.00	0.999	1.00	1.02	0.850 to 1.15	99.9	70.0 to 130	0.100	20.0
BC06181	Sodium, Dissolved	mg/L	0.00285	0.0660	5.00	18.6	19.1	5.13	4.25 to 5.75	88.0	70.0 to 130	2.65	20.0
BC06182	Sodium, Total	mg/L	0.00275	0.0660	5.00	5.40	5.21	5.18	4.25 to 5.75	108	70.0 to 130	3.58	20.0
BC06182	Sulfate	mg/L	0.369	2.0	20.0	21.2	20.7	20.6	18.0 to 22.0	106	80.0 to 120	2.39	20.0
BC06181	Thallium, Dissolved	mg/L	0.0000095	0.000147	0.100	0.101	0.0980	0.0990	0.0850 to 0.115	101	70.0 to 130	3.02	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC06180

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Thallium, Total	mg/L	0.0000020	0.000147	0.100	0.0992	0.0972	0.101	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BC06182	Total Organic Carbon	mg/L	0.310	1.00	10.0	10.1	10.1	10.0		101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC06180

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06181	Alkalinity, Total as CaCO3	mg/L					113	51.0	45.0 to 55.0			0.00	10.0
BC06182	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.08	0.200	2.00	1.94	-0.064	1.90	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC06181	Solids, Dissolved	mg/L	0.0000	25.0			298	49.0	40.0 to 60.0			0.336	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 09:53
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06181

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 10:37		1.015	0.355	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 11:50		10.15	49.6	mg/L	0.70035	4.06	
* Iron, Total	4/5/22 07:00	4/7/22 10:37		1.015	0.0165	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 10:37		1.015	0.123	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/7/22 10:37		1.015	19.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 10:37		1	4.92	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 10:37		1.015	2.30	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 10:37		1.015	15.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:20	4/5/22 09:10		1.015	0.341	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:20	4/5/22 09:48		10.15	45.6	mg/L	0.70035	4.06	RA
* Iron, Dissolved	4/4/22 08:20	4/5/22 09:10		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:20	4/5/22 09:10		1.015	0.114	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:20	4/5/22 09:10		1.015	18.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:20	4/5/22 09:10		1	4.88	mg/L			
Silicon, Dissolved	4/4/22 08:20	4/5/22 09:10		1.015	2.28	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:20	4/5/22 09:10		1.015	14.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:27	3/30/22 12:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.0169	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.000164	mg/L	0.000081	0.000203	J
* Barium, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.0584	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:27	3/30/22 12:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.0000770	mg/L	0.000068	0.000203	J
* Chromium, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.000282	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.00516	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:27	3/30/22 12:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:27	3/30/22 13:09		10.15	5.20	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.0484	mg/L	0.000102	0.000203	
* Potassium, Total	3/29/22 14:27	3/30/22 12:43		1.015	5.45	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 09:53
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06181

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:27	3/30/22 12:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:27	3/30/22 12:43		1.015	0.0000683	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	0.000140	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	0.0598	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	0.00488	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:50	3/31/22 12:46		10.15	5.18	mg/L	0.001522	0.00203	RA
* Molybdenum, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	0.0473	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	5.44	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:50	3/29/22 16:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 14:13	3/29/22 14:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/4/22 12:50	4/4/22 13:40		1	113	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	297	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/4/22 12:50	4/4/22 13:40		1	113	mg/L			
Carbonate Alkalinity, (calc.)	4/4/22 12:50	4/4/22 13:40		1	0.18	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 19:52	3/29/22 19:52		1	1.06	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 09:53
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06181

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:35	3/28/22 11:35		1	7.95	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:51	3/28/22 14:51		1	0.166	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:06	3/29/22 13:06		8	131	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/22 09:50	3/23/22 09:50			464.00	uS/cm			FA
pH	3/23/22 09:50	3/23/22 09:50			6.55	SU			FA
Temperature	3/23/22 09:50	3/23/22 09:50			19.20	C			FA
Turbidity	3/23/22 09:50	3/23/22 09:50			2.24	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 4/27/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO DUP

Laboratory ID Number: BC06181

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06181	Aluminum, Dissolved	mg/L	-0.000185	0.010	0.100	0.0974	0.101	0.103	0.0850 to 0.115	97.4	70.0 to 130	3.63	20.0
BC06182	Aluminum, Total	mg/L	0.000625	0.010	0.100	0.0995	0.0991	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.403	20.0
BC06181	Antimony, Dissolved	mg/L	0.000264	0.00100	0.100	0.0933	0.0895	0.0961	0.0850 to 0.115	93.3	70.0 to 130	4.16	20.0
BC06182	Antimony, Total	mg/L	0.000337	0.00100	0.100	0.0973	0.100	0.0985	0.0850 to 0.115	97.3	70.0 to 130	2.74	20.0
BC06181	Arsenic, Dissolved	mg/L	-0.0000221	0.000176	0.100	0.0938	0.0925	0.0970	0.0850 to 0.115	93.7	70.0 to 130	1.40	20.0
BC06182	Arsenic, Total	mg/L	-0.0000454	0.000176	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BC06181	Barium, Dissolved	mg/L	-0.0000222	0.000200	0.100	0.163	0.152	0.103	0.0850 to 0.115	103	70.0 to 130	6.98	20.0
BC06182	Barium, Total	mg/L	0.0000111	0.000200	0.100	0.0941	0.0976	0.0961	0.0850 to 0.115	94.1	70.0 to 130	3.65	20.0
BC06181	Beryllium, Dissolved	mg/L	0.0000623	0.000880	0.100	0.0829	0.0840	0.0915	0.0850 to 0.115	82.9	70.0 to 130	1.32	20.0
BC06182	Beryllium, Total	mg/L	0.0000839	0.000880	0.100	0.0931	0.0933	0.0962	0.0850 to 0.115	93.1	70.0 to 130	0.215	20.0
BC06181	Boron, Dissolved	mg/L	-0.000299	0.0650	1.00	1.34	1.34	1.01	0.850 to 1.15	99.9	70.0 to 130	0.00	20.0
BC06182	Boron, Total	mg/L	-0.000107	0.0650	1.00	1.01	1.02	1.03	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC06181	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0936	0.0949	0.0997	0.0850 to 0.115	93.6	70.0 to 130	1.38	20.0
BC06182	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.101	0.100	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06181	Calcium, Dissolved	mg/L	-0.0123	0.152	5.00	52.4	52.7	4.83	4.25 to 5.75	136	70.0 to 130	0.571	20.0
BC06182	Calcium, Total	mg/L	-0.0108	0.152	5.00	4.87	4.91	5.01	4.25 to 5.75	97.4	70.0 to 130	0.818	20.0
BC06182	Chloride	mg/L	0.0443	1.00	10.0	10.2	10.2	10.2	9.00 to 11.0	102	80.0 to 120	0.00	20.0
BC06181	Chromium, Dissolved	mg/L	-0.0000155	0.000440	0.100	0.0913	0.0933	0.0959	0.0850 to 0.115	91.3	70.0 to 130	2.17	20.0
BC06182	Chromium, Total	mg/L	0.0000733	0.000440	0.100	0.100	0.0994	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BC06181	Cobalt, Dissolved	mg/L	0.0000038	0.000147	0.100	0.0969	0.0990	0.0988	0.0850 to 0.115	92.0	70.0 to 130	2.14	20.0
BC06182	Cobalt, Total	mg/L	-0.0000072	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06182	Fluoride	mg/L	0.0025	0.125	2.50	2.59	2.61	2.54	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BC06181	Iron, Dissolved	mg/L	-0.000628	0.0176	0.2	0.195	0.198	0.200	0.170 to 0.230	97.5	70.0 to 130	1.53	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO DUP

Laboratory ID Number: BC06181

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Iron, Total	mg/L	0.000062	0.0176	0.2	0.200	0.201	0.201	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC06181	Lead, Dissolved	mg/L	0.0000147	0.000147	0.100	0.100	0.0980	0.0988	0.0850 to 0.115	100	70.0 to 130	2.02	20.0
BC06182	Lead, Total	mg/L	0.0000097	0.000147	0.100	0.0984	0.0985	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.102	20.0
BC06181	Lithium, Dissolved	mg/L	0.000086	0.0154	0.200	0.297	0.304	0.199	0.170 to 0.230	91.5	70.0 to 130	2.33	20.0
BC06182	Lithium, Total	mg/L	0.000041	0.0154	0.200	0.212	0.205	0.205	0.170 to 0.230	106	70.0 to 130	3.36	20.0
BC06181	Magnesium, Dissolved	mg/L	-0.00141	0.0462	5.00	23.3	23.7	5.11	4.25 to 5.75	94.0	70.0 to 130	1.70	20.0
BC06182	Magnesium, Total	mg/L	-0.0105	0.0462	5.00	5.24	5.20	5.23	4.25 to 5.75	105	70.0 to 130	0.766	20.0
BC06181	Manganese, Dissolved	mg/L	0.0000254	0.0002	0.100	5.13	5.21	0.0986	0.0850 to 0.115	-50.0	70.0 to 130	1.55	20.0
BC06182	Manganese, Total	mg/L	-0.0000815	0.0002	0.100	0.100	0.0990	0.103	0.0850 to 0.115	100	70.0 to 130	1.01	20.0
BC06182	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00392	0.00402	0.00399	0.00340 to 0.00460	98.0	70.0 to 130	2.52	20.0
BC06181	Molybdenum, Dissolved	mg/L	-0.0000036	0.0002	0.100	0.143	0.140	0.0979	0.0850 to 0.115	95.7	70.0 to 130	2.12	20.0
BC06182	Molybdenum, Total	mg/L	0.0000190	0.0002	0.100	0.0983	0.0967	0.0987	0.0850 to 0.115	98.3	70.0 to 130	1.64	20.0
BC06181	Potassium, Dissolved	mg/L	0.0238	0.367	10.0	15.1	15.5	9.92	8.50 to 11.5	96.6	70.0 to 130	2.61	20.0
BC06182	Potassium, Total	mg/L	-0.0247	0.367	10.0	10.2	10.0	10.4	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC06181	Selenium, Dissolved	mg/L	0.000184	0.00100	0.100	0.0938	0.0924	0.0968	0.0850 to 0.115	93.8	70.0 to 130	1.50	20.0
BC06182	Selenium, Total	mg/L	0.0000464	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06181	Silicon, Dissolved	mg/L	-0.000515	0.0440	1.00	3.26	3.26	1.01	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BC06182	Silicon, Total	mg/L	0.000356	0.0440	1.00	0.999	1.00	1.02	0.850 to 1.15	99.9	70.0 to 130	0.100	20.0
BC06181	Sodium, Dissolved	mg/L	0.00285	0.0660	5.00	18.6	19.1	5.13	4.25 to 5.75	88.0	70.0 to 130	2.65	20.0
BC06182	Sodium, Total	mg/L	0.00275	0.0660	5.00	5.40	5.21	5.18	4.25 to 5.75	108	70.0 to 130	3.58	20.0
BC06182	Sulfate	mg/L	0.369	2.0	20.0	21.2	20.7	20.6	18.0 to 22.0	106	80.0 to 120	2.39	20.0
BC06181	Thallium, Dissolved	mg/L	0.0000095	0.000147	0.100	0.101	0.0980	0.0990	0.0850 to 0.115	101	70.0 to 130	3.02	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO DUP

Laboratory ID Number: BC06181

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Thallium, Total	mg/L	0.0000020	0.000147	0.100	0.0992	0.0972	0.101	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BC06182	Total Organic Carbon	mg/L	0.310	1.00	10.0	10.1	10.1	10.0		101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 09:53
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond - MW-46HO DUP

Laboratory ID Number: BC06181

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06181	Alkalinity, Total as CaCO3	mg/L					113	51.0	45.0 to 55.0			0.00	10.0
BC06182	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.08	0.200	2.00	1.94	-0.064	1.90	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC06181	Solids, Dissolved	mg/L	0.0000	25.0			298	49.0	40.0 to 60.0			0.336	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 4/27/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 3/23/22 10:20
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06182

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/7/22 10:40		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/7/22 10:40		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:27	3/30/22 12:47		1.015	0.000271	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:27	3/30/22 12:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 21:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 14:14	3/29/22 14:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 4/27/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 3/23/22 10:20
Customer ID:
Submittal Date: 3/24/22 11:36

Laboratory ID Number: BC06182

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 20:08	3/29/22 20:08		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:36	3/28/22 11:36		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:52	3/28/22 14:52		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 13:00	3/29/22 13:00		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 10:20
Customer ID:
Delivery Date: 3/24/22 11:36

Description:Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06182

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Aluminum, Total	mg/L	0.000625	0.010	0.100	0.0995	0.0991	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.403	20.0
BC06182	Antimony, Total	mg/L	0.000337	0.00100	0.100	0.0973	0.100	0.0985	0.0850 to 0.115	97.3	70.0 to 130	2.74	20.0
BC06182	Arsenic, Total	mg/L	-0.0000454	0.000176	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BC06182	Barium, Total	mg/L	0.0000111	0.000200	0.100	0.0941	0.0976	0.0961	0.0850 to 0.115	94.1	70.0 to 130	3.65	20.0
BC06182	Beryllium, Total	mg/L	0.0000839	0.000880	0.100	0.0931	0.0933	0.0962	0.0850 to 0.115	93.1	70.0 to 130	0.215	20.0
BC06182	Boron, Total	mg/L	-0.000107	0.0650	1.00	1.01	1.02	1.03	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC06182	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.100	0.101	0.100	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC06182	Calcium, Total	mg/L	-0.0108	0.152	5.00	4.87	4.91	5.01	4.25 to 5.75	97.4	70.0 to 130	0.818	20.0
BC06182	Chloride	mg/L	0.0443	1.00	10.0	10.2	10.2	10.2	9.00 to 11.0	102	80.0 to 120	0.00	20.0
BC06182	Chromium, Total	mg/L	0.0000733	0.000440	0.100	0.100	0.0994	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BC06182	Cobalt, Total	mg/L	-0.0000072	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC06182	Fluoride	mg/L	0.0025	0.125	2.50	2.59	2.61	2.54	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BC06182	Iron, Total	mg/L	0.000062	0.0176	0.2	0.200	0.201	0.201	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC06182	Lead, Total	mg/L	0.0000097	0.000147	0.100	0.0984	0.0985	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.102	20.0
BC06182	Lithium, Total	mg/L	0.000041	0.0154	0.200	0.212	0.205	0.205	0.170 to 0.230	106	70.0 to 130	3.36	20.0
BC06182	Magnesium, Total	mg/L	-0.0105	0.0462	5.00	5.24	5.20	5.23	4.25 to 5.75	105	70.0 to 130	0.766	20.0
BC06182	Manganese, Total	mg/L	-0.0000815	0.0002	0.100	0.100	0.0990	0.103	0.0850 to 0.115	100	70.0 to 130	1.01	20.0
BC06182	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00392	0.00402	0.00399	0.00340 to 0.00460	98.0	70.0 to 130	2.52	20.0
BC06182	Molybdenum, Total	mg/L	0.0000190	0.0002	0.100	0.0983	0.0967	0.0987	0.0850 to 0.115	98.3	70.0 to 130	1.64	20.0
BC06182	Potassium, Total	mg/L	-0.0247	0.367	10.0	10.2	10.0	10.4	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC06182	Selenium, Total	mg/L	0.0000464	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06182	Silicon, Total	mg/L	0.000356	0.0440	1.00	0.999	1.00	1.02	0.850 to 1.15	99.9	70.0 to 130	0.100	20.0
BC06182	Sodium, Total	mg/L	0.00275	0.0660	5.00	5.40	5.21	5.18	4.25 to 5.75	108	70.0 to 130	3.58	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 10:20
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06182

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Sulfate	mg/L	0.369	2.0	20.0	21.2	20.7	20.6	18.0 to 22.0	106	80.0 to 120	2.39	20.0
BC06182	Thallium, Total	mg/L	0.0000020	0.000147	0.100	0.0992	0.0972	0.101	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BC06182	Total Organic Carbon	mg/L	0.310	1.00	10.0	10.1	10.1	10.0		101	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 10:20
Customer ID:
Delivery Date: 3/24/22 11:36

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06182

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06182	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.08	0.200	2.00	1.94	-0.064	1.90	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC06181	Solids, Dissolved	mg/L	0.0000	25.0			298	49.0	40.0 to 60.0			0.336	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Project Number: WMWGREAP_1356

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM broke MW-46HO DUP Alkalinity bottle cap when accidentally knocked over bottle. Replaced cap w/ unused precleaned bottle from same bottle lot #0326501G. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-64HO	03/23/2022	08:52	7	Groundwater		BC06178
FB-1	03/23/2022	09:15	5	Field Blank		BC06179
MW-46HO	03/23/2022	09:53	7	Groundwater		BC06180
MW-46HO dup	03/23/2022	09:53	7	Sample Duplicate		BC06181
EB-1	03/23/2022	10:20	5	Equipment Blank		BC06182

Relinquished By	Received By	Date/Time
Dallas Gentry		03/24/2022 09:55

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.5 degrees C
Sample Event	1356	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Sulfide	250 mL	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments
Radium MS/MSD collected at MW-64HO
Sulfide bottles pH>9. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-64HO	03/23/2022	08:52	4	Groundwater		BC06183
FB-1	03/23/2022	09:15	2	Field Blank		BC06184
MW-46HO	03/23/2022	09:53	2	Groundwater		BC06185
MW-46HO dup	03/23/2022	09:53	2	Sample Duplicate		BC06186
EB-1	03/23/2022	10:20	2	Equipment Blank		BC06187

Relinquished By	Received By	Date/Time
		03/24/2022 09:55

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20010-2-2
Sample Event	1356

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.5 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

March 30, 2022

Laura Midkiff
Alabama Power
744 Highway 87
GSC 8
Calera, AL 35040

RE: Project: WMWGREAP_1356
Pace Project No.: 20238672

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - New Orleans

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen H Brown

Karen Brown
karen.brown@pacelabs.com
(504)469-0333
Project Manager

Enclosures

cc: Renee Jernigan, Alabama Power
Trinity B. Williams, Alabama Power

CERTIFICATIONS

Project:	WMWGREAP_1356
Pace Project No.:	20238672

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

SAMPLE SUMMARY

Project: WMWGREAP_1356
Pace Project No.: 20238672

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20238672001	**BC06183 MW-64HO**	Water	03/23/22 08:52	03/26/22 04:00
20238672002	**BC06184 FB-1**	Water	03/23/22 09:15	03/26/22 04:00
20238672003	**BC06185 MW-46HO**	Water	03/23/22 09:53	03/26/22 04:00
20238672004	**BC06186 MW-46HO DUP**	Water	03/23/22 09:53	03/26/22 04:00
20238672005	**BC06187 EB-1**	Water	03/23/22 10:20	03/26/22 04:00

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1356
Pace Project No.: 20238672

Lab ID	Sample ID	Method	Analysts	Analytes Reported
20238672001	**BC06183 MW-64HO**	SM 4500-S-2 D	RVJ	1
20238672002	**BC06184 FB-1**	SM 4500-S-2 D	RVJ	1
20238672003	**BC06185 MW-46HO**	SM 4500-S-2 D	RVJ	1
20238672004	**BC06186 MW-46HO DUP**	SM 4500-S-2 D	RVJ	1
20238672005	**BC06187 EB-1**	SM 4500-S-2 D	RVJ	1

PASI-N = Pace Analytical Services - New Orleans

PROJECT NARRATIVE

Project: WMWGREAP_1356
Pace Project No.: 20238672

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Alabama Power
Date: March 30, 2022

General Information:
5 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services New Orleans. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 251511

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20238671002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1194666)
  - Sulfide, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: WMWGREAP_1356
Pace Project No.: 20238672

Sample: BC06183 MW-64HO **Lab ID: 20238672001** Collected: 03/23/22 08:52 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:01	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1356
Pace Project No.: 20238672

Sample: BC06184 FB-1 **Lab ID: 20238672002** Collected: 03/23/22 09:15 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:02	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1356
Pace Project No.: 20238672

Sample: BC06185 MW-46HO **Lab ID: 20238672003** Collected: 03/23/22 09:53 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:03	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1356
Pace Project No.: 20238672

Sample: BC06186 MW-46HO DUP **Lab ID: 20238672004** Collected: 03/23/22 09:53 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:04	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1356
Pace Project No.: 20238672

Sample: BC06187 EB-1 **Lab ID: 20238672005** Collected: 03/23/22 10:20 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:05	18496-25-8	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WMWGREAP_1356
Pace Project No.: 20238672

QC Batch:	251511	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
		Laboratory:	Pace Analytical Services - New Orleans

Associated Lab Samples: 20238672001, 20238672002, 20238672003, 20238672004, 20238672005

METHOD BLANK: 1194663 Matrix: Water

Associated Lab Samples: 20238672001, 20238672002, 20238672003, 20238672004, 20238672005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.020	0.012	03/30/22 13:20	

LABORATORY CONTROL SAMPLE: 1194664

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.2	0.20	98	90-110	

MATRIX SPIKE SAMPLE: 1194666

Parameter	Units	20238671002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	0.2	0.11	54	75-125	M1

SAMPLE DUPLICATE: 1194665

Parameter	Units	20238671002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project: WMWGREAP_1356
Pace Project No.: 20238672

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGREAP_1356
Pace Project No.:	20238672

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20238672001	**BC06183 MW-64HO**	SM 4500-S-2 D	251511		
20238672002	**BC06184 FB-1**	SM 4500-S-2 D	251511		
20238672003	**BC06185 MW-46HO**	SM 4500-S-2 D	251511		
20238672004	**BC06186 MW-46HO DUP**	SM 4500-S-2 D	251511		
20238672005	**BC06187 EB-1**	SM 4500-S-2 D	251511		

WO#:20238672

20238672

CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be c

Page : 1 Of 1

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1356

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Karen Brown
Pace Profile #:	17210

Regulatory Agency	
State / Location	AL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)
1	BC06183	MW-64HO	APCO-GC-AP-MW-64HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	8:52	1		X						X	
2	BC06184	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	9:15	1		X						X	
3	BC06185	MW-46HO	APCO-GC-AP-MW-46HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	9:53	1		X						X	
4	BC06186	MW-46HO DUP	APCO-GC-AP-MW-46HO	APCO_GreeneCounty_AshPond	X			GW	G	3/23/2022	9:53	1		X						X	
5	BC06187	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:20	1		X						X	
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/24/2022	13:30							
	G. H.	3/26/2022	0400		3/26/2022	0400	1.5	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon R

WO#:20238672

PM: KHB Due Date: 04/07/22
CLIENT: 20-Alabama

Proj

Courier: ☐ Pace Courier ☒ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☒ Yes ☐ No

Therometer Used: ☐ Therm Fisher IR 7 ☒ Therm Fisher IR 10

Type of Ice: [✓ Wet] Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/26/2022 lmjs

Temp must be measured from Temperature blank when present

		Comments:
Temperature Blank Present"?	☐ Yes ☐ No ☒ N/A	1
Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	2
Chain of Custody Complete:	☒ Yes ☐ No ☐ N/A	3
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	4
Sampler Name & Signature on COC:	☐ Yes ☒ No ☐ N/A	5
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	6
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	7
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	8
Filtered vol. Rec. for Diss. tests	☐ Yes ☐ No ☒ N/A	9
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒ Yes ☐ No ☐ N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒ Yes ☐ No ☐ N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☒ Yes ☐ No ☐ N/A	13 If No, was preserative added? ☐ Yes ☐ No If added record lot no.: HNO3 _______ H2SO4 _______
Headspace in VOA Vials (>6mm):	☐ Yes ☐ No ☒ N/A	14
Trip Blank Present:	☐ Yes ☒ No	15

Client Notification/ Resolution:

Person Contacted: ______________________ Date/Time: __________

Comments/ Resolution: ______________________

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 02, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGREAP_1356
Pace Project No.: 30476468

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power
Laura Midkiff, Alabama Power

CERTIFICATIONS

Project: WMWGREAP_1356
Pace Project No.: 30476468

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30476468001	**BC06183 MW-64HO**	Water	03/23/22 08:52	03/29/22 22:00
30476468002	**BC06183 MW-64HO MS**	Water	03/23/22 08:52	03/29/22 22:00
30476468003	**BC06183 MW-64HO MSD**	Water	03/23/22 08:52	03/29/22 22:00
30476468004	**BC06184 FB-1**	Water	03/23/22 09:15	03/29/22 22:00
30476468005	**BC06185 MW-46HO**	Water	03/23/22 09:53	03/29/22 22:00
30476468006	**BC06186 MW-46HO DUP**	Water	03/23/22 09:53	03/29/22 22:00
30476468007	**BC06187 EB-1**	Water	03/23/22 10:20	03/29/22 22:00

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1356
Pace Project No.: 30476468

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30476468001	**BC06183 MW-64HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476468002	**BC06183 MW-64HO MS**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30476468003	**BC06183 MW-64HO MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30476468004	**BC06184 FB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476468005	**BC06185 MW-46HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476468006	**BC06186 MW-46HO DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476468007	**BC06187 EB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGREAP_1356
Pace Project No.:	30476468

Method:	**EPA 9315**
Description:	9315 Total Radium
Client:	Alabama Power
Date:	May 02, 2022

General Information:
7 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1356
Pace Project No.:	30476468

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: May 02, 2022

General Information:
7 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1356
Pace Project No.:	30476468

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: May 02, 2022

General Information:
5 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06183 MW-64HO **Lab ID: 30476468001** Collected: 03/23/22 08:52 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.469 ± 0.239 (0.304)** **C:97% T:NA**	pCi/L	04/26/22 09:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.565U ± 0.325 (0.579)** **C:76% T:84%**	pCi/L	04/18/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.03 ± 0.564 (0.883)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06183 MW-64HO MS **Lab ID: 30476468002** Collected: 03/23/22 08:52 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**94.18 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/26/22 09:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**93.94 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/18/22 12:55	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06183 MW-64HO MSD **Lab ID: 30476468003** Collected: 03/23/22 08:52 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**100.55 %REC 6.55RPD ± NA (NA) C:NA T:NA**	pCi/L	04/26/22 09:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**98.58 %REC 4.82 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/18/22 12:55	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06184 FB-1 **Lab ID: 30476468004** Collected: 03/23/22 09:15 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0381U ± 0.101 (0.250)** **C:94% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**-0.185U ± 0.237 (0.603)** **C:78% T:88%**	pCi/L	04/18/22 12:55	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.0381U ± 0.338 (0.853)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06185 MW-46HO **Lab ID: 30476468005** Collected: 03/23/22 09:53 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.114U ± 0.132 (0.258)** **C:94% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.433U ± 0.311 (0.590)** **C:71% T:88%**	pCi/L	04/18/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.547U ± 0.443 (0.848)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06186 MW-46HO DUP **Lab ID: 30476468006** Collected: 03/23/22 09:53 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.194U ± 0.165 (0.288)** **C:96% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.470U ± 0.329 (0.629)** **C:74% T:87%**	pCi/L	04/18/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.664U ± 0.494 (0.917)**	pCi/L	04/27/22 12:45	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

Sample: BC06187 EB-1 **Lab ID: 30476468007** Collected: 03/23/22 10:20 Received: 03/29/22 22:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.177U ± 0.163 (0.301)** **C:101% T:NA**	pCi/L	04/26/22 11:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.164U ± 0.306 (0.752)** **C:74% T:82%**	pCi/L	04/18/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.177U ± 0.469 (1.05)**	pCi/L	04/27/22 12:45	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

QC Batch: 494964
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30476468001, 30476468002, 30476468003, 30476468004, 30476468005, 30476468006, 30476468007

METHOD BLANK: 2394282
Matrix: Water
Associated Lab Samples: 30476468001, 30476468002, 30476468003, 30476468004, 30476468005, 30476468006, 30476468007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.432 ± 0.355 (0.710) C:74% T:87%	pCi/L	04/18/22 12:55	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1356
Pace Project No.: 30476468

QC Batch:	494692	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30476468001, 30476468002, 30476468003, 30476468004, 30476468005, 30476468006, 30476468007

METHOD BLANK: 2393433 Matrix: Water

Associated Lab Samples: 30476468001, 30476468002, 30476468003, 30476468004, 30476468005, 30476468006, 30476468007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.118 ± 0.0948 (0.171) C:101% T:NA	pCi/L	04/26/22 09:41	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGREAP_1356
Pace Project No.:	30476468

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1356
Pace Project No.: 30476468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30476468001	**BC06183 MW-64HO**	EPA 9315	494692		
30476468002	**BC06183 MW-64HO MS**	EPA 9315	494692		
30476468003	**BC06183 MW-64HO MSD**	EPA 9315	494692		
30476468004	**BC06184 FB-1**	EPA 9315	494692		
30476468005	**BC06185 MW-46HO**	EPA 9315	494692		
30476468006	**BC06186 MW-46HO DUP**	EPA 9315	494692		
30476468007	**BC06187 EB-1**	EPA 9315	494692		
30476468001	**BC06183 MW-64HO**	EPA 9320	494964		
30476468002	**BC06183 MW-64HO MS**	EPA 9320	494964		
30476468003	**BC06183 MW-64HO MSD**	EPA 9320	494964		
30476468004	**BC06184 FB-1**	EPA 9320	494964		
30476468005	**BC06185 MW-46HO**	EPA 9320	494964		
30476468006	**BC06186 MW-46HO DUP**	EPA 9320	494964		
30476468007	**BC06187 EB-1**	EPA 9320	494964		
30476468001	**BC06183 MW-64HO**	Total Radium Calculation	500399		
30476468004	**BC06184 FB-1**	Total Radium Calculation	500399		
30476468005	**BC06185 MW-46HO**	Total Radium Calculation	500399		
30476468006	**BC06186 MW-46HO DUP**	Total Radium Calculation	500399		
30476468007	**BC06187 EB-1**	Total Radium Calculation	500399		

WO#:30476468

30476468

C Document
T ust be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:			
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6197 Fax	Project Name:	Plant Greene County Ash Pond	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGREAP_1356	Pace Profile #:	13805

Regulatory Agency:

State / Location: AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	NaOH+ZnAcetate	HNO3			Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BC06183	MW-64HO	APCO-GC-AP-MW-64HO	APCO_GreeneCounty_AshPond		X		GW	G	3/23/2022	8:52	3			X				X	X	X				001, 002, 003
2	BC06184	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	9:15	1			X				X	X	X				004
3	BC06185	MW-46HO	APCO-GC-AP-MW-46HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	9:53	1			X				X	X	X				005
4	BC06186	MW-46HO DUP	APCO-GC-AP-MW-46HO	APCO_GreeneCounty_AshPond	X			GW	G	3/23/2022	9:53	1			X				X	X	X				006
5	BC06187	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:20	1			X				X	X	X				007
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/25/2022	9:35		3-30-22	9:25				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Alabama Power Project # ______

WO#: 30476468
PM: SCR Due Date: 04/20/22
CLIENT: ALABAMA PWR

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ______

Tracking #: 5701 6584 7592

Label AF
LIMS Login YPINC

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used N/A Type of Ice: Wet Blue [✓ None]

Cooler Temperature Observed Temp – °C Correction Factor: – °C Final Temp: – °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 1002811 | Date and Initials of person examining contents: 04/1/22 AF
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:		✓		3. No Signature
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. Ph<2
All containers meet method preservation requirements.	✓			Initial when completed AF | Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: AF | Date: 4/1/22 | Survey Meter SN: 15703

Client Notification/ Resolution:

Person Contacted: ______ Date/Time: ______ Contacted By: ______

Comments/ Resolution: ______

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical
www.pacelabs.com

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: VAL
Date: 4/13/2022
Worklist: 65978
Matrix: W I

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2394282
MB concentration:	0.432
M/B 2 Sigma CSU:	0.355
MB MDC:	0.710
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS65978	LCSD65978
Count Date:	4/18/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	36.063	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.807	
Target Conc. (pCi/L, g, F):	4.468	
Uncertainty (Calculated):	0.219	
Result (pCi/L, g, F):	5.259	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.189	
Numerical Performance Indicator:	1.28	
Percent Recovery:	117.70%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/23/2022
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Spike I.D.:	22-016	22-016
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.376	36.376
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.808	0.817
MS Target Conc.(pCi/L, g, F):	9.001	8.908
MSD Aliquot (L, g, F):	0.812	0.821
MSD Target Conc. (pCi/L, g, F):	8.962	8.867
MS Spike Uncertainty (calculated):	0.441	0.437
MSD Spike Uncertainty (calculated):	0.439	0.434
Sample Result:	0.565	0.439
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.325	0.327
Sample Matrix Spike Result:	9.021	9.068
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.800	1.822
Sample Matrix Spike Duplicate Result:	9.401	8.596
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.877	1.753
MS Numerical Performance Indicator:	-0.568	-0.288
MSD Numerical Performance Indicator:	-0.127	-0.758
MS Percent Recovery:	93.94%	96.87%
MSD Percent Recovery:	98.58%	92.00%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Sample Matrix Spike Result:	9.021	9.068
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.800	1.822
Sample Matrix Spike Duplicate Result:	9.401	8.596
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.877	1.753
Duplicate Numerical Performance Indicator:	-0.286	0.366
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	4.82%	5.16%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4/19/22

4/25/22

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Pace Analytical™
www.pacelabs.com

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	4/4/2022
Worklist:	65909
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2393433
MB concentration:	0.118
M/B Counting Uncertainty:	0.093
MB MDC:	0.171
MB Numerical Performance Indicator:	2.49
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65909	**LCSD65909**
Count Date:	4/26/2022	4/26/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.028	24.028
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.515
Target Conc. (pCi/L, g, F):	4.805	4.667
Uncertainty (Calculated):	0.058	0.056
Result (pCi/L, g, F):	5.079	4.651
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.464	0.438
Numerical Performance Indicator:	1.15	-0.07
Percent Recovery:	105.70%	99.64%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/23/2022
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.029	24.029
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.253	0.255
MS Target Conc.(pCi/L, g, F):	18.994	18.818
MSD Aliquot (L, g, F):	0.254	0.254
MSD Target Conc. (pCi/L, g, F):	18.934	18.884
MS Spike Uncertainty (calculated):	0.228	0.226
MSD Spike Uncertainty (calculated):	0.227	0.227
Sample Result:	0.469	0.560
Sample Result Counting Uncertainty (pCi/L, g, F):	0.229	0.231
Sample Matrix Spike Result:	18.357	19.229
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237	1.250
Sample Matrix Spike Duplicate Result:	19.508	21.343
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.257	1.330
MS Numerical Performance Indicator:	-1.697	-0.226
MSD Numerical Performance Indicator:	0.158	2.719
MS Percent Recovery:	94.18%	99.21%
MSD Percent Recovery:	100.55%	110.06%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS65909	
Duplicate Sample I.D.	LCSD65909	
Sample Result (pCi/L, g, F):	5.079	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.464	
Sample Duplicate Result (pCi/L, g, F):	4.651	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.438	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.314	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.90%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Sample Matrix Spike Result:	18.357	19.229
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237	1.250
Sample Matrix Spike Duplicate Result:	19.508	21.343
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.257	1.330
Duplicate Numerical Performance Indicator:	-1.279	-2.270
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.55%	10.37%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4/27/22

LAM 4/27/22

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Sewell Off-Site Wells Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1355

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

May 03, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on March 24, 2022.
All results reported herein conform to the laboratory’s most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.05.03 09:06:40 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-05-03 16:17-05:00

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06156	722484	WMWGREAP_1355
BC06157	722484	WMWGREAP_1355
BC06158	722484	WMWGREAP_1355
BC06159	722484	WMWGREAP_1355
BC06160	722484	WMWGREAP_1355
BC06161	722484	WMWGREAP_1355
BC06162	722484	WMWGREAP_1355
BC06163	722484	WMWGREAP_1355
BC06164	722484	WMWGREAP_1355
BC06165	722484	WMWGREAP_1355
BC06166	722485	WMWGREAP_1355

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.

Revision 5

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06157	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06156	722107	WMWGREAP_1355
BC06157	722107	WMWGREAP_1355
BC06158	722107	WMWGREAP_1355
BC06159	722107	WMWGREAP_1355
BC06161	722107	WMWGREAP_1355
BC06162	722107	WMWGREAP_1355
BC06163	722107	WMWGREAP_1355
BC06164	722107	WMWGREAP_1355
BC06165	722107	WMWGREAP_1355

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any

qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06157	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06156	722365	WMWGREAP_1355
BC06157	722365	WMWGREAP_1355
BC06158	722365	WMWGREAP_1355
BC06159	722365	WMWGREAP_1355
BC06160	722365	WMWGREAP_1355
BC06161	722365	WMWGREAP_1355
BC06162	722365	WMWGREAP_1355
BC06163	722365	WMWGREAP_1355
BC06164	722365	WMWGREAP_1355
BC06165	722365	WMWGREAP_1355
BC06166	722365	WMWGREAP_1355

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Revision 5

Case Narrative

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for:
  - BC06156 Aluminum MS/MSD recoveries were outside of the specification limits.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met, except for:
  - BC06156 Aluminum precision was outside of the specification limits.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC06156	Manganese	10.15
BC06157	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06156	722278	WMWGREAP_1355
BC06157	722278	WMWGREAP_1355
BC06158	722278	WMWGREAP_1355
BC06159	722278	WMWGREAP_1355
BC06161	722278	WMWGREAP_1355
BC06162	722278	WMWGREAP_1355
BC06163	722278	WMWGREAP_1355
BC06164	722278	WMWGREAP_1355
BC06165	722278	WMWGREAP_1355

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional

QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC06156	Manganese	10.15
BC06157	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06156	721862	WMWGREAP_1355
BC06157	721862	WMWGREAP_1355
BC06158	721862	WMWGREAP_1355
BC06159	721862	WMWGREAP_1355
BC06160	721862	WMWGREAP_1355
BC06161	721862	WMWGREAP_1355
BC06162	721862	WMWGREAP_1355
BC06163	721862	WMWGREAP_1355
BC06164	721862	WMWGREAP_1355
BC06165	721862	WMWGREAP_1355
BC06166	721863	WMWGREAP_1355

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06156	721694	WMWGREAP_1355
BC06157	721694	WMWGREAP_1355
BC06158	721694	WMWGREAP_1355
BC06159	721694	WMWGREAP_1355
BC06160	721694	WMWGREAP_1355
BC06161	721694	WMWGREAP_1355
BC06162	721694	WMWGREAP_1355
BC06163	721694	WMWGREAP_1355
BC06164	721694	WMWGREAP_1355
BC06165	722001	WMWGREAP_1355
BC06166	721694	WMWGREAP_1355

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BC06160
    - BC06166

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06156	721868, 721952, & 722002	WMWGREAP_1355
BC06157	721868, 721952, & 722002	WMWGREAP_1355
BC06158	721868, 721952, & 722002	WMWGREAP_1355
BC06159	721868, 721952, & 722002	WMWGREAP_1355
BC06160	721868, 721952, & 722002	WMWGREAP_1355
BC06161	721868, 721952, & 722002	WMWGREAP_1355
BC06162	721868, 721952, & 722002	WMWGREAP_1355
BC06163	721868, 721952, & 722002	WMWGREAP_1355
BC06164	721868, 721952, & 722002	WMWGREAP_1355
BC06165	721868, 721952, & 722002	WMWGREAP_1355
BC06166	721869, 721953, & 722003	WMWGREAP_1355

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC06156	Sulfate	3
BC06157	Sulfate	16
BC06162	Sulfate	3
BC06163	Sulfate	3

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06156	722430, 722431	WMWGREAP_1355
BC06157	722430, 722431	WMWGREAP_1355
BC06158	722430, 722431	WMWGREAP_1355
BC06159	722430, 722431	WMWGREAP_1355
BC06161	722430, 722431	WMWGREAP_1355
BC06162	722430, 722431	WMWGREAP_1355
BC06163	722430, 722431	WMWGREAP_1355
BC06164	722430, 722431	WMWGREAP_1355
BC06165	722430, 722431	WMWGREAP_1355

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Revision 5

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC06156	721980	WMWGREAP_1355
BC06157	721980	WMWGREAP_1355
BC06158	721980	WMWGREAP_1355
BC06159	721980	WMWGREAP_1355
BC06160	721980	WMWGREAP_1355
BC06161	721980	WMWGREAP_1355
BC06162	721980	WMWGREAP_1355
BC06163	721980	WMWGREAP_1355
BC06164	721980	WMWGREAP_1355
BC06165	721980	WMWGREAP_1355
BC06166	721981	WMWGREAP_1355

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

Revision 5

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1355

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC06156	722009	WMWGREAP_1355
BC06157	722009	WMWGREAP_1355
BC06158	722009	WMWGREAP_1355
BC06159	722009	WMWGREAP_1355
BC06160	722009	WMWGREAP_1355
BC06161	722009	WMWGREAP_1355
BC06162	722009	WMWGREAP_1355
BC06163	722009	WMWGREAP_1355
BC06164	722009	WMWGREAP_1355
BC06165	722009	WMWGREAP_1355
BC06166	722010	WMWGREAP_1355

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

Revision 5

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-50HO

Location Code: WMWGREAP
Collected: 3/23/22 08:48
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06156

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:28		1.015	0.508	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 09:28		1.015	38.7	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:28		1.015	0.118	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 09:28		1.015	0.110	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/7/22 09:28		1.015	7.34	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:28		1	8.47	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:28		1.015	3.96	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:28		1.015	31.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	0.499	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	38.2	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	0.0141	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	0.108	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	7.14	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:38		1	8.37	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	3.91	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:38		1.015	31.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 10:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.0679	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.000144	mg/L	0.000081	0.000203	J
* Barium, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.0762	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 10:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.000372	mg/L	0.000068	0.000203	
* Chromium, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.000510	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.00960	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.000130	mg/L	0.000068	0.000203	J
* Manganese, Total	3/29/22 14:18	3/30/22 12:07		10.15	7.15	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 10:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 10:58		1.015	5.56	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-50HO

Location Code: WMWGREAP
Collected: 3/23/22 08:48
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06156

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 10:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 10:58		1.015	0.000108	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	0.000143	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	0.0799	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	0.000437	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	0.00883	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/31/22 12:32		10.15	7.11	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	5.70	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:38	3/29/22 14:59		1.015	0.000101	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 12:54	3/29/22 12:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	138	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	236	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	137	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	1.02	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 13:39	3/29/22 13:39		1	1.08	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description:	Greene County Ash Pond - MW-50HO
Location Code:	WMWGREAP
Collected:	3/23/22 08:48
Customer ID:	
Submittal Date:	3/24/22 11:23
Laboratory ID Number:	BC06156

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 10:52	3/28/22 10:52		1	17.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:10	3/28/22 14:10		1	0.160	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:30	3/29/22 12:30		3	60.4	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/23/22 08:44	3/23/22 08:44			392.31	uS/cm			FA
pH	3/23/22 08:44	3/23/22 08:44			6.17	SU			FA
Temperature	3/23/22 08:44	3/23/22 08:44			20.47	C			FA
Turbidity	3/23/22 08:44	3/23/22 08:44			4.51	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:48
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC06156

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:48
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC06156

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:48
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC06156

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 08:48
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC06156

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-59HO

Location Code: WMWGREAP
Collected: 3/23/22 10:10
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06157

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:31		1.015	0.197	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 11:41		10.15	63.2	mg/L	0.70035	4.06	
* Iron, Total	4/5/22 07:00	4/7/22 09:31		1.015	0.353	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 09:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:31		1.015	16.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:31		1	6.76	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:31		1.015	3.16	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:31		1.015	27.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:40		1.015	0.190	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:15	4/5/22 09:31		10.15	57.3	mg/L	0.70035	4.06	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:40		1.015	0.0574	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:40		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:40		1.015	16.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:40		1	6.61	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:40		1.015	3.09	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:40		1.015	27.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.0335	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.000819	mg/L	0.000081	0.000203	
* Barium, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.0627	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.000116	mg/L	0.000068	0.000203	J
* Chromium, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.000309	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.0281	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 12:11		10.15	10.3	mg/L	0.001522	0.00203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.000116	mg/L	0.000102	0.000203	J
* Potassium, Total	3/29/22 14:18	3/30/22 11:02		1.015	3.94	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-59HO

Location Code: WMWGREAP
Collected: 3/23/22 10:10
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06157

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.000970	mg/L	0.000508	0.001015	J
* Thallium, Total	3/29/22 14:18	3/30/22 11:02		1.015	0.000126	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	0.000474	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	0.0642	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	0.0275	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/31/22 12:35		10.15	10.6	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	3.94	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	0.000981	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:02		1.015	0.000117	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 12:55	3/29/22 12:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	63.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	389	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	62.9	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 13:57	3/29/22 13:57		1	1.07	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-59HO

Location Code: WMWGREAP
Collected: 3/23/22 10:10
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06157

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 10:54	3/28/22 10:54		1	9.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:11	3/28/22 14:11		1	0.0775	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:31	3/29/22 12:31		16	225	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/23/22 10:07	3/23/22 10:07			531.35	uS/cm			FA
pH	3/23/22 10:07	3/23/22 10:07			5.88	SU			FA
Temperature	3/23/22 10:07	3/23/22 10:07			19.88	C			FA
Turbidity	3/23/22 10:07	3/23/22 10:07			4.69	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC06157

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC06157

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC06157

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 10:10
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC06157

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-61HO

Location Code: WMWGREAP
Collected: 3/23/22 11:18
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06158

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:33		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 09:33		1.015	22.4	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:33		1.015	0.0281	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 09:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:33		1.015	1.33	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:33		1	7.45	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:33		1.015	3.48	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:33		1.015	1.60	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	23.9	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	1.29	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:42		1	7.28	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	3.40	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:42		1.015	1.62	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.0619	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.000246	mg/L	0.000081	0.000203	
* Barium, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.0411	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.000654	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.000370	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.0117	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.000524	mg/L	0.000102	0.000203	
* Potassium, Total	3/29/22 14:18	3/30/22 11:05		1.015	1.20	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-61HO

Location Code: WMWGREAP
Collected: 3/23/22 11:18
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06158

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:05		1.015	0.000711	mg/L	0.000508	0.001015	J
* Thallium, Total	3/29/22 14:18	3/30/22 11:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.00787	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.000319	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.0413	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.000367	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.000286	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.0113	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.000568	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	1.19	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	0.000641	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 12:57	3/29/22 12:57		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	60.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	74.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	60.1	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 14:15	3/29/22 14:15		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-61HO

Location Code: WMWGREAP
Collected: 3/23/22 11:18
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06158

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 10:55	3/28/22 10:55		1	2.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:12	3/28/22 14:12		1	0.0871	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:18	3/29/22 12:18		1	10.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/23/22 11:14	3/23/22 11:14			119.36	uS/cm			FA
pH	3/23/22 11:14	3/23/22 11:14			6.38	SU			FA
Temperature	3/23/22 11:14	3/23/22 11:14			20.70	C			FA
Turbidity	3/23/22 11:14	3/23/22 11:14			3.48	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:18
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC06158

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:18
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC06158

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:18
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC06158

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:18
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC06158

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-60HO

Location Code: WMWGREAP
Collected: 3/23/22 12:22
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06159

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 09:36		1.015	2.95	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:36		1.015	0.0117	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 09:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:36		1.015	0.857	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:36		1	10.2	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:36		1.015	4.77	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:36		1.015	6.25	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	3.07	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	0.832	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:44		1	10.1	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	4.71	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:44		1.015	5.95	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:09		1.015	0.0343	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:09		1.015	0.0338	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:09		1.015	0.00111	mg/L	0.000203	0.001015	
* Cobalt, Total	3/29/22 14:18	3/30/22 11:09		1.015	0.000701	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:09		1.015	0.0149	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:09		1.015	1.07	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-60HO

Location Code: WMWGREAP
Collected: 3/23/22 12:22
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06159

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:09		1.015	0.00122	mg/L	0.000508	0.001015	
* Thallium, Total	3/29/22 14:18	3/30/22 11:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	0.0180	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	0.0362	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	0.000391	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	0.000715	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	0.0149	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	1.04	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	0.00116	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 12:59	3/29/22 12:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	12.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	39.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	12.4	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 14:35	3/29/22 14:35		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-60HO

Location Code: WMWGREAP
Collected: 3/23/22 12:22
Customer ID:
Submittal Date: 3/24/22 11:23

Laboratory ID Number: BC06159

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 10:56	3/28/22 10:56		1	4.08	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:14	3/28/22 14:14		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:19	3/29/22 12:19		1	6.73	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/23/22 12:18	3/23/22 12:18			55.19	uS/cm			FA
pH	3/23/22 12:18	3/23/22 12:18			5.22	SU			FA
Temperature	3/23/22 12:18	3/23/22 12:18			21.05	C			FA
Turbidity	3/23/22 12:18	3/23/22 12:18			2.57	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:22
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC06159

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:22
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC06159

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:22
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC06159

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:22
Customer ID:
Delivery Date: 3/24/22 11:23

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC06159

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/23/22 12:45
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06160

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:39		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/7/22 09:39		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:13		1.015	0.000349	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:13		1.015	0.000171	mg/L	0.000152	0.000203	J
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:01	3/29/22 13:01		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 3/23/22 12:45
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06160

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 14:54	3/29/22 14:54		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 10:57	3/28/22 10:57		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:15	3/28/22 14:15		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:20	3/29/22 12:20		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 12:45
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06160

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 12:45
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06160

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 3/23/22 12:45
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC06160

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-63HO

Location Code: WMWGREAP
Collected: 3/23/22 11:32
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06161

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:42		1.015	0.0339	mg/L	0.030000	0.1015	J
* Calcium, Total	4/5/22 07:00	4/7/22 09:42		1.015	6.43	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:42		1.015	0.0150	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 09:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:42		1.015	1.28	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:42		1	6.53	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:42		1.015	3.05	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:42		1.015	2.92	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	0.0323	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	6.08	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	1.25	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:46		1	6.40	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	2.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:46		1.015	2.84	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.0300	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.0498	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.000104	mg/L	0.000068	0.000203	J
* Chromium, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.000448	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.000314	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.0193	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:16		1.015	0.824	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-63HO

Location Code: WMWGREAP
Collected: 3/23/22 11:32
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06161

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	0.0222	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	0.0533	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	0.000300	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	0.000286	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	0.0183	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	0.851	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:03	3/29/22 13:03		1	0.211	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	4.04	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	41.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	4.03	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 15:11	3/29/22 15:11		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-63HO

Location Code: WMWGREAP
Collected: 3/23/22 11:32
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06161

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 10:58	3/28/22 10:58		1	2.42	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:16	3/28/22 14:16		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:22	3/29/22 12:22		1	18.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/22 11:29	3/23/22 11:29			58.17	uS/cm			FA
pH	3/23/22 11:29	3/23/22 11:29			5.34	SU			FA
Temperature	3/23/22 11:29	3/23/22 11:29			17.04	C			FA
Turbidity	3/23/22 11:29	3/23/22 11:29			1.08	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:32
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC06161

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:32
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC06161

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:32
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC06161

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 11:32
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC06161

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO

Location Code: WMWGREAP
Collected: 3/23/22 13:01
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06162

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:45		1.015	0.159	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 09:45		1.015	21.1	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:45		1.015	0.0147	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 09:45		1.015	0.0531	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/7/22 09:45		1.015	5.45	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:45		1	7.21	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:45		1.015	3.37	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:45		1.015	16.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	0.152	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	20.0	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	0.0500	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	5.22	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:48		1	7.17	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	3.35	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:48		1.015	15.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:20		1.015	0.0132	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:20		1.015	0.0332	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:20		1.015	0.000398	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:20		1.015	0.000246	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:20		1.015	0.127	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:20		1.015	3.48	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2022
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO

Location Code: WMWGREAP
Collected: 3/23/22 13:01
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06162

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	0.0352	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	0.0000727	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	0.000209	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	0.125	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	3.50	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:05	3/29/22 13:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	42.9	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	137	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	42.6	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 15:31	3/29/22 15:31		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO

Location Code: WMWGREAP
Collected: 3/23/22 13:01
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06162

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:00	3/28/22 11:00		1	8.80	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:17	3/28/22 14:17		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:32	3/29/22 12:32		3	61.1	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/22 12:58	3/23/22 12:58			235.66	uS/cm			FA
pH	3/23/22 12:58	3/23/22 12:58			5.30	SU			FA
Temperature	3/23/22 12:58	3/23/22 12:58			19.03	C			FA
Turbidity	3/23/22 12:58	3/23/22 12:58			2.98	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC06162

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC06162

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC06162

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC06162

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 13:01
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06163

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:48		1.015	0.158	mg/L	0.030000	0.1015	
* Calcium, Total	4/5/22 07:00	4/7/22 09:48		1.015	20.7	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:48		1.015	0.0114	mg/L	0.008120	0.0406	J
* Lithium, Total	4/5/22 07:00	4/7/22 09:48		1.015	0.0521	mg/L	0.007105	0.01999956	
* Magnesium, Total	4/5/22 07:00	4/7/22 09:48		1.015	5.36	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:48		1	7.19	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:48		1.015	3.36	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:48		1.015	16.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	0.151	mg/L	0.030000	0.1015	
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	19.8	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	0.0508	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	5.27	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:50		1	7.23	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	3.38	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:50		1.015	15.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:24		1.015	0.0135	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:24		1.015	0.0343	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:24		1.015	0.000307	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:24		1.015	0.000238	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:24		1.015	0.125	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:24		1.015	3.37	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 13:01
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06163

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	0.0354	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	0.000219	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	0.130	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	3.46	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 19:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:07	3/29/22 13:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	43.0	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	137	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	42.7	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 15:49	3/29/22 15:49		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO DUP

Location Code: WMWGREAP
Collected: 3/23/22 13:01
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06163

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:01	3/28/22 11:01		1	8.82	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:18	3/28/22 14:18		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:34	3/29/22 12:34		3	61.6	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/22 12:58	3/23/22 12:58			235.66	uS/cm			FA
pH	3/23/22 12:58	3/23/22 12:58			5.30	SU			FA
Temperature	3/23/22 12:58	3/23/22 12:58			19.03	C			FA
Turbidity	3/23/22 12:58	3/23/22 12:58			2.98	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO DUP

Laboratory ID Number: BC06163

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO DUP

Laboratory ID Number: BC06163

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO DUP

Laboratory ID Number: BC06163

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:01
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-47HO DUP

Laboratory ID Number: BC06163

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-62HO

Location Code: WMWGREAP
Collected: 3/23/22 12:25
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06164

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:51		1.015	0.0339	mg/L	0.030000	0.1015	J
* Calcium, Total	4/5/22 07:00	4/7/22 09:51		1.015	8.23	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:51		1.015	0.192	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 09:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:51		1.015	1.26	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:51		1	6.76	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:51		1.015	3.16	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:51		1.015	3.28	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	0.0323	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	8.07	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	1.20	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:52		1	6.36	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	2.97	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:52		1.015	3.22	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.157	mg/L	0.006090	0.01015	
* Arsenic, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.000113	mg/L	0.000081	0.000203	J
* Barium, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.0807	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.0000713	mg/L	0.000068	0.000203	J
* Chromium, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.000723	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.000380	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.000159	mg/L	0.000068	0.000203	J
* Manganese, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.0309	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.000126	mg/L	0.000102	0.000203	J
* Potassium, Total	3/29/22 14:18	3/30/22 11:27		1.015	0.836	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-62HO

Location Code: WMWGREAP
Collected: 3/23/22 12:25
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06164

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.0101	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.0814	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.0000731	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.000336	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.000103	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.0179	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.000126	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	0.838	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:09	3/29/22 13:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	13.5	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	44.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	13.5	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 16:03	3/29/22 16:03		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-62HO

Location Code: WMWGREAP
Collected: 3/23/22 12:25
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06164

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:02	3/28/22 11:02		1	3.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:20	3/28/22 14:20		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:25	3/29/22 12:25		1	15.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/23/22 12:23	3/23/22 12:23			72.90	uS/cm			FA
pH	3/23/22 12:23	3/23/22 12:23			5.82	SU			FA
Temperature	3/23/22 12:23	3/23/22 12:23			17.93	C			FA
Turbidity	3/23/22 12:23	3/23/22 12:23			6	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:25
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC06164

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:25
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC06164

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:25
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC06164

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 12:25
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC06164

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-55HO

Location Code: WMWGREAP
Collected: 3/23/22 13:50
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06165

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 09:54		1.015	0.0337	mg/L	0.030000	0.1015	J
* Calcium, Total	4/5/22 07:00	4/7/22 09:54		1.015	2.26	mg/L	0.070035	0.406	
* Iron, Total	4/5/22 07:00	4/7/22 09:54		1.015	0.132	mg/L	0.008120	0.0406	
* Lithium, Total	4/5/22 07:00	4/7/22 09:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 09:54		1.015	1.73	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/5/22 07:00	4/7/22 09:54		1	10.6	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 09:54		1.015	4.97	mg/L	0.02030	0.25375	
* Sodium, Total	4/5/22 07:00	4/7/22 09:54		1.015	5.78	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	0.0318	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	2.28	mg/L	0.070035	0.406	
* Iron, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	1.65	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/4/22 08:15	4/5/22 08:53		1	10.3	mg/L			
Silicon, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	4.81	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/4/22 08:15	4/5/22 08:53		1.015	5.51	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:31		1.015	0.0871	mg/L	0.006090	0.01015	R
* Arsenic, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:31		1.015	0.0352	mg/L	0.000102	0.000203	
* Beryllium, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:31		1.015	0.00107	mg/L	0.000203	0.001015	
* Cobalt, Total	3/29/22 14:18	3/30/22 11:31		1.015	0.00102	mg/L	0.000068	0.000203	
* Lead, Total	3/29/22 14:18	3/30/22 11:31		1.015	0.000102	mg/L	0.000068	0.000203	J
* Manganese, Total	3/29/22 14:18	3/30/22 11:31		1.015	0.00971	mg/L	0.000152	0.000203	
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:31		1.015	1.85	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-55HO

Location Code: WMWGREAP
Collected: 3/23/22 13:50
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06165

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	0.0225	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	0.0348	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	0.000574	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	0.000901	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	0.00893	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	1.83	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/29/22 13:38	3/29/22 15:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:10	3/29/22 13:10		1	0.283	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	4/1/22 11:00	4/1/22 14:35		1	10.0	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/22 11:23	3/30/22 12:58		1	47.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	10.0	mg/L			
Carbonate Alkalinity, (calc.)	4/1/22 11:00	4/1/22 14:35		1	< 0.5	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 16:18	3/29/22 16:18		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-55HO

Location Code: WMWGREAP
Collected: 3/23/22 13:50
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06165

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:03	3/28/22 11:03		1	4.56	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:21	3/28/22 14:21		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:26	3/29/22 12:26		1	8.46	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/23/22 13:47	3/23/22 13:47			57.34	uS/cm			FA
pH	3/23/22 13:47	3/23/22 13:47			5.20	SU			FA
Temperature	3/23/22 13:47	3/23/22 13:47			18.30	C			FA
Turbidity	3/23/22 13:47	3/23/22 13:47			4.37	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:50
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC06165

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Aluminum, Dissolved	mg/L	-0.000282	0.010	0.100	0.126	0.123	0.108	0.0850 to 0.115	104	70.0 to 130	2.41	20.0
BC06165	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.261	0.333	0.101	0.0850 to 0.115	174	70.0 to 130	24.2	20.0
BC06165	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0944	0.0959	0.0972	0.0850 to 0.115	94.4	70.0 to 130	1.58	20.0
BC06165	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0972	0.100	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.84	20.0
BC06165	Arsenic, Dissolved	mg/L	-0.0000604	0.000176	0.100	0.0969	0.0967	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.207	20.0
BC06165	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.0977	0.0996	0.103	0.0850 to 0.115	97.7	70.0 to 130	1.93	20.0
BC06165	Barium, Dissolved	mg/L	-0.0000329	0.00100	0.100	0.134	0.137	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.21	20.0
BC06165	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.129	0.133	0.0989	0.0850 to 0.115	93.8	70.0 to 130	3.05	20.0
BC06165	Beryllium, Dissolved	mg/L	0.0000219	0.000880	0.100	0.0900	0.0881	0.0887	0.0850 to 0.115	90.0	70.0 to 130	2.13	20.0
BC06165	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0948	0.0957	0.100	0.0850 to 0.115	94.8	70.0 to 130	0.945	20.0
BC06165	Boron, Dissolved	mg/L	-0.000302	0.0650	1.00	1.01	1.06	1.00	0.850 to 1.15	97.8	70.0 to 130	4.83	20.0
BC06165	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.06	1.05	1.03	0.850 to 1.15	103	70.0 to 130	0.948	20.0
BC06165	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.100	0.0958	0.104	0.0850 to 0.115	100	70.0 to 130	4.29	20.0
BC06165	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0984	0.102	0.101	0.0850 to 0.115	98.4	70.0 to 130	3.59	20.0
BC06165	Calcium, Dissolved	mg/L	-0.0134	0.152	5.00	7.68	6.76	4.91	4.25 to 5.75	108	70.0 to 130	12.7	20.0
BC06165	Calcium, Total	mg/L	-0.0137	0.152	5.00	7.37	7.31	5.03	4.25 to 5.75	102	70.0 to 130	0.817	20.0
BC06165	Chloride	mg/L	0.0145	1.00	10.0	15.2	15.2	10.3	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC06165	Chromium, Dissolved	mg/L	-0.0000175	0.000440	0.100	0.0984	0.0964	0.103	0.0850 to 0.115	97.8	70.0 to 130	2.05	20.0
BC06165	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.0984	0.100	0.101	0.0850 to 0.115	97.3	70.0 to 130	1.61	20.0
BC06165	Cobalt, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.100	0.0984	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.61	20.0
BC06165	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.101	0.103	0.104	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BC06165	Fluoride	mg/L	-0.00923	0.125	2.50	2.43	2.49	2.62	2.25 to 2.75	97.2	80.0 to 120	2.44	20.0
BC06165	Iron, Dissolved	mg/L	-0.000332	0.0176	0.2	0.195	0.195	0.201	0.170 to 0.230	97.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:50
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC06165

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Iron, Total	mg/L	0.000305	0.0176	0.2	0.335	0.341	0.205	0.170 to 0.230	102	70.0 to 130	1.78	20.0
BC06165	Lead, Dissolved	mg/L	0.0000123	0.000147	0.100	0.102	0.0976	0.0980	0.0850 to 0.115	102	70.0 to 130	4.41	20.0
BC06165	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.0980	0.100	0.101	0.0850 to 0.115	97.9	70.0 to 130	2.02	20.0
BC06165	Lithium, Dissolved	mg/L	0.00018	0.0154	0.200	0.199	0.190	0.205	0.170 to 0.230	99.5	70.0 to 130	4.63	20.0
BC06165	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.202	0.205	0.201	0.170 to 0.230	101	70.0 to 130	1.47	20.0
BC06165	Magnesium, Dissolved	mg/L	-0.000732	0.0462	5.00	6.93	6.20	5.26	4.25 to 5.75	106	70.0 to 130	11.1	20.0
BC06165	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	6.92	6.97	5.23	4.25 to 5.75	104	70.0 to 130	0.720	20.0
BC06165	Manganese, Dissolved	mg/L	0.0000135	0.0002	0.100	0.108	0.106	0.105	0.0850 to 0.115	99.1	70.0 to 130	1.87	20.0
BC06165	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.106	0.109	0.103	0.0850 to 0.115	96.3	70.0 to 130	2.79	20.0
BC06165	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00397	0.00397	0.00399	0.00340 to 0.00460	99.2	70.0 to 130	0.00	20.0
BC06165	Molybdenum, Dissolved	mg/L	-0.0000070	0.0002	0.100	0.0982	0.0974	0.106	0.0850 to 0.115	98.2	70.0 to 130	0.818	20.0
BC06165	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0958	0.0954	0.0990	0.0850 to 0.115	95.8	70.0 to 130	0.418	20.0
BC06165	Potassium, Dissolved	mg/L	0.0183	0.367	10.0	12.1	11.6	10.7	8.50 to 11.5	103	70.0 to 130	4.22	20.0
BC06165	Potassium, Total	mg/L	-0.00490	0.367	10.0	11.7	11.8	10.4	8.50 to 11.5	98.5	70.0 to 130	0.851	20.0
BC06165	Selenium, Dissolved	mg/L	0.000136	0.00100	0.100	0.0995	0.0981	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.42	20.0
BC06165	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.0973	0.0985	0.105	0.0850 to 0.115	97.3	70.0 to 130	1.23	20.0
BC06165	Silicon, Dissolved	mg/L	-0.000353	0.0440	1.00	5.80	5.79	1.02	0.850 to 1.15	99.0	70.0 to 130	0.173	20.0
BC06165	Silicon, Total	mg/L	0.00239	0.0440	1.00	6.23	6.22	1.02	0.850 to 1.15	126	70.0 to 130	0.161	20.0
BC06165	Sodium, Dissolved	mg/L	-0.000098	0.0660	5.00	10.7	9.97	5.27	4.25 to 5.75	104	70.0 to 130	7.06	20.0
BC06165	Sodium, Total	mg/L	0.000793	0.0660	5.00	10.8	11.0	5.14	4.25 to 5.75	100	70.0 to 130	1.83	20.0
BC06165	Sulfate	mg/L	0.028	2.0	20.0	30.7	30.8	20.6	18.0 to 22.0	111	80.0 to 120	0.325	20.0
BC06165	Thallium, Dissolved	mg/L	0.0000067	0.000147	0.100	0.103	0.0971	0.0973	0.0850 to 0.115	103	70.0 to 130	5.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:50
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC06165

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0960	0.0984	0.101	0.0850 to 0.115	96.0	70.0 to 130	2.47	20.0
BC06165	Total Organic Carbon	mg/L	0.350	1.00	10.0	10.3	10.3	10.0		103	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 3/23/22 13:50
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC06165

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06165	Alkalinity, Total as CaCO3	mg/L					10.0	50.2	45.0 to 55.0			0.00	10.0
BC06165	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.29	0.300	1.96	1.80 to 2.20	100	90.0 to 110	5.83	15.0
BC06165	Solids, Dissolved	mg/L	2.00	25.0			48.7	59.0	40.0 to 60.0			2.92	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum MS/MSD recovery and precision did not meet specification limits.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 3/23/22 14:05
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06166

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	4/5/22 07:00	4/7/22 10:08		1	Not Detected	mg/L			
Silicon, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	4/5/22 07:00	4/7/22 10:08		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/29/22 14:18	3/30/22 11:52		1.015	0.000215	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/29/22 14:18	3/30/22 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/28/22 15:26	3/28/22 20:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	3/29/22 13:16	3/29/22 13:16		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/22 14:30	3/29/22 11:47		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 3/23/22 14:05
Customer ID:
Submittal Date: 3/24/22 11:24

Laboratory ID Number: BC06166

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	3/29/22 17:37	3/29/22 17:37		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/28/22 11:19	3/28/22 11:19		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/28/22 14:34	3/28/22 14:34		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/29/22 12:43	3/29/22 12:43		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/3/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 14:05
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06166

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06166	Aluminum, Total	mg/L	0.000411	0.010	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC06166	Antimony, Total	mg/L	0.000338	0.00100	0.100	0.0989	0.0976	0.100	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC06166	Arsenic, Total	mg/L	-0.0000108	0.000176	0.100	0.101	0.100	0.103	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC06166	Barium, Total	mg/L	0.0000548	0.00100	0.100	0.0955	0.0972	0.0989	0.0850 to 0.115	95.5	70.0 to 130	1.76	20.0
BC06166	Beryllium, Total	mg/L	0.000128	0.000880	0.100	0.0947	0.0941	0.100	0.0850 to 0.115	94.7	70.0 to 130	0.636	20.0
BC06166	Boron, Total	mg/L	-0.000091	0.0650	1.00	1.01	1.02	1.03	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC06166	Cadmium, Total	mg/L	0.0000087	0.000147	0.100	0.0982	0.100	0.101	0.0850 to 0.115	98.2	70.0 to 130	1.82	20.0
BC06166	Calcium, Total	mg/L	-0.0137	0.152	5.00	4.86	4.84	5.03	4.25 to 5.75	97.2	70.0 to 130	0.412	20.0
BC06166	Chloride	mg/L	0.00553	1.00	10.0	10.1	10.2	10.2	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC06166	Chromium, Total	mg/L	0.0000441	0.000440	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06166	Cobalt, Total	mg/L	0.0000065	0.000147	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC06166	Fluoride	mg/L	0.0076	0.125	2.50	2.50	2.52	2.64	2.25 to 2.75	100	80.0 to 120	0.797	20.0
BC06166	Iron, Total	mg/L	0.000305	0.0176	0.2	0.198	0.198	0.205	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BC06166	Lead, Total	mg/L	0.0000225	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC06166	Lithium, Total	mg/L	0.000078	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BC06166	Magnesium, Total	mg/L	-0.00900	0.0462	5.00	5.18	5.13	5.23	4.25 to 5.75	104	70.0 to 130	0.970	20.0
BC06166	Manganese, Total	mg/L	-0.0000558	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC06166	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00399	0.00395	0.00399	0.00340 to 0.00460	99.8	70.0 to 130	1.01	20.0
BC06166	Molybdenum, Total	mg/L	-0.0000006	0.0002	0.100	0.0983	0.0995	0.0990	0.0850 to 0.115	98.3	70.0 to 130	1.21	20.0
BC06166	Potassium, Total	mg/L	-0.00490	0.367	10.0	10.3	10.4	10.4	8.50 to 11.5	103	70.0 to 130	0.966	20.0
BC06166	Selenium, Total	mg/L	0.0000410	0.00100	0.100	0.102	0.102	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC06166	Silicon, Total	mg/L	0.00239	0.0440	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC06166	Sodium, Total	mg/L	0.000793	0.0660	5.00	5.23	5.21	5.14	4.25 to 5.75	105	70.0 to 130	0.383	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 14:05
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06166

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06166	Sulfate	mg/L	0.289	2.0	20.0	21.4	21.3	20.6	18.0 to 22.0	107	80.0 to 120	0.468	20.0
BC06166	Thallium, Total	mg/L	0.0000152	0.000147	0.100	0.0998	0.0999	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC06166	Total Organic Carbon	mg/L	0.300	1.00	10.0	10.1	10.1	10.0		101	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 3/23/22 14:05
Customer ID:
Delivery Date: 3/24/22 11:24

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC06166

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC06166	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	1.92	-0.041	1.86	1.80 to 2.20	96.0	90.0 to 110	0.00	15.0
BC06163	Solids, Dissolved	mg/L	0.0000	25.0			135	49.0	40.0 to 60.0			1.47	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Project Number: WMWGREAP_1355

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine
Collector	Anthony Goggins
Results To	Dustin Brooks, Greg Dyer
Requested By	Greg Dyer
Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-62HO	03/23/2022	12:25	7	Groundwater		BC06164
MW-55HO	03/23/2022	13:50	7	Groundwater		BC06165
EB-1	03/23/2022	14:05	5	Equipment Blank		BC06166

Relinquished By	Received By	Date/Time
	Laura M	03/24/2022 09:51

SmarTroll ID	7586-41442-5-1
Turbidity ID	4677-23343-4-2
Sample Event	1355

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	1.0 degrees C
Thermometer ID	6603-34819-1-1
pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab& Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-63HO	03/23/2022	11:32	7	Groundwater		BC06161
MW-47HO	03/23/2022	13:01	7	Groundwater		BC06162
MW-47HO dup	03/23/2022	13:01	7	Sample Duplicate		BC06163

Relinquished By	Received By	Date/Time
	Laura	03/24/2022 09:56

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.5 degrees C
Sample Event	1355	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC bottles pH<2. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-50HO	03/23/2022	08:48	7	Groundwater		BC06156
MW-59HO	03/23/2022	10:10	7	Groundwater		BC06157
MW-61HO	03/23/2022	11:18	7	Groundwater		BC06158
MW-60HO	03/23/2022	12:22	7	Groundwater		BC06159
FB-1	03/23/2022	12:45	5	Field Blank		BC06160

Relinquished By	Received By	Date/Time
	Laura M	03/24/2022 09:54

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.3 degrees C
Sample Event	1355	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Sulfide	250 mL	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Sulfide bottles pH>9. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-62HO	03/23/2022	12:25	2	Groundwater		BC06175
MW-55HO	03/23/2022	13:50	2	Groundwater		BC06176
EB-1	03/23/2022	14:05	2	Equipment Blank		BC06177

Relinquished By	Received By	Date/Time
		03/24/2022 09:50

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.0 degrees C
Sample Event	1355	Thermometer ID	6603-34819-1-1
		pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Sulfide	250 mL	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Sulfide bottles pH>9. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-63HO	03/23/2022	11:32	2	Groundwater		BC06172
MW-47HO	03/23/2022	13:01	2	Groundwater		BC06173
MW-47HO dup	03/23/2022	13:01	2	Sample Duplicate		BC06174

Relinquished By	Received By	Date/Time
Dallas Gentry		03/24/2022 09:56

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20010-2-2
Sample Event	1355

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.5 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Sulfide	250 mL	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD collected at MW-50HO per TJD Correcting bottle count to 4. Sulfide bottles pH>9. LBM 3/24/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-50HO	03/23/2022	08:48	4	Groundwater		BC06167
MW-59HO	03/23/2022	10:10	2	Groundwater		BC06168
MW-61HO	03/23/2022	11:18	2	Groundwater		BC06169
MW-60HO	03/23/2022	12:22	2	Groundwater		BC06170
FB-1	03/23/2022	12:45	2	Field Blank		BC06171

Relinquished By	Received By	Date/Time
		03/24/2022 09:54

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.3 degrees C
Sample Event	1355	Thermometer ID	5408-27568-2-2
		pH Strip ID	9772-56581-100-3

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

March 31, 2022

Laura Midkiff
Alabama Power
744 Highway 87
GSC 8
Calera, AL 35040

RE: Project: WMWGREAP_1355
Pace Project No.: 20238673

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - New Orleans

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen H Brown

Karen Brown
karen.brown@pacelabs.com
(504)469-0333
Project Manager

Enclosures

cc: Renee Jernigan, Alabama Power
Trinity B. Williams, Alabama Power

CERTIFICATIONS

Project:	WMWGREAP_1355
Pace Project No.:	20238673

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

SAMPLE SUMMARY

Project: WMWGREAP_1355
Pace Project No.: 20238673

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20238673001	**BC06167 MW-50HO**	Water	03/23/22 08:48	03/26/22 04:00
20238673002	**BC06168 MW-59HO**	Water	03/23/22 10:10	03/26/22 04:00
20238673003	**BC06169 MW-61HO**	Water	03/23/22 11:18	03/26/22 04:00
20238673004	**BC06170 MW-60HO**	Water	03/23/22 12:22	03/26/22 04:00
20238673005	**BC06171 FB-1**	Water	03/23/22 12:45	03/26/22 04:00
20238673006	**BC06172 MW-63HO**	Water	03/23/22 11:32	03/26/22 04:00
20238673007	**BC06173 MW-47HO**	Water	03/23/22 13:01	03/26/22 04:00
20238673008	**BC06174 MW-47HO DUP**	Water	03/23/22 13:01	03/26/22 04:00
20238673009	**BC06175 MW-62HO**	Water	03/23/22 12:25	03/26/22 04:00
20238673010	**BC06176 MW-55HO**	Water	03/23/22 13:50	03/26/22 04:00
20238673011	**BC06177 EB-1**	Water	03/23/22 14:05	03/26/22 04:00

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1355
Pace Project No.: 20238673

Lab ID	Sample ID	Method	Analysts	Analytes Reported
20238673001	**BC06167 MW-50HO**	SM 4500-S-2 D	RVJ	1
20238673002	**BC06168 MW-59HO**	SM 4500-S-2 D	RVJ	1
20238673003	**BC06169 MW-61HO**	SM 4500-S-2 D	RVJ	1
20238673004	**BC06170 MW-60HO**	SM 4500-S-2 D	RVJ	1
20238673005	**BC06171 FB-1**	SM 4500-S-2 D	RVJ	1
20238673006	**BC06172 MW-63HO**	SM 4500-S-2 D	RVJ	1
20238673007	**BC06173 MW-47HO**	SM 4500-S-2 D	RVJ	1
20238673008	**BC06174 MW-47HO DUP**	SM 4500-S-2 D	RVJ	1
20238673009	**BC06175 MW-62HO**	SM 4500-S-2 D	RVJ	1
20238673010	**BC06176 MW-55HO**	SM 4500-S-2 D	RVJ	1
20238673011	**BC06177 EB-1**	SM 4500-S-2 D	RVJ	1

PASI-N = Pace Analytical Services - New Orleans

PROJECT NARRATIVE

Project:	WMWGREAP_1355
Pace Project No.:	20238673

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Alabama Power
Date: March 31, 2022

General Information:
11 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services New Orleans. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 251511

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20238671002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1194666)
    - Sulfide, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06167 MW-50HO **Lab ID: 20238673001** Collected: 03/23/22 08:48 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:05	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06168 MW-59HO **Lab ID: 20238673002** Collected: 03/23/22 10:10 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:34	18496-25-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06169 MW-61HO **Lab ID: 20238673003** Collected: 03/23/22 11:18 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:35	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06170 MW-60HO **Lab ID: 20238673004** Collected: 03/23/22 12:22 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:35	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06171 FB-1 **Lab ID: 20238673005** Collected: 03/23/22 12:45 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:37	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06172 MW-63HO **Lab ID: 20238673006** Collected: 03/23/22 11:32 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:37	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06173 MW-47HO **Lab ID: 20238673007** Collected: 03/23/22 13:01 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 14:38	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06174 MW-47HO DUP **Lab ID: 20238673008** Collected: 03/23/22 13:01 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 15:21	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06175 MW-62HO **Lab ID: 20238673009** Collected: 03/23/22 12:25 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 15:24	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06176 MW-55HO **Lab ID: 20238673010** Collected: 03/23/22 13:50 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 15:24	18496-25-8	

ANALYTICAL RESULTS

Project: WMWGREAP_1355
Pace Project No.: 20238673

Sample: BC06177 EB-1 **Lab ID: 20238673011** Collected: 03/23/22 14:05 Received: 03/26/22 04:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - New Orleans								
Sulfide, Total	ND	mg/L	0.020	0.012	1		03/30/22 15:24	18496-25-8	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WMWGREAP_1355
Pace Project No.: 20238673

QC Batch: 251511
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20238673001, 20238673002, 20238673003, 20238673004, 20238673005, 20238673006, 20238673007

METHOD BLANK: 1194663 Matrix: Water
Associated Lab Samples: 20238673001, 20238673002, 20238673003, 20238673004, 20238673005, 20238673006, 20238673007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.020	0.012	03/30/22 13:20	

LABORATORY CONTROL SAMPLE: 1194664

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.2	0.20	98	90-110	

MATRIX SPIKE SAMPLE: 1194666

Parameter	Units	20238671002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	0.2	0.11	54	75-125	M1

SAMPLE DUPLICATE: 1194665

Parameter	Units	20238671002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL DATA

Project: WMWGREAP_1355
Pace Project No.: 20238673

QC Batch: 251533
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20238673008, 20238673009, 20238673010, 20238673011

METHOD BLANK: 1194887 Matrix: Water
Associated Lab Samples: 20238673008, 20238673009, 20238673010, 20238673011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.020	0.012	03/30/22 15:14	

LABORATORY CONTROL SAMPLE: 1194888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.2	0.19	97	90-110	

MATRIX SPIKE SAMPLE: 1194890

Parameter	Units	20238673008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	0.2	0.18	91	75-125	

SAMPLE DUPLICATE: 1194889

Parameter	Units	20238673008 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project: WMWGREAP_1355
Pace Project No.: 20238673

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGREAP_1355
Pace Project No.:	20238673

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20238673001	**BC06167 MW-50HO**	SM 4500-S-2 D	251511		
20238673002	**BC06168 MW-59HO**	SM 4500-S-2 D	251511		
20238673003	**BC06169 MW-61HO**	SM 4500-S-2 D	251511		
20238673004	**BC06170 MW-60HO**	SM 4500-S-2 D	251511		
20238673005	**BC06171 FB-1**	SM 4500-S-2 D	251511		
20238673006	**BC06172 MW-63HO**	SM 4500-S-2 D	251511		
20238673007	**BC06173 MW-47HO**	SM 4500-S-2 D	251511		
20238673008	**BC06174 MW-47HO DUP**	SM 4500-S-2 D	251533		
20238673009	**BC06175 MW-62HO**	SM 4500-S-2 D	251533		
20238673010	**BC06176 MW-55HO**	SM 4500-S-2 D	251533		
20238673011	**BC06177 EB-1**	SM 4500-S-2 D	251533		

WO# : 20238673

20238673

CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1355

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Karen Brown
Pace Profile #:	17210

Regulatory Agency	
State / Location	AL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)
1	BC06167	MW-50HO	APCO-GC-AP-MW-50HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	8:48	1		X								X		
2	BC06168	MW-59HO	APCO-GC-AP-MW-59HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:10	1		X								X		
3	BC06169	MW-61HO	APCO-GC-AP-MW-61HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	11:18	1		X								X		
4	BC06170	MW-60HO	APCO-GC-AP-MW-60HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	12:22	1		X								X		
5	BC06171	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	12:45	1		X								X		
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/24/2022	13:20	G. H.						
	G. H.	3/26/2022	0400		3/26/2022	0400	1.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TJ Daugherty

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 3

Section A
Required Client Information:

Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: lbmidkif@southernco.com
Phone: 205-664-6197 Fax
Requested Due Date: Normal

Section B
Required Project Information:

Report To: Laura Midkiff
Copy To: Brooke Caton & Renee Jernigan
Purchase Order #: **APC10755638**
Project Name: Plant Greene County Ash Pond
Project Number: WMWGREAP_1355

Section C
Invoice Information:

Attention: Laura Midkiff
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Karen Brown
Pace Profile #: 17210

Regulatory Agency

State / Location: AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Preservatives	Preservatives	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)
1	BC06172	MW-63HO	APCO-GC-AP-MW-63HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	11:32	1		X								X		
2	BC06173	MW-47HO	APCO-GC-AP-MW-47HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	13:01	1		X								X		
3	BC06174	MW-47HO DUP	APCO-GC-AP-MW-47HO	APCO_GreeneCounty_AshPond	X			GW	G	3/23/2022	13:01	1		X								X		
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Laura Midkiff/ APC GTL	3/24/2022	13:20							
	G.H.	3/26/2022	0400		3/26/2022	0400	1.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry
SIGNATURE of SAMPLER:
DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 3 Of 3

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	**APC10755638**
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1355

Section C
Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Karen Brown
Pace Profile #:	17210

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)
1	BC06175	MW-62HO	APCO-GC-AP-MW-62HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	12:25	1		X						X	
2	BC06176	MW-55HO	APCO-GC-AP-MW-55HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	13:50	1		X						X	
3	BC06177	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	14:05	1		X						X	
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/24/2022	13:20	G.H.						
	G.H.	3/26/2022	0400		3/26/2022	0400	1.5°	y	y	y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Goggins

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon Re

Proje

WO#: 20238673

PM: KHB Due Date: 04/07/22
CLIENT: 20-Alabama

Courier: ☐ Pace Courier ☒ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☒Yes ☐No

Therometer Used: ☐ Therm Fisher IR 7 ☒ Therm Fisher IR 10

Type of Ice: [✓ Wet] Blue None

Samples on ice: [see COC]

Date and Initials of person examining contents: 5/26/2022 lays

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Temp must be measured from Temperature blank when present

		Comments:
Temperature Blank Present"?	☐Yes ☐No ☒N/A	1
Chain of Custody Present:	☒Yes ☐No ☐N/A	2
Chain of Custody Complete:	☒Yes ☐No ☐N/A	3
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	4
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	5
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	6
Sufficient Volume:	☒Yes ☐No ☐N/A	7
Correct Containers Used:	☒Yes ☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☒N/A	9
Sample Labels match COC:	☒Yes ☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes ☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒Yes ☐No ☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	13 If No, was preservative added? ☐Yes ☐No If added record lot no.: HNO3 ______ H2SO4 ______
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	14
Trip Blank Present:	☐Yes ☒No	15

Client Notification/ Resolution:

Person Contacted: ____________________ Date/Time: ____________

Comments/ Resolution: ____________________

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 18, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGREAP_1355
Pace Project No.: 30476472

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

(Greensburg, WV) - Revision 1 - This report replaces the 5/2/2022 report. This project was revised on 5/13/22 to take total radium off of MS/ MSD samples per client request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

REPORT OF LABORATORY ANALYSIS

CERTIFICATIONS

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30476472001	**BC06167 MW-50HO**	Water	03/23/22 08:48	03/30/22 09:25
30476472002	**BC06167 MW-50HO MS**	Water	03/23/22 08:48	03/30/22 09:25
30476472003	**BC06167 MW-50HO MSD**	Water	03/23/22 08:48	03/30/22 09:25
30476472004	**BC06168 MW-59HO**	Water	03/23/22 10:10	03/30/22 09:25
30476472005	**BC06169 MW-61HO**	Water	03/23/22 11:18	03/30/22 09:25
30476472006	**BC06170 MW-60HO**	Water	03/23/22 12:22	03/30/22 09:25
30476472007	**BC06171 FB-1**	Water	03/23/22 12:45	03/30/22 09:25
30476472008	**BC06172 MW-63HO**	Water	03/23/22 11:32	03/30/22 09:25
30476472009	**BC06173 MW-47HO**	Water	03/23/22 13:01	03/30/22 09:25
30476472010	**BC06174 MW-47HO DUP**	Water	03/23/22 13:01	03/30/22 09:25
30476472011	**BC06175 MW-62HO**	Water	03/23/22 12:25	03/30/22 09:25
30476472012	**BC06176 MW-55HO**	Water	03/23/22 13:50	03/30/22 09:25
30476472013	**BC06177 EB-1**	Water	03/23/22 14:05	03/30/22 09:25

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1355
Pace Project No.: 30476472

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30476472001	**BC06167 MW-50HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472002	**BC06167 MW-50HO MS**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30476472003	**BC06167 MW-50HO MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30476472004	**BC06168 MW-59HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472005	**BC06169 MW-61HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472006	**BC06170 MW-60HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472007	**BC06171 FB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472008	**BC06172 MW-63HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472009	**BC06173 MW-47HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472010	**BC06174 MW-47HO DUP**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472011	**BC06175 MW-62HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472012	**BC06176 MW-55HO**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30476472013	**BC06177 EB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: May 18, 2022

General Information:
13 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: May 18, 2022

General Information:
13 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: May 18, 2022

General Information:
11 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06167 MW-50HO **Lab ID: 30476472001** Collected: 03/23/22 08:48 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.246U ± 0.169 (0.250)** **C:97% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.662U ± 0.400 (0.727)** **C:70% T:80%**	pCi/L	04/29/22 11:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.908U ± 0.569 (0.977)**	pCi/L	04/30/22 20:26	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06167 MW-50HO MS **Lab ID: 30476472002** Collected: 03/23/22 08:48 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**94.68 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**94.76 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/29/22 11:14	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06167 MW-50HO MSD **Lab ID: 30476472003** Collected: 03/23/22 08:48 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**99.43 %REC 4.89RPD ± NA (NA) C:NA T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**102.61 %REC 7.95 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/29/22 11:14	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06168 MW-59HO **Lab ID: 30476472004** Collected: 03/23/22 10:10 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.442 ± 0.226 (0.285)** **C:98% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.577U ± 0.394 (0.756)** **C:77% T:85%**	pCi/L	04/18/22 15:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02U ± 0.620 (1.04)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Sample: BC06169 MW-61HO **Lab ID: 30476472005** Collected: 03/23/22 11:18 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.116U ± 0.136 (0.269)** **C:100% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0852U ± 0.316 (0.715)** **C:78% T:90%**	pCi/L	04/18/22 15:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.201U ± 0.452 (0.984)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06170 MW-60HO **Lab ID: 30476472006** Collected: 03/23/22 12:22 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.218U ± 0.188 (0.349)** **C:101% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.714U ± 0.722 (1.49)** **C:70% T:46%**	pCi/L	04/18/22 15:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.932U ± 0.910 (1.84)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Sample: BC06171 FB-1 **Lab ID: 30476472007** Collected: 03/23/22 12:45 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0793U ± 0.130 (0.289)** **C:101% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.444U ± 0.379 (0.761)** **C:74% T:86%**	pCi/L	04/18/22 15:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.523U ± 0.509 (1.05)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Sample: BC06172 MW-63HO **Lab ID: 30476472008** Collected: 03/23/22 11:32 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0122U ± 0.103 (0.283)** **C:90% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.195U ± 0.375 (0.823)** **C:75% T:82%**	pCi/L	04/18/22 15:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.207U ± 0.478 (1.11)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06173 MW-47HO **Lab ID: 30476472009** Collected: 03/23/22 13:01 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0729U ± 0.0665 (0.288)** **C:100% T:NA**	pCi/L	04/27/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.214U ± 0.345 (0.749)** **C:73% T:86%**	pCi/L	04/18/22 15:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.214U ± 0.412 (1.04)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06174 MW-47HO DUP **Lab ID: 30476472010** Collected: 03/23/22 13:01 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0727U ± 0.114 (0.247)** **C:96% T:NA**	pCi/L	04/27/22 09:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.234U ± 0.396 (0.863)** **C:73% T:79%**	pCi/L	04/18/22 16:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.307U ± 0.510 (1.11)**	pCi/L	04/27/22 12:46	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1355
Pace Project No.:	30476472

Sample: BC06175 MW-62HO **Lab ID: 30476472011** Collected: 03/23/22 12:25 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.260U ± 0.182 (0.291)** **C:100% T:NA**	pCi/L	04/27/22 09:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.569U ± 0.388 (0.746)** **C:74% T:86%**	pCi/L	04/29/22 11:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.829U ± 0.570 (1.04)**	pCi/L	04/30/22 20:26	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06176 MW-55HO **Lab ID: 30476472012** Collected: 03/23/22 13:50 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.271 ± 0.178 (0.267)** **C:103% T:NA**	pCi/L	04/27/22 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.477U ± 0.396 (0.790)** **C:72% T:85%**	pCi/L	04/29/22 11:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.748U ± 0.574 (1.06)**	pCi/L	04/30/22 20:26	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

Sample: BC06177 EB-1 **Lab ID: 30476472013** Collected: 03/23/22 14:05 Received: 03/30/22 09:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0968U ± 0.140 (0.300)** **C:101% T:NA**	pCi/L	04/27/22 09:20	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.609U ± 0.428 (0.807)** **C:58% T:81%**	pCi/L	04/29/22 11:16	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.706U ± 0.568 (1.11)**	pCi/L	04/30/22 20:26	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

QC Batch: 494693
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30476472001, 30476472002, 30476472003, 30476472004, 30476472005, 30476472006, 30476472007, 30476472008, 30476472009, 30476472010, 30476472011, 30476472012, 30476472013

METHOD BLANK: 2393435
Matrix: Water

Associated Lab Samples: 30476472001, 30476472002, 30476472003, 30476472004, 30476472005, 30476472006, 30476472007, 30476472008, 30476472009, 30476472010, 30476472011, 30476472012, 30476472013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0309 ± 0.0566 (0.128) C:92% T:NA	pCi/L	04/27/22 09:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1355
Pace Project No.: 30476472

QC Batch: 497369
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30476472001, 30476472002, 30476472003, 30476472011, 30476472012, 30476472013

METHOD BLANK: 2407526
Matrix: Water
Associated Lab Samples: 30476472001, 30476472002, 30476472003, 30476472011, 30476472012, 30476472013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0537 ± 0.301 (0.691) C:76% T:81%	pCi/L	04/29/22 11:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1355
Pace Project No.:	30476472

QC Batch:	494964	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30476472004, 30476472005, 30476472006, 30476472007, 30476472008, 30476472009, 30476472010

METHOD BLANK: 2394282 Matrix: Water

Associated Lab Samples: 30476472004, 30476472005, 30476472006, 30476472007, 30476472008, 30476472009, 30476472010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.432 ± 0.355 (0.710) C:74% T:87%	pCi/L	04/18/22 12:55	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGREAP_1355
Pace Project No.:	30476472

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1355
Pace Project No.: 30476472

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30476472001	**BC06167 MW-50HO**	EPA 9315	494693		
30476472002	**BC06167 MW-50HO MS**	EPA 9315	494693		
30476472003	**BC06167 MW-50HO MSD**	EPA 9315	494693		
30476472004	**BC06168 MW-59HO**	EPA 9315	494693		
30476472005	**BC06169 MW-61HO**	EPA 9315	494693		
30476472006	**BC06170 MW-60HO**	EPA 9315	494693		
30476472007	**BC06171 FB-1**	EPA 9315	494693		
30476472008	**BC06172 MW-63HO**	EPA 9315	494693		
30476472009	**BC06173 MW-47HO**	EPA 9315	494693		
30476472010	**BC06174 MW-47HO DUP**	EPA 9315	494693		
30476472011	**BC06175 MW-62HO**	EPA 9315	494693		
30476472012	**BC06176 MW-55HO**	EPA 9315	494693		
30476472013	**BC06177 EB-1**	EPA 9315	494693		
30476472001	**BC06167 MW-50HO**	EPA 9320	497369		
30476472002	**BC06167 MW-50HO MS**	EPA 9320	497369		
30476472003	**BC06167 MW-50HO MSD**	EPA 9320	497369		
30476472004	**BC06168 MW-59HO**	EPA 9320	494964		
30476472005	**BC06169 MW-61HO**	EPA 9320	494964		
30476472006	**BC06170 MW-60HO**	EPA 9320	494964		
30476472007	**BC06171 FB-1**	EPA 9320	494964		
30476472008	**BC06172 MW-63HO**	EPA 9320	494964		
30476472009	**BC06173 MW-47HO**	EPA 9320	494964		
30476472010	**BC06174 MW-47HO DUP**	EPA 9320	494964		
30476472011	**BC06175 MW-62HO**	EPA 9320	497369		
30476472012	**BC06176 MW-55HO**	EPA 9320	497369		
30476472013	**BC06177 EB-1**	EPA 9320	497369		
30476472001	**BC06167 MW-50HO**	Total Radium Calculation	501148		
30476472004	**BC06168 MW-59HO**	Total Radium Calculation	500402		
30476472005	**BC06169 MW-61HO**	Total Radium Calculation	500402		
30476472006	**BC06170 MW-60HO**	Total Radium Calculation	500402		
30476472007	**BC06171 FB-1**	Total Radium Calculation	500402		
30476472008	**BC06172 MW-63HO**	Total Radium Calculation	500402		
30476472009	**BC06173 MW-47HO**	Total Radium Calculation	500402		
30476472010	**BC06174 MW-47HO DUP**	Total Radium Calculation	500402		
30476472011	**BC06175 MW-62HO**	Total Radium Calculation	501148		
30476472012	**BC06176 MW-55HO**	Total Radium Calculation	501148		
30476472013	**BC06177 EB-1**	Total Radium Calculation	501148		

WO#:30476472

30476472

Cl ... ocument

The ... st be completed accurately.

Page : 1 Of 3

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1355

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skylar Richmond
Pace Profile #:	13805

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BC06167	MW-50HO	APCO-GC-AP-MW-50HO	APCO_GreeneCounty_AshPond		X		GW	G	3/23/2022	8:48	3			X				X	X	X				001,002,003
2	BC06168	MW-59HO	APCO-GC-AP-MW-59HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	10:10	1			X				X	X	X				004
3	BC06169	MW-61HO	APCO-GC-AP-MW-61HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	11:18	1			X				X	X	X				005
4	BC06170	MW-60HO	APCO-GC-AP-MW-60HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	12:22	1			X				X	X	X				006
5	BC06171	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	12:45	1			X				X	X	X				007
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/25/2022	9:30		3-30-22	9:25				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TJ Daugherty

SIGNATURE of SAMPLER: DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be

WO#: 30476472

PM: SCR **Due Date: 04/20/22**

CLIENT: ALABAMA PWR

Section A
Required Client Information:

Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: lbmidkif@southernco.com
Phone: 205-664-6197 Fax
Requested Due Date: Normal

Section B
Required Project Information:

Report To: Laura Midkiff
Copy To: Brooke Caton & Renee Jernigan
Purchase Order #: APC10755638
Project Name: Plant Greene County Ash Pond
Project Number: WMWGREAP_1355

Section C
Invoice Information:

Attention: Laura Midkiff
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 13805

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BC06172	MW-63HO	APCO-GC-AP-MW-63HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	11:32	1			X		X	X	X			008
2	BC06173	MW-47HO	APCO-GC-AP-MW-47HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	13:01	1			X		X	X	X			009
3	BC06174	MW-47HO DUP	APCO-GC-AP-MW-47HO	APCO_GreeneCounty_AshPond	X			GW	G	3/23/2022	13:01	1			X		X	X	X			010
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	3/25/2022	9:30		3-30-22	9:25	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#:30476472
PM: SCR Due Date: 04/20/22
CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

Page: 3 Of 3

Section A
Required Client Information:
Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: lbmidkif@southernco.com
Phone: 205-664-6197 Fax:
Requested Due Date: Normal

Section B
Required Project Information:
Report To: Laura Midkiff
Copy To: Brooke Caton & Renee Jernigan
Purchase Order #: APC10755638
Project Name: Plant Greene County Ash Pond
Project Number: WMWGREAP_1355

Section C
Invoice Information:
Attention: Laura Midkiff
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 13805

Regulatory Agency

State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME		# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BC06175	MW-62HO	APCO-GC-AP-MW-62HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	12:25		1			X				X	X	X				011
2	BC06176	MW-55HO	APCO-GC-AP-MW-55HO	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	13:50		1			X				X	X	X				012
3	BC06177	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	3/23/2022	14:05		1			X				X	X	X				013
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/25/2022	9:30		3-30-22	9:25				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Anthony Goggins
SIGNATURE of SAMPLER:
DATE Signed:

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical Client Name: Alabama Power Project #

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 5701 6584 7592

Label AF
LIMS Login VPINC

WO#: 30476472
PM: SCR Due Date: 04/20/22
CLIENT: ALABAMA PWR

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used N/A Type of Ice: Wet Blue [✓ None]

Cooler Temperature Observed Temp - °C Correction Factor: - °C Final Temp: - °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 1002811	Date and Initials of person examining contents: 04/01/22 AF
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:		X		3. Printed signature	
Sampler Name & Signature on COC:		X		4. Printed Signature	
Sample Labels match COC:	X			5.	
-Includes date/time/ID Matrix: WT					
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:		X		8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	X			16. ph<2	
All containers meet method preservation requirements.	X			Initial when completed AF	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):			X	17.	
Trip Blank Present:		X		18.	
Trip Blank Custody Seals Present			X		
Rad Samples Screened < 0.5 mrem/hr	X			Initial when completed: AF	Date: 4/1/22 Survey Meter SN: 1563

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 4/22/2022
Worklist: 66133
Matrix: WT

Method Blank Assessment	
MB Sample ID	2407526
MB concentration:	0.054
M/B 2 Sigma CSU:	0.301
MB MDC:	0.691
MB Numerical Performance Indicator:	0.35
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS66133	**LCSD66133**
Count Date:	4/29/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.933	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	4.384	
Uncertainty (Calculated):	0.215	
Result (pCi/L, g, F):	2.842	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.720	
Numerical Performance Indicator:	-4.02	
Percent Recovery:	64.83%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/28/2022
Sample I.D.	30476472001	30480057012
Sample MS I.D.	30476472002	30480057013
Sample MSD I.D.	30476472003	30480057014
Spike I.D.:	22-016	22-016
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.376	36.376
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.819	0.799
MS Target Conc.(pCi/L, g, F):	8.878	9.105
MSD Aliquot (L, g, F):	0.801	0.798
MSD Target Conc. (pCi/L, g, F):	9.083	9.122
MS Spike Uncertainty (calculated):	0.435	0.446
MSD Spike Uncertainty (calculated):	0.445	0.447
Sample Result:	0.662	0.539
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.400	0.357
Sample Matrix Spike Result:	9.075	8.858
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.845	1.779
Sample Matrix Spike Duplicate Result:	9.982	8.872
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.995	1.797
MS Numerical Performance Indicator:	-0.470	-0.824
MSD Numerical Performance Indicator:	0.223	-0.820
MS Percent Recovery:	94.76%	91.37%
MSD Percent Recovery:	102.61%	91.35%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476472001	30480057012
Sample MS I.D.	30476472002	30480057013
Sample MSD I.D.	30476472003	30480057014
Sample Matrix Spike Result:	9.075	8.858
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.845	1.779
Sample Matrix Spike Duplicate Result:	9.982	8.872
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.995	1.797
Duplicate Numerical Performance Indicator:	-0.654	-0.011
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	7.95%	0.02%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

\## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	4/4/2022
Worklist:	65910
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2393435
MB concentration:	0.031
M/B Counting Uncertainty:	0.056
MB MDC:	0.128
MB Numerical Performance Indicator:	1.07
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65910	**LCSD65910**
Count Date:	4/27/2022	4/27/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.028	24.028
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.509	0.506
Target Conc. (pCi/L, g, F):	4.719	4.745
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.433	4.918
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.495	0.477
Numerical Performance Indicator:	2.81	0.71
Percent Recovery:	115.14%	103.66%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS65910	
Duplicate Sample I.D.	LCSD65910	
Sample Result (pCi/L, g, F):	5.433	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.495	
Sample Duplicate Result (pCi/L, g, F):	4.918	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.477	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.467	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.49%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	
Sample I.D.	30476472001	
Sample MS I.D.	30476472002	
Sample MSD I.D.	30476472003	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.029	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.251	
MS Target Conc.(pCi/L, g, F):	19.162	
MSD Aliquot (L, g, F):	0.250	
MSD Target Conc. (pCi/L, g, F):	19.230	
MS Spike Uncertainty (calculated):	0.230	
MSD Spike Uncertainty (calculated):	0.231	
Sample Result:	0.246	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.165	
Sample Matrix Spike Result:	18.388	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.252	
Sample Matrix Spike Duplicate Result:	19.365	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.318	
MS Numerical Performance Indicator:	-1.558	
MSD Numerical Performance Indicator:	-0.160	
MS Percent Recovery:	94.68%	
MSD Percent Recovery:	99.43%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476472001	
Sample MS I.D.	30476472002	
Sample MSD I.D.	30476472003	
Sample Matrix Spike Result:	18.388	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.252	
Sample Matrix Spike Duplicate Result:	19.365	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.318	
Duplicate Numerical Performance Indicator:	-1.053	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	4.89%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 4/27/22

PACE Analytical Services
Ra-228 Analysis

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	4/13/2022
Worklist:	65978
Matrix:	W I

Method Blank Assessment	
MB Sample ID	2394282
MB concentration:	0.432
M/B 2 Sigma CSU:	0.355
MB MDC:	0.710
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS65978	LCSD65978
Count Date:	4/18/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	36.063	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.807	
Target Conc. (pCi/L, g, F):	4.468	
Uncertainty (Calculated):	0.219	
Result (pCi/L, g, F):	5.259	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.189	
Numerical Performance Indicator:	1.28	
Percent Recovery:	117.70%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/23/2022	3/23/2022
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Spike I.D.:	22-016	22-016
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.376	36.376
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.808	0.817
MS Target Conc.(pCi/L, g, F):	9.001	8.908
MSD Aliquot (L, g, F):	0.812	0.821
MSD Target Conc. (pCi/L, g, F):	8.962	8.867
MS Spike Uncertainty (calculated):	0.441	0.437
MSD Spike Uncertainty (calculated):	0.439	0.434
Sample Result:	0.565	0.439
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.325	0.327
Sample Matrix Spike Result:	9.021	9.068
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.800	1.822
Sample Matrix Spike Duplicate Result:	9.401	8.596
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.877	1.753
MS Numerical Performance Indicator:	-0.568	-0.288
MSD Numerical Performance Indicator:	-0.127	-0.758
MS Percent Recovery:	93.94%	96.87%
MSD Percent Recovery:	98.58%	92.00%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30476468001	30476470001
Sample MS I.D.	30476468002	30476470002
Sample MSD I.D.	30476468003	30476470003
Sample Matrix Spike Result:	9.021	9.068
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.800	1.822
Sample Matrix Spike Duplicate Result:	9.401	8.596
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.877	1.753
Duplicate Numerical Performance Indicator:	-0.286	0.366
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	4.82%	5.16%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4/19/22

4/25/22

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Additional Request (MW-13)

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1366

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Renee Jernigan
rgarner@southernco.com
(205) 664-6247

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

June 01, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on May 19, 2022.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Renee Jernigan

Digitally signed by Renee
Jernigan
Date: 2022.06.01
10:14:57 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske
c=US United States l=US United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-06-01 10:52-05:00

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1366

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC09645	727045	WMWGREAP_1366
BC09646	727045	WMWGREAP_1366
BC09647	727045	WMWGREAP_1366
BC09648	727045	WMWGREAP_1366

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-13

Location Code: WMWGREAP
Collected: 5/17/22 11:45
Customer ID:
Submittal Date: 5/19/22 06:50

Laboratory ID Number: BC09645

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Selenium, Total	5/20/22 09:18	5/20/22 14:32		1.015	0.0452	mg/L	0.000508	0.001015	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/17/22 11:43	5/17/22 11:43			397.02	uS/cm			FA
pH	5/17/22 11:43	5/17/22 11:43			6.20	SU			FA
Temperature	5/17/22 11:43	5/17/22 11:43			21.06	C			FA
Turbidity	5/17/22 11:43	5/17/22 11:43			4.72	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 5/17/22 11:45
Customer ID:
Delivery Date: 5/19/22 06:50

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC09645

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09648	Selenium, Total	mg/L	0.0000307	0.00100	0.100	0.101	0.100	0.0999	0.0850 to 0.115	101	70.0 to 130	0.995	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-13 Dup

Location Code: WMWGREAP
Collected: 5/17/22 11:45
Customer ID:
Submittal Date: 5/19/22 06:50

Laboratory ID Number: BC09646

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Selenium, Total	5/20/22 09:18	5/20/22 14:36		1.015	0.0457	mg/L	0.000508	0.001015	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/17/22 11:43	5/17/22 11:43			397.02	uS/cm			FA
pH	5/17/22 11:43	5/17/22 11:43			6.20	SU			FA
Temperature	5/17/22 11:43	5/17/22 11:43			21.06	C			FA
Turbidity	5/17/22 11:43	5/17/22 11:43			4.72	NTU			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 5/17/22 11:45
Customer ID:
Delivery Date: 5/19/22 06:50

Description: Greene County Ash Pond - MW-13 Dup

Laboratory ID Number: BC09646

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09648	Selenium, Total	mg/L	0.0000307	0.00100	0.100	0.101	0.100	0.0999	0.0850 to 0.115	101	70.0 to 130	0.995	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 5/17/22 11:50
Customer ID:
Submittal Date: 5/19/22 06:50

Laboratory ID Number: BC09647

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Selenium, Total	5/20/22 09:18	5/20/22 14:39		1.015	Not Detected	mg/L	0.000508	0.001015	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 5/17/22 11:50
Customer ID:
Delivery Date: 5/19/22 06:50

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC09647

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09648	Selenium, Total	mg/L	0.0000307	0.00100	0.100	0.101	0.100	0.0999	0.0850 to 0.115	101	70.0 to 130	0.995	20.0

Comments:

Reported: 6/1/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 5/17/22 14:30
Customer ID:
Submittal Date: 5/19/22 06:50

Laboratory ID Number: BC09648

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Selenium, Total	5/20/22 09:18	5/20/22 14:43		1.015	Not Detected	mg/L	0.000508	0.001015	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 5/17/22 14:30
Customer ID:
Delivery Date: 5/19/22 06:50

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC09648

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09648	Selenium, Total	mg/L	0.0000307	0.00100	0.100	0.101	0.100	0.0999	0.0850 to 0.115	101	70.0 to 130	0.995	20.0

Comments:

Definitions

Project Number: WMWGREAP_1366

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
U	Compound was analyzed, but not detected.

Alabama Power
Lab& Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments:
Relinquish to Shipping Lab secure room @0855 051822 AWG
Total Selenium Analysis Only 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-13	05/17/2022	11:45	1	Groundwater		BC09645
MW-13 DUP	05/17/2022	11:45	1	Sample Duplicate		BC09646
FB-1	05/17/2022	11:50	1	Field Blank		BC09647
EB-1	05/17/2022	14:30	1	Equipment Blank		BC09648

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:30:50 -05'00'	05/18/2022 14:31

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	NA
Sample Event	1366	Thermometer ID	NA
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Compliance Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Water Level Record/Well Inspection
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	10/03/2022	Weather	PC 80
Location	Greene Ash Pond		
Collector	Dallas Gentry		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1222	18.90	☑	☑	☑	☑	☑	
MW-2	1219	14.25	☑	☑	☑	☑	☑	
MW-3	1215	14.34	☑	☑	☑	☑	☑	
PZ-4	1211	13.62	☑	☑	☑	☑	☑	
MW-5	1517	17.29	☑	☑	☑	☑	☑	
MW-6	1514	16.18	☑	☑	☑	☑	☑	
MW-7	1510	15.54	☑	☑	☑	☑	☑	
MW-8	1506	15.03	☑	☑	☑	☑	☑	
MW-9	1502	12.68	☑	☑	☑	☑	☑	
MW-10	1458	9.00	☑	☑	☑	☑	☑	
MW-11	1455	20.76	☑	☑	☑	☑	☑	
MW-12	1326	24.42	☑	☑	☑	☑	☑	
MW-13	1322	25.39	☑	☑	☑	☑	☑	
MW-14	1309	10.44	☑	☑	☑	☑	☑	
MW-14E	1307	10.78	☑	☑	☑	☑	☑	
MW-15	1303	17.76	☑	☑	☑	☑	☑	
MW-16	1251	34.59	☑	☑	☑	☑	☑	
MW-17	1245	31.68	☑	☑	☑	☑	☑	
MW-18	1239	30.45	☑	☑	☑	☑	☑	
PZ-19	1236	30.09	☑	☑	☑	☑	☑	
MW-21	1451	26.10	☑	☑	☑	☑	☑	
PZ-22		DRY	☑	☑	☑	☑	☑	
MW-23	1516	15.26	☑	☑	☑	☑	☑	AWG
MW-24	1534	19.03	☑	☑	☑	☑	☑	AWG
MW-25	1730	15.56	☑	☑	☑	☑	☑	
MW-26	1430	9.36	☑	☑	☑	☑	☑	AWG
MW-27	1456	11.13	☑	☑	☑	☑	☑	AWG
MW-28	1501	10.75	☑	☑	☑	☑	☑	AWG
MW-29	1452	9.48	☑	☑	☑	☑	☑	AWG
MW-30	1444	10.55	☑	☑	☑	☑	☑	AWG
MW-31	1318	11.02	☑	☑	☑	☑	☑	AWG
MW-32	1340	17.97	☑	☑	☑	☑	☑	AWG
MW-33	1333	21.38	☑	☑	☑	☑	☑	AWG

Water Level Record/Well Inspection Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Submit

Date 10/03/2022
Location Greene Ash Pond
Collector Dallas Gentry
Weather PC 80

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1222	18.90	☑	☑	☑	☑	☑	
MW-2	1219	14.25	☑	☑	☑	☑	☑	
MW-3	1215	14.34	☑	☑	☑	☑	☑	
PZ-4	1211	13.62	☑	☑	☑	☑	☑	
MW-5	1517	17.29	☑	☑	☑	☑	☑	
MW-6	1514	16.18	☑	☑	☑	☑	☑	
MW-7	1510	15.54	☑	☑	☑	☑	☑	
MW-8	1506	15.03	☑	☑	☑	☑	☑	
MW-9	1502	12.68	☑	☑	☑	☑	☑	
MW-10	1458	9.00	☑	☑	☑	☑	☑	
MW-11	1455	20.76	☑	☑	☑	☑	☑	
MW-12	1326	24.42	☑	☑	☑	☑	☑	
MW-13	1322	25.39	☑	☑	☑	☑	☑	
MW-14	1309	10.44	☑	☑	☑	☑	☑	
MW-14E	1307	10.78	☑	☑	☑	☑	☑	
MW-15	1303	17.76	☑	☑	☑	☑	☑	
MW-16	1251	34.59	☑	☑	☑	☑	☑	
MW-17	1245	31.68	☑	☑	☑	☑	☑	
MW-18	1239	30.45	☑	☑	☑	☑	☑	
PZ-19	1236	30.09	☑	☑	☑	☑	☑	
MW-21	1451	26.10	☑	☑	☑	☑	☑	
PZ-22		DRY	☑	☑	☑	☑	☑	
MW-23	1516	15.26	☑	☑	☑	☑	☑	AWG
MW-24	1534	19.03	☑	☑	☑	☑	☑	AWG
MW-25	1730	15.56	☑	☑	☑	☑	☑	
MW-26	1430	9.36	☑	☑	☑	☑	☑	AWG
MW-27	1456	11.13	☑	☑	☑	☑	☑	AWG
MW-28	1501	10.75	☑	☑	☑	☑	☑	AWG
MW-29	1452	9.48	☐	☐	☐	☐	☐	AWG
MW-30	1444	10.55	☐	☐	☐	☐	☐	AWG
MW-31	1318	11.02	☐	☐	☐	☐	☐	AWG
MW-32	1340	17.97	☐	☐	☐	☐	☐	AWG
MW-33	1333	21.38	☐	☐	☐	☐	☐	AWG

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-31	COND	Conductivity	10/5/2022 8:46	66.48	uS/cm
GC-AP-MW-31	DO	DO	10/5/2022 8:46	1.09	mg/L
GC-AP-MW-31	DTW	Depth to Water Detail	10/5/2022 8:46	11.05	ft
GC-AP-MW-31	ORP	Oxidation Reduction Potention	10/5/2022 8:46	94.09	mv
GC-AP-MW-31	PH	pH	10/5/2022 8:46	5.42	SU
GC-AP-MW-31	TEMP	Temperature	10/5/2022 8:46	18.33	C
GC-AP-MW-31	TURB	Turbidity	10/5/2022 8:46	1.66	NTU
GC-AP-MW-31	COND	Conductivity	10/5/2022 8:51	70.15	uS/cm
GC-AP-MW-31	DO	DO	10/5/2022 8:51	1.1	mg/L
GC-AP-MW-31	DTW	Depth to Water Detail	10/5/2022 8:51	11.05	ft
GC-AP-MW-31	ORP	Oxidation Reduction Potention	10/5/2022 8:51	88.88	mv
GC-AP-MW-31	PH	pH	10/5/2022 8:51	5.46	SU
GC-AP-MW-31	TEMP	Temperature	10/5/2022 8:51	18.41	C
GC-AP-MW-31	TURB	Turbidity	10/5/2022 8:51	1.17	NTU
GC-AP-MW-31	COND	Conductivity	10/5/2022 8:56	72.45	uS/cm
GC-AP-MW-31	DO	DO	10/5/2022 8:56	1.3	mg/L
GC-AP-MW-31	DTW	Depth to Water Detail	10/5/2022 8:56	11.05	ft
GC-AP-MW-31	ORP	Oxidation Reduction Potention	10/5/2022 8:56	89.95	mv
GC-AP-MW-31	PH	pH	10/5/2022 8:56	5.49	SU
GC-AP-MW-31	TEMP	Temperature	10/5/2022 8:56	18.45	C
GC-AP-MW-31	TURB	Turbidity	10/5/2022 8:56	0.93	NTU
GC-AP-MW-31	COND	Conductivity	10/5/2022 9:01	73.15	uS/cm
GC-AP-MW-31	DO	DO	10/5/2022 9:01	1.96	mg/L
GC-AP-MW-31	DTW	Depth to Water Detail	10/5/2022 9:01	11.05	ft
GC-AP-MW-31	ORP	Oxidation Reduction Potention	10/5/2022 9:01	91.76	mv
GC-AP-MW-31	PH	pH	10/5/2022 9:01	5.48	SU
GC-AP-MW-31	TEMP	Temperature	10/5/2022 9:01	18.47	C
GC-AP-MW-31	TURB	Turbidity	10/5/2022 9:01	0.99	NTU
GC-AP-MW-31	COND	Conductivity	10/5/2022 9:06	73.6	uS/cm
GC-AP-MW-31	DO	DO	10/5/2022 9:06	1.94	mg/L
GC-AP-MW-31	DTW	Depth to Water Detail	10/5/2022 9:06	11.05	ft
GC-AP-MW-31	ORP	Oxidation Reduction Potention	10/5/2022 9:06	94.57	mv
GC-AP-MW-31	PH	pH	10/5/2022 9:06	5.47	SU
GC-AP-MW-31	TEMP	Temperature	10/5/2022 9:06	18.48	C
GC-AP-MW-31	TURB	Turbidity	10/5/2022 9:06	1.06	NTU
GC-AP-MW-31	COND	Conductivity	10/5/2022 9:11	75.95	uS/cm
GC-AP-MW-31	DO	DO	10/5/2022 9:11	2.04	mg/L
GC-AP-MW-31	DTW	Depth to Water Detail	10/5/2022 9:11	11.05	ft
GC-AP-MW-31	ORP	Oxidation Reduction Potention	10/5/2022 9:11	95.18	mv
GC-AP-MW-31	PH	pH	10/5/2022 9:11	5.49	SU
GC-AP-MW-31	SULFIDE	Sulfide	10/5/2022 9:11	0	mg/L
GC-AP-MW-31	TEMP	Temperature	10/5/2022 9:11	18.48	C
GC-AP-MW-31	TURB	Turbidity	10/5/2022 9:11	0.83	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-32	COND	Conductivity	10/5/2022 10:53	55.87	uS/cm
GC-AP-MW-32	DO	DO	10/5/2022 10:53	4.53	mg/L
GC-AP-MW-32	DTW	Depth to Water Detail	10/5/2022 10:53	17.97	ft
GC-AP-MW-32	ORP	Oxidation Reduction Potention	10/5/2022 10:53	183.17	mv
GC-AP-MW-32	PH	pH	10/5/2022 10:53	5.85	SU
GC-AP-MW-32	TEMP	Temperature	10/5/2022 10:53	20.54	C
GC-AP-MW-32	TURB	Turbidity	10/5/2022 10:53	1	NTU
GC-AP-MW-32	COND	Conductivity	10/5/2022 10:58	58	uS/cm
GC-AP-MW-32	DO	DO	10/5/2022 10:58	4.45	mg/L
GC-AP-MW-32	DTW	Depth to Water Detail	10/5/2022 10:58	17.97	ft
GC-AP-MW-32	ORP	Oxidation Reduction Potention	10/5/2022 10:58	187.72	mv
GC-AP-MW-32	PH	pH	10/5/2022 10:58	5.9	SU
GC-AP-MW-32	TEMP	Temperature	10/5/2022 10:58	20.53	C
GC-AP-MW-32	TURB	Turbidity	10/5/2022 10:58	1.25	NTU
GC-AP-MW-32	COND	Conductivity	10/5/2022 11:03	68.25	uS/cm
GC-AP-MW-32	DO	DO	10/5/2022 11:03	2.97	mg/L
GC-AP-MW-32	DTW	Depth to Water Detail	10/5/2022 11:03	17.97	ft
GC-AP-MW-32	ORP	Oxidation Reduction Potention	10/5/2022 11:03	193.76	mv
GC-AP-MW-32	PH	pH	10/5/2022 11:03	5.86	SU
GC-AP-MW-32	TEMP	Temperature	10/5/2022 11:03	20.51	C
GC-AP-MW-32	TURB	Turbidity	10/5/2022 11:03	0.62	NTU
GC-AP-MW-32	COND	Conductivity	10/5/2022 11:08	68.76	uS/cm
GC-AP-MW-32	DO	DO	10/5/2022 11:08	4.35	mg/L
GC-AP-MW-32	DTW	Depth to Water Detail	10/5/2022 11:08	17.97	ft
GC-AP-MW-32	ORP	Oxidation Reduction Potention	10/5/2022 11:08	198.42	mv
GC-AP-MW-32	PH	pH	10/5/2022 11:08	5.85	SU
GC-AP-MW-32	TEMP	Temperature	10/5/2022 11:08	20.56	C
GC-AP-MW-32	TURB	Turbidity	10/5/2022 11:08	0.81	NTU
GC-AP-MW-32	COND	Conductivity	10/5/2022 11:13	68.99	uS/cm
GC-AP-MW-32	DO	DO	10/5/2022 11:13	4.28	mg/L
GC-AP-MW-32	DTW	Depth to Water Detail	10/5/2022 11:13	17.97	ft
GC-AP-MW-32	ORP	Oxidation Reduction Potention	10/5/2022 11:13	201.84	mv
GC-AP-MW-32	PH	pH	10/5/2022 11:13	5.84	SU
GC-AP-MW-32	TEMP	Temperature	10/5/2022 11:13	20.63	C
GC-AP-MW-32	TURB	Turbidity	10/5/2022 11:13	0.96	NTU
GC-AP-MW-32	COND	Conductivity	10/5/2022 11:18	69.24	uS/cm
GC-AP-MW-32	DO	DO	10/5/2022 11:18	4.27	mg/L
GC-AP-MW-32	DTW	Depth to Water Detail	10/5/2022 11:18	17.97	ft
GC-AP-MW-32	ORP	Oxidation Reduction Potention	10/5/2022 11:18	203.81	mv
GC-AP-MW-32	PH	pH	10/5/2022 11:18	5.84	SU
GC-AP-MW-32	SULFIDE	Sulfide	10/5/2022 11:18	0	mg/L
GC-AP-MW-32	TEMP	Temperature	10/5/2022 11:18	20.66	C
GC-AP-MW-32	TURB	Turbidity	10/5/2022 11:18	0.87	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-33	COND	Conductivity	10/5/2022 9:57	95.05	uS/cm
GC-AP-MW-33	DO	DO	10/5/2022 9:57	3.98	mg/L
GC-AP-MW-33	DTW	Depth to Water Detail	10/5/2022 9:57	21.46	ft
GC-AP-MW-33	ORP	Oxidation Reduction Potention	10/5/2022 9:57	239.79	mv
GC-AP-MW-33	PH	pH	10/5/2022 9:57	4.58	SU
GC-AP-MW-33	TEMP	Temperature	10/5/2022 9:57	19.2	C
GC-AP-MW-33	TURB	Turbidity	10/5/2022 9:57	0.83	NTU
GC-AP-MW-33	COND	Conductivity	10/5/2022 10:02	96.59	uS/cm
GC-AP-MW-33	DO	DO	10/5/2022 10:02	4.32	mg/L
GC-AP-MW-33	DTW	Depth to Water Detail	10/5/2022 10:02	21.46	ft
GC-AP-MW-33	ORP	Oxidation Reduction Potention	10/5/2022 10:02	259.69	mv
GC-AP-MW-33	PH	pH	10/5/2022 10:02	4.56	SU
GC-AP-MW-33	TEMP	Temperature	10/5/2022 10:02	19.2	C
GC-AP-MW-33	TURB	Turbidity	10/5/2022 10:02	0.81	NTU
GC-AP-MW-33	COND	Conductivity	10/5/2022 10:07	96.77	uS/cm
GC-AP-MW-33	DO	DO	10/5/2022 10:07	4.21	mg/L
GC-AP-MW-33	DTW	Depth to Water Detail	10/5/2022 10:07	21.46	ft
GC-AP-MW-33	ORP	Oxidation Reduction Potention	10/5/2022 10:07	273.29	mv
GC-AP-MW-33	PH	pH	10/5/2022 10:07	4.55	SU
GC-AP-MW-33	SULFIDE	Sulfide	10/5/2022 10:07	0	mg/L
GC-AP-MW-33	TEMP	Temperature	10/5/2022 10:07	19.21	C
GC-AP-MW-33	TURB	Turbidity	10/5/2022 10:07	0.75	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-40H	COND	Conductivity	10/5/2022 15:40	650.45	uS/cm
GC-AP-MW-40H	DO	DO	10/5/2022 15:40	0.14	mg/L
GC-AP-MW-40H	DTW	Depth to Water Detail	10/5/2022 15:40	13.75	ft
GC-AP-MW-40H	ORP	Oxidation Reduction Potention	10/5/2022 15:40	100.89	mv
GC-AP-MW-40H	PH	pH	10/5/2022 15:40	5.97	SU
GC-AP-MW-40H	TEMP	Temperature	10/5/2022 15:40	19.84	C
GC-AP-MW-40H	TURB	Turbidity	10/5/2022 15:40	2.61	NTU
GC-AP-MW-40H	COND	Conductivity	10/5/2022 15:45	655.58	uS/cm
GC-AP-MW-40H	DO	DO	10/5/2022 15:45	0.11	mg/L
GC-AP-MW-40H	DTW	Depth to Water Detail	10/5/2022 15:45	13.75	ft
GC-AP-MW-40H	ORP	Oxidation Reduction Potention	10/5/2022 15:45	113.32	mv
GC-AP-MW-40H	PH	pH	10/5/2022 15:45	5.85	SU
GC-AP-MW-40H	TEMP	Temperature	10/5/2022 15:45	19.79	C
GC-AP-MW-40H	TURB	Turbidity	10/5/2022 15:45	2.89	NTU
GC-AP-MW-40H	COND	Conductivity	10/5/2022 15:50	661.99	uS/cm
GC-AP-MW-40H	DO	DO	10/5/2022 15:50	0.1	mg/L
GC-AP-MW-40H	DTW	Depth to Water Detail	10/5/2022 15:50	13.75	ft
GC-AP-MW-40H	ORP	Oxidation Reduction Potention	10/5/2022 15:50	120.75	mv
GC-AP-MW-40H	PH	pH	10/5/2022 15:50	5.74	SU
GC-AP-MW-40H	TEMP	Temperature	10/5/2022 15:50	19.71	C
GC-AP-MW-40H	TURB	Turbidity	10/5/2022 15:50	1.69	NTU
GC-AP-MW-40H	COND	Conductivity	10/5/2022 15:55	674.54	uS/cm
GC-AP-MW-40H	DO	DO	10/5/2022 15:55	0.09	mg/L
GC-AP-MW-40H	DTW	Depth to Water Detail	10/5/2022 15:55	13.75	ft
GC-AP-MW-40H	ORP	Oxidation Reduction Potention	10/5/2022 15:55	117.95	mv
GC-AP-MW-40H	PH	pH	10/5/2022 15:55	5.77	SU
GC-AP-MW-40H	SULFIDE	Sulfide	10/5/2022 15:55	0	mg/L
GC-AP-MW-40H	TEMP	Temperature	10/5/2022 15:55	19.53	C
GC-AP-MW-40H	TURB	Turbidity	10/5/2022 15:55	1.64	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:18	695.52	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:18	1.38	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:18	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:18	97.55	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:18	5.32	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:18	23.97	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:18	3.07	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:23	785.77	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:23	1.25	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:23	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:23	102.06	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:23	5.3	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:23	23.92	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:23	2.09	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:28	907.42	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:28	1.06	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:28	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:28	97.96	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:28	5.34	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:28	23.95	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:28	1.5	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:33	1023.16	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:33	0.87	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:33	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:33	95.98	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:33	5.36	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:33	24	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:33	1.39	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:38	1102.41	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:38	0.75	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:38	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:38	95.8	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:38	5.36	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:38	24.06	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:38	1.38	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:43	1163.02	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:43	0.63	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:43	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:43	93.65	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:43	5.38	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:43	24.17	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:43	1.31	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:48	1210.97	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:48	0.55	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:48	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:48	96.7	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:48	5.36	SU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:48	23.96	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:48	1.26	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:53	1253.22	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:53	0.48	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:53	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:53	92.45	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:53	5.4	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:53	23.83	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:53	1.08	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 13:58	1281.83	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 13:58	0.44	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 13:58	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 13:58	92.76	mv
GC-AP-PZ-4	PH	pH	10/5/2022 13:58	5.41	SU
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 13:58	23.88	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 13:58	1.04	NTU
GC-AP-PZ-4	COND	Conductivity	10/5/2022 14:03	1305.52	uS/cm
GC-AP-PZ-4	DO	DO	10/5/2022 14:03	0.41	mg/L
GC-AP-PZ-4	DTW	Depth to Water Detail	10/5/2022 14:03	11.65	ft
GC-AP-PZ-4	ORP	Oxidation Reduction Potention	10/5/2022 14:03	91.5	mv
GC-AP-PZ-4	PH	pH	10/5/2022 14:03	5.42	SU
GC-AP-PZ-4	SULFIDE	Sulfide	10/5/2022 14:03	0	mg/L
GC-AP-PZ-4	TEMP	Temperature	10/5/2022 14:03	23.94	C
GC-AP-PZ-4	TURB	Turbidity	10/5/2022 14:03	1.43	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-1	COND	Conductivity	10/5/2022 10:09	1537.16	uS/cm
GC-AP-MW-1	DO	DO	10/5/2022 10:09	1.2	mg/L
GC-AP-MW-1	DTW	Depth to Water Detail	10/5/2022 10:09	18.98	ft
GC-AP-MW-1	ORP	Oxidation Reduction Potention	10/5/2022 10:09	7.31	mv
GC-AP-MW-1	PH	pH	10/5/2022 10:09	5.65	SU
GC-AP-MW-1	TEMP	Temperature	10/5/2022 10:09	22.15	C
GC-AP-MW-1	TURB	Turbidity	10/5/2022 10:09	1.22	NTU
GC-AP-MW-1	COND	Conductivity	10/5/2022 10:14	1549.23	uS/cm
GC-AP-MW-1	DO	DO	10/5/2022 10:14	1.09	mg/L
GC-AP-MW-1	DTW	Depth to Water Detail	10/5/2022 10:14	18.98	ft
GC-AP-MW-1	ORP	Oxidation Reduction Potention	10/5/2022 10:14	9.79	mv
GC-AP-MW-1	PH	pH	10/5/2022 10:14	5.63	SU
GC-AP-MW-1	TEMP	Temperature	10/5/2022 10:14	22.12	C
GC-AP-MW-1	TURB	Turbidity	10/5/2022 10:14	1.15	NTU
GC-AP-MW-1	COND	Conductivity	10/5/2022 10:19	1545.83	uS/cm
GC-AP-MW-1	DO	DO	10/5/2022 10:19	1.02	mg/L
GC-AP-MW-1	DTW	Depth to Water Detail	10/5/2022 10:19	18.98	ft
GC-AP-MW-1	ORP	Oxidation Reduction Potention	10/5/2022 10:19	15.92	mv
GC-AP-MW-1	PH	pH	10/5/2022 10:19	5.6	SU
GC-AP-MW-1	TEMP	Temperature	10/5/2022 10:19	22.01	C
GC-AP-MW-1	TURB	Turbidity	10/5/2022 10:19	1.16	NTU
GC-AP-MW-1	COND	Conductivity	10/5/2022 10:24	1546.48	uS/cm
GC-AP-MW-1	DO	DO	10/5/2022 10:24	0.99	mg/L
GC-AP-MW-1	DTW	Depth to Water Detail	10/5/2022 10:24	18.98	ft
GC-AP-MW-1	ORP	Oxidation Reduction Potention	10/5/2022 10:24	16.76	mv
GC-AP-MW-1	PH	pH	10/5/2022 10:24	5.59	SU
GC-AP-MW-1	SULFIDE	Sulfide	10/5/2022 10:24	0	mg/L
GC-AP-MW-1	TEMP	Temperature	10/5/2022 10:24	22.02	C
GC-AP-MW-1	TURB	Turbidity	10/5/2022 10:24	1.04	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-2	COND	Conductivity	10/5/2022 9:11	1272.56	uS/cm
GC-AP-MW-2	DO	DO	10/5/2022 9:11	1.15	mg/L
GC-AP-MW-2	DTW	Depth to Water Detail	10/5/2022 9:11	14.83	ft
GC-AP-MW-2	ORP	Oxidation Reduction Potention	10/5/2022 9:11	-23.94	mv
GC-AP-MW-2	PH	pH	10/5/2022 9:11	6.15	SU
GC-AP-MW-2	TEMP	Temperature	10/5/2022 9:11	23.71	C
GC-AP-MW-2	TURB	Turbidity	10/5/2022 9:11	4.48	NTU
GC-AP-MW-2	COND	Conductivity	10/5/2022 9:16	1323.5	uS/cm
GC-AP-MW-2	DO	DO	10/5/2022 9:16	0.98	mg/L
GC-AP-MW-2	DTW	Depth to Water Detail	10/5/2022 9:16	14.87	ft
GC-AP-MW-2	ORP	Oxidation Reduction Potention	10/5/2022 9:16	-18.54	mv
GC-AP-MW-2	PH	pH	10/5/2022 9:16	6.05	SU
GC-AP-MW-2	TEMP	Temperature	10/5/2022 9:16	23.66	C
GC-AP-MW-2	TURB	Turbidity	10/5/2022 9:16	3.53	NTU
GC-AP-MW-2	COND	Conductivity	10/5/2022 9:21	1334.82	uS/cm
GC-AP-MW-2	DO	DO	10/5/2022 9:21	0.91	mg/L
GC-AP-MW-2	DTW	Depth to Water Detail	10/5/2022 9:21	14.89	ft
GC-AP-MW-2	ORP	Oxidation Reduction Potention	10/5/2022 9:21	-16.1	mv
GC-AP-MW-2	PH	pH	10/5/2022 9:21	6.02	SU
GC-AP-MW-2	TEMP	Temperature	10/5/2022 9:21	23.61	C
GC-AP-MW-2	TURB	Turbidity	10/5/2022 9:21	3.24	NTU
GC-AP-MW-2	COND	Conductivity	10/5/2022 9:26	1337.66	uS/cm
GC-AP-MW-2	DO	DO	10/5/2022 9:26	0.88	mg/L
GC-AP-MW-2	DTW	Depth to Water Detail	10/5/2022 9:26	14.91	ft
GC-AP-MW-2	ORP	Oxidation Reduction Potention	10/5/2022 9:26	-17.52	mv
GC-AP-MW-2	PH	pH	10/5/2022 9:26	6.01	SU
GC-AP-MW-2	SULFIDE	Sulfide	10/5/2022 9:26	0	mg/L
GC-AP-MW-2	TEMP	Temperature	10/5/2022 9:26	23.62	C
GC-AP-MW-2	TURB	Turbidity	10/5/2022 9:26	2.67	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-3	COND	Conductivity	10/5/2022 8:16	671.99	uS/cm
GC-AP-MW-3	DO	DO	10/5/2022 8:16	1.25	mg/L
GC-AP-MW-3	DTW	Depth to Water Detail	10/5/2022 8:16	15.15	ft
GC-AP-MW-3	ORP	Oxidation Reduction Potention	10/5/2022 8:16	-54	mv
GC-AP-MW-3	PH	pH	10/5/2022 8:16	5.84	SU
GC-AP-MW-3	TEMP	Temperature	10/5/2022 8:16	22.11	C
GC-AP-MW-3	TURB	Turbidity	10/5/2022 8:16	1.39	NTU
GC-AP-MW-3	COND	Conductivity	10/5/2022 8:21	675.95	uS/cm
GC-AP-MW-3	DO	DO	10/5/2022 8:21	1.07	mg/L
GC-AP-MW-3	DTW	Depth to Water Detail	10/5/2022 8:21	15.19	ft
GC-AP-MW-3	ORP	Oxidation Reduction Potention	10/5/2022 8:21	-40.47	mv
GC-AP-MW-3	PH	pH	10/5/2022 8:21	5.85	SU
GC-AP-MW-3	TEMP	Temperature	10/5/2022 8:21	22.13	C
GC-AP-MW-3	TURB	Turbidity	10/5/2022 8:21	1.2	NTU
GC-AP-MW-3	COND	Conductivity	10/5/2022 8:26	685.79	uS/cm
GC-AP-MW-3	DO	DO	10/5/2022 8:26	1.02	mg/L
GC-AP-MW-3	DTW	Depth to Water Detail	10/5/2022 8:26	15.19	ft
GC-AP-MW-3	ORP	Oxidation Reduction Potention	10/5/2022 8:26	-43.04	mv
GC-AP-MW-3	PH	pH	10/5/2022 8:26	5.87	SU
GC-AP-MW-3	TEMP	Temperature	10/5/2022 8:26	22.14	C
GC-AP-MW-3	TURB	Turbidity	10/5/2022 8:26	1.14	NTU
GC-AP-MW-3	COND	Conductivity	10/5/2022 8:31	690.16	uS/cm
GC-AP-MW-3	DO	DO	10/5/2022 8:31	0.99	mg/L
GC-AP-MW-3	DTW	Depth to Water Detail	10/5/2022 8:31	15.19	ft
GC-AP-MW-3	ORP	Oxidation Reduction Potention	10/5/2022 8:31	-44.34	mv
GC-AP-MW-3	PH	pH	10/5/2022 8:31	5.89	SU
GC-AP-MW-3	SULFIDE	Sulfide	10/5/2022 8:31	0	mg/L
GC-AP-MW-3	TEMP	Temperature	10/5/2022 8:31	22.21	C
GC-AP-MW-3	TURB	Turbidity	10/5/2022 8:31	1.06	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-44H	COND	Conductivity	10/5/2022 13:16	986.09	uS/cm
GC-AP-MW-44H	DO	DO	10/5/2022 13:16	0.21	mg/L
GC-AP-MW-44H	DTW	Depth to Water Detail	10/5/2022 13:16	11.6	ft
GC-AP-MW-44H	ORP	Oxidation Reduction Potention	10/5/2022 13:16	8.04	mv
GC-AP-MW-44H	PH	pH	10/5/2022 13:16	6.32	SU
GC-AP-MW-44H	TEMP	Temperature	10/5/2022 13:16	20.18	C
GC-AP-MW-44H	TURB	Turbidity	10/5/2022 13:16	2.51	NTU
GC-AP-MW-44H	COND	Conductivity	10/5/2022 13:21	977.52	uS/cm
GC-AP-MW-44H	DO	DO	10/5/2022 13:21	0.19	mg/L
GC-AP-MW-44H	DTW	Depth to Water Detail	10/5/2022 13:21	11.6	ft
GC-AP-MW-44H	ORP	Oxidation Reduction Potention	10/5/2022 13:21	18.62	mv
GC-AP-MW-44H	PH	pH	10/5/2022 13:21	6.19	SU
GC-AP-MW-44H	TEMP	Temperature	10/5/2022 13:21	20.19	C
GC-AP-MW-44H	TURB	Turbidity	10/5/2022 13:21	2.4	NTU
GC-AP-MW-44H	COND	Conductivity	10/5/2022 13:26	977.8	uS/cm
GC-AP-MW-44H	DO	DO	10/5/2022 13:26	0.17	mg/L
GC-AP-MW-44H	DTW	Depth to Water Detail	10/5/2022 13:26	11.6	ft
GC-AP-MW-44H	ORP	Oxidation Reduction Potention	10/5/2022 13:26	19.94	mv
GC-AP-MW-44H	PH	pH	10/5/2022 13:26	6.12	SU
GC-AP-MW-44H	TEMP	Temperature	10/5/2022 13:26	20.26	C
GC-AP-MW-44H	TURB	Turbidity	10/5/2022 13:26	2.22	NTU
GC-AP-MW-44H	COND	Conductivity	10/5/2022 13:31	973.85	uS/cm
GC-AP-MW-44H	DO	DO	10/5/2022 13:31	0.17	mg/L
GC-AP-MW-44H	DTW	Depth to Water Detail	10/5/2022 13:31	11.6	ft
GC-AP-MW-44H	ORP	Oxidation Reduction Potention	10/5/2022 13:31	18.31	mv
GC-AP-MW-44H	PH	pH	10/5/2022 13:31	6.06	SU
GC-AP-MW-44H	SULFIDE	Sulfide	10/5/2022 13:31	0	mg/L
GC-AP-MW-44H	TEMP	Temperature	10/5/2022 13:31	20.19	C
GC-AP-MW-44H	TURB	Turbidity	10/5/2022 13:31	2.16	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:04	847.98	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:04	0.15	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:04	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:04	-87.75	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:04	6.52	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:04	21.78	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:04	40.5	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:09	850.62	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:09	0.13	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:09	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:09	-91.42	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:09	6.5	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:09	21.72	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:09	31.2	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:14	850.87	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:14	0.12	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:14	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:14	-93.33	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:14	6.49	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:14	21.69	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:14	30.3	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:19	849.22	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:19	0.11	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:19	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:19	-94.14	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:19	6.47	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:19	21.71	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:19	23.4	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:24	849.31	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:24	0.11	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:24	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:24	-94.41	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:24	6.46	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:24	21.7	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:24	13	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:29	852.69	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:29	0.11	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:29	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:29	-94.56	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:29	6.44	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:29	21.69	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:29	11.67	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:34	851.05	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:34	0.11	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:34	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:34	-94.61	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:34	6.43	SU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:34	21.68	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:34	12.34	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:39	853.24	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:39	0.1	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:39	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:39	-94.66	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:39	6.42	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:39	21.68	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:39	11.68	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:44	853.66	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:44	0.1	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:44	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:44	-94.57	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:44	6.42	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:44	21.71	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:44	10.55	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:49	850.54	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:49	0.09	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:49	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:49	-94.51	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:49	6.41	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:49	21.65	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:49	10.7	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:54	858.11	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:54	0.1	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:54	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:54	-89.66	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:54	6.41	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:54	21.64	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:54	35.7	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 15:59	860.37	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 15:59	0.15	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 15:59	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 15:59	-92.14	mv
GC-AP-MW-54H	PH	pH	10/5/2022 15:59	6.4	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 15:59	21.72	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 15:59	24.1	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 16:04	859.39	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 16:04	0.15	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 16:04	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 16:04	-92.8	mv
GC-AP-MW-54H	PH	pH	10/5/2022 16:04	6.4	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 16:04	21.7	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 16:04	12.1	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 16:09	857.17	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 16:09	0.14	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 16:09	12.36	ft

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 16:09	-93.38	mv
GC-AP-MW-54H	PH	pH	10/5/2022 16:09	6.41	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 16:09	21.73	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 16:09	10.96	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 16:14	857.87	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 16:14	0.14	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 16:14	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 16:14	-93.64	mv
GC-AP-MW-54H	PH	pH	10/5/2022 16:14	6.41	SU
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 16:14	21.73	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 16:14	9.42	NTU
GC-AP-MW-54H	COND	Conductivity	10/5/2022 16:19	857.59	uS/cm
GC-AP-MW-54H	DO	DO	10/5/2022 16:19	0.14	mg/L
GC-AP-MW-54H	DTW	Depth to Water Detail	10/5/2022 16:19	12.36	ft
GC-AP-MW-54H	ORP	Oxidation Reduction Potention	10/5/2022 16:19	-93.8	mv
GC-AP-MW-54H	PH	pH	10/5/2022 16:19	6.41	SU
GC-AP-MW-54H	SULFIDE	Sulfide	10/5/2022 16:19	0	mg/L
GC-AP-MW-54H	TEMP	Temperature	10/5/2022 16:19	21.71	C
GC-AP-MW-54H	TURB	Turbidity	10/5/2022 16:19	9.28	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-57H	COND	Conductivity	10/5/2022 14:11	462.45	uS/cm
GC-AP-MW-57H	DO	DO	10/5/2022 14:11	0.13	mg/L
GC-AP-MW-57H	DTW	Depth to Water Detail	10/5/2022 14:11	9.94	ft
GC-AP-MW-57H	ORP	Oxidation Reduction Potention	10/5/2022 14:11	-31	mv
GC-AP-MW-57H	PH	pH	10/5/2022 14:11	6.27	SU
GC-AP-MW-57H	TEMP	Temperature	10/5/2022 14:11	21.15	C
GC-AP-MW-57H	TURB	Turbidity	10/5/2022 14:11	13.4	NTU
GC-AP-MW-57H	COND	Conductivity	10/5/2022 14:16	459.68	uS/cm
GC-AP-MW-57H	DO	DO	10/5/2022 14:16	0.11	mg/L
GC-AP-MW-57H	DTW	Depth to Water Detail	10/5/2022 14:16	9.94	ft
GC-AP-MW-57H	ORP	Oxidation Reduction Potention	10/5/2022 14:16	-26.65	mv
GC-AP-MW-57H	PH	pH	10/5/2022 14:16	6.17	SU
GC-AP-MW-57H	TEMP	Temperature	10/5/2022 14:16	21.17	C
GC-AP-MW-57H	TURB	Turbidity	10/5/2022 14:16	10.54	NTU
GC-AP-MW-57H	COND	Conductivity	10/5/2022 14:21	460.26	uS/cm
GC-AP-MW-57H	DO	DO	10/5/2022 14:21	0.1	mg/L
GC-AP-MW-57H	DTW	Depth to Water Detail	10/5/2022 14:21	9.94	ft
GC-AP-MW-57H	ORP	Oxidation Reduction Potention	10/5/2022 14:21	-23.5	mv
GC-AP-MW-57H	PH	pH	10/5/2022 14:21	6.09	SU
GC-AP-MW-57H	TEMP	Temperature	10/5/2022 14:21	21.15	C
GC-AP-MW-57H	TURB	Turbidity	10/5/2022 14:21	8.86	NTU
GC-AP-MW-57H	COND	Conductivity	10/5/2022 14:26	462.74	uS/cm
GC-AP-MW-57H	DO	DO	10/5/2022 14:26	0.09	mg/L
GC-AP-MW-57H	DTW	Depth to Water Detail	10/5/2022 14:26	9.94	ft
GC-AP-MW-57H	ORP	Oxidation Reduction Potention	10/5/2022 14:26	-21.66	mv
GC-AP-MW-57H	PH	pH	10/5/2022 14:26	6.04	SU
GC-AP-MW-57H	TEMP	Temperature	10/5/2022 14:26	21.19	C
GC-AP-MW-57H	TURB	Turbidity	10/5/2022 14:26	5.26	NTU
GC-AP-MW-57H	COND	Conductivity	10/5/2022 14:31	461.49	uS/cm
GC-AP-MW-57H	DO	DO	10/5/2022 14:31	0.09	mg/L
GC-AP-MW-57H	DTW	Depth to Water Detail	10/5/2022 14:31	9.94	ft
GC-AP-MW-57H	ORP	Oxidation Reduction Potention	10/5/2022 14:31	-18.84	mv
GC-AP-MW-57H	PH	pH	10/5/2022 14:31	5.99	SU
GC-AP-MW-57H	SULFIDE	Sulfide	10/5/2022 14:31	0	mg/L
GC-AP-MW-57H	TEMP	Temperature	10/5/2022 14:31	21.22	C
GC-AP-MW-57H	TURB	Turbidity	10/5/2022 14:31	3.97	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-36H	COND	Conductivity	10/17/2022 12:04	257.31	uS/cm
GC-AP-MW-36H	DO	DO	10/17/2022 12:04	0.42	mg/L
GC-AP-MW-36H	DTW	Depth to Water Detail	10/17/2022 12:04	26.91	ft
GC-AP-MW-36H	ORP	Oxidation Reduction Potention	10/17/2022 12:04	156.04	mv
GC-AP-MW-36H	PH	pH	10/17/2022 12:04	7.88	SU
GC-AP-MW-36H	TEMP	Temperature	10/17/2022 12:04	23.46	C
GC-AP-MW-36H	TURB	Turbidity	10/17/2022 12:04	10.19	NTU
GC-AP-MW-36H	COND	Conductivity	10/17/2022 12:09	256.74	uS/cm
GC-AP-MW-36H	DO	DO	10/17/2022 12:09	0.37	mg/L
GC-AP-MW-36H	DTW	Depth to Water Detail	10/17/2022 12:09	26.91	ft
GC-AP-MW-36H	ORP	Oxidation Reduction Potention	10/17/2022 12:09	143.2	mv
GC-AP-MW-36H	PH	pH	10/17/2022 12:09	7.92	SU
GC-AP-MW-36H	TEMP	Temperature	10/17/2022 12:09	23.49	C
GC-AP-MW-36H	TURB	Turbidity	10/17/2022 12:09	10.69	NTU
GC-AP-MW-36H	COND	Conductivity	10/17/2022 12:14	255.87	uS/cm
GC-AP-MW-36H	DO	DO	10/17/2022 12:14	0.32	mg/L
GC-AP-MW-36H	DTW	Depth to Water Detail	10/17/2022 12:14	26.91	ft
GC-AP-MW-36H	ORP	Oxidation Reduction Potention	10/17/2022 12:14	132.21	mv
GC-AP-MW-36H	PH	pH	10/17/2022 12:14	7.94	SU
GC-AP-MW-36H	TEMP	Temperature	10/17/2022 12:14	23.51	C
GC-AP-MW-36H	TURB	Turbidity	10/17/2022 12:14	11.46	NTU
GC-AP-MW-36H	COND	Conductivity	10/17/2022 12:19	254.6	uS/cm
GC-AP-MW-36H	DO	DO	10/17/2022 12:19	0.3	mg/L
GC-AP-MW-36H	DTW	Depth to Water Detail	10/17/2022 12:19	26.91	ft
GC-AP-MW-36H	ORP	Oxidation Reduction Potention	10/17/2022 12:19	122.23	mv
GC-AP-MW-36H	PH	pH	10/17/2022 12:19	7.91	SU
GC-AP-MW-36H	TEMP	Temperature	10/17/2022 12:19	23.59	C
GC-AP-MW-36H	TURB	Turbidity	10/17/2022 12:19	10.63	NTU
GC-AP-MW-36H	COND	Conductivity	10/17/2022 12:24	254.17	uS/cm
GC-AP-MW-36H	DO	DO	10/17/2022 12:24	0.32	mg/L
GC-AP-MW-36H	DTW	Depth to Water Detail	10/17/2022 12:24	26.91	ft
GC-AP-MW-36H	ORP	Oxidation Reduction Potention	10/17/2022 12:24	113.05	mv
GC-AP-MW-36H	PH	pH	10/17/2022 12:24	7.92	SU
GC-AP-MW-36H	TEMP	Temperature	10/17/2022 12:24	23.57	C
GC-AP-MW-36H	TURB	Turbidity	10/17/2022 12:24	10.19	NTU
GC-AP-MW-36H	COND	Conductivity	10/17/2022 12:29	253.7	uS/cm
GC-AP-MW-36H	DO	DO	10/17/2022 12:29	0.31	mg/L
GC-AP-MW-36H	DTW	Depth to Water Detail	10/17/2022 12:29	26.91	ft
GC-AP-MW-36H	ORP	Oxidation Reduction Potention	10/17/2022 12:29	106.96	mv
GC-AP-MW-36H	PH	pH	10/17/2022 12:29	7.92	SU
GC-AP-MW-36H	SULFIDE	Sulfide	10/17/2022 12:29	0	mg/L
GC-AP-MW-36H	TEMP	Temperature	10/17/2022 12:29	23.51	C
GC-AP-MW-36H	TURB	Turbidity	10/17/2022 12:29	9.66	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:23	1036.07	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:23	0.79	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:23	25.09	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:23	-58.04	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:23	6.36	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:23	23.04	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:23	1.3	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:28	1037.14	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:28	0.67	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:28	25.33	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:28	-59.87	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:28	6.36	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:28	23.27	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:28	0.79	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:33	1030.54	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:33	0.61	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:33	25.51	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:33	-60.42	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:33	6.36	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:33	23.38	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:33	1.09	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:38	1029.2	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:38	0.57	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:38	25.81	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:38	-61.94	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:38	6.35	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:38	23.26	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:38	1.26	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:43	1031.83	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:43	0.56	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:43	25.98	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:43	-63.37	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:43	6.34	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:43	23.06	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:43	1.99	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:48	1033.98	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:48	0.54	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:48	26.16	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:48	-65.89	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:48	6.33	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:48	23.15	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:48	0.82	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:53	1040.9	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:53	0.53	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:53	26.34	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:53	-69.22	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:53	6.3	SU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:53	22.93	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:53	0.83	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 14:58	1049.87	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 14:58	0.53	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 14:58	26.56	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 14:58	-73.84	mv
GC-AP-MW-37H	PH	pH	10/17/2022 14:58	6.27	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 14:58	23	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 14:58	0.68	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 15:03	1054.52	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 15:03	0.52	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 15:03	26.82	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 15:03	-76.76	mv
GC-AP-MW-37H	PH	pH	10/17/2022 15:03	6.24	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 15:03	22.98	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 15:03	0.88	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 15:08	1056.31	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 15:08	0.51	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 15:08	27	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 15:08	-79.46	mv
GC-AP-MW-37H	PH	pH	10/17/2022 15:08	6.23	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 15:08	22.92	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 15:08	1.2	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 15:13	1055.09	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 15:13	0.51	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 15:13	27.12	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 15:13	-81.94	mv
GC-AP-MW-37H	PH	pH	10/17/2022 15:13	6.22	SU
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 15:13	22.82	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 15:13	1.62	NTU
GC-AP-MW-37H	COND	Conductivity	10/17/2022 15:18	1052.97	uS/cm
GC-AP-MW-37H	DO	DO	10/17/2022 15:18	0.5	mg/L
GC-AP-MW-37H	DTW	Depth to Water Detail	10/17/2022 15:18	27.28	ft
GC-AP-MW-37H	ORP	Oxidation Reduction Potention	10/17/2022 15:18	-83.22	mv
GC-AP-MW-37H	PH	pH	10/17/2022 15:18	6.23	SU
GC-AP-MW-37H	SULFIDE	Sulfide	10/17/2022 15:18	0	mg/L
GC-AP-MW-37H	TEMP	Temperature	10/17/2022 15:18	22.79	C
GC-AP-MW-37H	TURB	Turbidity	10/17/2022 15:18	1.84	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-38H	COND	Conductivity	10/18/2022 9:39	426.51	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 9:39	3.65	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 9:39	21.29	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 9:39	37.34	mv
GC-AP-MW-38H	PH	pH	10/18/2022 9:39	6.6	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 9:39	21.64	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 9:39	7.22	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 9:44	399.31	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 9:44	3.04	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 9:44	21.41	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 9:44	39.31	mv
GC-AP-MW-38H	PH	pH	10/18/2022 9:44	6.49	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 9:44	21.72	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 9:44	5.71	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 9:49	391.79	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 9:49	2.69	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 9:49	21.52	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 9:49	33.52	mv
GC-AP-MW-38H	PH	pH	10/18/2022 9:49	6.46	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 9:49	21.71	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 9:49	4.98	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 9:54	420.16	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 9:54	3.43	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 9:54	21.6	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 9:54	31.09	mv
GC-AP-MW-38H	PH	pH	10/18/2022 9:54	6.56	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 9:54	21.62	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 9:54	3.31	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 9:59	437.73	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 9:59	3.96	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 9:59	21.66	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 9:59	30.88	mv
GC-AP-MW-38H	PH	pH	10/18/2022 9:59	6.62	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 9:59	21.66	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 9:59	2.6	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:04	443.72	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:04	4.15	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:04	21.81	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:04	32.98	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:04	6.65	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:04	21.83	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:04	3.08	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:09	445.2	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:09	4.34	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:09	21.85	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:09	33.49	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:09	6.67	SU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:09	21.79	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:09	6.21	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:14	444.3	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:14	4.47	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:14	21.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:14	28.94	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:14	6.67	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:14	21.85	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:14	16.3	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:19	441.26	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:19	4.5	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:19	22.21	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:19	21.83	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:19	6.67	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:19	21.74	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:19	29.5	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:24	440.2	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:24	4.54	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:24	22.42	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:24	30.42	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:24	6.66	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:24	21.99	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:24	13.8	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:29	426.88	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:29	3.48	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:29	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:29	49.71	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:29	6.61	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:29	21.86	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:29	20.7	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:34	428.86	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:34	3.19	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:34	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:34	56.28	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:34	6.62	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:34	21.62	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:34	19.4	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:39	444.47	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:39	4.46	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:39	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:39	60.07	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:39	6.67	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:39	21.55	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:39	3.67	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:44	445.51	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:44	4.66	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:44	22.91	ft

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:44	63.9	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:44	6.68	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:44	21.86	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:44	2.67	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:49	447.42	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:49	4.92	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:49	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:49	66.92	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:49	6.69	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:49	21.83	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:49	2.36	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:54	448.46	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:54	5.06	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:54	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:54	70.16	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:54	6.7	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:54	21.88	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:54	2.04	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 10:59	449.79	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 10:59	5.19	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 10:59	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 10:59	72.91	mv
GC-AP-MW-38H	PH	pH	10/18/2022 10:59	6.7	SU
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 10:59	21.95	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 10:59	1.7	NTU
GC-AP-MW-38H	COND	Conductivity	10/18/2022 11:04	450.37	uS/cm
GC-AP-MW-38H	DO	DO	10/18/2022 11:04	5.29	mg/L
GC-AP-MW-38H	DTW	Depth to Water Detail	10/18/2022 11:04	22.91	ft
GC-AP-MW-38H	ORP	Oxidation Reduction Potention	10/18/2022 11:04	75.19	mv
GC-AP-MW-38H	PH	pH	10/18/2022 11:04	6.7	SU
GC-AP-MW-38H	SULFIDE	Sulfide	10/18/2022 11:04	0	mg/L
GC-AP-MW-38H	TEMP	Temperature	10/18/2022 11:04	22.07	C
GC-AP-MW-38H	TURB	Turbidity	10/18/2022 11:04	1.44	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-39H	COND	Conductivity	10/18/2022 15:03	783.13	uS/cm
GC-AP-MW-39H	DO	DO	10/18/2022 15:03	0.2	mg/L
GC-AP-MW-39H	DTW	Depth to Water Detail	10/18/2022 15:03	35.85	ft
GC-AP-MW-39H	ORP	Oxidation Reduction Potention	10/18/2022 15:03	-46.46	mv
GC-AP-MW-39H	PH	pH	10/18/2022 15:03	6.59	SU
GC-AP-MW-39H	TEMP	Temperature	10/18/2022 15:03	19.2	C
GC-AP-MW-39H	TURB	Turbidity	10/18/2022 15:03	3.12	NTU
GC-AP-MW-39H	COND	Conductivity	10/18/2022 15:08	784.46	uS/cm
GC-AP-MW-39H	DO	DO	10/18/2022 15:08	0.16	mg/L
GC-AP-MW-39H	DTW	Depth to Water Detail	10/18/2022 15:08	35.85	ft
GC-AP-MW-39H	ORP	Oxidation Reduction Potention	10/18/2022 15:08	-48.75	mv
GC-AP-MW-39H	PH	pH	10/18/2022 15:08	6.59	SU
GC-AP-MW-39H	TEMP	Temperature	10/18/2022 15:08	19.17	C
GC-AP-MW-39H	TURB	Turbidity	10/18/2022 15:08	1.88	NTU
GC-AP-MW-39H	COND	Conductivity	10/18/2022 15:13	783.43	uS/cm
GC-AP-MW-39H	DO	DO	10/18/2022 15:13	0.15	mg/L
GC-AP-MW-39H	DTW	Depth to Water Detail	10/18/2022 15:13	35.85	ft
GC-AP-MW-39H	ORP	Oxidation Reduction Potention	10/18/2022 15:13	-49.68	mv
GC-AP-MW-39H	PH	pH	10/18/2022 15:13	6.59	SU
GC-AP-MW-39H	TEMP	Temperature	10/18/2022 15:13	19.16	C
GC-AP-MW-39H	TURB	Turbidity	10/18/2022 15:13	1.49	NTU
GC-AP-MW-39H	COND	Conductivity	10/18/2022 15:18	784.1	uS/cm
GC-AP-MW-39H	DO	DO	10/18/2022 15:18	0.14	mg/L
GC-AP-MW-39H	DTW	Depth to Water Detail	10/18/2022 15:18	35.85	ft
GC-AP-MW-39H	ORP	Oxidation Reduction Potention	10/18/2022 15:18	-50.53	mv
GC-AP-MW-39H	PH	pH	10/18/2022 15:18	6.59	SU
GC-AP-MW-39H	SULFIDE	Sulfide	10/18/2022 15:18	0	mg/L
GC-AP-MW-39H	TEMP	Temperature	10/18/2022 15:18	19.12	C
GC-AP-MW-39H	TURB	Turbidity	10/18/2022 15:18	1.6	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-17	COND	Conductivity	10/18/2022 8:34	933.26	uS/cm
GC-AP-MW-17	DO	DO	10/18/2022 8:34	0.15	mg/L
GC-AP-MW-17	DTW	Depth to Water Detail	10/18/2022 8:34	31.62	ft
GC-AP-MW-17	ORP	Oxidation Reduction Potention	10/18/2022 8:34	-96.18	mv
GC-AP-MW-17	PH	pH	10/18/2022 8:34	6.73	SU
GC-AP-MW-17	TEMP	Temperature	10/18/2022 8:34	19.55	C
GC-AP-MW-17	TURB	Turbidity	10/18/2022 8:34	4.3	NTU
GC-AP-MW-17	COND	Conductivity	10/18/2022 8:39	936.1	uS/cm
GC-AP-MW-17	DO	DO	10/18/2022 8:39	0.13	mg/L
GC-AP-MW-17	DTW	Depth to Water Detail	10/18/2022 8:39	31.62	ft
GC-AP-MW-17	ORP	Oxidation Reduction Potention	10/18/2022 8:39	-98.66	mv
GC-AP-MW-17	PH	pH	10/18/2022 8:39	6.75	SU
GC-AP-MW-17	TEMP	Temperature	10/18/2022 8:39	19.52	C
GC-AP-MW-17	TURB	Turbidity	10/18/2022 8:39	1.64	NTU
GC-AP-MW-17	COND	Conductivity	10/18/2022 8:44	945.45	uS/cm
GC-AP-MW-17	DO	DO	10/18/2022 8:44	0.12	mg/L
GC-AP-MW-17	DTW	Depth to Water Detail	10/18/2022 8:44	31.62	ft
GC-AP-MW-17	ORP	Oxidation Reduction Potention	10/18/2022 8:44	-100.42	mv
GC-AP-MW-17	PH	pH	10/18/2022 8:44	6.76	SU
GC-AP-MW-17	TEMP	Temperature	10/18/2022 8:44	19.63	C
GC-AP-MW-17	TURB	Turbidity	10/18/2022 8:44	1.53	NTU
GC-AP-MW-17	COND	Conductivity	10/18/2022 8:49	946.01	uS/cm
GC-AP-MW-17	DO	DO	10/18/2022 8:49	0.11	mg/L
GC-AP-MW-17	DTW	Depth to Water Detail	10/18/2022 8:49	31.62	ft
GC-AP-MW-17	ORP	Oxidation Reduction Potention	10/18/2022 8:49	-101.46	mv
GC-AP-MW-17	PH	pH	10/18/2022 8:49	6.77	SU
GC-AP-MW-17	SULFIDE	Sulfide	10/18/2022 8:49	0	mg/L
GC-AP-MW-17	TEMP	Temperature	10/18/2022 8:49	19.62	C
GC-AP-MW-17	TURB	Turbidity	10/18/2022 8:49	1.05	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-18	COND	Conductivity	10/17/2022 13:24	644.44	uS/cm
GC-AP-MW-18	DO	DO	10/17/2022 13:24	0.17	mg/L
GC-AP-MW-18	DTW	Depth to Water Detail	10/17/2022 13:24	30.44	ft
GC-AP-MW-18	ORP	Oxidation Reduction Potention	10/17/2022 13:24	-0.62	mv
GC-AP-MW-18	PH	pH	10/17/2022 13:24	6.49	SU
GC-AP-MW-18	TEMP	Temperature	10/17/2022 13:24	20.66	C
GC-AP-MW-18	TURB	Turbidity	10/17/2022 13:24	1.48	NTU
GC-AP-MW-18	COND	Conductivity	10/17/2022 13:29	647.07	uS/cm
GC-AP-MW-18	DO	DO	10/17/2022 13:29	0.14	mg/L
GC-AP-MW-18	DTW	Depth to Water Detail	10/17/2022 13:29	30.44	ft
GC-AP-MW-18	ORP	Oxidation Reduction Potention	10/17/2022 13:29	-7.22	mv
GC-AP-MW-18	PH	pH	10/17/2022 13:29	6.49	SU
GC-AP-MW-18	TEMP	Temperature	10/17/2022 13:29	20.55	C
GC-AP-MW-18	TURB	Turbidity	10/17/2022 13:29	1.31	NTU
GC-AP-MW-18	COND	Conductivity	10/17/2022 13:34	651.02	uS/cm
GC-AP-MW-18	DO	DO	10/17/2022 13:34	0.12	mg/L
GC-AP-MW-18	DTW	Depth to Water Detail	10/17/2022 13:34	30.44	ft
GC-AP-MW-18	ORP	Oxidation Reduction Potention	10/17/2022 13:34	-11.74	mv
GC-AP-MW-18	PH	pH	10/17/2022 13:34	6.49	SU
GC-AP-MW-18	TEMP	Temperature	10/17/2022 13:34	20.52	C
GC-AP-MW-18	TURB	Turbidity	10/17/2022 13:34	0.75	NTU
GC-AP-MW-18	COND	Conductivity	10/17/2022 13:39	653.3	uS/cm
GC-AP-MW-18	DO	DO	10/17/2022 13:39	0.11	mg/L
GC-AP-MW-18	DTW	Depth to Water Detail	10/17/2022 13:39	30.44	ft
GC-AP-MW-18	ORP	Oxidation Reduction Potention	10/17/2022 13:39	-14.99	mv
GC-AP-MW-18	PH	pH	10/17/2022 13:39	6.49	SU
GC-AP-MW-18	SULFIDE	Sulfide	10/17/2022 13:39	0	mg/L
GC-AP-MW-18	TEMP	Temperature	10/17/2022 13:39	20.61	C
GC-AP-MW-18	TURB	Turbidity	10/17/2022 13:39	0.56	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-16	COND	Conductivity	10/18/2022 14:06	771.02	uS/cm
GC-AP-MW-16	DO	DO	10/18/2022 14:06	0.14	mg/L
GC-AP-MW-16	DTW	Depth to Water Detail	10/18/2022 14:06	34.59	ft
GC-AP-MW-16	ORP	Oxidation Reduction Potention	10/18/2022 14:06	-20.43	mv
GC-AP-MW-16	PH	pH	10/18/2022 14:06	6.53	SU
GC-AP-MW-16	TEMP	Temperature	10/18/2022 14:06	19.56	C
GC-AP-MW-16	TURB	Turbidity	10/18/2022 14:06	16.6	NTU
GC-AP-MW-16	COND	Conductivity	10/18/2022 14:11	777.17	uS/cm
GC-AP-MW-16	DO	DO	10/18/2022 14:11	0.11	mg/L
GC-AP-MW-16	DTW	Depth to Water Detail	10/18/2022 14:11	34.59	ft
GC-AP-MW-16	ORP	Oxidation Reduction Potention	10/18/2022 14:11	-24.28	mv
GC-AP-MW-16	PH	pH	10/18/2022 14:11	6.54	SU
GC-AP-MW-16	TEMP	Temperature	10/18/2022 14:11	19.56	C
GC-AP-MW-16	TURB	Turbidity	10/18/2022 14:11	9.1	NTU
GC-AP-MW-16	COND	Conductivity	10/18/2022 14:16	782.4	uS/cm
GC-AP-MW-16	DO	DO	10/18/2022 14:16	0.09	mg/L
GC-AP-MW-16	DTW	Depth to Water Detail	10/18/2022 14:16	34.59	ft
GC-AP-MW-16	ORP	Oxidation Reduction Potention	10/18/2022 14:16	-26.3	mv
GC-AP-MW-16	PH	pH	10/18/2022 14:16	6.54	SU
GC-AP-MW-16	TEMP	Temperature	10/18/2022 14:16	19.51	C
GC-AP-MW-16	TURB	Turbidity	10/18/2022 14:16	6.07	NTU
GC-AP-MW-16	COND	Conductivity	10/18/2022 14:21	785.75	uS/cm
GC-AP-MW-16	DO	DO	10/18/2022 14:21	0.09	mg/L
GC-AP-MW-16	DTW	Depth to Water Detail	10/18/2022 14:21	34.59	ft
GC-AP-MW-16	ORP	Oxidation Reduction Potention	10/18/2022 14:21	-27.98	mv
GC-AP-MW-16	PH	pH	10/18/2022 14:21	6.53	SU
GC-AP-MW-16	SULFIDE	Sulfide	10/18/2022 14:21	0	mg/L
GC-AP-MW-16	TEMP	Temperature	10/18/2022 14:21	19.49	C
GC-AP-MW-16	TURB	Turbidity	10/18/2022 14:21	4.8	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-15	COND	Conductivity	10/18/2022 16:05	600.73	uS/cm
GC-AP-MW-15	DO	DO	10/18/2022 16:05	1.42	mg/L
GC-AP-MW-15	DTW	Depth to Water Detail	10/18/2022 16:05	17.69	ft
GC-AP-MW-15	ORP	Oxidation Reduction Potention	10/18/2022 16:05	14.4	mv
GC-AP-MW-15	PH	pH	10/18/2022 16:05	6.26	SU
GC-AP-MW-15	TEMP	Temperature	10/18/2022 16:05	18.46	C
GC-AP-MW-15	TURB	Turbidity	10/18/2022 16:05	1.2	NTU
GC-AP-MW-15	COND	Conductivity	10/18/2022 16:10	603.63	uS/cm
GC-AP-MW-15	DO	DO	10/18/2022 16:10	1.15	mg/L
GC-AP-MW-15	DTW	Depth to Water Detail	10/18/2022 16:10	17.69	ft
GC-AP-MW-15	ORP	Oxidation Reduction Potention	10/18/2022 16:10	22.05	mv
GC-AP-MW-15	PH	pH	10/18/2022 16:10	6.28	SU
GC-AP-MW-15	TEMP	Temperature	10/18/2022 16:10	18.53	C
GC-AP-MW-15	TURB	Turbidity	10/18/2022 16:10	1.38	NTU
GC-AP-MW-15	COND	Conductivity	10/18/2022 16:15	606.18	uS/cm
GC-AP-MW-15	DO	DO	10/18/2022 16:15	1.02	mg/L
GC-AP-MW-15	DTW	Depth to Water Detail	10/18/2022 16:15	17.69	ft
GC-AP-MW-15	ORP	Oxidation Reduction Potention	10/18/2022 16:15	25.88	mv
GC-AP-MW-15	PH	pH	10/18/2022 16:15	6.28	SU
GC-AP-MW-15	TEMP	Temperature	10/18/2022 16:15	18.54	C
GC-AP-MW-15	TURB	Turbidity	10/18/2022 16:15	0.77	NTU
GC-AP-MW-15	COND	Conductivity	10/18/2022 16:20	608.7	uS/cm
GC-AP-MW-15	DO	DO	10/18/2022 16:20	0.93	mg/L
GC-AP-MW-15	DTW	Depth to Water Detail	10/18/2022 16:20	17.69	ft
GC-AP-MW-15	ORP	Oxidation Reduction Potention	10/18/2022 16:20	28.15	mv
GC-AP-MW-15	PH	pH	10/18/2022 16:20	6.29	SU
GC-AP-MW-15	TEMP	Temperature	10/18/2022 16:20	18.59	C
GC-AP-MW-15	TURB	Turbidity	10/18/2022 16:20	1.3	NTU
GC-AP-MW-15	COND	Conductivity	10/18/2022 16:25	606.39	uS/cm
GC-AP-MW-15	DO	DO	10/18/2022 16:25	0.9	mg/L
GC-AP-MW-15	DTW	Depth to Water Detail	10/18/2022 16:25	17.69	ft
GC-AP-MW-15	ORP	Oxidation Reduction Potention	10/18/2022 16:25	30.21	mv
GC-AP-MW-15	PH	pH	10/18/2022 16:25	6.29	SU
GC-AP-MW-15	SULFIDE	Sulfide	10/18/2022 16:25	0	mg/L
GC-AP-MW-15	TEMP	Temperature	10/18/2022 16:25	18.56	C
GC-AP-MW-15	TURB	Turbidity	10/18/2022 16:25	1.39	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-26	COND	Conductivity	10/19/2022 9:11	69.42	uS/cm
GC-AP-MW-26	DO	DO	10/19/2022 9:11	2.18	mg/L
GC-AP-MW-26	DTW	Depth to Water Detail	10/19/2022 9:11	9.65	ft
GC-AP-MW-26	ORP	Oxidation Reduction Potention	10/19/2022 9:11	181.73	mv
GC-AP-MW-26	PH	pH	10/19/2022 9:11	5.5	SU
GC-AP-MW-26	TEMP	Temperature	10/19/2022 9:11	18.75	C
GC-AP-MW-26	TURB	Turbidity	10/19/2022 9:11	2.59	NTU
GC-AP-MW-26	COND	Conductivity	10/19/2022 9:16	67.79	uS/cm
GC-AP-MW-26	DO	DO	10/19/2022 9:16	2.16	mg/L
GC-AP-MW-26	DTW	Depth to Water Detail	10/19/2022 9:16	9.65	ft
GC-AP-MW-26	ORP	Oxidation Reduction Potention	10/19/2022 9:16	176.28	mv
GC-AP-MW-26	PH	pH	10/19/2022 9:16	5.52	SU
GC-AP-MW-26	TEMP	Temperature	10/19/2022 9:16	18.83	C
GC-AP-MW-26	TURB	Turbidity	10/19/2022 9:16	1.95	NTU
GC-AP-MW-26	COND	Conductivity	10/19/2022 9:21	67.93	uS/cm
GC-AP-MW-26	DO	DO	10/19/2022 9:21	2.16	mg/L
GC-AP-MW-26	DTW	Depth to Water Detail	10/19/2022 9:21	9.65	ft
GC-AP-MW-26	ORP	Oxidation Reduction Potention	10/19/2022 9:21	170.67	mv
GC-AP-MW-26	PH	pH	10/19/2022 9:21	5.55	SU
GC-AP-MW-26	TEMP	Temperature	10/19/2022 9:21	18.83	C
GC-AP-MW-26	TURB	Turbidity	10/19/2022 9:21	3.17	NTU
GC-AP-MW-26	COND	Conductivity	10/19/2022 9:26	67.42	uS/cm
GC-AP-MW-26	DO	DO	10/19/2022 9:26	2.17	mg/L
GC-AP-MW-26	DTW	Depth to Water Detail	10/19/2022 9:26	9.65	ft
GC-AP-MW-26	ORP	Oxidation Reduction Potention	10/19/2022 9:26	166.58	mv
GC-AP-MW-26	PH	pH	10/19/2022 9:26	5.55	SU
GC-AP-MW-26	SULFIDE	Sulfide	10/19/2022 9:26	0	mg/L
GC-AP-MW-26	TEMP	Temperature	10/19/2022 9:26	18.82	C
GC-AP-MW-26	TURB	Turbidity	10/19/2022 9:26	1.01	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-27	COND	Conductivity	10/19/2022 9:59	29.87	uS/cm
GC-AP-MW-27	DO	DO	10/19/2022 9:59	4.96	mg/L
GC-AP-MW-27	DTW	Depth to Water Detail	10/19/2022 9:59	11.43	ft
GC-AP-MW-27	ORP	Oxidation Reduction Potention	10/19/2022 9:59	162.03	mv
GC-AP-MW-27	PH	pH	10/19/2022 9:59	5.06	SU
GC-AP-MW-27	TEMP	Temperature	10/19/2022 9:59	19.01	C
GC-AP-MW-27	TURB	Turbidity	10/19/2022 9:59	1.17	NTU
GC-AP-MW-27	COND	Conductivity	10/19/2022 10:04	29.72	uS/cm
GC-AP-MW-27	DO	DO	10/19/2022 10:04	5.04	mg/L
GC-AP-MW-27	DTW	Depth to Water Detail	10/19/2022 10:04	11.43	ft
GC-AP-MW-27	ORP	Oxidation Reduction Potention	10/19/2022 10:04	170.11	mv
GC-AP-MW-27	PH	pH	10/19/2022 10:04	5.03	SU
GC-AP-MW-27	TEMP	Temperature	10/19/2022 10:04	19.05	C
GC-AP-MW-27	TURB	Turbidity	10/19/2022 10:04	1.15	NTU
GC-AP-MW-27	COND	Conductivity	10/19/2022 10:09	29.41	uS/cm
GC-AP-MW-27	DO	DO	10/19/2022 10:09	5.06	mg/L
GC-AP-MW-27	DTW	Depth to Water Detail	10/19/2022 10:09	11.43	ft
GC-AP-MW-27	ORP	Oxidation Reduction Potention	10/19/2022 10:09	176.76	mv
GC-AP-MW-27	PH	pH	10/19/2022 10:09	5.02	SU
GC-AP-MW-27	TEMP	Temperature	10/19/2022 10:09	19.07	C
GC-AP-MW-27	TURB	Turbidity	10/19/2022 10:09	1.13	NTU
GC-AP-MW-27	COND	Conductivity	10/19/2022 10:14	29.65	uS/cm
GC-AP-MW-27	DO	DO	10/19/2022 10:14	5.09	mg/L
GC-AP-MW-27	DTW	Depth to Water Detail	10/19/2022 10:14	11.43	ft
GC-AP-MW-27	ORP	Oxidation Reduction Potention	10/19/2022 10:14	180.18	mv
GC-AP-MW-27	PH	pH	10/19/2022 10:14	5.02	SU
GC-AP-MW-27	SULFIDE	Sulfide	10/19/2022 10:14	0	mg/L
GC-AP-MW-27	TEMP	Temperature	10/19/2022 10:14	19.11	C
GC-AP-MW-27	TURB	Turbidity	10/19/2022 10:14	1.4	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-28	COND	Conductivity	10/19/2022 11:03	41.72	uS/cm
GC-AP-MW-28	DO	DO	10/19/2022 11:03	8.35	mg/L
GC-AP-MW-28	DTW	Depth to Water Detail	10/19/2022 11:03	10.98	ft
GC-AP-MW-28	ORP	Oxidation Reduction Potention	10/19/2022 11:03	200.3	mv
GC-AP-MW-28	PH	pH	10/19/2022 11:03	4.74	SU
GC-AP-MW-28	TEMP	Temperature	10/19/2022 11:03	19	C
GC-AP-MW-28	TURB	Turbidity	10/19/2022 11:03	1.22	NTU
GC-AP-MW-28	COND	Conductivity	10/19/2022 11:08	41.21	uS/cm
GC-AP-MW-28	DO	DO	10/19/2022 11:08	8.24	mg/L
GC-AP-MW-28	DTW	Depth to Water Detail	10/19/2022 11:08	10.98	ft
GC-AP-MW-28	ORP	Oxidation Reduction Potention	10/19/2022 11:08	215.97	mv
GC-AP-MW-28	PH	pH	10/19/2022 11:08	4.77	SU
GC-AP-MW-28	TEMP	Temperature	10/19/2022 11:08	18.97	C
GC-AP-MW-28	TURB	Turbidity	10/19/2022 11:08	1.41	NTU
GC-AP-MW-28	COND	Conductivity	10/19/2022 11:13	40.92	uS/cm
GC-AP-MW-28	DO	DO	10/19/2022 11:13	8.14	mg/L
GC-AP-MW-28	DTW	Depth to Water Detail	10/19/2022 11:13	10.98	ft
GC-AP-MW-28	ORP	Oxidation Reduction Potention	10/19/2022 11:13	227.01	mv
GC-AP-MW-28	PH	pH	10/19/2022 11:13	4.82	SU
GC-AP-MW-28	TEMP	Temperature	10/19/2022 11:13	18.96	C
GC-AP-MW-28	TURB	Turbidity	10/19/2022 11:13	1.02	NTU
GC-AP-MW-28	COND	Conductivity	10/19/2022 11:18	40.67	uS/cm
GC-AP-MW-28	DO	DO	10/19/2022 11:18	8.09	mg/L
GC-AP-MW-28	DTW	Depth to Water Detail	10/19/2022 11:18	10.98	ft
GC-AP-MW-28	ORP	Oxidation Reduction Potention	10/19/2022 11:18	235.28	mv
GC-AP-MW-28	PH	pH	10/19/2022 11:18	4.87	SU
GC-AP-MW-28	SULFIDE	Sulfide	10/19/2022 11:18	0	mg/L
GC-AP-MW-28	TEMP	Temperature	10/19/2022 11:18	18.97	C
GC-AP-MW-28	TURB	Turbidity	10/19/2022 11:18	0.95	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-29	COND	Conductivity	10/19/2022 11:52	12.34	uS/cm
GC-AP-MW-29	DO	DO	10/19/2022 11:52	8.79	mg/L
GC-AP-MW-29	DTW	Depth to Water Detail	10/19/2022 11:52	9.81	ft
GC-AP-MW-29	ORP	Oxidation Reduction Potention	10/19/2022 11:52	207.37	mv
GC-AP-MW-29	PH	pH	10/19/2022 11:52	5.03	SU
GC-AP-MW-29	TEMP	Temperature	10/19/2022 11:52	18.58	C
GC-AP-MW-29	TURB	Turbidity	10/19/2022 11:52	2.39	NTU
GC-AP-MW-29	COND	Conductivity	10/19/2022 11:57	12.64	uS/cm
GC-AP-MW-29	DO	DO	10/19/2022 11:57	8.75	mg/L
GC-AP-MW-29	DTW	Depth to Water Detail	10/19/2022 11:57	9.81	ft
GC-AP-MW-29	ORP	Oxidation Reduction Potention	10/19/2022 11:57	219.64	mv
GC-AP-MW-29	PH	pH	10/19/2022 11:57	5.03	SU
GC-AP-MW-29	TEMP	Temperature	10/19/2022 11:57	18.62	C
GC-AP-MW-29	TURB	Turbidity	10/19/2022 11:57	2.32	NTU
GC-AP-MW-29	COND	Conductivity	10/19/2022 12:02	12.86	uS/cm
GC-AP-MW-29	DO	DO	10/19/2022 12:02	8.74	mg/L
GC-AP-MW-29	DTW	Depth to Water Detail	10/19/2022 12:02	9.81	ft
GC-AP-MW-29	ORP	Oxidation Reduction Potention	10/19/2022 12:02	228.82	mv
GC-AP-MW-29	PH	pH	10/19/2022 12:02	5.02	SU
GC-AP-MW-29	TEMP	Temperature	10/19/2022 12:02	18.63	C
GC-AP-MW-29	TURB	Turbidity	10/19/2022 12:02	1.95	NTU
GC-AP-MW-29	COND	Conductivity	10/19/2022 12:07	12.96	uS/cm
GC-AP-MW-29	DO	DO	10/19/2022 12:07	8.72	mg/L
GC-AP-MW-29	DTW	Depth to Water Detail	10/19/2022 12:07	9.81	ft
GC-AP-MW-29	ORP	Oxidation Reduction Potention	10/19/2022 12:07	233.69	mv
GC-AP-MW-29	PH	pH	10/19/2022 12:07	5.01	SU
GC-AP-MW-29	SULFIDE	Sulfide	10/19/2022 12:07	0	mg/L
GC-AP-MW-29	TEMP	Temperature	10/19/2022 12:07	18.65	C
GC-AP-MW-29	TURB	Turbidity	10/19/2022 12:07	1.18	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-30	COND	Conductivity	10/19/2022 12:46	27.97	uS/cm
GC-AP-MW-30	DO	DO	10/19/2022 12:46	4.39	mg/L
GC-AP-MW-30	DTW	Depth to Water Detail	10/19/2022 12:46	10.84	ft
GC-AP-MW-30	ORP	Oxidation Reduction Potention	10/19/2022 12:46	207.23	mv
GC-AP-MW-30	PH	pH	10/19/2022 12:46	5.3	SU
GC-AP-MW-30	TEMP	Temperature	10/19/2022 12:46	18.65	C
GC-AP-MW-30	TURB	Turbidity	10/19/2022 12:46	1.95	NTU
GC-AP-MW-30	COND	Conductivity	10/19/2022 12:51	27.72	uS/cm
GC-AP-MW-30	DO	DO	10/19/2022 12:51	4.28	mg/L
GC-AP-MW-30	DTW	Depth to Water Detail	10/19/2022 12:51	10.84	ft
GC-AP-MW-30	ORP	Oxidation Reduction Potention	10/19/2022 12:51	218.27	mv
GC-AP-MW-30	PH	pH	10/19/2022 12:51	5.3	SU
GC-AP-MW-30	TEMP	Temperature	10/19/2022 12:51	18.69	C
GC-AP-MW-30	TURB	Turbidity	10/19/2022 12:51	1.58	NTU
GC-AP-MW-30	COND	Conductivity	10/19/2022 12:56	27.68	uS/cm
GC-AP-MW-30	DO	DO	10/19/2022 12:56	4.27	mg/L
GC-AP-MW-30	DTW	Depth to Water Detail	10/19/2022 12:56	10.84	ft
GC-AP-MW-30	ORP	Oxidation Reduction Potention	10/19/2022 12:56	225.79	mv
GC-AP-MW-30	PH	pH	10/19/2022 12:56	5.3	SU
GC-AP-MW-30	TEMP	Temperature	10/19/2022 12:56	18.7	C
GC-AP-MW-30	TURB	Turbidity	10/19/2022 12:56	1.12	NTU
GC-AP-MW-30	COND	Conductivity	10/19/2022 13:01	27.58	uS/cm
GC-AP-MW-30	DO	DO	10/19/2022 13:01	4.28	mg/L
GC-AP-MW-30	DTW	Depth to Water Detail	10/19/2022 13:01	10.84	ft
GC-AP-MW-30	ORP	Oxidation Reduction Potention	10/19/2022 13:01	231.26	mv
GC-AP-MW-30	PH	pH	10/19/2022 13:01	5.29	SU
GC-AP-MW-30	SULFIDE	Sulfide	10/19/2022 13:01	0	mg/L
GC-AP-MW-30	TEMP	Temperature	10/19/2022 13:01	18.69	C
GC-AP-MW-30	TURB	Turbidity	10/19/2022 13:01	0.95	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-42H	COND	Conductivity	10/19/2022 14:05	630.15	uS/cm
GC-AP-MW-42H	DO	DO	10/19/2022 14:05	0.24	mg/L
GC-AP-MW-42H	DTW	Depth to Water Detail	10/19/2022 14:05	8.31	ft
GC-AP-MW-42H	ORP	Oxidation Reduction Potention	10/19/2022 14:05	-1.07	mv
GC-AP-MW-42H	PH	pH	10/19/2022 14:05	6.25	SU
GC-AP-MW-42H	TEMP	Temperature	10/19/2022 14:05	20.15	C
GC-AP-MW-42H	TURB	Turbidity	10/19/2022 14:05	1.43	NTU
GC-AP-MW-42H	COND	Conductivity	10/19/2022 14:10	627.5	uS/cm
GC-AP-MW-42H	DO	DO	10/19/2022 14:10	0.23	mg/L
GC-AP-MW-42H	DTW	Depth to Water Detail	10/19/2022 14:10	8.31	ft
GC-AP-MW-42H	ORP	Oxidation Reduction Potention	10/19/2022 14:10	-7.14	mv
GC-AP-MW-42H	PH	pH	10/19/2022 14:10	6.28	SU
GC-AP-MW-42H	TEMP	Temperature	10/19/2022 14:10	20.14	C
GC-AP-MW-42H	TURB	Turbidity	10/19/2022 14:10	1.28	NTU
GC-AP-MW-42H	COND	Conductivity	10/19/2022 14:15	623.58	uS/cm
GC-AP-MW-42H	DO	DO	10/19/2022 14:15	0.2	mg/L
GC-AP-MW-42H	DTW	Depth to Water Detail	10/19/2022 14:15	8.31	ft
GC-AP-MW-42H	ORP	Oxidation Reduction Potention	10/19/2022 14:15	-12.36	mv
GC-AP-MW-42H	PH	pH	10/19/2022 14:15	6.26	SU
GC-AP-MW-42H	TEMP	Temperature	10/19/2022 14:15	19.92	C
GC-AP-MW-42H	TURB	Turbidity	10/19/2022 14:15	1.53	NTU
GC-AP-MW-42H	COND	Conductivity	10/19/2022 14:20	623.56	uS/cm
GC-AP-MW-42H	DO	DO	10/19/2022 14:20	0.26	mg/L
GC-AP-MW-42H	DTW	Depth to Water Detail	10/19/2022 14:20	8.31	ft
GC-AP-MW-42H	ORP	Oxidation Reduction Potention	10/19/2022 14:20	-15.73	mv
GC-AP-MW-42H	PH	pH	10/19/2022 14:20	6.27	SU
GC-AP-MW-42H	SULFIDE	Sulfide	10/19/2022 14:20	0	mg/L
GC-AP-MW-42H	TEMP	Temperature	10/19/2022 14:20	19.95	C
GC-AP-MW-42H	TURB	Turbidity	10/19/2022 14:20	1.04	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-43H	COND	Conductivity	10/19/2022 14:57	883.97	uS/cm
GC-AP-MW-43H	DO	DO	10/19/2022 14:57	0.94	mg/L
GC-AP-MW-43H	DTW	Depth to Water Detail	10/19/2022 14:57	11.21	ft
GC-AP-MW-43H	ORP	Oxidation Reduction Potention	10/19/2022 14:57	-16.58	mv
GC-AP-MW-43H	PH	pH	10/19/2022 14:57	6.52	SU
GC-AP-MW-43H	TEMP	Temperature	10/19/2022 14:57	19.52	C
GC-AP-MW-43H	TURB	Turbidity	10/19/2022 14:57	11.96	NTU
GC-AP-MW-43H	COND	Conductivity	10/19/2022 15:02	876.78	uS/cm
GC-AP-MW-43H	DO	DO	10/19/2022 15:02	0.92	mg/L
GC-AP-MW-43H	DTW	Depth to Water Detail	10/19/2022 15:02	11.21	ft
GC-AP-MW-43H	ORP	Oxidation Reduction Potention	10/19/2022 15:02	-19.77	mv
GC-AP-MW-43H	PH	pH	10/19/2022 15:02	6.53	SU
GC-AP-MW-43H	TEMP	Temperature	10/19/2022 15:02	19.43	C
GC-AP-MW-43H	TURB	Turbidity	10/19/2022 15:02	6.92	NTU
GC-AP-MW-43H	COND	Conductivity	10/19/2022 15:07	880.78	uS/cm
GC-AP-MW-43H	DO	DO	10/19/2022 15:07	0.89	mg/L
GC-AP-MW-43H	DTW	Depth to Water Detail	10/19/2022 15:07	11.21	ft
GC-AP-MW-43H	ORP	Oxidation Reduction Potention	10/19/2022 15:07	-20.71	mv
GC-AP-MW-43H	PH	pH	10/19/2022 15:07	6.53	SU
GC-AP-MW-43H	TEMP	Temperature	10/19/2022 15:07	19.42	C
GC-AP-MW-43H	TURB	Turbidity	10/19/2022 15:07	4.23	NTU
GC-AP-MW-43H	COND	Conductivity	10/19/2022 15:12	877.68	uS/cm
GC-AP-MW-43H	DO	DO	10/19/2022 15:12	0.88	mg/L
GC-AP-MW-43H	DTW	Depth to Water Detail	10/19/2022 15:12	11.21	ft
GC-AP-MW-43H	ORP	Oxidation Reduction Potention	10/19/2022 15:12	-21.42	mv
GC-AP-MW-43H	PH	pH	10/19/2022 15:12	6.53	SU
GC-AP-MW-43H	SULFIDE	Sulfide	10/19/2022 15:12	0	mg/L
GC-AP-MW-43H	TEMP	Temperature	10/19/2022 15:12	19.42	C
GC-AP-MW-43H	TURB	Turbidity	10/19/2022 15:12	3.36	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-5	COND	Conductivity	10/17/2022 12:19	769.67	uS/cm
GC-AP-MW-5	DO	DO	10/17/2022 12:19	1.23	mg/L
GC-AP-MW-5	DTW	Depth to Water Detail	10/17/2022 12:19	17.48	ft
GC-AP-MW-5	ORP	Oxidation Reduction Potention	10/17/2022 12:19	-83.42	mv
GC-AP-MW-5	PH	pH	10/17/2022 12:19	6.75	SU
GC-AP-MW-5	TEMP	Temperature	10/17/2022 12:19	21.9	C
GC-AP-MW-5	TURB	Turbidity	10/17/2022 12:19	5.53	NTU
GC-AP-MW-5	COND	Conductivity	10/17/2022 12:24	776.76	uS/cm
GC-AP-MW-5	DO	DO	10/17/2022 12:24	1.06	mg/L
GC-AP-MW-5	DTW	Depth to Water Detail	10/17/2022 12:24	17.48	ft
GC-AP-MW-5	ORP	Oxidation Reduction Potention	10/17/2022 12:24	-82.12	mv
GC-AP-MW-5	PH	pH	10/17/2022 12:24	6.72	SU
GC-AP-MW-5	TEMP	Temperature	10/17/2022 12:24	21.92	C
GC-AP-MW-5	TURB	Turbidity	10/17/2022 12:24	4.03	NTU
GC-AP-MW-5	COND	Conductivity	10/17/2022 12:29	780.92	uS/cm
GC-AP-MW-5	DO	DO	10/17/2022 12:29	1.05	mg/L
GC-AP-MW-5	DTW	Depth to Water Detail	10/17/2022 12:29	17.48	ft
GC-AP-MW-5	ORP	Oxidation Reduction Potention	10/17/2022 12:29	-80.81	mv
GC-AP-MW-5	PH	pH	10/17/2022 12:29	6.7	SU
GC-AP-MW-5	TEMP	Temperature	10/17/2022 12:29	21.85	C
GC-AP-MW-5	TURB	Turbidity	10/17/2022 12:29	3.66	NTU
GC-AP-MW-5	COND	Conductivity	10/17/2022 12:34	781.99	uS/cm
GC-AP-MW-5	DO	DO	10/17/2022 12:34	1.01	mg/L
GC-AP-MW-5	DTW	Depth to Water Detail	10/17/2022 12:34	17.48	ft
GC-AP-MW-5	ORP	Oxidation Reduction Potention	10/17/2022 12:34	-80.19	mv
GC-AP-MW-5	PH	pH	10/17/2022 12:34	6.71	SU
GC-AP-MW-5	SULFIDE	Sulfide	10/17/2022 12:34	0	mg/L
GC-AP-MW-5	TEMP	Temperature	10/17/2022 12:34	21.83	C
GC-AP-MW-5	TURB	Turbidity	10/17/2022 12:34	3.27	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-11	COND	Conductivity	10/17/2022 13:21	540.52	uS/cm
GC-AP-MW-11	DO	DO	10/17/2022 13:21	1.35	mg/L
GC-AP-MW-11	DTW	Depth to Water Detail	10/17/2022 13:21	21.02	ft
GC-AP-MW-11	ORP	Oxidation Reduction Potention	10/17/2022 13:21	5.01	mv
GC-AP-MW-11	PH	pH	10/17/2022 13:21	6.31	SU
GC-AP-MW-11	TEMP	Temperature	10/17/2022 13:21	21.37	C
GC-AP-MW-11	TURB	Turbidity	10/17/2022 13:21	0.41	NTU
GC-AP-MW-11	COND	Conductivity	10/17/2022 13:26	548.91	uS/cm
GC-AP-MW-11	DO	DO	10/17/2022 13:26	1.16	mg/L
GC-AP-MW-11	DTW	Depth to Water Detail	10/17/2022 13:26	21.03	ft
GC-AP-MW-11	ORP	Oxidation Reduction Potention	10/17/2022 13:26	8.28	mv
GC-AP-MW-11	PH	pH	10/17/2022 13:26	6.29	SU
GC-AP-MW-11	TEMP	Temperature	10/17/2022 13:26	21.42	C
GC-AP-MW-11	TURB	Turbidity	10/17/2022 13:26	0.31	NTU
GC-AP-MW-11	COND	Conductivity	10/17/2022 13:31	551.79	uS/cm
GC-AP-MW-11	DO	DO	10/17/2022 13:31	1.08	mg/L
GC-AP-MW-11	DTW	Depth to Water Detail	10/17/2022 13:31	21.03	ft
GC-AP-MW-11	ORP	Oxidation Reduction Potention	10/17/2022 13:31	9.23	mv
GC-AP-MW-11	PH	pH	10/17/2022 13:31	6.29	SU
GC-AP-MW-11	TEMP	Temperature	10/17/2022 13:31	21.47	C
GC-AP-MW-11	TURB	Turbidity	10/17/2022 13:31	0.25	NTU
GC-AP-MW-11	COND	Conductivity	10/17/2022 13:36	550.76	uS/cm
GC-AP-MW-11	DO	DO	10/17/2022 13:36	1.05	mg/L
GC-AP-MW-11	DTW	Depth to Water Detail	10/17/2022 13:36	21.03	ft
GC-AP-MW-11	ORP	Oxidation Reduction Potention	10/17/2022 13:36	10.33	mv
GC-AP-MW-11	PH	pH	10/17/2022 13:36	6.28	SU
GC-AP-MW-11	SULFIDE	Sulfide	10/17/2022 13:36	0	mg/L
GC-AP-MW-11	TEMP	Temperature	10/17/2022 13:36	21.4	C
GC-AP-MW-11	TURB	Turbidity	10/17/2022 13:36	0.21	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-12	COND	Conductivity	10/17/2022 15:07	486.75	uS/cm
GC-AP-MW-12	DO	DO	10/17/2022 15:07	1.72	mg/L
GC-AP-MW-12	DTW	Depth to Water Detail	10/17/2022 15:07	24.65	ft
GC-AP-MW-12	ORP	Oxidation Reduction Potention	10/17/2022 15:07	37.53	mv
GC-AP-MW-12	PH	pH	10/17/2022 15:07	6.89	SU
GC-AP-MW-12	TEMP	Temperature	10/17/2022 15:07	21.77	C
GC-AP-MW-12	TURB	Turbidity	10/17/2022 15:07	0.25	NTU
GC-AP-MW-12	COND	Conductivity	10/17/2022 15:12	487.71	uS/cm
GC-AP-MW-12	DO	DO	10/17/2022 15:12	1.49	mg/L
GC-AP-MW-12	DTW	Depth to Water Detail	10/17/2022 15:12	24.65	ft
GC-AP-MW-12	ORP	Oxidation Reduction Potention	10/17/2022 15:12	44.01	mv
GC-AP-MW-12	PH	pH	10/17/2022 15:12	6.88	SU
GC-AP-MW-12	TEMP	Temperature	10/17/2022 15:12	21.76	C
GC-AP-MW-12	TURB	Turbidity	10/17/2022 15:12	0.22	NTU
GC-AP-MW-12	COND	Conductivity	10/17/2022 15:17	491.13	uS/cm
GC-AP-MW-12	DO	DO	10/17/2022 15:17	1.39	mg/L
GC-AP-MW-12	DTW	Depth to Water Detail	10/17/2022 15:17	24.65	ft
GC-AP-MW-12	ORP	Oxidation Reduction Potention	10/17/2022 15:17	48.96	mv
GC-AP-MW-12	PH	pH	10/17/2022 15:17	6.88	SU
GC-AP-MW-12	TEMP	Temperature	10/17/2022 15:17	21.82	C
GC-AP-MW-12	TURB	Turbidity	10/17/2022 15:17	0.18	NTU
GC-AP-MW-12	COND	Conductivity	10/17/2022 15:22	492.95	uS/cm
GC-AP-MW-12	DO	DO	10/17/2022 15:22	1.37	mg/L
GC-AP-MW-12	DTW	Depth to Water Detail	10/17/2022 15:22	24.65	ft
GC-AP-MW-12	ORP	Oxidation Reduction Potention	10/17/2022 15:22	49.77	mv
GC-AP-MW-12	PH	pH	10/17/2022 15:22	6.88	SU
GC-AP-MW-12	SULFIDE	Sulfide	10/17/2022 15:22	0	mg/L
GC-AP-MW-12	TEMP	Temperature	10/17/2022 15:22	21.77	C
GC-AP-MW-12	TURB	Turbidity	10/17/2022 15:22	0.16	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-13	COND	Conductivity	10/17/2022 15:57	1040.69	uS/cm
GC-AP-MW-13	DO	DO	10/17/2022 15:57	1.07	mg/L
GC-AP-MW-13	DTW	Depth to Water Detail	10/17/2022 15:57	25.63	ft
GC-AP-MW-13	ORP	Oxidation Reduction Potention	10/17/2022 15:57	112.24	mv
GC-AP-MW-13	PH	pH	10/17/2022 15:57	6.19	SU
GC-AP-MW-13	TEMP	Temperature	10/17/2022 15:57	23.49	C
GC-AP-MW-13	TURB	Turbidity	10/17/2022 15:57	0.42	NTU
GC-AP-MW-13	COND	Conductivity	10/17/2022 16:02	1035.34	uS/cm
GC-AP-MW-13	DO	DO	10/17/2022 16:02	1.05	mg/L
GC-AP-MW-13	DTW	Depth to Water Detail	10/17/2022 16:02	25.63	ft
GC-AP-MW-13	ORP	Oxidation Reduction Potention	10/17/2022 16:02	92.97	mv
GC-AP-MW-13	PH	pH	10/17/2022 16:02	6.19	SU
GC-AP-MW-13	TEMP	Temperature	10/17/2022 16:02	23.47	C
GC-AP-MW-13	TURB	Turbidity	10/17/2022 16:02	0.41	NTU
GC-AP-MW-13	COND	Conductivity	10/17/2022 16:07	1037.06	uS/cm
GC-AP-MW-13	DO	DO	10/17/2022 16:07	1.04	mg/L
GC-AP-MW-13	DTW	Depth to Water Detail	10/17/2022 16:07	25.63	ft
GC-AP-MW-13	ORP	Oxidation Reduction Potention	10/17/2022 16:07	61.59	mv
GC-AP-MW-13	PH	pH	10/17/2022 16:07	6.21	SU
GC-AP-MW-13	TEMP	Temperature	10/17/2022 16:07	23.48	C
GC-AP-MW-13	TURB	Turbidity	10/17/2022 16:07	0.36	NTU
GC-AP-MW-13	COND	Conductivity	10/17/2022 16:12	1035.56	uS/cm
GC-AP-MW-13	DO	DO	10/17/2022 16:12	1.04	mg/L
GC-AP-MW-13	DTW	Depth to Water Detail	10/17/2022 16:12	25.63	ft
GC-AP-MW-13	ORP	Oxidation Reduction Potention	10/17/2022 16:12	53.04	mv
GC-AP-MW-13	PH	pH	10/17/2022 16:12	6.22	SU
GC-AP-MW-13	SULFIDE	Sulfide	10/17/2022 16:12	0	mg/L
GC-AP-MW-13	TEMP	Temperature	10/17/2022 16:12	23.49	C
GC-AP-MW-13	TURB	Turbidity	10/17/2022 16:12	0.32	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-21	COND	Conductivity	10/17/2022 14:12	588.24	uS/cm
GC-AP-MW-21	DO	DO	10/17/2022 14:12	0.4	mg/L
GC-AP-MW-21	DTW	Depth to Water Detail	10/17/2022 14:12	26.22	ft
GC-AP-MW-21	ORP	Oxidation Reduction Potention	10/17/2022 14:12	47.88	mv
GC-AP-MW-21	PH	pH	10/17/2022 14:12	6.3	SU
GC-AP-MW-21	TEMP	Temperature	10/17/2022 14:12	21.78	C
GC-AP-MW-21	TURB	Turbidity	10/17/2022 14:12	0.2	NTU
GC-AP-MW-21	COND	Conductivity	10/17/2022 14:17	586.48	uS/cm
GC-AP-MW-21	DO	DO	10/17/2022 14:17	0.34	mg/L
GC-AP-MW-21	DTW	Depth to Water Detail	10/17/2022 14:17	26.22	ft
GC-AP-MW-21	ORP	Oxidation Reduction Potention	10/17/2022 14:17	56.72	mv
GC-AP-MW-21	PH	pH	10/17/2022 14:17	6.26	SU
GC-AP-MW-21	TEMP	Temperature	10/17/2022 14:17	21.76	C
GC-AP-MW-21	TURB	Turbidity	10/17/2022 14:17	0.15	NTU
GC-AP-MW-21	COND	Conductivity	10/17/2022 14:22	585.78	uS/cm
GC-AP-MW-21	DO	DO	10/17/2022 14:22	0.34	mg/L
GC-AP-MW-21	DTW	Depth to Water Detail	10/17/2022 14:22	26.22	ft
GC-AP-MW-21	ORP	Oxidation Reduction Potention	10/17/2022 14:22	62.53	mv
GC-AP-MW-21	PH	pH	10/17/2022 14:22	6.23	SU
GC-AP-MW-21	TEMP	Temperature	10/17/2022 14:22	21.82	C
GC-AP-MW-21	TURB	Turbidity	10/17/2022 14:22	0.25	NTU
GC-AP-MW-21	COND	Conductivity	10/17/2022 14:27	583.72	uS/cm
GC-AP-MW-21	DO	DO	10/17/2022 14:27	0.33	mg/L
GC-AP-MW-21	DTW	Depth to Water Detail	10/17/2022 14:27	26.22	ft
GC-AP-MW-21	ORP	Oxidation Reduction Potention	10/17/2022 14:27	67.81	mv
GC-AP-MW-21	PH	pH	10/17/2022 14:27	6.21	SU
GC-AP-MW-21	SULFIDE	Sulfide	10/17/2022 14:27	0	mg/L
GC-AP-MW-21	TEMP	Temperature	10/17/2022 14:27	21.81	C
GC-AP-MW-21	TURB	Turbidity	10/17/2022 14:27	0.26	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-41H	COND	Conductivity	10/18/2022 11:04	2567.54	uS/cm
GC-AP-MW-41H	DO	DO	10/18/2022 11:04	0.21	mg/L
GC-AP-MW-41H	DTW	Depth to Water Detail	10/18/2022 11:04	12.55	ft
GC-AP-MW-41H	ORP	Oxidation Reduction Potention	10/18/2022 11:04	-34.96	mv
GC-AP-MW-41H	PH	pH	10/18/2022 11:04	6.38	SU
GC-AP-MW-41H	TEMP	Temperature	10/18/2022 11:04	20.09	C
GC-AP-MW-41H	TURB	Turbidity	10/18/2022 11:04	6.09	NTU
GC-AP-MW-41H	COND	Conductivity	10/18/2022 11:09	2572.8	uS/cm
GC-AP-MW-41H	DO	DO	10/18/2022 11:09	0.17	mg/L
GC-AP-MW-41H	DTW	Depth to Water Detail	10/18/2022 11:09	12.55	ft
GC-AP-MW-41H	ORP	Oxidation Reduction Potention	10/18/2022 11:09	-35.1	mv
GC-AP-MW-41H	PH	pH	10/18/2022 11:09	6.4	SU
GC-AP-MW-41H	TEMP	Temperature	10/18/2022 11:09	20	C
GC-AP-MW-41H	TURB	Turbidity	10/18/2022 11:09	3.87	NTU
GC-AP-MW-41H	COND	Conductivity	10/18/2022 11:14	2579.93	uS/cm
GC-AP-MW-41H	DO	DO	10/18/2022 11:14	0.17	mg/L
GC-AP-MW-41H	DTW	Depth to Water Detail	10/18/2022 11:14	12.55	ft
GC-AP-MW-41H	ORP	Oxidation Reduction Potention	10/18/2022 11:14	-34.69	mv
GC-AP-MW-41H	PH	pH	10/18/2022 11:14	6.4	SU
GC-AP-MW-41H	TEMP	Temperature	10/18/2022 11:14	20.07	C
GC-AP-MW-41H	TURB	Turbidity	10/18/2022 11:14	3.33	NTU
GC-AP-MW-41H	COND	Conductivity	10/18/2022 11:19	2561.04	uS/cm
GC-AP-MW-41H	DO	DO	10/18/2022 11:19	0.16	mg/L
GC-AP-MW-41H	DTW	Depth to Water Detail	10/18/2022 11:19	12.55	ft
GC-AP-MW-41H	ORP	Oxidation Reduction Potention	10/18/2022 11:19	-33.74	mv
GC-AP-MW-41H	PH	pH	10/18/2022 11:19	6.39	SU
GC-AP-MW-41H	SULFIDE	Sulfide	10/18/2022 11:19	0	mg/L
GC-AP-MW-41H	TEMP	Temperature	10/18/2022 11:19	20.15	C
GC-AP-MW-41H	TURB	Turbidity	10/18/2022 11:19	2.15	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-45H	COND	Conductivity	10/18/2022 10:12	2237.87	uS/cm
GC-AP-MW-45H	DO	DO	10/18/2022 10:12	0.18	mg/L
GC-AP-MW-45H	DTW	Depth to Water Detail	10/18/2022 10:12	21.02	ft
GC-AP-MW-45H	ORP	Oxidation Reduction Potention	10/18/2022 10:12	45.48	mv
GC-AP-MW-45H	PH	pH	10/18/2022 10:12	6.33	SU
GC-AP-MW-45H	TEMP	Temperature	10/18/2022 10:12	20.86	C
GC-AP-MW-45H	TURB	Turbidity	10/18/2022 10:12	10.47	NTU
GC-AP-MW-45H	COND	Conductivity	10/18/2022 10:17	2248.11	uS/cm
GC-AP-MW-45H	DO	DO	10/18/2022 10:17	0.17	mg/L
GC-AP-MW-45H	DTW	Depth to Water Detail	10/18/2022 10:17	21.02	ft
GC-AP-MW-45H	ORP	Oxidation Reduction Potention	10/18/2022 10:17	41.9	mv
GC-AP-MW-45H	PH	pH	10/18/2022 10:17	6.35	SU
GC-AP-MW-45H	TEMP	Temperature	10/18/2022 10:17	20.84	C
GC-AP-MW-45H	TURB	Turbidity	10/18/2022 10:17	8.98	NTU
GC-AP-MW-45H	COND	Conductivity	10/18/2022 10:22	2254.1	uS/cm
GC-AP-MW-45H	DO	DO	10/18/2022 10:22	0.16	mg/L
GC-AP-MW-45H	DTW	Depth to Water Detail	10/18/2022 10:22	21.02	ft
GC-AP-MW-45H	ORP	Oxidation Reduction Potention	10/18/2022 10:22	39.37	mv
GC-AP-MW-45H	PH	pH	10/18/2022 10:22	6.37	SU
GC-AP-MW-45H	TEMP	Temperature	10/18/2022 10:22	20.85	C
GC-AP-MW-45H	TURB	Turbidity	10/18/2022 10:22	5.97	NTU
GC-AP-MW-45H	COND	Conductivity	10/18/2022 10:27	2256.94	uS/cm
GC-AP-MW-45H	DO	DO	10/18/2022 10:27	0.15	mg/L
GC-AP-MW-45H	DTW	Depth to Water Detail	10/18/2022 10:27	21.02	ft
GC-AP-MW-45H	ORP	Oxidation Reduction Potention	10/18/2022 10:27	37.3	mv
GC-AP-MW-45H	PH	pH	10/18/2022 10:27	6.38	SU
GC-AP-MW-45H	SULFIDE	Sulfide	10/18/2022 10:27	0	mg/L
GC-AP-MW-45H	TEMP	Temperature	10/18/2022 10:27	20.79	C
GC-AP-MW-45H	TURB	Turbidity	10/18/2022 10:27	4.45	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-48H	COND	Conductivity	10/18/2022 9:04	2000.77	uS/cm
GC-AP-MW-48H	DO	DO	10/18/2022 9:04	0.28	mg/L
GC-AP-MW-48H	DTW	Depth to Water Detail	10/18/2022 9:04	11.08	ft
GC-AP-MW-48H	ORP	Oxidation Reduction Potention	10/18/2022 9:04	226.71	mv
GC-AP-MW-48H	PH	pH	10/18/2022 9:04	5.03	SU
GC-AP-MW-48H	TEMP	Temperature	10/18/2022 9:04	19.64	C
GC-AP-MW-48H	TURB	Turbidity	10/18/2022 9:04	0.14	NTU
GC-AP-MW-48H	COND	Conductivity	10/18/2022 9:09	1989.78	uS/cm
GC-AP-MW-48H	DO	DO	10/18/2022 9:09	0.19	mg/L
GC-AP-MW-48H	DTW	Depth to Water Detail	10/18/2022 9:09	11.08	ft
GC-AP-MW-48H	ORP	Oxidation Reduction Potention	10/18/2022 9:09	242.48	mv
GC-AP-MW-48H	PH	pH	10/18/2022 9:09	5.09	SU
GC-AP-MW-48H	TEMP	Temperature	10/18/2022 9:09	19.62	C
GC-AP-MW-48H	TURB	Turbidity	10/18/2022 9:09	0.1	NTU
GC-AP-MW-48H	COND	Conductivity	10/18/2022 9:14	1990.82	uS/cm
GC-AP-MW-48H	DO	DO	10/18/2022 9:14	0.16	mg/L
GC-AP-MW-48H	DTW	Depth to Water Detail	10/18/2022 9:14	11.08	ft
GC-AP-MW-48H	ORP	Oxidation Reduction Potention	10/18/2022 9:14	247.41	mv
GC-AP-MW-48H	PH	pH	10/18/2022 9:14	5.1	SU
GC-AP-MW-48H	TEMP	Temperature	10/18/2022 9:14	19.65	C
GC-AP-MW-48H	TURB	Turbidity	10/18/2022 9:14	0.11	NTU
GC-AP-MW-48H	COND	Conductivity	10/18/2022 9:19	1994.48	uS/cm
GC-AP-MW-48H	DO	DO	10/18/2022 9:19	0.15	mg/L
GC-AP-MW-48H	DTW	Depth to Water Detail	10/18/2022 9:19	11.08	ft
GC-AP-MW-48H	ORP	Oxidation Reduction Potention	10/18/2022 9:19	244.28	mv
GC-AP-MW-48H	PH	pH	10/18/2022 9:19	5.14	SU
GC-AP-MW-48H	SULFIDE	Sulfide	10/18/2022 9:19	0	mg/L
GC-AP-MW-48H	TEMP	Temperature	10/18/2022 9:19	19.68	C
GC-AP-MW-48H	TURB	Turbidity	10/18/2022 9:19	0.08	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:10	774.62	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:10	0.21	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:10	13.22	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:10	-77.78	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:10	6.27	SU
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:10	22.6	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:10	75.2	NTU
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:15	866.36	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:15	0.13	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:15	13.31	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:15	-84.17	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:15	6.32	SU
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:15	22.67	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:15	69	NTU
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:20	852.72	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:20	0.12	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:20	13.24	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:20	-83.91	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:20	6.35	SU
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:20	22.57	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:20	54.7	NTU
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:25	844.46	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:25	0.11	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:25	13.21	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:25	-88.19	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:25	6.38	SU
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:25	22.55	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:25	16.3	NTU
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:30	851.04	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:30	0.1	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:30	13.21	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:30	-90.35	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:30	6.4	SU
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:30	22.58	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:30	11.7	NTU
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:35	855.19	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:35	0.1	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:35	13.21	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:35	-92.33	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:35	6.42	SU
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:35	22.68	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:35	9.32	NTU
GC-AP-MW-53H	COND	Conductivity	10/17/2022 11:40	855.19	uS/cm
GC-AP-MW-53H	DO	DO	10/17/2022 11:40	0.1	mg/L
GC-AP-MW-53H	DTW	Depth to Water Detail	10/17/2022 11:40	13.21	ft
GC-AP-MW-53H	ORP	Oxidation Reduction Potention	10/17/2022 11:40	-93.56	mv
GC-AP-MW-53H	PH	pH	10/17/2022 11:40	6.43	SU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-53H	SULFIDE	Sulfide	10/17/2022 11:40	0	mg/L
GC-AP-MW-53H	TEMP	Temperature	10/17/2022 11:40	22.69	C
GC-AP-MW-53H	TURB	Turbidity	10/17/2022 11:40	8.19	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-25	COND	Conductivity	10/18/2022 14:41	405.66	uS/cm
GC-AP-MW-25	DO	DO	10/18/2022 14:41	0.84	mg/L
GC-AP-MW-25	DTW	Depth to Water Detail	10/18/2022 14:41	15.78	ft
GC-AP-MW-25	ORP	Oxidation Reduction Potention	10/18/2022 14:41	91.33	mv
GC-AP-MW-25	PH	pH	10/18/2022 14:41	5.67	SU
GC-AP-MW-25	TEMP	Temperature	10/18/2022 14:41	20.08	C
GC-AP-MW-25	TURB	Turbidity	10/18/2022 14:41	3.38	NTU
GC-AP-MW-25	COND	Conductivity	10/18/2022 14:46	420.25	uS/cm
GC-AP-MW-25	DO	DO	10/18/2022 14:46	0.65	mg/L
GC-AP-MW-25	DTW	Depth to Water Detail	10/18/2022 14:46	15.78	ft
GC-AP-MW-25	ORP	Oxidation Reduction Potention	10/18/2022 14:46	55.32	mv
GC-AP-MW-25	PH	pH	10/18/2022 14:46	5.84	SU
GC-AP-MW-25	TEMP	Temperature	10/18/2022 14:46	19.92	C
GC-AP-MW-25	TURB	Turbidity	10/18/2022 14:46	1.68	NTU
GC-AP-MW-25	COND	Conductivity	10/18/2022 14:51	406.41	uS/cm
GC-AP-MW-25	DO	DO	10/18/2022 14:51	0.57	mg/L
GC-AP-MW-25	DTW	Depth to Water Detail	10/18/2022 14:51	15.78	ft
GC-AP-MW-25	ORP	Oxidation Reduction Potention	10/18/2022 14:51	54.58	mv
GC-AP-MW-25	PH	pH	10/18/2022 14:51	5.85	SU
GC-AP-MW-25	TEMP	Temperature	10/18/2022 14:51	19.93	C
GC-AP-MW-25	TURB	Turbidity	10/18/2022 14:51	1.5	NTU
GC-AP-MW-25	COND	Conductivity	10/18/2022 14:56	405.24	uS/cm
GC-AP-MW-25	DO	DO	10/18/2022 14:56	0.54	mg/L
GC-AP-MW-25	DTW	Depth to Water Detail	10/18/2022 14:56	15.78	ft
GC-AP-MW-25	ORP	Oxidation Reduction Potention	10/18/2022 14:56	53.14	mv
GC-AP-MW-25	PH	pH	10/18/2022 14:56	5.88	SU
GC-AP-MW-25	SULFIDE	Sulfide	10/18/2022 14:56	0	mg/L
GC-AP-MW-25	TEMP	Temperature	10/18/2022 14:56	20.06	C
GC-AP-MW-25	TURB	Turbidity	10/18/2022 14:56	1.71	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-6	COND	Conductivity	10/18/2022 8:51	1058.75	uS/cm
GC-AP-MW-6	DO	DO	10/18/2022 8:51	0.91	mg/L
GC-AP-MW-6	DTW	Depth to Water Detail	10/18/2022 8:51	16.48	ft
GC-AP-MW-6	ORP	Oxidation Reduction Potention	10/18/2022 8:51	178.48	mv
GC-AP-MW-6	PH	pH	10/18/2022 8:51	6.32	SU
GC-AP-MW-6	TEMP	Temperature	10/18/2022 8:51	19.87	C
GC-AP-MW-6	TURB	Turbidity	10/18/2022 8:51	1.24	NTU
GC-AP-MW-6	COND	Conductivity	10/18/2022 8:56	1166.27	uS/cm
GC-AP-MW-6	DO	DO	10/18/2022 8:56	0.71	mg/L
GC-AP-MW-6	DTW	Depth to Water Detail	10/18/2022 8:56	16.48	ft
GC-AP-MW-6	ORP	Oxidation Reduction Potention	10/18/2022 8:56	155.33	mv
GC-AP-MW-6	PH	pH	10/18/2022 8:56	6.35	SU
GC-AP-MW-6	TEMP	Temperature	10/18/2022 8:56	19.79	C
GC-AP-MW-6	TURB	Turbidity	10/18/2022 8:56	0.8	NTU
GC-AP-MW-6	COND	Conductivity	10/18/2022 9:01	1188.37	uS/cm
GC-AP-MW-6	DO	DO	10/18/2022 9:01	0.62	mg/L
GC-AP-MW-6	DTW	Depth to Water Detail	10/18/2022 9:01	16.48	ft
GC-AP-MW-6	ORP	Oxidation Reduction Potention	10/18/2022 9:01	90.07	mv
GC-AP-MW-6	PH	pH	10/18/2022 9:01	6.36	SU
GC-AP-MW-6	TEMP	Temperature	10/18/2022 9:01	20.04	C
GC-AP-MW-6	TURB	Turbidity	10/18/2022 9:01	1.34	NTU
GC-AP-MW-6	COND	Conductivity	10/18/2022 9:06	1192.42	uS/cm
GC-AP-MW-6	DO	DO	10/18/2022 9:06	0.58	mg/L
GC-AP-MW-6	DTW	Depth to Water Detail	10/18/2022 9:06	16.48	ft
GC-AP-MW-6	ORP	Oxidation Reduction Potention	10/18/2022 9:06	47.92	mv
GC-AP-MW-6	PH	pH	10/18/2022 9:06	6.38	SU
GC-AP-MW-6	SULFIDE	Sulfide	10/18/2022 9:06	0	mg/L
GC-AP-MW-6	TEMP	Temperature	10/18/2022 9:06	19.78	C
GC-AP-MW-6	TURB	Turbidity	10/18/2022 9:06	1.44	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-7	COND	Conductivity	10/18/2022 9:43	1715.04	uS/cm
GC-AP-MW-7	DO	DO	10/18/2022 9:43	0.67	mg/L
GC-AP-MW-7	DTW	Depth to Water Detail	10/18/2022 9:43	15.48	ft
GC-AP-MW-7	ORP	Oxidation Reduction Potention	10/18/2022 9:43	67.37	mv
GC-AP-MW-7	PH	pH	10/18/2022 9:43	6.35	SU
GC-AP-MW-7	TEMP	Temperature	10/18/2022 9:43	19.28	C
GC-AP-MW-7	TURB	Turbidity	10/18/2022 9:43	0.78	NTU
GC-AP-MW-7	COND	Conductivity	10/18/2022 9:48	1705.57	uS/cm
GC-AP-MW-7	DO	DO	10/18/2022 9:48	0.51	mg/L
GC-AP-MW-7	DTW	Depth to Water Detail	10/18/2022 9:48	15.48	ft
GC-AP-MW-7	ORP	Oxidation Reduction Potention	10/18/2022 9:48	70.61	mv
GC-AP-MW-7	PH	pH	10/18/2022 9:48	6.36	SU
GC-AP-MW-7	TEMP	Temperature	10/18/2022 9:48	19.28	C
GC-AP-MW-7	TURB	Turbidity	10/18/2022 9:48	1.12	NTU
GC-AP-MW-7	COND	Conductivity	10/18/2022 9:53	1696.33	uS/cm
GC-AP-MW-7	DO	DO	10/18/2022 9:53	0.44	mg/L
GC-AP-MW-7	DTW	Depth to Water Detail	10/18/2022 9:53	15.48	ft
GC-AP-MW-7	ORP	Oxidation Reduction Potention	10/18/2022 9:53	71.96	mv
GC-AP-MW-7	PH	pH	10/18/2022 9:53	6.37	SU
GC-AP-MW-7	TEMP	Temperature	10/18/2022 9:53	19.39	C
GC-AP-MW-7	TURB	Turbidity	10/18/2022 9:53	1.01	NTU
GC-AP-MW-7	COND	Conductivity	10/18/2022 9:58	1689.93	uS/cm
GC-AP-MW-7	DO	DO	10/18/2022 9:58	0.41	mg/L
GC-AP-MW-7	DTW	Depth to Water Detail	10/18/2022 9:58	15.48	ft
GC-AP-MW-7	ORP	Oxidation Reduction Potention	10/18/2022 9:58	71.58	mv
GC-AP-MW-7	PH	pH	10/18/2022 9:58	6.37	SU
GC-AP-MW-7	SULFIDE	Sulfide	10/18/2022 9:58	0	mg/L
GC-AP-MW-7	TEMP	Temperature	10/18/2022 9:58	19.45	C
GC-AP-MW-7	TURB	Turbidity	10/18/2022 9:58	1.07	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-8	COND	Conductivity	10/18/2022 10:19	1248.77	uS/cm
GC-AP-MW-8	DO	DO	10/18/2022 10:19	0.87	mg/L
GC-AP-MW-8	DTW	Depth to Water Detail	10/18/2022 10:19	14.9	ft
GC-AP-MW-8	ORP	Oxidation Reduction Potention	10/18/2022 10:19	202.51	mv
GC-AP-MW-8	PH	pH	10/18/2022 10:19	6.46	SU
GC-AP-MW-8	TEMP	Temperature	10/18/2022 10:19	19.27	C
GC-AP-MW-8	TURB	Turbidity	10/18/2022 10:19	0.94	NTU
GC-AP-MW-8	COND	Conductivity	10/18/2022 10:24	1206.01	uS/cm
GC-AP-MW-8	DO	DO	10/18/2022 10:24	0.59	mg/L
GC-AP-MW-8	DTW	Depth to Water Detail	10/18/2022 10:24	14.9	ft
GC-AP-MW-8	ORP	Oxidation Reduction Potention	10/18/2022 10:24	116.03	mv
GC-AP-MW-8	PH	pH	10/18/2022 10:24	6.45	SU
GC-AP-MW-8	TEMP	Temperature	10/18/2022 10:24	19.46	C
GC-AP-MW-8	TURB	Turbidity	10/18/2022 10:24	1.03	NTU
GC-AP-MW-8	COND	Conductivity	10/18/2022 10:29	1178.24	uS/cm
GC-AP-MW-8	DO	DO	10/18/2022 10:29	0.48	mg/L
GC-AP-MW-8	DTW	Depth to Water Detail	10/18/2022 10:29	14.9	ft
GC-AP-MW-8	ORP	Oxidation Reduction Potention	10/18/2022 10:29	-35.62	mv
GC-AP-MW-8	PH	pH	10/18/2022 10:29	6.45	SU
GC-AP-MW-8	TEMP	Temperature	10/18/2022 10:29	19.44	C
GC-AP-MW-8	TURB	Turbidity	10/18/2022 10:29	0.92	NTU
GC-AP-MW-8	COND	Conductivity	10/18/2022 10:34	1169.69	uS/cm
GC-AP-MW-8	DO	DO	10/18/2022 10:34	0.45	mg/L
GC-AP-MW-8	DTW	Depth to Water Detail	10/18/2022 10:34	14.9	ft
GC-AP-MW-8	ORP	Oxidation Reduction Potention	10/18/2022 10:34	-58.45	mv
GC-AP-MW-8	PH	pH	10/18/2022 10:34	6.45	SU
GC-AP-MW-8	SULFIDE	Sulfide	10/18/2022 10:34	0	mg/L
GC-AP-MW-8	TEMP	Temperature	10/18/2022 10:34	19.1	C
GC-AP-MW-8	TURB	Turbidity	10/18/2022 10:34	0.82	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-9	COND	Conductivity	10/18/2022 10:54	1146.47	uS/cm
GC-AP-MW-9	DO	DO	10/18/2022 10:54	0.57	mg/L
GC-AP-MW-9	DTW	Depth to Water Detail	10/18/2022 10:54	12.18	ft
GC-AP-MW-9	ORP	Oxidation Reduction Potention	10/18/2022 10:54	-40.07	mv
GC-AP-MW-9	PH	pH	10/18/2022 10:54	6.32	SU
GC-AP-MW-9	TEMP	Temperature	10/18/2022 10:54	19.43	C
GC-AP-MW-9	TURB	Turbidity	10/18/2022 10:54	0.96	NTU
GC-AP-MW-9	COND	Conductivity	10/18/2022 10:59	1131.69	uS/cm
GC-AP-MW-9	DO	DO	10/18/2022 10:59	0.41	mg/L
GC-AP-MW-9	DTW	Depth to Water Detail	10/18/2022 10:59	12.18	ft
GC-AP-MW-9	ORP	Oxidation Reduction Potention	10/18/2022 10:59	-33.39	mv
GC-AP-MW-9	PH	pH	10/18/2022 10:59	6.29	SU
GC-AP-MW-9	TEMP	Temperature	10/18/2022 10:59	19.27	C
GC-AP-MW-9	TURB	Turbidity	10/18/2022 10:59	1.19	NTU
GC-AP-MW-9	COND	Conductivity	10/18/2022 11:04	1124.12	uS/cm
GC-AP-MW-9	DO	DO	10/18/2022 11:04	0.36	mg/L
GC-AP-MW-9	DTW	Depth to Water Detail	10/18/2022 11:04	12.18	ft
GC-AP-MW-9	ORP	Oxidation Reduction Potention	10/18/2022 11:04	-29.45	mv
GC-AP-MW-9	PH	pH	10/18/2022 11:04	6.27	SU
GC-AP-MW-9	TEMP	Temperature	10/18/2022 11:04	19.19	C
GC-AP-MW-9	TURB	Turbidity	10/18/2022 11:04	1.17	NTU
GC-AP-MW-9	COND	Conductivity	10/18/2022 11:09	1124.35	uS/cm
GC-AP-MW-9	DO	DO	10/18/2022 11:09	0.34	mg/L
GC-AP-MW-9	DTW	Depth to Water Detail	10/18/2022 11:09	12.18	ft
GC-AP-MW-9	ORP	Oxidation Reduction Potention	10/18/2022 11:09	-27.72	mv
GC-AP-MW-9	PH	pH	10/18/2022 11:09	6.27	SU
GC-AP-MW-9	SULFIDE	Sulfide	10/18/2022 11:09	0	mg/L
GC-AP-MW-9	TEMP	Temperature	10/18/2022 11:09	19.2	C
GC-AP-MW-9	TURB	Turbidity	10/18/2022 11:09	0.93	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-10	COND	Conductivity	10/18/2022 15:37	706.83	uS/cm
GC-AP-MW-10	DO	DO	10/18/2022 15:37	0.62	mg/L
GC-AP-MW-10	DTW	Depth to Water Detail	10/18/2022 15:37	8.87	ft
GC-AP-MW-10	ORP	Oxidation Reduction Potention	10/18/2022 15:37		mv
GC-AP-MW-10	PH	pH	10/18/2022 15:37		SU
GC-AP-MW-10	TEMP	Temperature	10/18/2022 15:37	19.93	C
GC-AP-MW-10	TURB	Turbidity	10/18/2022 15:37	4.55	NTU
GC-AP-MW-10	COND	Conductivity	10/18/2022 15:42	699.77	uS/cm
GC-AP-MW-10	DO	DO	10/18/2022 15:42	0.48	mg/L
GC-AP-MW-10	DTW	Depth to Water Detail	10/18/2022 15:42	8.87	ft
GC-AP-MW-10	ORP	Oxidation Reduction Potention	10/18/2022 15:42	-63.21	mv
GC-AP-MW-10	PH	pH	10/18/2022 15:42	6.6	SU
GC-AP-MW-10	TEMP	Temperature	10/18/2022 15:42	19.8	C
GC-AP-MW-10	TURB	Turbidity	10/18/2022 15:42	2.44	NTU
GC-AP-MW-10	COND	Conductivity	10/18/2022 15:47	695.46	uS/cm
GC-AP-MW-10	DO	DO	10/18/2022 15:47	0.45	mg/L
GC-AP-MW-10	DTW	Depth to Water Detail	10/18/2022 15:47	8.87	ft
GC-AP-MW-10	ORP	Oxidation Reduction Potention	10/18/2022 15:47	-60.76	mv
GC-AP-MW-10	PH	pH	10/18/2022 15:47	6.61	SU
GC-AP-MW-10	TEMP	Temperature	10/18/2022 15:47	19.27	C
GC-AP-MW-10	TURB	Turbidity	10/18/2022 15:47	2.49	NTU
GC-AP-MW-10	COND	Conductivity	10/18/2022 15:52	705.85	uS/cm
GC-AP-MW-10	DO	DO	10/18/2022 15:52	0.41	mg/L
GC-AP-MW-10	DTW	Depth to Water Detail	10/18/2022 15:52	8.87	ft
GC-AP-MW-10	ORP	Oxidation Reduction Potention	10/18/2022 15:52	-61.01	mv
GC-AP-MW-10	PH	pH	10/18/2022 15:52	6.62	SU
GC-AP-MW-10	SULFIDE	Sulfide	10/18/2022 15:52	0	mg/L
GC-AP-MW-10	TEMP	Temperature	10/18/2022 15:52	18.35	C
GC-AP-MW-10	TURB	Turbidity	10/18/2022 15:52	1.23	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-23	COND	Conductivity	10/17/2022 14:44	145.9	uS/cm
GC-AP-MW-23	DO	DO	10/17/2022 14:44	5.31	mg/L
GC-AP-MW-23	DTW	Depth to Water Detail	10/17/2022 14:44	15.8	ft
GC-AP-MW-23	ORP	Oxidation Reduction Potention	10/17/2022 14:44	196.22	mv
GC-AP-MW-23	PH	pH	10/17/2022 14:44	6.3	SU
GC-AP-MW-23	TEMP	Temperature	10/17/2022 14:44	22.63	C
GC-AP-MW-23	TURB	Turbidity	10/17/2022 14:44	5.8	NTU
GC-AP-MW-23	COND	Conductivity	10/17/2022 14:49	142.9	uS/cm
GC-AP-MW-23	DO	DO	10/17/2022 14:49	5.51	mg/L
GC-AP-MW-23	DTW	Depth to Water Detail	10/17/2022 14:49	15.8	ft
GC-AP-MW-23	ORP	Oxidation Reduction Potention	10/17/2022 14:49	198.11	mv
GC-AP-MW-23	PH	pH	10/17/2022 14:49	6.26	SU
GC-AP-MW-23	TEMP	Temperature	10/17/2022 14:49	22.59	C
GC-AP-MW-23	TURB	Turbidity	10/17/2022 14:49	4.05	NTU
GC-AP-MW-23	COND	Conductivity	10/17/2022 14:54	138.17	uS/cm
GC-AP-MW-23	DO	DO	10/17/2022 14:54	5.57	mg/L
GC-AP-MW-23	DTW	Depth to Water Detail	10/17/2022 14:54	15.8	ft
GC-AP-MW-23	ORP	Oxidation Reduction Potention	10/17/2022 14:54	199.76	mv
GC-AP-MW-23	PH	pH	10/17/2022 14:54	6.22	SU
GC-AP-MW-23	TEMP	Temperature	10/17/2022 14:54	22.57	C
GC-AP-MW-23	TURB	Turbidity	10/17/2022 14:54	3.19	NTU
GC-AP-MW-23	COND	Conductivity	10/17/2022 14:59	137.05	uS/cm
GC-AP-MW-23	DO	DO	10/17/2022 14:59	5.51	mg/L
GC-AP-MW-23	DTW	Depth to Water Detail	10/17/2022 14:59	15.8	ft
GC-AP-MW-23	ORP	Oxidation Reduction Potention	10/17/2022 14:59	199.87	mv
GC-AP-MW-23	PH	pH	10/17/2022 14:59	6.22	SU
GC-AP-MW-23	SULFIDE	Sulfide	10/17/2022 14:59	0	mg/L
GC-AP-MW-23	TEMP	Temperature	10/17/2022 14:59	22.6	C
GC-AP-MW-23	TURB	Turbidity	10/17/2022 14:59	2.86	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-24	COND	Conductivity	10/17/2022 13:56	172.55	uS/cm
GC-AP-MW-24	DO	DO	10/17/2022 13:56	4.46	mg/L
GC-AP-MW-24	DTW	Depth to Water Detail	10/17/2022 13:56	19.32	ft
GC-AP-MW-24	ORP	Oxidation Reduction Potention	10/17/2022 13:56	262.27	mv
GC-AP-MW-24	PH	pH	10/17/2022 13:56	5.12	SU
GC-AP-MW-24	TEMP	Temperature	10/17/2022 13:56	22.24	C
GC-AP-MW-24	TURB	Turbidity	10/17/2022 13:56	2.37	NTU
GC-AP-MW-24	COND	Conductivity	10/17/2022 14:01	184.81	uS/cm
GC-AP-MW-24	DO	DO	10/17/2022 14:01	4.37	mg/L
GC-AP-MW-24	DTW	Depth to Water Detail	10/17/2022 14:01	19.32	ft
GC-AP-MW-24	ORP	Oxidation Reduction Potention	10/17/2022 14:01	284.13	mv
GC-AP-MW-24	PH	pH	10/17/2022 14:01	5.14	SU
GC-AP-MW-24	TEMP	Temperature	10/17/2022 14:01	22.13	C
GC-AP-MW-24	TURB	Turbidity	10/17/2022 14:01	1.67	NTU
GC-AP-MW-24	COND	Conductivity	10/17/2022 14:06	195.29	uS/cm
GC-AP-MW-24	DO	DO	10/17/2022 14:06	4.28	mg/L
GC-AP-MW-24	DTW	Depth to Water Detail	10/17/2022 14:06	19.32	ft
GC-AP-MW-24	ORP	Oxidation Reduction Potention	10/17/2022 14:06	233.49	mv
GC-AP-MW-24	PH	pH	10/17/2022 14:06	5.18	SU
GC-AP-MW-24	TEMP	Temperature	10/17/2022 14:06	22.08	C
GC-AP-MW-24	TURB	Turbidity	10/17/2022 14:06	1.67	NTU
GC-AP-MW-24	COND	Conductivity	10/17/2022 14:11	202.06	uS/cm
GC-AP-MW-24	DO	DO	10/17/2022 14:11	3.92	mg/L
GC-AP-MW-24	DTW	Depth to Water Detail	10/17/2022 14:11	19.32	ft
GC-AP-MW-24	ORP	Oxidation Reduction Potention	10/17/2022 14:11	239.09	mv
GC-AP-MW-24	PH	pH	10/17/2022 14:11	5.2	SU
GC-AP-MW-24	TEMP	Temperature	10/17/2022 14:11	22.08	C
GC-AP-MW-24	TURB	Turbidity	10/17/2022 14:11	1.44	NTU
GC-AP-MW-24	COND	Conductivity	10/17/2022 14:16	207.82	uS/cm
GC-AP-MW-24	DO	DO	10/17/2022 14:16	4.24	mg/L
GC-AP-MW-24	DTW	Depth to Water Detail	10/17/2022 14:16	19.32	ft
GC-AP-MW-24	ORP	Oxidation Reduction Potention	10/17/2022 14:16	250.38	mv
GC-AP-MW-24	PH	pH	10/17/2022 14:16	5.2	SU
GC-AP-MW-24	TEMP	Temperature	10/17/2022 14:16	22.03	C
GC-AP-MW-24	TURB	Turbidity	10/17/2022 14:16	1.06	NTU
GC-AP-MW-24	COND	Conductivity	10/17/2022 14:21	212.05	uS/cm
GC-AP-MW-24	DO	DO	10/17/2022 14:21	4.23	mg/L
GC-AP-MW-24	DTW	Depth to Water Detail	10/17/2022 14:21	19.32	ft
GC-AP-MW-24	ORP	Oxidation Reduction Potention	10/17/2022 14:21	261.09	mv
GC-AP-MW-24	PH	pH	10/17/2022 14:21	5.22	SU
GC-AP-MW-24	SULFIDE	Sulfide	10/17/2022 14:21	0	mg/L
GC-AP-MW-24	TEMP	Temperature	10/17/2022 14:21	22.02	C
GC-AP-MW-24	TURB	Turbidity	10/17/2022 14:21	1.39	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:27	982.33	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:27	0.99	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:27	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:27	-62.27	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:27	6.49	SU
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:27	19.49	C
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:27	3.69	NTU
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:32	976.48	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:32	0.56	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:32	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:32	-63.57	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:32	6.48	SU
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:32	19.47	C
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:32	3.04	NTU
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:37	947.83	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:37	0.43	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:37	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:37	-63.16	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:37	6.48	SU
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:37	19.5	C
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:37	2.06	NTU
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:42	914.13	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:42	0.38	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:42	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:42	-63.1	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:42	6.48	SU
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:42	19.48	C
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:42	2.05	NTU
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:47	1019.77	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:47	0.36	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:47	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:47	-62.08	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:47	6.47	SU
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:47	19.44	C
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:47	1.42	NTU
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:52	1013.54	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:52	0.33	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:52	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:52	-62.17	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:52	6.47	SU
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:52	19.48	C
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:52	1.52	NTU
GC-AP-MW-14	COND	Conductivity	10/18/2022 16:57	1010.33	uS/cm
GC-AP-MW-14	DO	DO	10/18/2022 16:57	0.32	mg/L
GC-AP-MW-14	DTW	Depth to Water Detail	10/18/2022 16:57	10.48	ft
GC-AP-MW-14	ORP	Oxidation Reduction Potention	10/18/2022 16:57	-61.69	mv
GC-AP-MW-14	PH	pH	10/18/2022 16:57	6.46	SU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-14	SULFIDE	Sulfide	10/18/2022 16:57	0	mg/L
GC-AP-MW-14	TEMP	Temperature	10/18/2022 16:57	19.48	C

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-14	TURB	Turbidity	10/18/2022 16:57	1.47	NTU
GC-AP-MW-34HA	COND	Conductivity	10/19/2022 7:33	133.26	uS/cm
GC-AP-MW-34HA	DO	DO	10/19/2022 7:33	2.34	mg/L
GC-AP-MW-34HA	DTW	Depth to Water Detail	10/19/2022 7:33	23.25	ft
GC-AP-MW-34HA	ORP	Oxidation Reduction Potention	10/19/2022 7:33	111.46	mv
GC-AP-MW-34HA	PH	pH	10/19/2022 7:33	5.27	SU
GC-AP-MW-34HA	TEMP	Temperature	10/19/2022 7:33	21.8	C
GC-AP-MW-34HA	TURB	Turbidity	10/19/2022 7:33	6.55	NTU
GC-AP-MW-34HA	COND	Conductivity	10/19/2022 7:38	134.8	uS/cm
GC-AP-MW-34HA	DO	DO	10/19/2022 7:38	2.15	mg/L
GC-AP-MW-34HA	DTW	Depth to Water Detail	10/19/2022 7:38	23.25	ft
GC-AP-MW-34HA	ORP	Oxidation Reduction Potention	10/19/2022 7:38	140.83	mv
GC-AP-MW-34HA	PH	pH	10/19/2022 7:38	5.32	SU
GC-AP-MW-34HA	TEMP	Temperature	10/19/2022 7:38	21.86	C
GC-AP-MW-34HA	TURB	Turbidity	10/19/2022 7:38	3.14	NTU
GC-AP-MW-34HA	COND	Conductivity	10/19/2022 7:43	135.96	uS/cm
GC-AP-MW-34HA	DO	DO	10/19/2022 7:43	2.11	mg/L
GC-AP-MW-34HA	DTW	Depth to Water Detail	10/19/2022 7:43	23.25	ft
GC-AP-MW-34HA	ORP	Oxidation Reduction Potention	10/19/2022 7:43	164.3	mv
GC-AP-MW-34HA	PH	pH	10/19/2022 7:43	5.36	SU
GC-AP-MW-34HA	TEMP	Temperature	10/19/2022 7:43	21.85	C
GC-AP-MW-34HA	TURB	Turbidity	10/19/2022 7:43	3.1	NTU
GC-AP-MW-34HA	COND	Conductivity	10/19/2022 7:48	136.77	uS/cm
GC-AP-MW-34HA	DO	DO	10/19/2022 7:48	2.09	mg/L
GC-AP-MW-34HA	DTW	Depth to Water Detail	10/19/2022 7:48	23.25	ft
GC-AP-MW-34HA	ORP	Oxidation Reduction Potention	10/19/2022 7:48	182	mv
GC-AP-MW-34HA	PH	pH	10/19/2022 7:48	5.42	SU
GC-AP-MW-34HA	SULFIDE	Sulfide	10/19/2022 7:48	0	mg/L
GC-AP-MW-34HA	TEMP	Temperature	10/19/2022 7:48	21.66	C
GC-AP-MW-34HA	TURB	Turbidity	10/19/2022 7:48	2.35	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-35H	COND	Conductivity	10/17/2022 13:16	156.69	uS/cm
GC-AP-MW-35H	DO	DO	10/17/2022 13:16	7.26	mg/L
GC-AP-MW-35H	DTW	Depth to Water Detail	10/17/2022 13:16	22.52	ft
GC-AP-MW-35H	ORP	Oxidation Reduction Potention	10/17/2022 13:16	131.65	mv
GC-AP-MW-35H	PH	pH	10/17/2022 13:16	6.18	SU
GC-AP-MW-35H	TEMP	Temperature	10/17/2022 13:16	22.01	C
GC-AP-MW-35H	TURB	Turbidity	10/17/2022 13:16	1.02	NTU
GC-AP-MW-35H	COND	Conductivity	10/17/2022 13:21	157.24	uS/cm
GC-AP-MW-35H	DO	DO	10/17/2022 13:21	7.12	mg/L
GC-AP-MW-35H	DTW	Depth to Water Detail	10/17/2022 13:21	22.52	ft
GC-AP-MW-35H	ORP	Oxidation Reduction Potention	10/17/2022 13:21	158.72	mv
GC-AP-MW-35H	PH	pH	10/17/2022 13:21	6.19	SU
GC-AP-MW-35H	TEMP	Temperature	10/17/2022 13:21	21.91	C
GC-AP-MW-35H	TURB	Turbidity	10/17/2022 13:21	1.38	NTU
GC-AP-MW-35H	COND	Conductivity	10/17/2022 13:26	157.02	uS/cm
GC-AP-MW-35H	DO	DO	10/17/2022 13:26	7.06	mg/L
GC-AP-MW-35H	DTW	Depth to Water Detail	10/17/2022 13:26	22.52	ft
GC-AP-MW-35H	ORP	Oxidation Reduction Potention	10/17/2022 13:26	167.29	mv
GC-AP-MW-35H	PH	pH	10/17/2022 13:26	6.17	SU
GC-AP-MW-35H	TEMP	Temperature	10/17/2022 13:26	22.06	C
GC-AP-MW-35H	TURB	Turbidity	10/17/2022 13:26	0.97	NTU
GC-AP-MW-35H	COND	Conductivity	10/17/2022 13:31	157.02	uS/cm
GC-AP-MW-35H	DO	DO	10/17/2022 13:31	7.06	mg/L
GC-AP-MW-35H	DTW	Depth to Water Detail	10/17/2022 13:31	22.52	ft
GC-AP-MW-35H	ORP	Oxidation Reduction Potention	10/17/2022 13:31	170.63	mv
GC-AP-MW-35H	PH	pH	10/17/2022 13:31	6.19	SU
GC-AP-MW-35H	SULFIDE	Sulfide	10/17/2022 13:31	0	mg/L
GC-AP-MW-35H	TEMP	Temperature	10/17/2022 13:31	22.01	C
GC-AP-MW-35H	TURB	Turbidity	10/17/2022 13:31	1	NTU

Field Parameters Summary
Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-49H	COND	Conductivity	10/19/2022 6:39	348.6	uS/cm
GC-AP-MW-49H	DO	DO	10/19/2022 6:39	0.15	mg/L
GC-AP-MW-49H	DTW	Depth to Water Detail	10/19/2022 6:39	11.88	ft
GC-AP-MW-49H	ORP	Oxidation Reduction Potention	10/19/2022 6:39	156.82	mv
GC-AP-MW-49H	PH	pH	10/19/2022 6:39	5.6	SU
GC-AP-MW-49H	TEMP	Temperature	10/19/2022 6:39	19.61	C
GC-AP-MW-49H	TURB	Turbidity	10/19/2022 6:39	0.65	NTU
GC-AP-MW-49H	COND	Conductivity	10/19/2022 6:44	343.19	uS/cm
GC-AP-MW-49H	DO	DO	10/19/2022 6:44	0.14	mg/L
GC-AP-MW-49H	DTW	Depth to Water Detail	10/19/2022 6:44	11.88	ft
GC-AP-MW-49H	ORP	Oxidation Reduction Potention	10/19/2022 6:44	165.43	mv
GC-AP-MW-49H	PH	pH	10/19/2022 6:44	5.61	SU
GC-AP-MW-49H	TEMP	Temperature	10/19/2022 6:44	19.74	C
GC-AP-MW-49H	TURB	Turbidity	10/19/2022 6:44	0.67	NTU
GC-AP-MW-49H	COND	Conductivity	10/19/2022 6:49	343.52	uS/cm
GC-AP-MW-49H	DO	DO	10/19/2022 6:49	0.15	mg/L
GC-AP-MW-49H	DTW	Depth to Water Detail	10/19/2022 6:49	11.88	ft
GC-AP-MW-49H	ORP	Oxidation Reduction Potention	10/19/2022 6:49	169.92	mv
GC-AP-MW-49H	PH	pH	10/19/2022 6:49	5.6	SU
GC-AP-MW-49H	SULFIDE	Sulfide	10/19/2022 6:49	0	mg/L
GC-AP-MW-49H	TEMP	Temperature	10/19/2022 6:49	19.69	C
GC-AP-MW-49H	TURB	Turbidity	10/19/2022 6:49	0.39	NTU

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group :	WMWGREAP_1388
Project/Site :	Greene County Ash Pond Demopolis, AL 36732
For :	Southern Company Services 3535 Colonnade Parkway Birmingham, AL 35243
Attention :	Dustin Brooks & Greg Dyer
Released By :	Brooke Caton tbwill@southernco.com (205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

November 18, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between October 06, 2022 and October 20, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Renee Jernigan

Digitally signed by Renee Jernigan
Date: 2022.11.21
08:39:12 -06'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US
United States l=US United States
e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2022-11-21 15:30-06:00

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	739431	WMWGREAP_1388
BC18506	739431	WMWGREAP_1388
BC18507	739431	WMWGREAP_1388
BC18508	739431	WMWGREAP_1388
BC18509	739431	WMWGREAP_1388
BC18510	739431	WMWGREAP_1388
BC18511	739431	WMWGREAP_1388
BC18547	739431	WMWGREAP_1388
BC18548	739431	WMWGREAP_1388
BC18549	739431	WMWGREAP_1388
BC18550	739432, 741790	WMWGREAP_1388
BC18551	739432	WMWGREAP_1388
BC18552	739432	WMWGREAP_1388
BC18553	739432	WMWGREAP_1388
BC18554	739432	WMWGREAP_1388
BC19074	739099	WMWGREAP_1388
BC19075	739099	WMWGREAP_1388
BC19076	739099	WMWGREAP_1388
BC19077	739099	WMWGREAP_1388
BC19078	739099	WMWGREAP_1388
BC19079	739099	WMWGREAP_1388
BC19080	739099	WMWGREAP_1388
BC19081	739099	WMWGREAP_1388
BC19082	739099	WMWGREAP_1388
BC19083	739099	WMWGREAP_1388
BC19084	739100	WMWGREAP_1388
BC19085	739100	WMWGREAP_1388
BC19086	739100	WMWGREAP_1388
BC19087	739100	WMWGREAP_1388
BC19088	739100	WMWGREAP_1388
BC19089	739100	WMWGREAP_1388

BC19090	739100	WMWGREAP_1388
BC19091	739100	WMWGREAP_1388
BC19092	739100	WMWGREAP_1388
BC19093	739100	WMWGREAP_1388
BC19094	739101	WMWGREAP_1388
BC19095	739101	WMWGREAP_1388
BC19096	739101	WMWGREAP_1388
BC19252	739600	WMWGREAP_1388
BC19253	739600	WMWGREAP_1388
BC19254	739600	WMWGREAP_1388
BC19255	739600	WMWGREAP_1388
BC19256	739600	WMWGREAP_1388
BC19257	739600	WMWGREAP_1388
BC19258	739600	WMWGREAP_1388
BC19259	739600	WMWGREAP_1388
BC19260	739600	WMWGREAP_1388
BC19261	739600	WMWGREAP_1388
BC19262	739601	WMWGREAP_1388
BC19263	739601	WMWGREAP_1388
BC19264	739601	WMWGREAP_1388
BC19265	739601	WMWGREAP_1388
BC19266	739601	WMWGREAP_1388
BC19267	739601	WMWGREAP_1388
BC19268	739601	WMWGREAP_1388
BC19269	739601	WMWGREAP_1388
BC19270	739601	WMWGREAP_1388
BC19271	739601	WMWGREAP_1388
BC19272	739602	WMWGREAP_1388

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.

- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18550 Iron MS/MSD spike levels were <30% of the sample concentrations.
    - BC18554 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.
    - BC18554 Silicon MS recovery and/or MSD recovery is outside of specification limit.
    - BC19083 Calcium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19093 Calcium & Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19096 Calcium, Iron, & Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19261 Calcium, Iron, & Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19271 Calcium, Iron, & Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19272 Calcium, Iron, & Sodium MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18510	Calcium, Iron	101.5
BC18511	Calcium	10.15
BC18547	Calcium, Iron	101.5
BC18548	Calcium, Iron	101.5
BC18550	Calcium, Sodium	10.15
BC18550	Iron	101.5
BC18551	Calcium, Iron	10.15

BC18552	Iron	10.15
BC18553	Iron	10.15
BC18554	Calcium, Iron	101.5
BC19074	Sodium	10.15
BC19075	Calcium, Iron, Sodium	10.15
BC19076	Calcium, Iron	101.5
BC19077	Calcium, Sodium	10.15
BC19077	Iron	101.5
BC19078	Calcium	10.15
BC19079	Calcium, Iron	101.5
BC19080	Calcium, Iron	10.15
BC19081	Calcium	10.15
BC19082	Calcium	10.15
BC19083	Calcium	10.15
BC19084	Calcium	10.15
BC19087	Calcium	10.15
BC19088	Calcium, Iron	10.15
BC19092	Calcium, Sodium	10.15
BC19093	Calcium, Sodium	10.15
BC19094	Calcium, Sodium	10.15
BC19095	Calcium, Sodium	10.15
BC19096	Calcium, Iron, Sodium	10.15
BC19253	Calcium, Iron	10.15
BC19254	Calcium, Iron	101.5
BC19261	Calcium, Iron	10.15
BC19262	Calcium, Iron	10.15
BC19263	Calcium	10.15
BC19271	Calcium, Iron	10.15
BC19272	Calcium, Iron, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18505	739225	WMWGREAP_1388
BC18506	739225	WMWGREAP_1388
BC18507	739225	WMWGREAP_1388
BC18509	739225	WMWGREAP_1388
BC18510	739225	WMWGREAP_1388
BC18511	739225	WMWGREAP_1388
BC18547	739225	WMWGREAP_1388
BC18548	739225	WMWGREAP_1388
BC18550	739225, 741284	WMWGREAP_1388
BC18551	739225	WMWGREAP_1388
BC18552	739226	WMWGREAP_1388
BC18553	739226	WMWGREAP_1388
BC18554	739226	WMWGREAP_1388
BC19074	739035	WMWGREAP_1388
BC19075	739035	WMWGREAP_1388
BC19076	739035	WMWGREAP_1388
BC19077	739035	WMWGREAP_1388
BC19078	739035	WMWGREAP_1388
BC19079	739035	WMWGREAP_1388
BC19080	739035	WMWGREAP_1388
BC19081	739035	WMWGREAP_1388
BC19082	739035	WMWGREAP_1388
BC19083	739035	WMWGREAP_1388
BC19084	739036	WMWGREAP_1388
BC19085	739036	WMWGREAP_1388
BC19086	739036	WMWGREAP_1388
BC19087	739036	WMWGREAP_1388
BC19088	739036	WMWGREAP_1388
BC19089	739036	WMWGREAP_1388
BC19090	739036	WMWGREAP_1388
BC19091	739036	WMWGREAP_1388

BC19092	739036	WMWGREAP_1388
BC19093	739036	WMWGREAP_1388
BC19094	739037	WMWGREAP_1388
BC19095	739037	WMWGREAP_1388
BC19096	739037	WMWGREAP_1388
BC19252	739524	WMWGREAP_1388
BC19253	739524	WMWGREAP_1388
BC19254	739524	WMWGREAP_1388
BC19255	739524	WMWGREAP_1388
BC19257	739524	WMWGREAP_1388
BC19261	739524	WMWGREAP_1388
BC19262	739524	WMWGREAP_1388
BC19263	739524	WMWGREAP_1388
BC19265	739524	WMWGREAP_1388
BC19266	739524	WMWGREAP_1388
BC19267	739525	WMWGREAP_1388
BC19268	739525	WMWGREAP_1388
BC19269	739525	WMWGREAP_1388
BC19270	739525	WMWGREAP_1388
BC19271	739525	WMWGREAP_1388
BC19272	739525	WMWGREAP_1388

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.

Case Narrative

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:

    - BC18550 Calcium, Iron, Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC18551 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.
    - BC18554 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.
    - BC19083 Calcium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19093 Calcium & Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19096 Calcium, Iron, & Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC19272 Calcium, Iron, & Sodium MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met, except for the following:
    - BC18550 Calcium precision is out of specification limit.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18510	Calcium, Iron	101.5
BC18511	Calcium	10.15
BC18547	Calcium, Iron	101.5
BC18548	Calcium, Iron	101.5
BC18550	Calcium, Sodium	10.15
BC18550	Iron	101.5
BC18551	Calcium, Iron	10.15
BC18552	Iron	10.15
BC18553	Iron	10.15
BC18554	Calcium, Iron	101.5
BC19074	Sodium	10.15
BC19075	Calcium, Iron, Sodium	10.15
BC19076	Calcium, Iron	101.5
BC19077	Calcium, Iron, Sodium	10.15
BC19078	Calcium	10.15

BC19079	Calcium, Iron	101.5
BC19080	Calcium, Iron	10.15
BC19081	Calcium	10.15
BC19082	Calcium	10.15
BC19083	Calcium	10.15
BC19084	Calcium	10.15
BC19087	Calcium	10.15
BC19088	Calcium, Iron	10.15
BC19092	Calcium, Sodium	10.15
BC19093	Calcium, Sodium	10.15
BC19094	Calcium, Sodium	10.15
BC19095	Calcium, Sodium	10.15
BC19096	Calcium, Iron, Sodium	10.15
BC19253	Calcium, Iron	10.15
BC19254	Calcium, Iron	101.5
BC19261	Calcium, Iron	10.15
BC19262	Calcium, Iron	10.15
BC19263	Calcium	10.15
BC19271	Calcium, Iron	10.15
BC19272	Calcium, Iron, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18505	738874	WMWGREAP_1388
BC18506	738874	WMWGREAP_1388
BC18507	738874	WMWGREAP_1388
BC18508	738874	WMWGREAP_1388
BC18509	738874	WMWGREAP_1388
BC18510	738874	WMWGREAP_1388
BC18511	738874	WMWGREAP_1388
BC18547	738874	WMWGREAP_1388
BC18548	738874	WMWGREAP_1388
BC18549	738874	WMWGREAP_1388
BC18550	733875	WMWGREAP_1388
BC18551	733875	WMWGREAP_1388
BC18552	733875	WMWGREAP_1388
BC18553	733875	WMWGREAP_1388
BC18554	733875	WMWGREAP_1388
BC19074	740153	WMWGREAP_1388
BC19075	740153	WMWGREAP_1388
BC19076	740153	WMWGREAP_1388
BC19077	740153	WMWGREAP_1388
BC19078	740153	WMWGREAP_1388
BC19079	740153	WMWGREAP_1388
BC19080	740153	WMWGREAP_1388
BC19081	740153	WMWGREAP_1388
BC19082	740153	WMWGREAP_1388
BC19083	740153	WMWGREAP_1388
BC19084	740154	WMWGREAP_1388
BC19085	740154	WMWGREAP_1388
BC19086	740154	WMWGREAP_1388
BC19087	740154	WMWGREAP_1388
BC19088	740154	WMWGREAP_1388
BC19089	740154	WMWGREAP_1388

BC19090	740154	WMWGREAP_1388
BC19091	740154	WMWGREAP_1388
BC19092	740154	WMWGREAP_1388
BC19093	740154	WMWGREAP_1388
BC19094	740155	WMWGREAP_1388
BC19095	740155	WMWGREAP_1388
BC19096	740155	WMWGREAP_1388
BC19252	740512	WMWGREAP_1388
BC19253	740512	WMWGREAP_1388
BC19254	740512	WMWGREAP_1388
BC19255	740512	WMWGREAP_1388
BC19256	740512	WMWGREAP_1388
BC19257	740512	WMWGREAP_1388
BC19258	740512	WMWGREAP_1388
BC19259	740512	WMWGREAP_1388
BC19260	740512	WMWGREAP_1388
BC19261	740512	WMWGREAP_1388
BC19262	740513	WMWGREAP_1388
BC19263	740513	WMWGREAP_1388
BC19264	740513	WMWGREAP_1388
BC19265	740513	WMWGREAP_1388
BC19266	740513	WMWGREAP_1388
BC19267	740513	WMWGREAP_1388
BC19268	740513	WMWGREAP_1388
BC19269	740513	WMWGREAP_1388
BC19270	740513	WMWGREAP_1388
BC19271	740513	WMWGREAP_1388
BC19272	740514	WMWGREAP_1388

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.

- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18554 Aluminum MS recovery and/or MSD recovery is outside of specification limit.
    - BC18554 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC19196 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC19261 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC19271 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC19272 Manganese MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18510	Manganese	10.15
BC18511	Manganese	5.075
BC18548	Manganese	10.15
BC18550	Manganese	92.364
BC18551	Manganese	10.15
BC18552	Manganese	5.075
BC18553	Manganese	5.075
BC18554	Manganese	5.075
BC19075	Manganese	5.075
BC19076	Manganese	5.075

BC19077	Manganese	5.075
BC19079	Manganese	5.075
BC19080	Manganese	5.075
BC19081	Manganese	10.15
BC19082	Manganese	5.075
BC19083	Manganese	5.075
BC19084	Manganese	5.075
BC19087	Manganese	5.075
BC19088	Manganese	5.075
BC19096	Manganese	10.15
BC19253	Manganese	5.075
BC19254	Manganese	5.075
BC19255	Manganese	5.075
BC19261	Manganese	5.075
BC19262	Manganese	5.075
BC19263	Manganese	5.075
BC19271	Manganese	10.15
BC19272	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	738786	WMWGREAP_1388
BC18506	738786	WMWGREAP_1388
BC18507	738786	WMWGREAP_1388
BC18509	738786	WMWGREAP_1388
BC18510	738786	WMWGREAP_1388
BC18511	738786	WMWGREAP_1388
BC18547	738786	WMWGREAP_1388
BC18548	738786	WMWGREAP_1388
BC18550	738786	WMWGREAP_1388
BC18551	738786	WMWGREAP_1388
BC18552	738787	WMWGREAP_1388
BC18553	738787	WMWGREAP_1388
BC18554	738787	WMWGREAP_1388
BC19074	740156	WMWGREAP_1388
BC19075	740156	WMWGREAP_1388
BC19076	740156	WMWGREAP_1388
BC19077	740156	WMWGREAP_1388
BC19078	740156	WMWGREAP_1388
BC19079	740156	WMWGREAP_1388
BC19080	740156	WMWGREAP_1388
BC19081	740156	WMWGREAP_1388
BC19082	740156	WMWGREAP_1388
BC19083	740156	WMWGREAP_1388
BC19084	740157	WMWGREAP_1388
BC19085	740157	WMWGREAP_1388
BC19086	740157	WMWGREAP_1388
BC19087	740157	WMWGREAP_1388
BC19088	740157	WMWGREAP_1388
BC19089	740157	WMWGREAP_1388
BC19090	740157	WMWGREAP_1388
BC19091	740157	WMWGREAP_1388

BC19092	740157	WMWGREAP_1388
BC19093	740157	WMWGREAP_1388
BC19094	740158	WMWGREAP_1388
BC19095	740158	WMWGREAP_1388
BC19096	740158	WMWGREAP_1388
BC19252	740515	WMWGREAP_1388
BC19253	740515	WMWGREAP_1388
BC19254	740515	WMWGREAP_1388
BC19255	740515	WMWGREAP_1388
BC19257	740515	WMWGREAP_1388
BC19261	740515	WMWGREAP_1388
BC19262	740515	WMWGREAP_1388
BC19263	740515	WMWGREAP_1388
BC19265	740515	WMWGREAP_1388
BC19266	740515	WMWGREAP_1388
BC19267	740516	WMWGREAP_1388
BC19268	740516	WMWGREAP_1388
BC19269	740516	WMWGREAP_1388
BC19270	740516	WMWGREAP_1388
BC19271	740516	WMWGREAP_1388
BC19272	740516	WMWGREAP_1388

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Revision 5

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18551 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC18554 Arsenic MS/MSD spike levels were <30% of the sample concentrations.
    - BC19096 Manganese MS/MSD spike levels were <30% of the sample concentrations.
    - BC19272 Manganese MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18510	Manganese	10.15
BC18511	Manganese	5.075
BC18548	Manganese	10.15
BC18550	Manganese	92.365
BC18551	Manganese	10.15
BC18552	Manganese	5.075
BC18553	Manganese	5.075
BC18554	Manganese	5.075
BC19075	Manganese	5.075
BC19076	Manganese	5.075
BC19077	Manganese	5.075
BC19079	Manganese	5.075
BC19080	Manganese	5.075
BC19081	Manganese	10.15
BC19082	Manganese	5.075
BC19083	Manganese	5.075
BC19084	Manganese	5.075
BC19087	Manganese	5.075
BC19088	Manganese	5.075

BC19096	Manganese	10.15
BC19253	Manganese	5.075
BC19253	Manganese	5.075
BC19254	Manganese	5.075
BC19255	Manganese	5.075
BC19261	Manganese	5.075
BC19262	Manganese	5.075
BC19263	Manganese	5.075
BC19271	Manganese	10.15
BC19272	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	738235	WMWGREAP_1388
BC18506	738235	WMWGREAP_1388
BC18507	738235	WMWGREAP_1388
BC18508	738235	WMWGREAP_1388
BC18509	738235	WMWGREAP_1388
BC18510	738235	WMWGREAP_1388
BC18511	738235	WMWGREAP_1388
BC18547	738235	WMWGREAP_1388
BC18548	738235	WMWGREAP_1388
BC18549	738235	WMWGREAP_1388
BC18550	738236	WMWGREAP_1388
BC18551	738236	WMWGREAP_1388
BC18552	738236	WMWGREAP_1388
BC18553	738236	WMWGREAP_1388
BC18554	738236	WMWGREAP_1388
BC19074	739264	WMWGREAP_1388
BC19075	739264	WMWGREAP_1388
BC19076	739264	WMWGREAP_1388
BC19077	739264	WMWGREAP_1388
BC19078	739264	WMWGREAP_1388
BC19079	739264	WMWGREAP_1388
BC19080	739264	WMWGREAP_1388
BC19081	739264	WMWGREAP_1388
BC19082	739264	WMWGREAP_1388
BC19083	739264	WMWGREAP_1388
BC19084	739265	WMWGREAP_1388
BC19085	739265	WMWGREAP_1388
BC19086	739265	WMWGREAP_1388
BC19087	739265	WMWGREAP_1388
BC19088	739265	WMWGREAP_1388
BC19089	739265	WMWGREAP_1388

BC19090	739265	WMWGREAP_1388
BC19091	739265	WMWGREAP_1388
BC19092	739265	WMWGREAP_1388
BC19093	739265	WMWGREAP_1388
BC19094	739266	WMWGREAP_1388
BC19095	739266	WMWGREAP_1388
BC19096	739266	WMWGREAP_1388
BC19252	739266	WMWGREAP_1388
BC19253	739266	WMWGREAP_1388
BC19254	739266	WMWGREAP_1388
BC19255	739266	WMWGREAP_1388
BC19256	739266	WMWGREAP_1388
BC19257	739266	WMWGREAP_1388
BC19258	739266	WMWGREAP_1388
BC19259	739267	WMWGREAP_1388
BC19260	739267	WMWGREAP_1388
BC19261	739267	WMWGREAP_1388
BC19262	739267	WMWGREAP_1388
BC19263	739267	WMWGREAP_1388
BC19264	739267	WMWGREAP_1388
BC19265	739267	WMWGREAP_1388
BC19266	739267	WMWGREAP_1388
BC19267	739267	WMWGREAP_1388
BC19268	739267	WMWGREAP_1388
BC19269	739478	WMWGREAP_1388
BC19270	739478	WMWGREAP_1388
BC19271	739478	WMWGREAP_1388
BC19272	739478	WMWGREAP_1388

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.

Revision 5

- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	738156	WMWGREAP_1388
BC18506	738156	WMWGREAP_1388
BC18507	738156	WMWGREAP_1388
BC18508	738156	WMWGREAP_1388
BC18509	738156	WMWGREAP_1388
BC18510	738156	WMWGREAP_1388
BC18511	738156	WMWGREAP_1388
BC18547	738156	WMWGREAP_1388
BC18548	738156	WMWGREAP_1388
BC18549	738156	WMWGREAP_1388
BC18550	738369	WMWGREAP_1388
BC18551	738369	WMWGREAP_1388
BC18552	738369	WMWGREAP_1388
BC18553	738369	WMWGREAP_1388
BC18554	738369	WMWGREAP_1388
BC19074	739026	WMWGREAP_1388
BC19075	739026	WMWGREAP_1388
BC19076	739026	WMWGREAP_1388
BC19077	739026	WMWGREAP_1388
BC19078	739026	WMWGREAP_1388
BC19079	739026	WMWGREAP_1388
BC19080	739026	WMWGREAP_1388
BC19081	739026	WMWGREAP_1388
BC19082	739026	WMWGREAP_1388
BC19083	739026	WMWGREAP_1388
BC19084	739027	WMWGREAP_1388
BC19085	739027	WMWGREAP_1388
BC19086	739027	WMWGREAP_1388
BC19087	739027	WMWGREAP_1388
BC19088	739027	WMWGREAP_1388
BC19089	739027	WMWGREAP_1388

Revision 5

BC19090	739027	WMWGREAP_1388
BC19091	739027	WMWGREAP_1388
BC19092	739027	WMWGREAP_1388
BC19093	739027	WMWGREAP_1388
BC19094	739279	WMWGREAP_1388
BC19095	739279	WMWGREAP_1388
BC19096	739279	WMWGREAP_1388
BC19252	739279	WMWGREAP_1388
BC19253	739279	WMWGREAP_1388
BC19254	739279	WMWGREAP_1388
BC19255	739280	WMWGREAP_1388
BC19256	739280	WMWGREAP_1388
BC19257	739280	WMWGREAP_1388
BC19258	739280	WMWGREAP_1388
BC19259	739280	WMWGREAP_1388
BC19260	739280	WMWGREAP_1388
BC19261	739280	WMWGREAP_1388
BC19262	739280	WMWGREAP_1388
BC19263	739280	WMWGREAP_1388
BC19264	739280	WMWGREAP_1388
BC19265	739619	WMWGREAP_1388
BC19266	739619	WMWGREAP_1388
BC19267	739619	WMWGREAP_1388
BC19268	739619	WMWGREAP_1388
BC19269	739619	WMWGREAP_1388
BC19270	739619	WMWGREAP_1388
BC19271	739619	WMWGREAP_1388
BC19272	739619	WMWGREAP_1388

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.
7.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:

  - BC18508
  - BC18549
  - BC19256
  - BC19258
  - BC19259
  - BC19260
  - BC19264
  - BC19269

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18505	738996, 738997	WMWGREAP_1388
BC18506	738996, 738997	WMWGREAP_1388
BC18507	738996, 738997	WMWGREAP_1388
BC18509	738996, 738997	WMWGREAP_1388
BC18510	739114, 739115	WMWGREAP_1388
BC18511	739114, 739115	WMWGREAP_1388
BC18547	738996, 738997	WMWGREAP_1388
BC18548	738996, 738997	WMWGREAP_1388
BC18550	738996, 738997	WMWGREAP_1388
BC18551	739114, 739115	WMWGREAP_1388
BC18552	739114, 739115	WMWGREAP_1388
BC18553	739114, 739115	WMWGREAP_1388
BC18554	739114, 739115	WMWGREAP_1388
BC19074	740066, 740067	WMWGREAP_1388
BC19075	740066, 740067	WMWGREAP_1388
BC19076	740066, 740067	WMWGREAP_1388
BC19077	740203, 740204	WMWGREAP_1388
BC19078	740203, 740204	WMWGREAP_1388
BC19079	740066, 740067	WMWGREAP_1388
BC19080	740066, 740067	WMWGREAP_1388
BC19081	740066, 740067	WMWGREAP_1388
BC19082	740066, 740067	WMWGREAP_1388
BC19083	740066, 740067	WMWGREAP_1388
BC19084	740066, 740067	WMWGREAP_1388
BC19085	740203, 740204	WMWGREAP_1388
BC19086	740203, 740204	WMWGREAP_1388
BC19087	740203, 740204	WMWGREAP_1388
BC19088	740203, 740204	WMWGREAP_1388
BC19089	740066, 740067	WMWGREAP_1388
BC19090	740066, 740067	WMWGREAP_1388
BC19091	740066, 740067	WMWGREAP_1388

BC19092	740203, 740204	WMWGREAP_1388
BC19093	740203, 740204	WMWGREAP_1388
BC19094	740203, 740204	WMWGREAP_1388
BC19095	740416, 740417	WMWGREAP_1388
BC19096	740416, 740417	WMWGREAP_1388
BC19252	740416, 740417	WMWGREAP_1388
BC19253	740416, 740417	WMWGREAP_1388
BC19254	740416, 740417	WMWGREAP_1388
BC19255	740557, 740558	WMWGREAP_1388
BC19257	740557, 740558	WMWGREAP_1388
BC19261	740416, 740417	WMWGREAP_1388
BC19262	740416, 740417	WMWGREAP_1388
BC19263	740416, 740417	WMWGREAP_1388
BC19265	740557, 740558	WMWGREAP_1388
BC19266	740557, 740558	WMWGREAP_1388
BC19267	740557, 740558	WMWGREAP_1388
BC19268	740717, 740718	WMWGREAP_1388
BC19269	740717, 740718	WMWGREAP_1388
BC19270	740717, 740718	WMWGREAP_1388
BC19271	740717, 740718	WMWGREAP_1388
BC19272	740717, 740718	WMWGREAP_1388

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BC18510
    - BC18548
    - BC18550
    - BC18551
    - BC19076
    - BC19077
    - BC19084
    - BC19092
    - BC19093
    - BC19094
    - BC19095
    - BC19096
    - BC19254
    - BC19272

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	738295, 738349, 738435	WMWGREAP_1388
BC18506	738295, 738349, 738435	WMWGREAP_1388
BC18507	738295, 738349, 738435	WMWGREAP_1388
BC18508	738295, 738349, 738435	WMWGREAP_1388
BC18509	738295, 738349, 738435	WMWGREAP_1388
BC18510	738295, 738349, 738435	WMWGREAP_1388
BC18511	738295, 738349, 738435	WMWGREAP_1388
BC18547	738295, 738349, 738435	WMWGREAP_1388
BC18548	738295, 738349, 738435	WMWGREAP_1388
BC18549	738295, 738349, 738435	WMWGREAP_1388
BC18550	738296, 738350, 738438	WMWGREAP_1388
BC18551	738296, 738350, 738438	WMWGREAP_1388
BC18552	738296, 738350, 738438	WMWGREAP_1388
BC18553	738296, 738350, 738438	WMWGREAP_1388
BC18554	738296, 738350, 738438	WMWGREAP_1388
BC19074	739554, 739672, 740101	WMWGREAP_1388
BC19075	739554, 739672, 740101	WMWGREAP_1388
BC19076	739554, 739672, 740101	WMWGREAP_1388
BC19077	739554, 739672, 740101	WMWGREAP_1388
BC19078	739554, 739672, 740101	WMWGREAP_1388
BC19079	739554, 739672, 740101	WMWGREAP_1388
BC19080	739554, 739672, 740101	WMWGREAP_1388
BC19081	739554, 739672, 740101	WMWGREAP_1388
BC19082	739554, 739672, 740101	WMWGREAP_1388
BC19083	739555, 739673, 740102	WMWGREAP_1388
BC19084	739555, 739673, 740102	WMWGREAP_1388
BC19085	739555, 739673, 740102	WMWGREAP_1388
BC19086	739555, 739673, 740102	WMWGREAP_1388
BC19087	739555, 739673, 740102	WMWGREAP_1388
BC19088	739555, 739673, 740102	WMWGREAP_1388
BC19089	739555, 739673, 740102	WMWGREAP_1388

BC19090	739555, 739673, 740102	WMWGREAP_1388
BC19091	739555, 739673, 740102	WMWGREAP_1388
BC19092	739555, 739673, 740102	WMWGREAP_1388
BC19093	739556, 739674, 740103	WMWGREAP_1388
BC19094	739556, 739674, 740103	WMWGREAP_1388
BC19095	739556, 739674, 740103	WMWGREAP_1388
BC19096	739556, 739674, 740103	WMWGREAP_1388
BC19252	739556, 739674, 740103	WMWGREAP_1388
BC19253	739556, 739674, 740103	WMWGREAP_1388
BC19254	739556, 739674, 740103	WMWGREAP_1388
BC19255	739556, 739674, 740103	WMWGREAP_1388
BC19256	739556, 739674, 740103	WMWGREAP_1388
BC19257	739556, 739674, 740103	WMWGREAP_1388
BC19258	739557, 739675, 740104	WMWGREAP_1388
BC19259	739557, 739675, 740104	WMWGREAP_1388
BC19260	739557, 739675, 740104	WMWGREAP_1388
BC19261	739557, 739675, 740104	WMWGREAP_1388
BC19262	739557, 739675, 740104	WMWGREAP_1388
BC19263	739557, 739675, 740104	WMWGREAP_1388
BC19264	739557, 739675, 740104	WMWGREAP_1388
BC19265	739557, 739675, 740104	WMWGREAP_1388
BC19266	739557, 739675, 740104	WMWGREAP_1388
BC19267	739557, 739675, 740104	WMWGREAP_1388
BC19268	739558, 739676, 740105	WMWGREAP_1388
BC19269	739558, 739676, 740105	WMWGREAP_1388
BC19270	739558, 739676, 740105	WMWGREAP_1388
BC19271	739558, 739676, 740105	WMWGREAP_1388
BC19272	739558, 739676, 740105	WMWGREAP_1388

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18510	Sulfate	32
BC18511	Sulfate	16
BC18547	Chloride	2
BC18548	Sulfate	32
BC18550	Sulfate	32
BC18551	Sulfate	20
BC18552	Sulfate	2
BC18553	Sulfate	2
BC18554	Sulfate	10
BC19075	Chloride	2
BC19076	Sulfate	20
BC19077	Sulfate	4
BC19078	Sulfate	2
BC19080	Sulfate	8
BC19081	Chloride, Sulfate	2, 8
BC19082	Sulfate	10
BC19083	Sulfate	4
BC19084	Sulfate	25
BC19087	Sulfate	10
BC19088	Sulfate	10
BC19090	Sulfate	4
BC19092	Chloride, Sulfate	5, 10
BC19093	Chloride, Sulfate	4, 10
BC19094	Chloride, Sulfate	10, 16

BC19095	Chloride, Sulfate	8, 4
BC19096	Chloride, Sulfate	8, 10
BC19252	Chloride, Sulfate	3, 3
BC19253	Sulfate	8
BC19254	Sulfate	10
BC19255	Sulfate	8
BC19261	Sulfate	2
BC19263	Sulfate	8
BC19271	Sulfate	10
BC19272	Chloride, Sulfate	5, 10

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	738165	WMWGREAP_1388
BC18506	738165	WMWGREAP_1388
BC18507	738165	WMWGREAP_1388
BC18508	738165	WMWGREAP_1388
BC18509	738165	WMWGREAP_1388
BC18510	738165	WMWGREAP_1388
BC18511	738165	WMWGREAP_1388
BC18547	738165	WMWGREAP_1388
BC18548	738165	WMWGREAP_1388
BC18549	738165	WMWGREAP_1388
BC18550	738166	WMWGREAP_1388
BC18551	738166	WMWGREAP_1388
BC18552	738166	WMWGREAP_1388
BC18553	738166	WMWGREAP_1388
BC18554	738166	WMWGREAP_1388
BC19074	739117	WMWGREAP_1388
BC19075	739117	WMWGREAP_1388
BC19076	739117	WMWGREAP_1388
BC19077	739117	WMWGREAP_1388
BC19078	739117	WMWGREAP_1388
BC19079	739117	WMWGREAP_1388
BC19080	739117	WMWGREAP_1388
BC19081	739117	WMWGREAP_1388
BC19082	739117	WMWGREAP_1388
BC19083	739117	WMWGREAP_1388
BC19084	739118	WMWGREAP_1388
BC19085	739118	WMWGREAP_1388
BC19086	739118	WMWGREAP_1388
BC19087	739118	WMWGREAP_1388
BC19088	739118	WMWGREAP_1388
BC19089	739118	WMWGREAP_1388

Revision 5

BC19090	739118	WMWGREAP_1388
BC19091	739118	WMWGREAP_1388
BC19092	739118	WMWGREAP_1388
BC19093	739118	WMWGREAP_1388
BC19094	739445	WMWGREAP_1388
BC19095	739445	WMWGREAP_1388
BC19096	739445	WMWGREAP_1388
BC19252	739445	WMWGREAP_1388
BC19253	739445	WMWGREAP_1388
BC19254	739445	WMWGREAP_1388
BC19255	739445	WMWGREAP_1388
BC19256	739445	WMWGREAP_1388
BC19257	739445	WMWGREAP_1388
BC19258	739445	WMWGREAP_1388
BC19259	739446	WMWGREAP_1388
BC19260	739446	WMWGREAP_1388
BC19261	739446	WMWGREAP_1388
BC19262	739446	WMWGREAP_1388
BC19263	739446	WMWGREAP_1388
BC19264	739446	WMWGREAP_1388
BC19265	739446	WMWGREAP_1388
BC19266	739446	WMWGREAP_1388
BC19267	739446	WMWGREAP_1388
BC19268	739446	WMWGREAP_1388
BC19269	739447	WMWGREAP_1388
BC19270	739447	WMWGREAP_1388
BC19271	739447	WMWGREAP_1388
BC19272	739447	WMWGREAP_1388

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1388

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18505	738440	WMWGREAP_1388
BC18506	738440	WMWGREAP_1388
BC18507	738440	WMWGREAP_1388
BC18508	738440	WMWGREAP_1388
BC18509	738440	WMWGREAP_1388
BC18510	738440	WMWGREAP_1388
BC18511	738440	WMWGREAP_1388
BC18547	738440	WMWGREAP_1388
BC18548	738440	WMWGREAP_1388
BC18549	738440	WMWGREAP_1388
BC18550	738441	WMWGREAP_1388
BC18551	738441	WMWGREAP_1388
BC18552	738441	WMWGREAP_1388
BC18553	738441	WMWGREAP_1388
BC18554	738441	WMWGREAP_1388
BC19074	739024	WMWGREAP_1388
BC19075	739024	WMWGREAP_1388
BC19076	739024	WMWGREAP_1388
BC19077	739024	WMWGREAP_1388
BC19078	739024	WMWGREAP_1388
BC19079	739024	WMWGREAP_1388
BC19080	739024	WMWGREAP_1388
BC19081	739024	WMWGREAP_1388
BC19082	739024	WMWGREAP_1388
BC19083	739024	WMWGREAP_1388
BC19084	739025	WMWGREAP_1388
BC19085	739025	WMWGREAP_1388
BC19086	739025	WMWGREAP_1388
BC19087	739025	WMWGREAP_1388
BC19088	739025	WMWGREAP_1388
BC19089	739025	WMWGREAP_1388

BC19090	739025	WMWGREAP_1388
BC19091	739025	WMWGREAP_1388
BC19092	739025	WMWGREAP_1388
BC19093	739025	WMWGREAP_1388
BC19094	739276	WMWGREAP_1388
BC19095	739276	WMWGREAP_1388
BC19096	739276	WMWGREAP_1388
BC19252	739276	WMWGREAP_1388
BC19253	739276	WMWGREAP_1388
BC19254	739276	WMWGREAP_1388
BC19255	739276	WMWGREAP_1388
BC19256	739276	WMWGREAP_1388
BC19257	739276	WMWGREAP_1388
BC19258	739276	WMWGREAP_1388
BC19259	739277	WMWGREAP_1388
BC19260	739277	WMWGREAP_1388
BC19261	739277	WMWGREAP_1388
BC19262	739277	WMWGREAP_1388
BC19263	739277	WMWGREAP_1388
BC19264	739277	WMWGREAP_1388
BC19265	739277	WMWGREAP_1388
BC19266	739277	WMWGREAP_1388
BC19267	739277	WMWGREAP_1388
BC19268	739277	WMWGREAP_1388
BC19269	739278	WMWGREAP_1388
BC19270	739278	WMWGREAP_1388
BC19271	739278	WMWGREAP_1388
BC19272	739278	WMWGREAP_1388

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-31

Location Code: WMWGREAP
Collected: 10/5/22 09:15
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18505

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:57	10/21/22 12:04		1.015	6.69	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:57	10/21/22 12:04		1.015	0.0529	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:57	10/21/22 12:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:04		1.015	1.32	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:04		1	9.44	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:04		1.015	4.41	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:04		1.015	6.12	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	6.91	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	0.0478	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	1.31	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:11		1	9.99	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	4.67	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:11		1.015	6.34	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:27		1.015	0.00730	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 13:27		1.015	0.0283	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:27		1.015	0.000268	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:27		1.015	0.000728	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 13:27		1.015	0.00732	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:27		1.015	1.08	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31

Location Code: WMWGREAP
Collected: 10/5/22 09:15
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18505

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	0.0291	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	0.000242	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	0.000739	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	0.0000693	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	0.00836	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	1.22	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:03	10/7/22 09:03		1	0.708	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	23.8	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	40.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	23.8	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 14:51	10/12/22 14:51		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31

Location Code: WMWGREAP
Collected: 10/5/22 09:15
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18505

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:05	10/10/22 13:05		1	7.10	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:47	10/11/22 12:47		1	0.0671	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:06	10/18/22 10:06		1	4.08	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/5/22 09:11	10/5/22 09:11			75.95	uS/cm			FA
pH	10/5/22 09:11	10/5/22 09:11			5.49	SU			FA
Temperature	10/5/22 09:11	10/5/22 09:11			18.48	C			FA
Turbidity	10/5/22 09:11	10/5/22 09:11			0.83	NTU			FA
Sulfide	10/5/22 09:11	10/5/22 09:11			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:15
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC18505

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:15
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC18505

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:15
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: BC18505

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31 Dup

Location Code: WMWGREAP
Collected: 10/5/22 09:15
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18506

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:07		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:57	10/21/22 12:07		1.015	6.55	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:57	10/21/22 12:07		1.015	0.0526	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:57	10/21/22 12:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:07		1.015	1.31	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:07		1	9.61	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:07		1.015	4.49	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:07		1.015	6.22	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	7.15	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	0.0518	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	1.33	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:14		1	10.1	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	4.73	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:14		1.015	6.32	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:31		1.015	0.00724	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 13:31		1.015	0.0297	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:31		1.015	0.000252	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:31		1.015	0.000710	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 13:31		1.015	0.00748	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:31		1.015	1.09	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-31 Dup

Location Code: WMWGREAP
Collected: 10/5/22 09:15
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18506

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	0.0288	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	0.000232	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	0.000752	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	0.00836	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	1.14	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:05	10/7/22 09:05		1	0.758	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	23.7	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	43.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	23.7	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 15:05	10/12/22 15:05		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-31 Dup

Location Code: WMWGREAP
Collected: 10/5/22 09:15
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18506

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:07	10/10/22 13:07		1	7.06	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:48	10/11/22 12:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:21	10/18/22 10:21		1	3.73	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/5/22 09:11	10/5/22 09:11			75.95	uS/cm			FA
pH	10/5/22 09:11	10/5/22 09:11			5.49	SU			FA
Temperature	10/5/22 09:11	10/5/22 09:11			18.48	C			FA
Turbidity	10/5/22 09:11	10/5/22 09:11			0.83	NTU			FA
Sulfide	10/5/22 09:11	10/5/22 09:11			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:15
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: BC18506

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:15
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: BC18506

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:15
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: BC18506

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-33

Location Code: WMWGREAP
Collected: 10/5/22 10:10
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18507

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:10		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:57	10/21/22 12:10		1.015	2.01	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:57	10/21/22 12:10		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:57	10/21/22 12:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:10		1.015	2.51	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:10		1	6.40	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:10		1.015	2.99	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:10		1.015	8.85	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	2.11	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	2.55	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:17		1	6.85	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	3.20	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:17		1.015	9.03	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.128	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.0000813	mg/L	0.000081	0.000203	J
* Barium, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.0665	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.000311	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.000909	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.000115	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 13:34		1.015	0.0162	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:34		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:34		1.015	3.44	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-33

Location Code: WMWGREAP
Collected: 10/5/22 10:10
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18507

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	0.0716	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	0.0679	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	0.000254	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	0.000944	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	0.000198	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	0.0163	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	3.59	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	10/7/22 09:07	10/7/22 09:07		1	4.50	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		***Analyst: ALH***							
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	1.40	mg CaCO3/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	62.7	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	1.40	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	10/12/22 15:20	10/12/22 15:20		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-33

Location Code: WMWGREAP
Collected: 10/5/22 10:10
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18507

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:08	10/10/22 13:08		1	5.32	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:50	10/11/22 12:50		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:09	10/18/22 10:09		1	12.2	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/5/22 10:07	10/5/22 10:07			96.77	uS/cm			FA
pH	10/5/22 10:07	10/5/22 10:07			4.55	SU			FA
Temperature	10/5/22 10:07	10/5/22 10:07			19.21	C			FA
Turbidity	10/5/22 10:07	10/5/22 10:07			0.75	NTU			FA
Sulfide	10/5/22 10:07	10/5/22 10:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 10:10
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC18507

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 10:10
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC18507

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 10:10
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: BC18507

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-2

Location Code: WMWGREAPFB
Collected: 10/5/22 10:50
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18508

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:13		1	Not Detected	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/7/22 13:57	10/21/22 12:13		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:09	10/7/22 09:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-2

Location Code: WMWGREAPFB
Collected: 10/5/22 10:50
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18508

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 15:32	10/12/22 15:32		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:19	10/10/22 13:19		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:51	10/11/22 12:51		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:19	10/18/22 10:19		1	0.691	mg/L	0.6	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/5/22 10:50
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond Field Blank-2

Laboratory ID Number: BC18508

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/5/22 10:50
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond Field Blank-2

Laboratory ID Number: BC18508

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/5/22 10:50
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond Field Blank-2

Laboratory ID Number: BC18508

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-32

Location Code: WMWGREAP
Collected: 10/5/22 11:20
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18509

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:17		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:57	10/21/22 12:17		1.015	9.18	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:57	10/21/22 12:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:57	10/21/22 12:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:17		1.015	0.693	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:17		1	11.3	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:17		1.015	5.30	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:17		1.015	3.73	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	9.69	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	0.688	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:21		1	11.9	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	5.56	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:21		1.015	3.75	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 13:42		1.015	0.0133	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:42		1.015	0.000301	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:42		1.015	0.635	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-32

Location Code: WMWGREAP
Collected: 10/5/22 11:20
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18509

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	0.0131	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	0.000422	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	0.0000701	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	0.000264	mg/L	0.000152	0.001015	J
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	0.703	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:11	10/7/22 09:11		1	0.455	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	27.3	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	43.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	27.3	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 15:47	10/12/22 15:47		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-32

Location Code: WMWGREAP
Collected: 10/5/22 11:20
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18509

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:09	10/10/22 13:09		1	4.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:52	10/11/22 12:52		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:10	10/18/22 10:10		1	2.71	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/5/22 11:18	10/5/22 11:18			69.24	uS/cm			FA
pH	10/5/22 11:18	10/5/22 11:18			5.84	SU			FA
Temperature	10/5/22 11:18	10/5/22 11:18			20.66	C			FA
Turbidity	10/5/22 11:18	10/5/22 11:18			0.87	NTU			FA
Sulfide	10/5/22 11:18	10/5/22 11:18			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 11:20
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC18509

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 11:20
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC18509

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 11:20
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: BC18509

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4

Location Code: WMWGREAP
Collected: 10/5/22 14:07
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18510

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:20		1.015	0.272	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 13:22		101.5	198	mg/L	7.0035	40.6	
* Iron, Total	10/7/22 13:57	10/21/22 13:22		101.5	114	mg/L	0.8120	4.06	
* Lithium, Total	10/7/22 13:57	10/21/22 12:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:20		1.015	37.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:20		1	10.3	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:20		1.015	4.83	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:20		1.015	18.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:24		1.015	0.296	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/21/22 11:10		101.5	182	mg/L	7.0035	40.6	
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:10		101.5	98.3	mg/L	0.8120	4.06	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:24		1.015	38.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:24		1	11.2	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:24		1.015	5.24	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:24		1.015	21.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.444	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.00368	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.0698	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.000168	mg/L	0.000068	0.000203	J
* Chromium, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.528	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.000298	mg/L	0.000068	0.000203	
* Manganese, Total	10/7/22 13:51	10/10/22 15:19		10.15	11.8	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:45		1.015	5.89	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4

Location Code: WMWGREAP
Collected: 10/5/22 14:07
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18510

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.00692	mg/L	0.000508	0.001015	
* Thallium, Total	10/7/22 13:51	10/10/22 13:45		1.015	0.000158	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.411	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.00336	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.0675	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.000180	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.538	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.000297	mg/L	0.000068	0.000203	
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:22		10.15	11.9	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	6.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.00642	mg/L	0.000508	0.001015	
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:44		1.015	0.000168	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:12	10/7/22 09:12		1	0.596	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/19/22 13:02	10/19/22 13:10		1	30.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	1150	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:10		1	30.4	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:10		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 16:02	10/12/22 16:02		1	1.37	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - PZ-4

Location Code: WMWGREAP
Collected: 10/5/22 14:07
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18510

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:10	10/10/22 13:10		1	6.54	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:53	10/11/22 12:53		1	0.192	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:22	10/18/22 10:22		32	782	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/5/22 14:03	10/5/22 14:03			1305.52	uS/cm			FA
pH	10/5/22 14:03	10/5/22 14:03			5.42	SU			FA
Temperature	10/5/22 14:03	10/5/22 14:03			23.94	C			FA
Turbidity	10/5/22 14:03	10/5/22 14:03			1.43	NTU			FA
Sulfide	10/5/22 14:03	10/5/22 14:03			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:07
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC18510

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:07
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC18510

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:07
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - PZ-4

Laboratory ID Number: BC18510

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Alkalinity to pH 4.5	mg CaCO3/L					216	50.5	45.0 to 55.0			0.922	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-40H

Location Code: WMWGREAP
Collected: 10/5/22 15:57
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:23		1.015	0.541	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 13:25		10.15	106	mg/L	0.70035	4.06	
* Iron, Total	10/7/22 13:57	10/21/22 12:23		1.015	0.714	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:57	10/21/22 12:23		1.015	0.729	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/7/22 13:57	10/21/22 12:23		1.015	23.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:23		1	6.25	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:23		1.015	2.92	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:23		1.015	19.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:28		1.015	0.545	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/21/22 11:13		10.15	106	mg/L	0.70035	4.06	
* Iron, Dissolved	10/7/22 14:31	10/20/22 13:28		1.015	0.562	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:28		1.015	0.770	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:28		1.015	23.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:28		1	6.68	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:28		1.015	3.12	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:28		1.015	21.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 13:49		1.015	0.000232	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 13:49		1.015	0.0241	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:49		1.015	0.0000958	mg/L	0.000068	0.000203	J
* Chromium, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 13:49		1.015	0.00884	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 15:23		5.075	3.30	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:49		1.015	8.72	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-40H

Location Code: WMWGREAP
Collected: 10/5/22 15:57
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:49		1.015	0.000188	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	0.000216	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	0.0241	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	0.000121	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	0.00937	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:25		5.075	3.25	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	9.26	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:48		1.015	0.000185	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:14	10/7/22 09:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/19/22 13:02	10/19/22 14:35		1	96.2	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	471	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 14:35		1	96.1	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 14:35		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 16:17	10/12/22 16:17		1	1.13	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-40H

Location Code: WMWGREAP
Collected: 10/5/22 15:57
Customer ID:
Submittal Date: 10/6/22 09:17

Laboratory ID Number: BC18511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:12	10/10/22 13:12		1	7.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:54	10/11/22 12:54		1	0.133	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:23	10/18/22 10:23		16	264	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/5/22 15:55	10/5/22 15:55			674.54	uS/cm			FA
pH	10/5/22 15:55	10/5/22 15:55			5.77	SU			FA
Temperature	10/5/22 15:55	10/5/22 15:55			19.53	C			FA
Turbidity	10/5/22 15:55	10/5/22 15:55			1.64	NTU			FA
Sulfide	10/5/22 15:55	10/5/22 15:55			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 15:57
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC18511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 15:57
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC18511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 15:57
Customer ID:
Delivery Date: 10/6/22 09:17

Description: Greene County Ash Pond - MW-40H

Laboratory ID Number: BC18511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Alkalinity to pH 4.5	mg CaCO3/L					216	50.5	45.0 to 55.0			0.922	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-3

Location Code: WMWGREAP
Collected: 10/5/22 08:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18547

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:26		1.015	0.0404	mg/L	0.030000	0.1015	J
* Calcium, Total	10/7/22 13:57	10/21/22 13:28		101.5	54.5	mg/L	7.0035	40.6	
* Iron, Total	10/7/22 13:57	10/21/22 13:28		101.5	59.3	mg/L	0.8120	4.06	
* Lithium, Total	10/7/22 13:57	10/21/22 12:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:26		1.015	3.89	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:26		1	9.24	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:26		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:26		1.015	30.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:31		1.015	0.0503	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	10/7/22 14:31	10/21/22 11:17		101.5	52.8	mg/L	7.0035	40.6	
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:17		101.5	57.0	mg/L	0.8120	4.06	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:31		1.015	3.91	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:31		1	9.74	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:31		1.015	4.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:31		1.015	30.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.0119	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.138	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.000297	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.305	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.623	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-3

Location Code: WMWGREAP
Collected: 10/5/22 08:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18547

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:52		1.015	0.000612	mg/L	0.000508	0.001015	J
* Thallium, Total	10/7/22 13:51	10/10/22 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.0128	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.137	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.000287	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.000330	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.302	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.651	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	0.000802	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:16	10/7/22 09:16		1	0.326	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	228	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	319	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	228	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 16:32	10/12/22 16:32		1	11.9	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-3

Location Code: WMWGREAP
Collected: 10/5/22 08:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18547

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:21	10/10/22 13:21		2	23.1	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:56	10/11/22 12:56		1	0.120	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:13	10/18/22 10:13		1	5.11	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 08:31	10/5/22 08:31			690.16	uS/cm			FA
pH	10/5/22 08:31	10/5/22 08:31			5.89	SU			FA
Temperature	10/5/22 08:31	10/5/22 08:31			22.21	C			FA
Turbidity	10/5/22 08:31	10/5/22 08:31			1.06	NTU			FA
Sulfide	10/5/22 08:31	10/5/22 08:31			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 08:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC18547

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 08:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC18547

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 08:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: BC18547

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2

Location Code: WMWGREAP
Collected: 10/5/22 09:29
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18548

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:29		1.015	0.132	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 13:31		101.5	179	mg/L	7.0035	40.6	
* Iron, Total	10/7/22 13:57	10/21/22 13:31		101.5	64.8	mg/L	0.8120	4.06	
* Lithium, Total	10/7/22 13:57	10/21/22 12:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:29		1.015	22.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:29		1	11.3	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:29		1.015	5.28	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:29		1.015	31.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:34		1.015	0.141	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/21/22 11:20		101.5	159	mg/L	7.0035	40.6	
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:20		101.5	57.9	mg/L	0.8120	4.06	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:34		1.015	22.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:34		1	12.0	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:34		1.015	5.61	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:34		1.015	33.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.00629	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.00331	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.0344	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 13:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.000256	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.0293	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.000453	mg/L	0.000068	0.000203	
* Manganese, Total	10/7/22 13:51	10/10/22 15:27		10.15	5.87	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 13:56		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 13:56		1.015	5.93	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2

Location Code: WMWGREAP
Collected: 10/5/22 09:29
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18548

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 13:56		1.015	0.000158	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.0315	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.00388	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.0337	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.0297	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.000395	mg/L	0.000068	0.000203	
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:29		10.15	5.94	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	6.13	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:55		1.015	0.000157	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:18	10/7/22 09:18		1	0.329	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	50.5	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	864	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	50.5	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 16:48	10/12/22 16:48		1	1.95	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-2

Location Code: WMWGREAP
Collected: 10/5/22 09:29
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18548

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:14	10/10/22 13:14		1	12.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:57	10/11/22 12:57		1	0.124	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:28	10/18/22 10:28		32	590	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 09:26	10/5/22 09:26			1337.66	uS/cm			FA
pH	10/5/22 09:26	10/5/22 09:26			6.01	SU			FA
Temperature	10/5/22 09:26	10/5/22 09:26			23.62	C			FA
Turbidity	10/5/22 09:26	10/5/22 09:26			2.67	NTU			FA
Sulfide	10/5/22 09:26	10/5/22 09:26			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:29
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC18548

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:29
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC18548

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 09:29
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: BC18548

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/5/22 09:55
Customer ID:
Submittal Date: 10/6/22 11:02

Laboratory ID Number: BC18549

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:32		1	Not Detected	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/7/22 13:57	10/21/22 12:32		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:20	10/7/22 09:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/5/22 09:55
Customer ID:
Submittal Date: 10/6/22 11:02

Laboratory ID Number: BC18549

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 17:05	10/12/22 17:05		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:15	10/10/22 13:15		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:58	10/11/22 12:58		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:16	10/18/22 10:16		1	0.928	mg/L	0.6	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/5/22 09:55
Customer ID:
Delivery Date: 10/6/22 11:02

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18549

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18549	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.0943	0.0979	0.0987	0.0850 to 0.115	94.3	70.0 to 130	3.75	20.0
BC18549	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0883	0.0889	0.0924	0.0850 to 0.115	88.3	70.0 to 130	0.677	20.0
BC18549	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.0916	0.0920	0.0955	0.0850 to 0.115	91.6	70.0 to 130	0.436	20.0
BC18549	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.0963	0.0946	0.0996	0.0850 to 0.115	96.3	70.0 to 130	1.78	20.0
BC18549	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0896	0.0900	0.0920	0.0850 to 0.115	89.6	70.0 to 130	0.445	20.0
BC18549	Boron, Total	mg/L	-0.000103	0.0650	1.00	0.981	0.975	0.997	0.850 to 1.15	98.1	70.0 to 130	0.613	20.0
BC18549	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0983	0.101	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BC18549	Calcium, Total	mg/L	-0.0118	0.152	5.00	4.88	4.94	4.96	4.25 to 5.75	97.6	70.0 to 130	1.22	20.0
BC18549	Chloride	mg/L	-0.118	1.00	10.0	10.1	10.1	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC18549	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0979	0.0984	0.103	0.0850 to 0.115	97.9	70.0 to 130	0.509	20.0
BC18549	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.0963	0.0979	0.101	0.0850 to 0.115	96.3	70.0 to 130	1.65	20.0
BC18549	Fluoride	mg/L	0.0582	0.125	2.50	2.42	2.50	2.56	2.25 to 2.75	96.8	80.0 to 120	3.25	20.0
BC18549	Iron, Total	mg/L	0.00003	0.0176	0.2	0.198	0.195	0.196	0.170 to 0.230	99.0	70.0 to 130	1.53	20.0
BC18549	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0958	0.0962	0.0969	0.0850 to 0.115	95.8	70.0 to 130	0.417	20.0
BC18549	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.201	0.194	0.198	0.170 to 0.230	100	70.0 to 130	3.54	20.0
BC18549	Magnesium, Total	mg/L	0.00646	0.0462	5.00	5.10	4.98	5.06	4.25 to 5.75	102	70.0 to 130	2.38	20.0
BC18549	Manganese, Total	mg/L	0.0000183	0.00033	0.100	0.0956	0.0969	0.101	0.0850 to 0.115	95.6	70.0 to 130	1.35	20.0
BC18548	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00386	0.00393	0.00386	0.00340 to 0.00460	96.5	70.0 to 130	1.80	20.0
BC18549	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0955	0.0949	0.101	0.0850 to 0.115	95.5	70.0 to 130	0.630	20.0
BC18549	Potassium, Total	mg/L	-0.0312	0.367	10.0	9.54	9.60	9.88	8.50 to 11.5	95.4	70.0 to 130	0.627	20.0
BC18549	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0949	0.0958	0.101	0.0850 to 0.115	94.9	70.0 to 130	0.944	20.0
BC18549	Silicon, Total	mg/L	0.000136	0.0440	1.00	0.966	0.953	0.974	0.850 to 1.15	96.6	70.0 to 130	1.35	20.0
BC18549	Sodium, Total	mg/L	-0.000595	0.0660	5.00	4.97	4.80	4.95	4.25 to 5.75	99.4	70.0 to 130	3.48	20.0
BC18549	Sulfate	mg/L	0.546	2.0	20.0	21.1	20.8	19.7	18.0 to 22.0	101	80.0 to 120	1.43	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/5/22 09:55
Customer ID:
Delivery Date: 10/6/22 11:02

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18549

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18549	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0981	0.0982	0.0996	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18549	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.47	9.69	23.9		94.7	80.0 to 120	2.30	20.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/5/22 09:55
Customer ID:
Delivery Date: 10/6/22 11:02

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18549

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18549	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.02	0.128	2.04	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC18511	Solids, Dissolved	mg/L	1.00	25.0			463	53.0	40.0 to 60.0			1.71	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1

Location Code: WMWGREAP
Collected: 10/5/22 10:27
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18550

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:48		1.015	0.202	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 13:34		10.15	113	mg/L	0.70035	4.06	
* Iron, Total	11/17/22 11:17	11/18/22 10:33		101.5	233	mg/L	0.8120	4.06	RA
* Lithium, Total	10/7/22 13:57	10/21/22 12:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:48		1.015	29.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:48		1	10.8	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:48		1.015	5.06	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 13:34		10.15	53.3	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:38		1.015	0.248	mg/L	0.030000	0.1015	
* Calcium, Dissolved	11/10/22 10:18	11/10/22 10:58		10.15	99.8	mg/L	0.70035	4.06	RA
* Iron, Dissolved	11/10/22 10:18	11/10/22 11:10		101.5	274	mg/L	0.8120	4.06	RA
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:38		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:38		1.015	30.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:38		1	11.6	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:38		1.015	5.44	mg/L	0.02030	0.25375	
* Sodium, Dissolved	11/10/22 10:18	11/10/22 10:58		10.15	47.0	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 14:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.0144	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.0152	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.0256	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 14:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.0000917	mg/L	0.000068	0.000203	J
* Chromium, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.000287	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.226	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 14:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 15:30		92.365	12.9	mg/L	0.013855	0.092365	
* Molybdenum, Total	10/7/22 13:51	10/10/22 14:21		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 14:21		1.015	3.42	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Dissolved Calcium precision is out of specification limit.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1

Location Code: WMWGREAP
Collected: 10/5/22 10:27
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18550

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.000737	mg/L	0.000508	0.001015	J
* Thallium, Total	10/7/22 13:51	10/10/22 14:21		1.015	0.000149	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.0144	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.0155	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.0266	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.000235	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.231	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:33		92.365	13.3	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	3.51	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.000909	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:58		1.015	0.000161	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:29	10/7/22 09:29		1	0.459	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 14:28	10/18/22 15:46		1	35.0	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/22 11:17	10/12/22 13:40		1	1190	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	35.0	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/18/22 14:28	10/18/22 15:46		1	0.00185	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 18:15	10/12/22 18:15		1	2.56	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Dissolved Calcium precision is out of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-1

Location Code: WMWGREAP
Collected: 10/5/22 10:27
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18550

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:31	10/10/22 13:31		1	7.10	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 13:10	10/11/22 13:10		1	0.125	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:47	10/18/22 10:47		32	737	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 10:24	10/5/22 10:24			1546.48	uS/cm			FA
pH	10/5/22 10:24	10/5/22 10:24			5.59	SU			FA
Temperature	10/5/22 10:24	10/5/22 10:24			22.02	C			FA
Turbidity	10/5/22 10:24	10/5/22 10:24			1.04	NTU			FA
Sulfide	10/5/22 10:24	10/5/22 10:24			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Dissolved Calcium precision is out of specification limit.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 10:27
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC18550

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18554	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.321	0.337	0.0987	0.0850 to 0.115	157	70.0 to 130	4.86	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18554	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0947	0.0935	0.0924	0.0850 to 0.115	94.7	70.0 to 130	1.28	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18554	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.518	0.510	0.0955	0.0850 to 0.115	93.0	70.0 to 130	1.56	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18554	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.279	0.274	0.0996	0.0850 to 0.115	97.0	70.0 to 130	1.81	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18554	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0888	0.0915	0.0920	0.0850 to 0.115	88.8	70.0 to 130	3.00	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18554	Boron, Total	mg/L	-0.000103	0.0650	1.00	1.42	1.41	0.997	0.850 to 1.15	102	70.0 to 130	0.707	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18554	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0956	0.0968	0.104	0.0850 to 0.115	95.6	70.0 to 130	1.25	20.0
BC18550	Calcium, Dissolved	mg/L	0.0130	0.152	5.00	102	127	5.25	4.25 to 5.75	44.0	70.0 to 130	21.8	20.0
BC18554	Calcium, Total	mg/L	-0.0118	0.152	5.00	101	84.0	4.96	4.25 to 5.75	444	70.0 to 130	18.4	20.0
BC18554	Chloride	mg/L	-0.135	1.00	10.0	10.1	10.0	10.0	9.00 to 11.0	101	80.0 to 120	0.995	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18554	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0968	0.0951	0.103	0.0850 to 0.115	96.4	70.0 to 130	1.77	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18554	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.127	0.124	0.101	0.0850 to 0.115	93.9	70.0 to 130	2.39	20.0
BC18554	Fluoride	mg/L	0.0311	0.125	2.50	3.02	2.94	2.55	2.25 to 2.75	110	80.0 to 120	2.68	20.0
BC18550	Iron, Dissolved	mg/L	0.000316	0.0176	0.2	240	224	0.207	0.170 to 0.230	-1700	70.0 to 130	6.90	20.0
BC18550	Iron, Total	mg/L	0.00315	0.0176	0.2	242	221	0.198	0.170 to 0.230	4500	70.0 to 130	9.07	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Dissolved Calcium precision is out of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 10:27
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC18550

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18554	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0926	0.0960	0.0969	0.0850 to 0.115	92.4	70.0 to 130	3.61	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18554	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.274	0.258	0.198	0.170 to 0.230	104	70.0 to 130	6.02	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18554	Magnesium, Total	mg/L	0.00646	0.0462	5.00	24.6	24.2	5.06	4.25 to 5.75	116	70.0 to 130	1.64	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18554	Manganese, Total	mg/L	0.0000183	0.00033	0.100	1.82	1.79	0.101	0.0850 to 0.115	70.0	70.0 to 130	1.66	20.0
BC18554	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00388	0.00395	0.00386	0.00340 to 0.00460	97.0	70.0 to 130	1.79	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18554	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0887	0.0872	0.101	0.0850 to 0.115	85.9	70.0 to 130	1.71	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18554	Potassium, Total	mg/L	-0.0312	0.367	10.0	15.6	15.2	9.88	8.50 to 11.5	93.9	70.0 to 130	2.60	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18554	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0880	0.0873	0.101	0.0850 to 0.115	88.0	70.0 to 130	0.799	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18554	Silicon, Total	mg/L	0.000136	0.0440	1.00	9.29	9.22	0.974	0.850 to 1.15	152	70.0 to 130	0.756	20.0
BC18550	Sodium, Dissolved	mg/L	0.00135	0.0660	5.00	55.0	60.3	4.83	4.25 to 5.75	160	70.0 to 130	9.19	20.0
BC18554	Sodium, Total	mg/L	-0.000595	0.0660	5.00	21.1	19.9	4.95	4.25 to 5.75	124	70.0 to 130	5.85	20.0
BC18554	Sulfate	mg/L	0.0700	2.0	200	317	325	19.6	18.0 to 22.0	108	80.0 to 120	2.49	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18554	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0958	0.0983	0.0996	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BC18554	Total Organic Carbon	mg/L	0.241	1.00	10.0	11.8	11.9	23.3		93.2	80.0 to 120	0.844	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Dissolved Calcium precision is out of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 10:27
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: BC18550

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18550	Alkalinity to pH 4.5	mg CaCO3/L					35.1	50.3	45.0 to 55.0			0.285	10.0
BC18554	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.14	0.278	2.04	1.80 to 2.20	91.7	90.0 to 110	9.59	15.0
BC18553	Solids, Dissolved	mg/L	1.00	25.0			196	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Dissolved Calcium precision is out of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-44H

Location Code: WMWGREAP
Collected: 10/5/22 13:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:51		1.015	0.194	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 13:40		10.15	137	mg/L	0.70035	4.06	
* Iron, Total	10/7/22 13:57	10/21/22 13:40		10.15	7.66	mg/L	0.08120	0.406	
* Lithium, Total	10/7/22 13:57	10/21/22 12:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:51		1.015	17.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:51		1	9.91	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:51		1.015	4.63	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:51		1.015	25.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:41		1.015	0.197	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/21/22 11:26		10.15	150	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:26		10.15	7.98	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:41		1.015	17.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:41		1	10.7	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:41		1.015	5.01	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:41		1.015	28.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 14:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 14:25		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 14:25		1.015	0.00171	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 14:25		1.015	0.0475	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 14:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 14:25		1.015	0.000302	mg/L	0.000068	0.000203	
* Chromium, Total	10/7/22 13:51	10/10/22 14:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 14:25		1.015	0.288	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 14:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 15:34		10.15	8.06	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 14:25		1.015	0.000228	mg/L	0.000102	0.000203	
* Potassium, Total	10/7/22 13:51	10/10/22 14:25		1.015	2.66	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-44H

Location Code: WMWGREAP
Collected: 10/5/22 13:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 14:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 14:25		1.015	0.0000868	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	0.00173	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	0.0487	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	0.000221	mg/L	0.000068	0.000203	
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	0.294	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:36		10.15	8.57	mg/L	0.001522	0.01015	RA
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	0.000221	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	2.78	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:02		1.015	0.0000844	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:30	10/7/22 09:30		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/19/22 13:02	10/19/22 13:05		1	90.3	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/22 11:17	10/12/22 13:40		1	606	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:05		1	90.3	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:05		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 18:30	10/12/22 18:30		1	1.20	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-44H

Location Code: WMWGREAP
Collected: 10/5/22 13:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:32	10/10/22 13:32		1	7.16	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 13:11	10/11/22 13:11		1	0.104	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:48	10/18/22 10:48		20	376	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 13:31	10/5/22 13:31			973.85	uS/cm			FA
pH	10/5/22 13:31	10/5/22 13:31			6.06	SU			FA
Temperature	10/5/22 13:31	10/5/22 13:31			20.19	C			FA
Turbidity	10/5/22 13:31	10/5/22 13:31			2.16	NTU			FA
Sulfide	10/5/22 13:31	10/5/22 13:31			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 13:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC18551

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0934	0.0930	0.100	0.0850 to 0.115	93.4	70.0 to 130	0.429	20.0
BC18554	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.321	0.337	0.0987	0.0850 to 0.115	157	70.0 to 130	4.86	20.0
BC18551	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0949	0.0952	0.0950	0.0850 to 0.115	94.9	70.0 to 130	0.316	20.0
BC18554	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0947	0.0935	0.0924	0.0850 to 0.115	94.7	70.0 to 130	1.28	20.0
BC18551	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.0923	0.0929	0.0979	0.0850 to 0.115	90.6	70.0 to 130	0.648	20.0
BC18554	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.518	0.510	0.0955	0.0850 to 0.115	93.0	70.0 to 130	1.56	20.0
BC18551	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.138	0.140	0.102	0.0850 to 0.115	89.3	70.0 to 130	1.44	20.0
BC18554	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.279	0.274	0.0996	0.0850 to 0.115	97.0	70.0 to 130	1.81	20.0
BC18551	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0962	0.0956	0.0947	0.0850 to 0.115	96.2	70.0 to 130	0.626	20.0
BC18554	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0888	0.0915	0.0920	0.0850 to 0.115	88.8	70.0 to 130	3.00	20.0
BC18551	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.19	1.21	0.995	0.850 to 1.15	99.3	70.0 to 130	1.67	20.0
BC18554	Boron, Total	mg/L	-0.000103	0.0650	1.00	1.42	1.41	0.997	0.850 to 1.15	102	70.0 to 130	0.707	20.0
BC18551	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0951	0.0942	0.102	0.0850 to 0.115	94.9	70.0 to 130	0.951	20.0
BC18554	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0956	0.0968	0.104	0.0850 to 0.115	95.6	70.0 to 130	1.25	20.0
BC18551	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	145	152	5.31	4.25 to 5.75	-100	70.0 to 130	4.71	20.0
BC18554	Calcium, Total	mg/L	-0.0118	0.152	5.00	101	84.0	4.96	4.25 to 5.75	444	70.0 to 130	18.4	20.0
BC18554	Chloride	mg/L	-0.135	1.00	10.0	10.1	10.0	10.0	9.00 to 11.0	101	80.0 to 120	0.995	20.0
BC18551	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0957	0.0933	0.102	0.0850 to 0.115	95.7	70.0 to 130	2.54	20.0
BC18554	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0968	0.0951	0.103	0.0850 to 0.115	96.4	70.0 to 130	1.77	20.0
BC18551	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.384	0.381	0.103	0.0850 to 0.115	90.0	70.0 to 130	0.784	20.0
BC18554	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.127	0.124	0.101	0.0850 to 0.115	93.9	70.0 to 130	2.39	20.0
BC18554	Fluoride	mg/L	0.0311	0.125	2.50	3.02	2.94	2.55	2.25 to 2.75	110	80.0 to 120	2.68	20.0
BC18551	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	7.71	8.06	0.209	0.170 to 0.230	-135	70.0 to 130	4.44	20.0
BC18554	Iron, Total	mg/L	0.00003	0.0176	0.2	48.5	43.9	0.196	0.170 to 0.230	2100	70.0 to 130	9.96	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 13:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC18551

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18551	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0986	0.102	0.0850 to 0.115	97.8	70.0 to 130	0.815	20.0
BC18554	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0926	0.0960	0.0969	0.0850 to 0.115	92.4	70.0 to 130	3.61	20.0
BC18551	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.226	0.230	0.193	0.170 to 0.230	113	70.0 to 130	1.75	20.0
BC18554	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.274	0.258	0.198	0.170 to 0.230	104	70.0 to 130	6.02	20.0
BC18551	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	22.4	22.7	5.13	4.25 to 5.75	94.0	70.0 to 130	1.33	20.0
BC18554	Magnesium, Total	mg/L	0.00646	0.0462	5.00	24.6	24.2	5.06	4.25 to 5.75	116	70.0 to 130	1.64	20.0
BC18551	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	8.25	8.40	0.102	0.0850 to 0.115	-320	70.0 to 130	1.80	20.0
BC18554	Manganese, Total	mg/L	0.0000183	0.00033	0.100	1.82	1.79	0.101	0.0850 to 0.115	70.0	70.0 to 130	1.66	20.0
BC18554	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00388	0.00395	0.00386	0.00340 to 0.00460	97.0	70.0 to 130	1.79	20.0
BC18551	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0921	0.0937	0.101	0.0850 to 0.115	91.9	70.0 to 130	1.72	20.0
BC18554	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0887	0.0872	0.101	0.0850 to 0.115	85.9	70.0 to 130	1.71	20.0
BC18551	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	12.4	12.1	10.2	8.50 to 11.5	96.2	70.0 to 130	2.45	20.0
BC18554	Potassium, Total	mg/L	-0.0312	0.367	10.0	15.6	15.2	9.88	8.50 to 11.5	93.9	70.0 to 130	2.60	20.0
BC18551	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0946	0.0939	0.102	0.0850 to 0.115	94.6	70.0 to 130	0.743	20.0
BC18554	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0880	0.0873	0.101	0.0850 to 0.115	88.0	70.0 to 130	0.799	20.0
BC18551	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	5.90	6.00	1.05	0.850 to 1.15	89.0	70.0 to 130	1.68	20.0
BC18554	Silicon, Total	mg/L	0.000136	0.0440	1.00	9.29	9.22	0.974	0.850 to 1.15	152	70.0 to 130	0.756	20.0
BC18551	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	32.6	33.2	5.07	4.25 to 5.75	86.0	70.0 to 130	1.82	20.0
BC18554	Sodium, Total	mg/L	-0.000595	0.0660	5.00	21.1	19.9	4.95	4.25 to 5.75	124	70.0 to 130	5.85	20.0
BC18554	Sulfate	mg/L	0.0700	2.0	200	317	325	19.6	18.0 to 22.0	108	80.0 to 120	2.49	20.0
BC18551	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0999	0.100	0.104	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC18554	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0958	0.0983	0.0996	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BC18554	Total Organic Carbon	mg/L	0.241	1.00	10.0	11.8	11.9	23.3		93.2	80.0 to 120	0.844	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 13:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-44H

Laboratory ID Number: BC18551

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Alkalinity to pH 4.5	mg CaCO3/L					216	50.5	45.0 to 55.0			0.922	10.0
BC18554	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.14	0.278	2.04	1.80 to 2.20	91.7	90.0 to 110	9.59	15.0
BC18553	Solids, Dissolved	mg/L	1.00	25.0			196	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H

Location Code: WMWGREAP
Collected: 10/5/22 14:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:54		1.015	0.151	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 12:54		1.015	34.9	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:57	10/21/22 13:44		10.15	25.5	mg/L	0.08120	0.406	
* Lithium, Total	10/7/22 13:57	10/21/22 12:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:54		1.015	9.44	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:54		1	9.97	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:54		1.015	4.66	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:54		1.015	8.74	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 13:58		1.015	0.163	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/20/22 13:58		1.015	35.2	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:35		10.15	22.6	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 13:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 13:58		1.015	9.78	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 13:58		1	10.4	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 13:58		1.015	4.86	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 13:58		1.015	9.78	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 14:29		1.015	0.00934	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/7/22 13:51	10/10/22 14:29		1.015	0.0177	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 14:29		1.015	0.0719	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 14:29		1.015	0.0334	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 15:38		5.075	1.68	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/7/22 13:51	10/10/22 14:29		1.015	0.000757	mg/L	0.000102	0.000203	
* Potassium, Total	10/7/22 13:51	10/10/22 14:29		1.015	3.43	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H

Location Code: WMWGREAP
Collected: 10/5/22 14:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	0.00742	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	0.0185	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	0.0735	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	0.0344	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:47		5.075	1.71	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	0.000675	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	3.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:31	10/7/22 09:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/19/22 13:02	10/19/22 13:16		1	98.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/22 11:17	10/12/22 13:40		1	206	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:16		1	98.3	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:16		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 18:44	10/12/22 18:44		1	2.42	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H

Location Code: WMWGREAP
Collected: 10/5/22 14:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:34	10/10/22 13:34		1	5.31	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 13:13	10/11/22 13:13		1	0.165	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 10:49	10/18/22 10:49		2	54.8	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 14:31	10/5/22 14:31			461.49	uS/cm			FA
pH	10/5/22 14:31	10/5/22 14:31			5.99	SU			FA
Temperature	10/5/22 14:31	10/5/22 14:31			21.22	C			FA
Turbidity	10/5/22 14:31	10/5/22 14:31			3.97	NTU			FA
Sulfide	10/5/22 14:31	10/5/22 14:31			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC18552

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0946	0.0894	0.100	0.0850 to 0.115	94.6	70.0 to 130	5.65	20.0
BC18554	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.321	0.337	0.0987	0.0850 to 0.115	157	70.0 to 130	4.86	20.0
BC18554	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0966	0.0927	0.0950	0.0850 to 0.115	96.6	70.0 to 130	4.12	20.0
BC18554	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0947	0.0935	0.0924	0.0850 to 0.115	94.7	70.0 to 130	1.28	20.0
BC18554	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.517	0.507	0.0979	0.0850 to 0.115	68.0	70.0 to 130	1.95	20.0
BC18554	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.518	0.510	0.0955	0.0850 to 0.115	93.0	70.0 to 130	1.56	20.0
BC18554	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.277	0.268	0.102	0.0850 to 0.115	89.0	70.0 to 130	3.30	20.0
BC18554	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.279	0.274	0.0996	0.0850 to 0.115	97.0	70.0 to 130	1.81	20.0
BC18554	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0941	0.0952	0.0947	0.0850 to 0.115	94.1	70.0 to 130	1.16	20.0
BC18554	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0888	0.0915	0.0920	0.0850 to 0.115	88.8	70.0 to 130	3.00	20.0
BC18554	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.42	1.42	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC18554	Boron, Total	mg/L	-0.000103	0.0650	1.00	1.42	1.41	0.997	0.850 to 1.15	102	70.0 to 130	0.707	20.0
BC18554	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0960	0.0941	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.00	20.0
BC18554	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0956	0.0968	0.104	0.0850 to 0.115	95.6	70.0 to 130	1.25	20.0
BC18554	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	88.3	87.4	5.31	4.25 to 5.75	140	70.0 to 130	1.02	20.0
BC18554	Calcium, Total	mg/L	-0.0118	0.152	5.00	101	84.0	4.96	4.25 to 5.75	444	70.0 to 130	18.4	20.0
BC18554	Chloride	mg/L	-0.135	1.00	10.0	10.1	10.0	10.0	9.00 to 11.0	101	80.0 to 120	0.995	20.0
BC18554	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0961	0.0928	0.102	0.0850 to 0.115	96.1	70.0 to 130	3.49	20.0
BC18554	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0968	0.0951	0.103	0.0850 to 0.115	96.4	70.0 to 130	1.77	20.0
BC18554	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.127	0.122	0.103	0.0850 to 0.115	93.6	70.0 to 130	4.02	20.0
BC18554	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.127	0.124	0.101	0.0850 to 0.115	93.9	70.0 to 130	2.39	20.0
BC18554	Fluoride	mg/L	0.0311	0.125	2.50	3.02	2.94	2.55	2.25 to 2.75	110	80.0 to 120	2.68	20.0
BC18554	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	42.9	44.0	0.209	0.170 to 0.230	-700	70.0 to 130	2.53	20.0
BC18554	Iron, Total	mg/L	0.00003	0.0176	0.2	48.5	43.9	0.196	0.170 to 0.230	2100	70.0 to 130	9.96	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC18552

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0989	0.102	0.0850 to 0.115	97.8	70.0 to 130	1.12	20.0
BC18554	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0926	0.0960	0.0969	0.0850 to 0.115	92.4	70.0 to 130	3.61	20.0
BC18554	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.291	0.291	0.193	0.170 to 0.230	108	70.0 to 130	0.00	20.0
BC18554	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.274	0.258	0.198	0.170 to 0.230	104	70.0 to 130	6.02	20.0
BC18554	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	24.8	24.8	5.13	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC18554	Magnesium, Total	mg/L	0.00646	0.0462	5.00	24.6	24.2	5.06	4.25 to 5.75	116	70.0 to 130	1.64	20.0
BC18554	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	1.83	1.83	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.00	20.0
BC18554	Manganese, Total	mg/L	0.0000183	0.00033	0.100	1.82	1.79	0.101	0.0850 to 0.115	70.0	70.0 to 130	1.66	20.0
BC18554	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00388	0.00395	0.00386	0.00340 to 0.00460	97.0	70.0 to 130	1.79	20.0
BC18554	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0875	0.0851	0.101	0.0850 to 0.115	84.6	70.0 to 130	2.78	20.0
BC18554	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0887	0.0872	0.101	0.0850 to 0.115	85.9	70.0 to 130	1.71	20.0
BC18554	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	15.8	15.2	10.2	8.50 to 11.5	94.6	70.0 to 130	3.87	20.0
BC18554	Potassium, Total	mg/L	-0.0312	0.367	10.0	15.6	15.2	9.88	8.50 to 11.5	93.9	70.0 to 130	2.60	20.0
BC18554	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0885	0.0856	0.102	0.0850 to 0.115	88.5	70.0 to 130	3.33	20.0
BC18554	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0880	0.0873	0.101	0.0850 to 0.115	88.0	70.0 to 130	0.799	20.0
BC18554	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	9.26	9.20	1.05	0.850 to 1.15	97.0	70.0 to 130	0.650	20.0
BC18554	Silicon, Total	mg/L	0.000136	0.0440	1.00	9.29	9.22	0.974	0.850 to 1.15	152	70.0 to 130	0.756	20.0
BC18554	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	23.1	23.0	5.07	4.25 to 5.75	118	70.0 to 130	0.434	20.0
BC18554	Sodium, Total	mg/L	-0.000595	0.0660	5.00	21.1	19.9	4.95	4.25 to 5.75	124	70.0 to 130	5.85	20.0
BC18554	Sulfate	mg/L	0.0700	2.0	200	317	325	19.6	18.0 to 22.0	108	80.0 to 120	2.49	20.0
BC18554	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0994	0.0995	0.104	0.0850 to 0.115	99.4	70.0 to 130	0.101	20.0
BC18554	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0958	0.0983	0.0996	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BC18554	Total Organic Carbon	mg/L	0.241	1.00	10.0	11.8	11.9	23.3		93.2	80.0 to 120	0.844	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-57H

Laboratory ID Number: BC18552

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Alkalinity to pH 4.5	mg CaCO3/L					216	50.5	45.0 to 55.0			0.922	10.0
BC18554	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.14	0.278	2.04	1.80 to 2.20	91.7	90.0 to 110	9.59	15.0
BC18553	Solids, Dissolved	mg/L	1.00	25.0			196	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H Dup

Location Code: WMWGREAP
Collected: 10/5/22 14:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 12:58		1.015	0.151	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 12:58		1.015	34.5	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:57	10/21/22 13:47		10.15	24.5	mg/L	0.08120	0.406	
* Lithium, Total	10/7/22 13:57	10/21/22 12:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:57	10/21/22 12:58		1.015	9.47	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 12:58		1	9.84	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 12:58		1.015	4.60	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:57	10/21/22 12:58		1.015	8.95	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/7/22 14:31	10/20/22 14:01		1.015	0.163	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/20/22 14:01		1.015	35.3	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:39		10.15	22.7	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/7/22 14:31	10/20/22 14:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 14:01		1.015	9.79	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 14:01		1	10.5	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 14:01		1.015	4.90	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 14:01		1.015	9.82	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 14:32		1.015	0.00934	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/7/22 13:51	10/10/22 14:32		1.015	0.0178	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 14:32		1.015	0.0724	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 14:32		1.015	0.0335	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 15:41		5.075	1.79	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/7/22 13:51	10/10/22 14:32		1.015	0.000726	mg/L	0.000102	0.000203	
* Potassium, Total	10/7/22 13:51	10/10/22 14:32		1.015	3.50	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H Dup

Location Code: WMWGREAP
Collected: 10/5/22 14:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 14:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	0.00680	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	0.0186	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	0.0729	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	0.0342	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:51		5.075	1.66	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	0.000698	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	3.58	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 23:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:32	10/7/22 09:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/19/22 13:02	10/19/22 13:20		1	98.7	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/22 11:17	10/12/22 13:40		1	196	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:20		1	98.6	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 13:20		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 18:57	10/12/22 18:57		1	2.35	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-57H Dup

Location Code: WMWGREAP
Collected: 10/5/22 14:34
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:35	10/10/22 13:35		1	4.03	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 13:14	10/11/22 13:14		1	0.191	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 11:03	10/18/22 11:03		2	53.2	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 14:31	10/5/22 14:31			461.49	uS/cm			FA
pH	10/5/22 14:31	10/5/22 14:31			5.99	SU			FA
Temperature	10/5/22 14:31	10/5/22 14:31			21.22	C			FA
Turbidity	10/5/22 14:31	10/5/22 14:31			3.97	NTU			FA
Sulfide	10/5/22 14:31	10/5/22 14:31			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-57H Dup

Laboratory ID Number: BC18553

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0946	0.0894	0.100	0.0850 to 0.115	94.6	70.0 to 130	5.65	20.0
BC18554	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.321	0.337	0.0987	0.0850 to 0.115	157	70.0 to 130	4.86	20.0
BC18554	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0966	0.0927	0.0950	0.0850 to 0.115	96.6	70.0 to 130	4.12	20.0
BC18554	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0947	0.0935	0.0924	0.0850 to 0.115	94.7	70.0 to 130	1.28	20.0
BC18554	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.517	0.507	0.0979	0.0850 to 0.115	68.0	70.0 to 130	1.95	20.0
BC18554	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.518	0.510	0.0955	0.0850 to 0.115	93.0	70.0 to 130	1.56	20.0
BC18554	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.277	0.268	0.102	0.0850 to 0.115	89.0	70.0 to 130	3.30	20.0
BC18554	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.279	0.274	0.0996	0.0850 to 0.115	97.0	70.0 to 130	1.81	20.0
BC18554	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0941	0.0952	0.0947	0.0850 to 0.115	94.1	70.0 to 130	1.16	20.0
BC18554	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0888	0.0915	0.0920	0.0850 to 0.115	88.8	70.0 to 130	3.00	20.0
BC18554	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.42	1.42	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC18554	Boron, Total	mg/L	-0.000103	0.0650	1.00	1.42	1.41	0.997	0.850 to 1.15	102	70.0 to 130	0.707	20.0
BC18554	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0960	0.0941	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.00	20.0
BC18554	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0956	0.0968	0.104	0.0850 to 0.115	95.6	70.0 to 130	1.25	20.0
BC18554	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	88.3	87.4	5.31	4.25 to 5.75	140	70.0 to 130	1.02	20.0
BC18554	Calcium, Total	mg/L	-0.0118	0.152	5.00	101	84.0	4.96	4.25 to 5.75	444	70.0 to 130	18.4	20.0
BC18554	Chloride	mg/L	-0.135	1.00	10.0	10.1	10.0	10.0	9.00 to 11.0	101	80.0 to 120	0.995	20.0
BC18554	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0961	0.0928	0.102	0.0850 to 0.115	96.1	70.0 to 130	3.49	20.0
BC18554	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0968	0.0951	0.103	0.0850 to 0.115	96.4	70.0 to 130	1.77	20.0
BC18554	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.127	0.122	0.103	0.0850 to 0.115	93.6	70.0 to 130	4.02	20.0
BC18554	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.127	0.124	0.101	0.0850 to 0.115	93.9	70.0 to 130	2.39	20.0
BC18554	Fluoride	mg/L	0.0311	0.125	2.50	3.02	2.94	2.55	2.25 to 2.75	110	80.0 to 120	2.68	20.0
BC18554	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	42.9	44.0	0.209	0.170 to 0.230	-700	70.0 to 130	2.53	20.0
BC18554	Iron, Total	mg/L	0.00003	0.0176	0.2	48.5	43.9	0.196	0.170 to 0.230	2100	70.0 to 130	9.96	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-57H Dup

Laboratory ID Number: BC18553

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0989	0.102	0.0850 to 0.115	97.8	70.0 to 130	1.12	20.0
BC18554	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0926	0.0960	0.0969	0.0850 to 0.115	92.4	70.0 to 130	3.61	20.0
BC18554	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.291	0.291	0.193	0.170 to 0.230	108	70.0 to 130	0.00	20.0
BC18554	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.274	0.258	0.198	0.170 to 0.230	104	70.0 to 130	6.02	20.0
BC18554	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	24.8	24.8	5.13	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC18554	Magnesium, Total	mg/L	0.00646	0.0462	5.00	24.6	24.2	5.06	4.25 to 5.75	116	70.0 to 130	1.64	20.0
BC18554	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	1.83	1.83	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.00	20.0
BC18554	Manganese, Total	mg/L	0.0000183	0.00033	0.100	1.82	1.79	0.101	0.0850 to 0.115	70.0	70.0 to 130	1.66	20.0
BC18554	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00388	0.00395	0.00386	0.00340 to 0.00460	97.0	70.0 to 130	1.79	20.0
BC18554	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0875	0.0851	0.101	0.0850 to 0.115	84.6	70.0 to 130	2.78	20.0
BC18554	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0887	0.0872	0.101	0.0850 to 0.115	85.9	70.0 to 130	1.71	20.0
BC18554	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	15.8	15.2	10.2	8.50 to 11.5	94.6	70.0 to 130	3.87	20.0
BC18554	Potassium, Total	mg/L	-0.0312	0.367	10.0	15.6	15.2	9.88	8.50 to 11.5	93.9	70.0 to 130	2.60	20.0
BC18554	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0885	0.0856	0.102	0.0850 to 0.115	88.5	70.0 to 130	3.33	20.0
BC18554	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0880	0.0873	0.101	0.0850 to 0.115	88.0	70.0 to 130	0.799	20.0
BC18554	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	9.26	9.20	1.05	0.850 to 1.15	97.0	70.0 to 130	0.650	20.0
BC18554	Silicon, Total	mg/L	0.000136	0.0440	1.00	9.29	9.22	0.974	0.850 to 1.15	152	70.0 to 130	0.756	20.0
BC18554	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	23.1	23.0	5.07	4.25 to 5.75	118	70.0 to 130	0.434	20.0
BC18554	Sodium, Total	mg/L	-0.000595	0.0660	5.00	21.1	19.9	4.95	4.25 to 5.75	124	70.0 to 130	5.85	20.0
BC18554	Sulfate	mg/L	0.0700	2.0	200	317	325	19.6	18.0 to 22.0	108	80.0 to 120	2.49	20.0
BC18554	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0994	0.0995	0.104	0.0850 to 0.115	99.4	70.0 to 130	0.101	20.0
BC18554	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0958	0.0983	0.0996	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BC18554	Total Organic Carbon	mg/L	0.241	1.00	10.0	11.8	11.9	23.3		93.2	80.0 to 120	0.844	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 14:34
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-57H Dup

Laboratory ID Number: BC18553

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Alkalinity to pH 4.5	mg CaCO3/L					216	50.5	45.0 to 55.0			0.922	10.0
BC18554	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.14	0.278	2.04	1.80 to 2.20	91.7	90.0 to 110	9.59	15.0
BC18553	Solids, Dissolved	mg/L	1.00	25.0			196	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-54H

Location Code: WMWGREAP
Collected: 10/5/22 16:22
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:57	10/21/22 13:01		1.015	0.398	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:57	10/21/22 13:50		101.5	78.8	mg/L	7.0035	40.6	RA
* Iron, Total	10/7/22 13:57	10/21/22 13:50		101.5	44.3	mg/L	0.8120	4.06	RA
* Lithium, Total	10/7/22 13:57	10/21/22 13:01		1.015	0.0650	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/7/22 13:57	10/21/22 13:01		1.015	18.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:57	10/21/22 13:01		1	16.6	mg/L			
Silicon, Total	10/7/22 13:57	10/21/22 13:01		1.015	7.77	mg/L	0.02030	0.25375	R
* Sodium, Total	10/7/22 13:57	10/21/22 13:01		1.015	14.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/20/22 14:05		1.015	0.405	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/21/22 11:42		101.5	81.3	mg/L	7.0035	40.6	RA
* Iron, Dissolved	10/7/22 14:31	10/21/22 11:42		101.5	44.3	mg/L	0.8120	4.06	RA
* Lithium, Dissolved	10/7/22 14:31	10/20/22 14:05		1.015	0.0748	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/7/22 14:31	10/20/22 14:05		1.015	19.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/20/22 14:05		1	17.7	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/20/22 14:05		1.015	8.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/20/22 14:05		1.015	17.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 14:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.164	mg/L	0.006090	0.01015	R
* Arsenic, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.425	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.182	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 14:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 14:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.000414	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.0331	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.000194	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 15:45		5.075	1.75	mg/L	0.000761	0.005075	RA
* Molybdenum, Total	10/7/22 13:51	10/10/22 14:36		1.015	0.00277	mg/L	0.000102	0.000203	
* Potassium, Total	10/7/22 13:51	10/10/22 14:36		1.015	6.21	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-54H

Location Code: WMWGREAP
Collected: 10/5/22 16:22
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 14:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 14:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	0.449	mg/L	0.000081	0.000203	RA
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	0.188	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	0.0334	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:55		5.075	1.75	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	0.00286	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	6.34	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/8/22 00:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 09:32	10/7/22 09:32		1	0.306	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/19/22 13:02	10/19/22 14:35		1	218	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/22 11:17	10/12/22 13:40		1	403	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 14:35		1	218	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/19/22 13:02	10/19/22 14:35		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 19:13	10/12/22 19:13		1	2.48	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-54H

Location Code: WMWGREAP
Collected: 10/5/22 16:22
Customer ID:
Submittal Date: 10/6/22 11:01

Laboratory ID Number: BC18554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:36	10/10/22 13:36		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 13:15	10/11/22 13:15		1	0.261	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 11:04	10/18/22 11:04		10	101	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/22 16:19	10/5/22 16:19			857.59	uS/cm			FA
pH	10/5/22 16:19	10/5/22 16:19			6.41	SU			FA
Temperature	10/5/22 16:19	10/5/22 16:19			21.71	C			FA
Turbidity	10/5/22 16:19	10/5/22 16:19			9.28	NTU			FA
Sulfide	10/5/22 16:19	10/5/22 16:19			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 16:22
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC18554

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Aluminum, Dissolved	mg/L	-0.000334	0.010	0.100	0.0946	0.0894	0.100	0.0850 to 0.115	94.6	70.0 to 130	5.65	20.0
BC18554	Aluminum, Total	mg/L	-0.000179	0.010	0.100	0.321	0.337	0.0987	0.0850 to 0.115	157	70.0 to 130	4.86	20.0
BC18554	Antimony, Dissolved	mg/L	0.000316	0.00100	0.100	0.0966	0.0927	0.0950	0.0850 to 0.115	96.6	70.0 to 130	4.12	20.0
BC18554	Antimony, Total	mg/L	0.000154	0.00100	0.100	0.0947	0.0935	0.0924	0.0850 to 0.115	94.7	70.0 to 130	1.28	20.0
BC18554	Arsenic, Dissolved	mg/L	-0.0000409	0.000176	0.100	0.517	0.507	0.0979	0.0850 to 0.115	68.0	70.0 to 130	1.95	20.0
BC18554	Arsenic, Total	mg/L	-0.0000847	0.000176	0.100	0.518	0.510	0.0955	0.0850 to 0.115	93.0	70.0 to 130	1.56	20.0
BC18554	Barium, Dissolved	mg/L	0.0000069	0.00100	0.100	0.277	0.268	0.102	0.0850 to 0.115	89.0	70.0 to 130	3.30	20.0
BC18554	Barium, Total	mg/L	-0.0000151	0.00100	0.100	0.279	0.274	0.0996	0.0850 to 0.115	97.0	70.0 to 130	1.81	20.0
BC18554	Beryllium, Dissolved	mg/L	0.0000172	0.000880	0.100	0.0941	0.0952	0.0947	0.0850 to 0.115	94.1	70.0 to 130	1.16	20.0
BC18554	Beryllium, Total	mg/L	0.0000097	0.000880	0.100	0.0888	0.0915	0.0920	0.0850 to 0.115	88.8	70.0 to 130	3.00	20.0
BC18554	Boron, Dissolved	mg/L	0.00113	0.0650	1.00	1.42	1.42	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC18554	Boron, Total	mg/L	-0.000103	0.0650	1.00	1.42	1.41	0.997	0.850 to 1.15	102	70.0 to 130	0.707	20.0
BC18554	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0960	0.0941	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.00	20.0
BC18554	Cadmium, Total	mg/L	0.0000052	0.000147	0.100	0.0956	0.0968	0.104	0.0850 to 0.115	95.6	70.0 to 130	1.25	20.0
BC18554	Calcium, Dissolved	mg/L	-0.0194	0.152	5.00	88.3	87.4	5.31	4.25 to 5.75	140	70.0 to 130	1.02	20.0
BC18554	Calcium, Total	mg/L	-0.0118	0.152	5.00	101	84.0	4.96	4.25 to 5.75	444	70.0 to 130	18.4	20.0
BC18554	Chloride	mg/L	-0.135	1.00	10.0	10.1	10.0	10.0	9.00 to 11.0	101	80.0 to 120	0.995	20.0
BC18554	Chromium, Dissolved	mg/L	0.0000164	0.000440	0.100	0.0961	0.0928	0.102	0.0850 to 0.115	96.1	70.0 to 130	3.49	20.0
BC18554	Chromium, Total	mg/L	-0.0000409	0.000440	0.100	0.0968	0.0951	0.103	0.0850 to 0.115	96.4	70.0 to 130	1.77	20.0
BC18554	Cobalt, Dissolved	mg/L	-0.0000008	0.000147	0.100	0.127	0.122	0.103	0.0850 to 0.115	93.6	70.0 to 130	4.02	20.0
BC18554	Cobalt, Total	mg/L	-0.0000027	0.000147	0.100	0.127	0.124	0.101	0.0850 to 0.115	93.9	70.0 to 130	2.39	20.0
BC18554	Fluoride	mg/L	0.0311	0.125	2.50	3.02	2.94	2.55	2.25 to 2.75	110	80.0 to 120	2.68	20.0
BC18554	Iron, Dissolved	mg/L	-0.00190	0.0176	0.2	42.9	44.0	0.209	0.170 to 0.230	-700	70.0 to 130	2.53	20.0
BC18554	Iron, Total	mg/L	0.00003	0.0176	0.2	48.5	43.9	0.196	0.170 to 0.230	2100	70.0 to 130	9.96	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 16:22
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC18554

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Lead, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0978	0.0989	0.102	0.0850 to 0.115	97.8	70.0 to 130	1.12	20.0
BC18554	Lead, Total	mg/L	0.0000006	0.000147	0.100	0.0926	0.0960	0.0969	0.0850 to 0.115	92.4	70.0 to 130	3.61	20.0
BC18554	Lithium, Dissolved	mg/L	-1.230E-05	0.0154	0.200	0.291	0.291	0.193	0.170 to 0.230	108	70.0 to 130	0.00	20.0
BC18554	Lithium, Total	mg/L	0.000233	0.0154	0.200	0.274	0.258	0.198	0.170 to 0.230	104	70.0 to 130	6.02	20.0
BC18554	Magnesium, Dissolved	mg/L	-0.00160	0.0462	5.00	24.8	24.8	5.13	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC18554	Magnesium, Total	mg/L	0.00646	0.0462	5.00	24.6	24.2	5.06	4.25 to 5.75	116	70.0 to 130	1.64	20.0
BC18554	Manganese, Dissolved	mg/L	0.0000426	0.00033	0.100	1.83	1.83	0.102	0.0850 to 0.115	80.0	70.0 to 130	0.00	20.0
BC18554	Manganese, Total	mg/L	0.0000183	0.00033	0.100	1.82	1.79	0.101	0.0850 to 0.115	70.0	70.0 to 130	1.66	20.0
BC18554	Mercury, Total by CVAA	mg/L	-0.00011	0.000500	0.004	0.00388	0.00395	0.00386	0.00340 to 0.00460	97.0	70.0 to 130	1.79	20.0
BC18554	Molybdenum, Dissolved	mg/L	0.0000050	0.0002	0.100	0.0875	0.0851	0.101	0.0850 to 0.115	84.6	70.0 to 130	2.78	20.0
BC18554	Molybdenum, Total	mg/L	0.0000120	0.0002	0.100	0.0887	0.0872	0.101	0.0850 to 0.115	85.9	70.0 to 130	1.71	20.0
BC18554	Potassium, Dissolved	mg/L	-0.00537	0.367	10.0	15.8	15.2	10.2	8.50 to 11.5	94.6	70.0 to 130	3.87	20.0
BC18554	Potassium, Total	mg/L	-0.0312	0.367	10.0	15.6	15.2	9.88	8.50 to 11.5	93.9	70.0 to 130	2.60	20.0
BC18554	Selenium, Dissolved	mg/L	-0.0000781	0.00100	0.100	0.0885	0.0856	0.102	0.0850 to 0.115	88.5	70.0 to 130	3.33	20.0
BC18554	Selenium, Total	mg/L	-0.000298	0.00100	0.100	0.0880	0.0873	0.101	0.0850 to 0.115	88.0	70.0 to 130	0.799	20.0
BC18554	Silicon, Dissolved	mg/L	-0.00104	0.0440	1.00	9.26	9.20	1.05	0.850 to 1.15	97.0	70.0 to 130	0.650	20.0
BC18554	Silicon, Total	mg/L	0.000136	0.0440	1.00	9.29	9.22	0.974	0.850 to 1.15	152	70.0 to 130	0.756	20.0
BC18554	Sodium, Dissolved	mg/L	-0.000782	0.0660	5.00	23.1	23.0	5.07	4.25 to 5.75	118	70.0 to 130	0.434	20.0
BC18554	Sodium, Total	mg/L	-0.000595	0.0660	5.00	21.1	19.9	4.95	4.25 to 5.75	124	70.0 to 130	5.85	20.0
BC18554	Sulfate	mg/L	0.0700	2.0	200	317	325	19.6	18.0 to 22.0	108	80.0 to 120	2.49	20.0
BC18554	Thallium, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0994	0.0995	0.104	0.0850 to 0.115	99.4	70.0 to 130	0.101	20.0
BC18554	Thallium, Total	mg/L	0.0000029	0.000147	0.100	0.0958	0.0983	0.0996	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BC18554	Total Organic Carbon	mg/L	0.241	1.00	10.0	11.8	11.9	23.3		93.2	80.0 to 120	0.844	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/5/22 16:22
Customer ID:
Delivery Date: 10/6/22 11:01

Description: Greene County Ash Pond - MW-54H

Laboratory ID Number: BC18554

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18554	Alkalinity to pH 4.5	mg CaCO3/L					216	50.5	45.0 to 55.0			0.922	10.0
BC18554	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.14	0.278	2.04	1.80 to 2.20	91.7	90.0 to 110	9.59	15.0
BC18553	Solids, Dissolved	mg/L	1.00	25.0			196	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-36H

Location Code: WMWGREAP
Collected: 10/17/22 12:33
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19074

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:23		1.015	0.143	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/21/22 14:23		1.015	0.791	mg/L	0.070035	0.406	
* Iron, Total	10/19/22 11:08	10/21/22 14:23		1.015	0.244	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 14:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 14:23		1.015	0.0838	mg/L	0.021315	0.406	J
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:23		1	12.4	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:23		1.015	5.79	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 10:26		10.15	82.3	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 14:43		1.015	0.146	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/21/22 14:43		1.015	0.765	mg/L	0.070035	0.406	
* Iron, Dissolved	10/20/22 08:03	10/21/22 14:43		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/20/22 08:03	10/21/22 14:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 14:43		1.015	0.0530	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 14:43		1	12.5	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 14:43		1.015	5.82	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 10:50		10.15	67.6	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.773	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.00202	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.00282	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 13:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.00115	mg/L	0.000203	0.001015	
* Cobalt, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.000390	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.000349	mg/L	0.000068	0.000203	
* Manganese, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.00348	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.000144	mg/L	0.000102	0.000203	J
* Potassium, Total	10/19/22 11:08	10/20/22 13:56		1.015	0.594	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-36H

Location Code: WMWGREAP
Collected: 10/17/22 12:33
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19074

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.00699	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.00181	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.000809	mg/L	0.000508	0.001015	J
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.000281	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.00150	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.000161	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	0.518	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 22:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:36	10/19/22 12:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	137	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	165	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	136	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	1.40	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 14:56	10/19/22 14:56		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-36H

Location Code: WMWGREAP
Collected: 10/17/22 12:33
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19074

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:32	10/24/22 11:32		1	2.36	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:44	10/25/22 13:44		1	0.347	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:23	10/31/22 12:23		1	9.18	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/17/22 12:29	10/17/22 12:29			253.70	uS/cm			FA
pH	10/17/22 12:29	10/17/22 12:29			7.92	SU			FA
Temperature	10/17/22 12:29	10/17/22 12:29			23.51	C			FA
Turbidity	10/17/22 12:29	10/17/22 12:29			9.66	NTU			FA
Sulfide	10/17/22 12:29	10/17/22 12:29			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 12:33
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC19074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 12:33
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC19074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 12:33
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-36H

Laboratory ID Number: BC19074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18

Location Code: WMWGREAP
Collected: 10/17/22 13:42
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19075

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:26		1.015	1.46	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:29		10.15	99.9	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/24/22 10:29		10.15	18.0	mg/L	0.08120	0.406	
* Lithium, Total	10/19/22 11:08	10/21/22 14:26		1.015	0.321	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 14:26		1.015	14.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:26		1	16.3	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:26		1.015	7.61	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 10:29		10.15	62.5	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 14:46		1.015	1.46	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 10:54		10.15	87.5	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/24/22 10:54		10.15	15.7	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 14:46		1.015	0.345	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 14:46		1.015	14.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 14:46		1	17.4	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 14:46		1.015	8.14	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 10:54		10.15	48.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:00		1.015	0.0475	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:00		1.015	0.0700	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:00		1.015	0.000294	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:00		1.015	0.0201	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:15		5.075	3.86	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:00		1.015	0.000305	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:00		1.015	5.98	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18

Location Code: WMWGREAP
Collected: 10/17/22 13:42
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19075

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	0.0468	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	0.0672	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	0.0191	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:30		5.075	3.70	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	0.000290	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	5.83	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 22:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:37	10/19/22 12:37		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	323	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	382	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	323	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 15:09	10/19/22 15:09		1	1.78	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-18

Location Code: WMWGREAP
Collected: 10/17/22 13:42
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19075

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:46	10/24/22 11:46		2	26.0	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:45	10/25/22 13:45		1	0.176	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:25	10/31/22 12:25		1	23.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/17/22 13:39	10/17/22 13:39			653.30	uS/cm			FA
pH	10/17/22 13:39	10/17/22 13:39			6.49	SU			FA
Temperature	10/17/22 13:39	10/17/22 13:39			20.61	C			FA
Turbidity	10/17/22 13:39	10/17/22 13:39			0.56	NTU			FA
Sulfide	10/17/22 13:39	10/17/22 13:39			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:42
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC19075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:42
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC19075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:42
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: BC19075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-37H

Location Code: WMWGREAP
Collected: 10/17/22 15:20
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19076

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:30		1.015	0.159	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:32		101.5	148	mg/L	7.0035	40.6	
* Iron, Total	10/19/22 11:08	10/24/22 10:32		101.5	61.5	mg/L	0.8120	4.06	
* Lithium, Total	10/19/22 11:08	10/21/22 14:30		1.015	0.00728	mg/L	0.007105	0.01999956	J
* Magnesium, Total	10/19/22 11:08	10/21/22 14:30		1.015	23.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:30		1	19.5	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:30		1.015	9.10	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:30		1.015	28.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/20/22 08:03	10/21/22 14:49		1.015	0.177	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 10:57		101.5	148	mg/L	7.0035	40.6	
* Iron, Dissolved	10/20/22 08:03	10/24/22 10:57		101.5	51.2	mg/L	0.8120	4.06	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 14:49		1.015	0.00956	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 14:49		1.015	22.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 14:49		1	19.8	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 14:49		1.015	9.26	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 14:49		1.015	28.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:04		1.015	0.0128	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 14:04		1.015	0.00335	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:04		1.015	0.106	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:04		1.015	0.000624	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:04		1.015	0.00563	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:19		5.075	4.59	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:04		1.015	0.000164	mg/L	0.000102	0.000203	J
* Potassium, Total	10/19/22 11:08	10/20/22 14:04		1.015	3.34	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-37H

Location Code: WMWGREAP
Collected: 10/17/22 15:20
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19076

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	0.00461	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	0.0419	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	0.000395	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	0.0115	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:33		5.075	4.68	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	0.000240	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	2.91	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:39	10/19/22 12:39		1	0.256	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	240	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	706	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	240	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 15:27	10/19/22 15:27		1	10.0	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-37H

Location Code: WMWGREAP
Collected: 10/17/22 15:20
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19076

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:34	10/24/22 11:34		1	13.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:46	10/25/22 13:46		1	0.138	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:37	10/31/22 12:37		20	306	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/17/22 15:18	10/17/22 15:18			1052.97	uS/cm			FA
pH	10/17/22 15:18	10/17/22 15:18			6.23	SU			FA
Temperature	10/17/22 15:18	10/17/22 15:18			22.79	C			FA
Turbidity	10/17/22 15:18	10/17/22 15:18			1.84	NTU			FA
Sulfide	10/17/22 15:18	10/17/22 15:18			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:20
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC19076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:20
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC19076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:20
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-37H

Laboratory ID Number: BC19076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17

Location Code: WMWGREAP
Collected: 10/18/22 08:53
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19077

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:33		1.015	2.28	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:35		10.15	150	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/25/22 09:47		101.5	37.0	mg/L	0.8120	4.06	
* Lithium, Total	10/19/22 11:08	10/21/22 14:33		1.015	0.656	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 14:33		1.015	28.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:33		1	18.4	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:33		1.015	8.60	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 10:35		10.15	61.9	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 14:53		1.015	2.29	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:01		10.15	125	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/24/22 11:01		10.15	34.3	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 14:53		1.015	0.735	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 14:53		1.015	28.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 14:53		1	19.8	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 14:53		1.015	9.23	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 11:01		10.15	47.1	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:07		1.015	0.897	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:07		1.015	0.253	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:07		1.015	0.000211	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:07		1.015	0.00934	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:22		5.075	2.05	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:07		1.015	0.0513	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:07		1.015	12.8	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17

Location Code: WMWGREAP
Collected: 10/18/22 08:53
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19077

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	0.895	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	0.231	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	0.000218	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	0.00910	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:37		5.075	2.02	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	0.0491	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	12.7	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:41	10/19/22 12:41		1	0.205	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	453	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	598	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	452	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	0.829	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 15:42	10/19/22 15:42		1	1.80	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-17

Location Code: WMWGREAP
Collected: 10/18/22 08:53
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19077

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:36	10/24/22 11:36		1	10.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:48	10/25/22 13:48		1	0.544	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:38	10/31/22 12:38		4	64.9	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/18/22 08:49	10/18/22 08:49			946.01	uS/cm			FA
pH	10/18/22 08:49	10/18/22 08:49			6.77	SU			FA
Temperature	10/18/22 08:49	10/18/22 08:49			19.62	C			FA
Turbidity	10/18/22 08:49	10/18/22 08:49			1.05	NTU			FA
Sulfide	10/18/22 08:49	10/18/22 08:49			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 08:53
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC19077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 08:53
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC19077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 08:53
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: BC19077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-38H

Location Code: WMWGREAP
Collected: 10/18/22 11:08
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19078

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:36		1.015	0.0970	mg/L	0.030000	0.1015	J
* Calcium, Total	10/19/22 11:08	10/24/22 10:38		10.15	117	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 14:36		1.015	0.0206	mg/L	0.008120	0.0406	J
* Lithium, Total	10/19/22 11:08	10/21/22 14:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 14:36		1.015	6.60	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:36		1	8.80	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:36		1.015	4.11	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:36		1.015	2.52	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 14:56		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:04		10.15	98.6	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 14:56		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/20/22 08:03	10/21/22 14:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 14:56		1.015	6.53	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 14:56		1	9.33	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 14:56		1.015	4.36	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 14:56		1.015	2.66	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.0158	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.000208	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.0956	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.000220	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.000519	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.0851	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.000310	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:11		1.015	2.08	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-38H

Location Code: WMWGREAP
Collected: 10/18/22 11:08
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19078

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:11		1.015	0.0197	mg/L	0.000508	0.001015	
* Thallium, Total	10/19/22 11:08	10/20/22 14:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.000262	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.0956	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.000250	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.000335	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.0341	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.000233	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	2.13	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	0.0200	mg/L	0.000508	0.001015	
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:43	10/19/22 12:43		1	0.378	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	212	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	288	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	212	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 16:00	10/19/22 16:00		1	1.22	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-38H

Location Code: WMWGREAP
Collected: 10/18/22 11:08
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19078

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:37	10/24/22 11:37		1	3.60	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:49	10/25/22 13:49		1	0.151	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:39	10/31/22 12:39		2	40.6	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/18/22 11:04	10/18/22 11:04			450.37	uS/cm			FA
pH	10/18/22 11:04	10/18/22 11:04			6.70	SU			FA
Temperature	10/18/22 11:04	10/18/22 11:04			22.07	C			FA
Turbidity	10/18/22 11:04	10/18/22 11:04			1.44	NTU			FA
Sulfide	10/18/22 11:04	10/18/22 11:04			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:08
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC19078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:08
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC19078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:08
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-38H

Laboratory ID Number: BC19078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-53H

Location Code: WMWGREAP
Collected: 10/17/22 11:43
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19079

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:39		1.015	0.555	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:42		101.5	74.6	mg/L	7.0035	40.6	
* Iron, Total	10/19/22 11:08	10/24/22 10:42		101.5	78.7	mg/L	0.8120	4.06	
* Lithium, Total	10/19/22 11:08	10/21/22 14:39		1.015	0.00881	mg/L	0.007105	0.01999956	J
* Magnesium, Total	10/19/22 11:08	10/21/22 14:39		1.015	9.38	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:39		1	13.9	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:39		1.015	6.50	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:39		1.015	23.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 14:59		1.015	0.564	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:07		101.5	73.1	mg/L	7.0035	40.6	
* Iron, Dissolved	10/20/22 08:03	10/24/22 11:07		101.5	73.8	mg/L	0.8120	4.06	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 14:59		1.015	0.00944	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 14:59		1.015	9.23	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 14:59		1	14.5	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 14:59		1.015	6.77	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 14:59		1.015	23.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.188	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.342	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.318	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.000567	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.00583	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.000120	mg/L	0.000068	0.000203	J
* Manganese, Total	10/19/22 11:08	10/20/22 16:26		5.075	2.73	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:15		1.015	0.00197	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:15		1.015	4.36	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-53H

Location Code: WMWGREAP
Collected: 10/17/22 11:43
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19079

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	0.345	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	0.308	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	0.000238	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	0.00557	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:40		5.075	2.58	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	0.00182	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	4.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:45	10/19/22 12:45		1	0.294	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	266	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	382	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	266	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 16:17	10/19/22 16:17		1	4.23	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-53H

Location Code: WMWGREAP
Collected: 10/17/22 11:43
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19079

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:38	10/24/22 11:38		1	16.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:50	10/25/22 13:50		1	0.136	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:29	10/31/22 12:29		1	32.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/17/22 11:40	10/17/22 11:40			855.19	uS/cm			FA
pH	10/17/22 11:40	10/17/22 11:40			6.43	SU			FA
Temperature	10/17/22 11:40	10/17/22 11:40			22.69	C			FA
Turbidity	10/17/22 11:40	10/17/22 11:40			8.19	NTU			FA
Sulfide	10/17/22 11:40	10/17/22 11:40			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 11:43
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC19079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 11:43
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC19079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 11:43
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-53H

Laboratory ID Number: BC19079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-5

Location Code: WMWGREAP
Collected: 10/17/22 12:37
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19080

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:42		1.015	0.599	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:45		10.15	119	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/24/22 10:45		10.15	33.9	mg/L	0.08120	0.406	
* Lithium, Total	10/19/22 11:08	10/21/22 14:42		1.015	0.0901	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 14:42		1.015	17.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:42		1	17.2	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:42		1.015	8.06	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:42		1.015	21.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:03		1.015	0.604	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:11		10.15	105	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/24/22 11:11		10.15	29.8	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:03		1.015	0.0993	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:03		1.015	17.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:03		1	18.3	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:03		1.015	8.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:03		1.015	23.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:18		1.015	0.0246	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 14:18		1.015	0.366	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:18		1.015	0.134	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:18		1.015	0.000348	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:18		1.015	0.00620	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:30		5.075	1.80	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:18		1.015	0.00287	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:18		1.015	6.08	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-5

Location Code: WMWGREAP
Collected: 10/17/22 12:37
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19080

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	0.354	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	0.126	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	0.000256	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	0.00607	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:44		5.075	1.71	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	0.00330	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	6.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:47	10/19/22 12:47		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	199	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	483	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	199	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 16:35	10/19/22 16:35		1	1.50	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-5

Location Code: WMWGREAP
Collected: 10/17/22 12:37
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19080

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:39	10/24/22 11:39		1	10.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:51	10/25/22 13:51		1	0.192	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:40	10/31/22 12:40		8	154	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/17/22 12:34	10/17/22 12:34			781.99	uS/cm			FA
pH	10/17/22 12:34	10/17/22 12:34			6.71	SU			FA
Temperature	10/17/22 12:34	10/17/22 12:34			21.83	C			FA
Turbidity	10/17/22 12:34	10/17/22 12:34			3.27	NTU			FA
Sulfide	10/17/22 12:34	10/17/22 12:34			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 12:37
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC19080

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 12:37
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC19080

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 12:37
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: BC19080

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11

Location Code: WMWGREAP
Collected: 10/17/22 13:39
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19081

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:46		1.015	0.630	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:48		10.15	60.6	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 14:46		1.015	1.41	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 14:46		1.015	0.0928	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 14:46		1.015	14.0	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:46		1	4.77	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:46		1.015	2.23	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:46		1.015	32.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:06		1.015	0.637	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:14		10.15	50.2	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:06		1.015	1.48	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:06		1.015	0.0982	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:06		1.015	13.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:06		1	5.18	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:06		1.015	2.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:06		1.015	31.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:22		1.015	0.00251	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:22		1.015	0.0611	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:22		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:22		1.015	0.0256	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:44		10.15	7.75	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:22		1.015	0.0119	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:22		1.015	6.25	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11

Location Code: WMWGREAP
Collected: 10/17/22 13:39
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19081

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	0.00229	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	0.0626	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	0.0256	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:58		10.15	7.67	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	0.0120	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	6.33	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:30		1.015	0.0000712	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:49	10/19/22 12:49		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	91.9	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	323	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	91.8	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 16:50	10/19/22 16:50		1	1.13	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-11

Location Code: WMWGREAP
Collected: 10/17/22 13:39
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19081

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:48	10/24/22 11:48		2	22.4	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:52	10/25/22 13:52		1	0.118	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:41	10/31/22 12:41		8	144	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/17/22 13:36	10/17/22 13:36			550.76	uS/cm			FA
pH	10/17/22 13:36	10/17/22 13:36			6.28	SU			FA
Temperature	10/17/22 13:36	10/17/22 13:36			21.40	C			FA
Turbidity	10/17/22 13:36	10/17/22 13:36			0.21	NTU			FA
Sulfide	10/17/22 13:36	10/17/22 13:36			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:39
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC19081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:39
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC19081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:39
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: BC19081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-21

Location Code: WMWGREAP
Collected: 10/17/22 14:30
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19082

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:49		1.015	0.590	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:51		10.15	57.0	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 14:49		1.015	0.0994	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 14:49		1.015	0.0902	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 14:49		1.015	15.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:49		1	8.07	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:49		1.015	3.77	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:49		1.015	29.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:10		1.015	0.584	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:18		10.15	55.5	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:10		1.015	0.0969	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:10		1.015	0.0964	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:10		1.015	15.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:10		1	8.58	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:10		1.015	4.01	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:10		1.015	29.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:26		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.000217	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.0774	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.000102	mg/L	0.000068	0.000203	J
* Chromium, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.00501	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:48		5.075	3.73	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.00666	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:26		1.015	6.90	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-21

Location Code: WMWGREAP
Collected: 10/17/22 14:30
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19082

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:26		1.015	0.000120	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	0.000250	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	0.0746	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	0.00485	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 13:02		5.075	3.50	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	0.00574	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	6.93	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:33		1.015	0.000107	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:50	10/19/22 12:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	145	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	311	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	145	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 17:06	10/19/22 17:06		1	1.12	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-21

Location Code: WMWGREAP
Collected: 10/17/22 14:30
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19082

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 11:42	10/24/22 11:42		1	13.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 13:54	10/25/22 13:54		1	0.0988	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 12:51	10/31/22 12:51		10	103	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/17/22 14:27	10/17/22 14:27			583.72	uS/cm			FA
pH	10/17/22 14:27	10/17/22 14:27			6.21	SU			FA
Temperature	10/17/22 14:27	10/17/22 14:27			21.81	C			FA
Turbidity	10/17/22 14:27	10/17/22 14:27			0.26	NTU			FA
Sulfide	10/17/22 14:27	10/17/22 14:27			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 14:30
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC19082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19082	Chloride	mg/L	0.101	1.00	10.0	22.4	22.4	10.0	9.00 to 11.0	94.0	80.0 to 120	0.00	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19082	Fluoride	mg/L	0.0104	0.125	2.50	2.77	2.68	2.61	2.25 to 2.75	107	80.0 to 120	3.30	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 14:30
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC19082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19082	Sulfate	mg/L	0.187	2.0	200	311	313	19.2	18.0 to 22.0	104	80.0 to 120	0.641	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 14:30
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: BC19082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-12

Location Code: WMWGREAP
Collected: 10/17/22 15:25
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19083

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 14:52		1.015	0.272	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 10:54		10.15	49.8	mg/L	0.70035	4.06	RA
* Iron, Total	10/19/22 11:08	10/21/22 14:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/19/22 11:08	10/21/22 14:52		1.015	0.122	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 14:52		1.015	14.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 14:52		1	5.44	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 14:52		1.015	2.54	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 14:52		1.015	18.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:13		1.015	0.276	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:21		10.15	48.2	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:13		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:13		1.015	0.126	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:13		1.015	14.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:13		1	5.78	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:13		1.015	2.70	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:13		1.015	18.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:29		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:29		1.015	0.000335	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:29		1.015	0.0301	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 14:29		1.015	0.000332	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:29		1.015	0.000770	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 16:51		5.075	1.44	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:29		1.015	0.0568	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:29		1.015	5.40	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-12

Location Code: WMWGREAP
Collected: 10/17/22 15:25
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19083

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:29		1.015	0.000810	mg/L	0.000508	0.001015	J
* Thallium, Total	10/19/22 11:08	10/20/22 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	0.000356	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	0.0293	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	0.000233	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	0.000634	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 13:06		5.075	1.35	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	0.0559	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	5.35	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	0.00110	mg/L	0.000508	0.001015	
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 12:52	10/19/22 12:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	113	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	243	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	113	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 17:23	10/19/22 17:23		1	1.07	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-12

Location Code: WMWGREAP
Collected: 10/17/22 15:25
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19083

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:05	10/24/22 12:05		1	12.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:16	10/25/22 14:16		1	0.197	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:17	10/31/22 13:17		4	96.2	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/17/22 15:22	10/17/22 15:22			492.95	uS/cm			FA
pH	10/17/22 15:22	10/17/22 15:22			6.88	SU			FA
Temperature	10/17/22 15:22	10/17/22 15:22			21.77	C			FA
Turbidity	10/17/22 15:22	10/17/22 15:22			0.16	NTU			FA
Sulfide	10/17/22 15:22	10/17/22 15:22			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:25
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC19083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0936	0.0940	0.0981	0.0850 to 0.115	93.6	70.0 to 130	0.426	20.0
BC19083	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0989	0.101	0.102	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC19083	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0884	0.0896	0.0918	0.0850 to 0.115	88.4	70.0 to 130	1.35	20.0
BC19083	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0968	0.0978	0.0914	0.0850 to 0.115	96.8	70.0 to 130	1.03	20.0
BC19083	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0965	0.0971	0.100	0.0850 to 0.115	96.1	70.0 to 130	0.620	20.0
BC19083	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0972	0.0980	0.0982	0.0850 to 0.115	96.9	70.0 to 130	0.820	20.0
BC19083	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.120	0.122	0.0971	0.0850 to 0.115	90.7	70.0 to 130	1.65	20.0
BC19083	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.119	0.125	0.0966	0.0850 to 0.115	88.9	70.0 to 130	4.92	20.0
BC19083	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0938	0.0922	0.103	0.0850 to 0.115	93.8	70.0 to 130	1.72	20.0
BC19083	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0928	0.0949	0.0971	0.0850 to 0.115	92.8	70.0 to 130	2.24	20.0
BC19083	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	1.26	1.27	0.977	0.850 to 1.15	98.4	70.0 to 130	0.791	20.0
BC19083	Boron, Total	mg/L	-0.000157	0.0650	1.00	1.26	1.28	0.975	0.850 to 1.15	98.8	70.0 to 130	1.57	20.0
BC19083	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0951	0.0970	0.100	0.0850 to 0.115	95.1	70.0 to 130	1.98	20.0
BC19083	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0983	0.100	0.0994	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BC19083	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	54.0	55.2	5.11	4.25 to 5.75	116	70.0 to 130	2.20	20.0
BC19083	Calcium, Total	mg/L	-0.0193	0.152	5.00	59.5	54.2	4.84	4.25 to 5.75	194	70.0 to 130	9.32	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19083	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0949	0.0954	0.0991	0.0850 to 0.115	94.7	70.0 to 130	0.525	20.0
BC19083	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0963	0.0983	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.06	20.0
BC19083	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0970	0.0967	0.102	0.0850 to 0.115	96.4	70.0 to 130	0.310	20.0
BC19083	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0984	0.100	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.61	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19083	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.200	0.201	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BC19083	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.194	0.196	0.193	0.170 to 0.230	97.0	70.0 to 130	1.03	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:25
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC19083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19083	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0981	0.0993	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.22	20.0
BC19083	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0967	0.0980	0.0978	0.0850 to 0.115	96.7	70.0 to 130	1.34	20.0
BC19083	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.332	0.334	0.192	0.170 to 0.230	103	70.0 to 130	0.601	20.0
BC19083	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.323	0.332	0.195	0.170 to 0.230	100	70.0 to 130	2.75	20.0
BC19083	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	18.7	18.8	5.00	4.25 to 5.75	94.0	70.0 to 130	0.533	20.0
BC19083	Magnesium, Total	mg/L	0.0138	0.0462	5.00	18.9	19.0	4.87	4.25 to 5.75	96.0	70.0 to 130	0.528	20.0
BC19083	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	1.43	1.42	0.104	0.0850 to 0.115	80.0	70.0 to 130	0.702	20.0
BC19083	Manganese, Total	mg/L	0.000028	0.00033	0.100	1.54	1.53	0.106	0.0850 to 0.115	100	70.0 to 130	0.651	20.0
BC19083	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00406	0.00409	0.00403	0.00340 to 0.00460	102	70.0 to 130	0.736	20.0
BC19083	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.150	0.152	0.0994	0.0850 to 0.115	94.1	70.0 to 130	1.32	20.0
BC19083	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.154	0.156	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.29	20.0
BC19083	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	14.8	14.8	9.82	8.50 to 11.5	94.5	70.0 to 130	0.00	20.0
BC19083	Potassium, Total	mg/L	0.00510	0.367	10.0	15.0	15.4	10.1	8.50 to 11.5	96.0	70.0 to 130	2.63	20.0
BC19083	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.101	0.103	0.105	0.0850 to 0.115	99.9	70.0 to 130	1.96	20.0
BC19083	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.105	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19083	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	3.67	3.67	1.03	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC19083	Silicon, Total	mg/L	0.000132	0.0440	1.00	3.48	3.53	0.961	0.850 to 1.15	94.0	70.0 to 130	1.43	20.0
BC19083	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	24.1	24.3	4.87	4.25 to 5.75	106	70.0 to 130	0.826	20.0
BC19083	Sodium, Total	mg/L	0.00172	0.0660	5.00	22.8	23.2	4.78	4.25 to 5.75	94.0	70.0 to 130	1.74	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19083	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19083	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC19083	Total Organic Carbon	mg/L	0.266	1.00	10.0	10.2	9.96	22.4		91.3	80.0 to 120	2.38	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:25
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: BC19083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19083	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.02	0.047	2.07	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC19083	Solids, Dissolved	mg/L	2.00	25.0			246	48.0	40.0 to 60.0			1.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-13

Location Code: WMWGREAP
Collected: 10/17/22 16:15
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19084

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:08		1.015	0.499	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:10		10.15	158	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 15:08		1.015	1.26	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 15:08		1.015	0.764	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 15:08		1.015	31.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:08		1	9.18	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:08		1.015	4.29	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:08		1.015	25.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:30		1.015	0.498	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:38		10.15	149	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:30		1.015	1.35	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:30		1.015	0.838	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:30		1.015	30.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:30		1	9.93	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:30		1.015	4.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:30		1.015	27.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.00200	mg/L	0.000508	0.001015	
* Aluminum, Total	10/19/22 11:08	10/20/22 14:51		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.00397	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.119	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.000145	mg/L	0.000068	0.000203	J
* Chromium, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.000237	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.00424	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 17:02		5.075	5.76	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.0197	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 14:51		1.015	11.3	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-13

Location Code: WMWGREAP
Collected: 10/17/22 16:15
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19084

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.0103	mg/L	0.000508	0.001015	
* Thallium, Total	10/19/22 11:08	10/20/22 14:51		1.015	0.00238	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.00202	mg/L	0.000508	0.001015	
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.00384	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.119	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.0000959	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.00422	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 13:17		5.075	5.54	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.0194	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	11.0	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.0109	mg/L	0.000508	0.001015	
* Thallium, Dissolved	10/20/22 08:03	10/20/22 10:59		1.015	0.00241	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:01	10/19/22 13:01		1	0.328	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	89.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	708	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	89.3	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 18:41	10/19/22 18:41		1	2.29	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-13

Location Code: WMWGREAP
Collected: 10/17/22 16:15
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19084

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:07	10/24/22 12:07		1	12.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:17	10/25/22 14:17		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:18	10/31/22 13:18		25	467	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/17/22 16:12	10/17/22 16:12			1035.56	uS/cm			FA
pH	10/17/22 16:12	10/17/22 16:12			6.22	SU			FA
Temperature	10/17/22 16:12	10/17/22 16:12			23.49	C			FA
Turbidity	10/17/22 16:12	10/17/22 16:12			0.32	NTU			FA
Sulfide	10/17/22 16:12	10/17/22 16:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 16:15
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC19084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 16:15
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC19084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 16:15
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: BC19084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H

Location Code: WMWGREAP
Collected: 10/18/22 09:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19085

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:11		1.015	0.0976	mg/L	0.030000	0.1015	J
* Calcium, Total	10/19/22 11:08	10/21/22 15:11		1.015	13.2	mg/L	0.070035	0.406	
* Iron, Total	10/19/22 11:08	10/21/22 15:11		1.015	0.0166	mg/L	0.008120	0.0406	J
* Lithium, Total	10/19/22 11:08	10/21/22 15:11		1.015	0.0610	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 15:11		1.015	3.54	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:11		1	8.13	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:11		1.015	3.80	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:11		1.015	7.00	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	0.0987	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	14.5	mg/L	0.070035	0.406	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	0.0132	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	0.0589	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	3.42	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:33		1	8.67	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	4.05	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:33		1.015	6.62	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:55		1.015	0.000136	mg/L	0.000081	0.000203	J
* Barium, Total	10/19/22 11:08	10/20/22 14:55		1.015	0.0269	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:55		1.015	0.0000876	mg/L	0.000068	0.000203	J
* Chromium, Total	10/19/22 11:08	10/20/22 14:55		1.015	0.000309	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:55		1.015	0.000226	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 14:55		1.015	0.123	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 14:55		1.015	2.60	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-48H

Location Code: WMWGREAP
Collected: 10/18/22 09:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19085

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	0.000111	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	0.0267	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	0.000212	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	0.118	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	2.49	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:03	10/19/22 13:03		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	25.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	88.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	25.4	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 18:56	10/19/22 18:56		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H

Location Code: WMWGREAP
Collected: 10/18/22 09:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19085

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:08	10/24/22 12:08		1	4.34	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:18	10/25/22 14:18		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:05	10/31/22 13:05		1	36.2	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/18/22 09:19	10/18/22 09:19			1994.48	uS/cm			FA
pH	10/18/22 09:19	10/18/22 09:19			5.14	SU			FA
Temperature	10/18/22 09:19	10/18/22 09:19			19.68	C			FA
Turbidity	10/18/22 09:19	10/18/22 09:19			0.08	NTU			FA
Sulfide	10/18/22 09:19	10/18/22 09:19			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC19085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC19085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-48H

Laboratory ID Number: BC19085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H Dup

Location Code: WMWGREAP
Collected: 10/18/22 09:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19086

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:14		1.015	0.0978	mg/L	0.030000	0.1015	J
* Calcium, Total	10/19/22 11:08	10/21/22 15:14		1.015	13.8	mg/L	0.070035	0.406	
* Iron, Total	10/19/22 11:08	10/21/22 15:14		1.015	0.0163	mg/L	0.008120	0.0406	J
* Lithium, Total	10/19/22 11:08	10/21/22 15:14		1.015	0.0597	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 15:14		1.015	3.53	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:14		1	8.11	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:14		1.015	3.79	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:14		1.015	6.88	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	0.0984	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	14.5	mg/L	0.070035	0.406	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	0.0135	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	0.0575	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	3.44	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:37		1	8.54	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	3.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:37		1.015	6.71	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 14:58		1.015	0.000103	mg/L	0.000081	0.000203	J
* Barium, Total	10/19/22 11:08	10/20/22 14:58		1.015	0.0284	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 14:58		1.015	0.000162	mg/L	0.000068	0.000203	J
* Chromium, Total	10/19/22 11:08	10/20/22 14:58		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 14:58		1.015	0.000226	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 14:58		1.015	0.121	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 14:58		1.015	2.56	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H Dup

Location Code: WMWGREAP
Collected: 10/18/22 09:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19086

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	0.000139	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	0.0274	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	0.000109	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	0.000217	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	0.117	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	2.47	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:05	10/19/22 13:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	26.3	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	88.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	26.3	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 19:11	10/19/22 19:11		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-48H Dup

Location Code: WMWGREAP
Collected: 10/18/22 09:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19086

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:09	10/24/22 12:09		1	4.30	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:20	10/25/22 14:20		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:06	10/31/22 13:06		1	35.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/18/22 09:19	10/18/22 09:19			1994.48	uS/cm			FA
pH	10/18/22 09:19	10/18/22 09:19			5.14	SU			FA
Temperature	10/18/22 09:19	10/18/22 09:19			19.68	C			FA
Turbidity	10/18/22 09:19	10/18/22 09:19			0.08	NTU			FA
Sulfide	10/18/22 09:19	10/18/22 09:19			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-48H Dup

Laboratory ID Number: BC19086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-48H Dup

Laboratory ID Number: BC19086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-48H Dup

Laboratory ID Number: BC19086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H

Location Code: WMWGREAP
Collected: 10/18/22 10:30
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19087

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:17		1.015	0.489	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:13		10.15	83.4	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 15:17		1.015	0.367	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 15:17		1.015	0.296	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 15:17		1.015	20.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:17		1	5.07	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:17		1.015	2.37	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:17		1.015	20.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:40		1.015	0.485	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:41		10.15	70.5	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:40		1.015	0.166	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:40		1.015	0.310	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:40		1.015	20.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:40		1	5.46	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:40		1.015	2.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:40		1.015	22.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.0149	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.000880	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.0372	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.000230	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.00703	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 17:06		5.075	4.33	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.0660	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 15:02		1.015	7.37	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H

Location Code: WMWGREAP
Collected: 10/18/22 10:30
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19087

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 15:02		1.015	0.000159	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	0.000532	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	0.0374	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	0.00671	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 13:20		5.075	4.15	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	0.0640	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	7.32	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:09		1.015	0.000165	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/20/22 23:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:07	10/19/22 13:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	80.6	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	388	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	80.4	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 19:24	10/19/22 19:24		1	1.33	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-45H

Location Code: WMWGREAP
Collected: 10/18/22 10:30
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19087

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:10	10/24/22 12:10		1	9.25	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:21	10/25/22 14:21		1	0.147	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:19	10/31/22 13:19		10	219	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/18/22 10:27	10/18/22 10:27			2256.94	uS/cm			FA
pH	10/18/22 10:27	10/18/22 10:27			6.38	SU			FA
Temperature	10/18/22 10:27	10/18/22 10:27			20.79	C			FA
Turbidity	10/18/22 10:27	10/18/22 10:27			4.45	NTU			FA
Sulfide	10/18/22 10:27	10/18/22 10:27			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:30
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC19087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:30
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC19087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:30
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-45H

Laboratory ID Number: BC19087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-41H

Location Code: WMWGREAP
Collected: 10/18/22 11:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19088

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:21		1.015	0.585	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:16		10.15	130	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/24/22 11:16		10.15	12.0	mg/L	0.08120	0.406	
* Lithium, Total	10/19/22 11:08	10/21/22 15:21		1.015	0.0617	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/19/22 11:08	10/21/22 15:21		1.015	12.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:21		1	8.82	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:21		1.015	4.12	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:21		1.015	27.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:43		1.015	0.592	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:45		10.15	111	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/24/22 11:45		10.15	9.96	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:43		1.015	0.0704	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:43		1.015	12.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:43		1	9.33	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:43		1.015	4.36	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:43		1.015	29.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:06		1.015	0.0456	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 15:06		1.015	0.00204	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 15:06		1.015	0.119	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:06		1.015	0.000486	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:06		1.015	0.0150	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 17:10		5.075	3.90	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:06		1.015	0.000147	mg/L	0.000102	0.000203	J
* Potassium, Total	10/19/22 11:08	10/20/22 15:06		1.015	5.82	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-41H

Location Code: WMWGREAP
Collected: 10/18/22 11:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19088

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 15:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	0.00175	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	0.116	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	0.0146	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 13:24		5.075	3.87	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	0.000139	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	5.59	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:09	10/19/22 13:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	128	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	484	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	128	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 19:39	10/19/22 19:39		1	1.52	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-41H

Location Code: WMWGREAP
Collected: 10/18/22 11:22
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19088

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:11	10/24/22 12:11		1	13.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:22	10/25/22 14:22		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:20	10/31/22 13:20		10	236	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/18/22 11:19	10/18/22 11:19			2561.04	uS/cm			FA
pH	10/18/22 11:19	10/18/22 11:19			6.39	SU			FA
Temperature	10/18/22 11:19	10/18/22 11:19			20.15	C			FA
Turbidity	10/18/22 11:19	10/18/22 11:19			2.15	NTU			FA
Sulfide	10/18/22 11:19	10/18/22 11:19			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC19088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC19088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:22
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-41H

Laboratory ID Number: BC19088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-35H

Location Code: WMWGREAP
Collected: 10/17/22 13:33
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19089

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/19/22 11:08	10/21/22 15:24		1.015	23.7	mg/L	0.070035	0.406	
* Iron, Total	10/19/22 11:08	10/21/22 15:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/19/22 11:08	10/21/22 15:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 15:24		1.015	3.23	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:24		1	8.47	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:24		1.015	3.96	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:24		1.015	2.03	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	24.8	mg/L	0.070035	0.406	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	3.18	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:47		1	9.10	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	4.25	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:47		1.015	2.04	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 15:10		1.015	0.000174	mg/L	0.000081	0.000203	J
* Barium, Total	10/19/22 11:08	10/20/22 15:10		1.015	0.0386	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:10		1.015	0.000588	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:10		1.015	0.000217	mg/L	0.000152	0.001015	J
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 15:10		1.015	1.43	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-35H

Location Code: WMWGREAP
Collected: 10/17/22 13:33
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19089

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:10		1.015	0.00352	mg/L	0.000508	0.001015	
* Thallium, Total	10/19/22 11:08	10/20/22 15:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	0.000130	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	0.0392	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	0.000579	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	0.000211	mg/L	0.000152	0.001015	J
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	1.39	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	0.00288	mg/L	0.000508	0.001015	
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:11	10/19/22 13:11		1	1.28	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	45.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	96.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	45.4	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 19:56	10/19/22 19:56		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-35H

Location Code: WMWGREAP
Collected: 10/17/22 13:33
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19089

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:13	10/24/22 12:13		1	2.97	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:23	10/25/22 14:23		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:10	10/31/22 13:10		1	25.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/17/22 13:31	10/17/22 13:31			157.02	uS/cm			FA
pH	10/17/22 13:31	10/17/22 13:31			6.19	SU			FA
Temperature	10/17/22 13:31	10/17/22 13:31			22.01	C			FA
Turbidity	10/17/22 13:31	10/17/22 13:31			1	NTU			FA
Sulfide	10/17/22 13:31	10/17/22 13:31			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:33
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC19089

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:33
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC19089

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 13:33
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-35H

Laboratory ID Number: BC19089

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-24

Location Code: WMWGREAP
Collected: 10/17/22 14:25
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19090

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:27		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/19/22 11:08	10/21/22 15:27		1.015	31.6	mg/L	0.070035	0.406	
* Iron, Total	10/19/22 11:08	10/21/22 15:27		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/19/22 11:08	10/21/22 15:27		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 15:27		1.015	3.33	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:27		1	10.9	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:27		1.015	5.10	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:27		1.015	2.36	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	33.1	mg/L	0.070035	0.406	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	3.31	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:50		1	12.0	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	5.61	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:50		1.015	2.43	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.0261	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.000297	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.0511	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.000301	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.000595	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.138	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 15:13		1.015	1.29	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-24

Location Code: WMWGREAP
Collected: 10/17/22 14:25
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19090

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:13		1.015	0.000816	mg/L	0.000508	0.001015	J
* Thallium, Total	10/19/22 11:08	10/20/22 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.0218	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.000254	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.0517	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.000296	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.000579	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.134	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	0.000671	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:11	10/19/22 13:11		1	0.662	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	14.6	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	134	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	14.6	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 20:09	10/19/22 20:09		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-24

Location Code: WMWGREAP
Collected: 10/17/22 14:25
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19090

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:14	10/24/22 12:14		1	3.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:24	10/25/22 14:24		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:22	10/31/22 13:22		4	79.6	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/17/22 14:21	10/17/22 14:21			212.05	uS/cm			FA
pH	10/17/22 14:21	10/17/22 14:21			5.22	SU			FA
Temperature	10/17/22 14:21	10/17/22 14:21			22.02	C			FA
Turbidity	10/17/22 14:21	10/17/22 14:21			1.39	NTU			FA
Sulfide	10/17/22 14:21	10/17/22 14:21			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 14:25
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC19090

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 14:25
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC19090

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 14:25
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: BC19090

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-23

Location Code: WMWGREAP
Collected: 10/17/22 15:02
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19091

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/19/22 11:08	10/21/22 15:30		1.015	23.1	mg/L	0.070035	0.406	
* Iron, Total	10/19/22 11:08	10/21/22 15:30		1.015	0.0246	mg/L	0.008120	0.0406	J
* Lithium, Total	10/19/22 11:08	10/21/22 15:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 15:30		1.015	1.84	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:30		1	8.22	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:30		1.015	3.84	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/21/22 15:30		1.015	2.04	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	24.2	mg/L	0.070035	0.406	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	1.85	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:54		1	8.71	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	4.07	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/21/22 15:54		1.015	2.08	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.0302	mg/L	0.006090	0.01015	
* Arsenic, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.000111	mg/L	0.000081	0.000203	J
* Barium, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.0286	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.000347	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.000563	mg/L	0.000152	0.001015	J
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.799	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-23

Location Code: WMWGREAP
Collected: 10/17/22 15:02
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19091

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:17		1.015	0.000864	mg/L	0.000508	0.001015	J
* Thallium, Total	10/19/22 11:08	10/20/22 15:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	0.000086	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	0.0269	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	0.000341	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	0.793	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	0.000888	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:12	10/19/22 13:12		1	0.245	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/28/22 09:20	10/28/22 11:23		1	60.7	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	83.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	60.6	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/28/22 09:20	10/28/22 11:23		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 20:24	10/19/22 20:24		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-23

Location Code: WMWGREAP
Collected: 10/17/22 15:02
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19091

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:15	10/24/22 12:15		1	0.973	mg/L	0.50	1	J
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:26	10/25/22 14:26		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:12	10/31/22 13:12		1	9.72	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/17/22 14:59	10/17/22 14:59			137.05	uS/cm			FA
pH	10/17/22 14:59	10/17/22 14:59			6.22	SU			FA
Temperature	10/17/22 14:59	10/17/22 14:59			22.60	C			FA
Turbidity	10/17/22 14:59	10/17/22 14:59			2.86	NTU			FA
Sulfide	10/17/22 14:59	10/17/22 14:59			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:02
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC19091

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:02
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC19091

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/17/22 15:02
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: BC19091

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19091	Alkalinity to pH 4.5	mg CaCO3/L					61.2	50.5	45.0 to 55.0			0.820	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6

Location Code: WMWGREAP
Collected: 10/18/22 09:10
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19092

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:33		1.015	1.16	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:20		10.15	159	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 15:33		1.015	0.498	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 15:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 15:33		1.015	23.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:33		1	20.3	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:33		1.015	9.48	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 11:20		10.15	157	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 15:57		1.015	1.16	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:48		10.15	129	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 15:57		1.015	0.420	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 15:57		1.015	0.00740	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 15:57		1.015	23.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 15:57		1	22.0	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 15:57		1.015	10.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 11:48		10.15	123	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.000182	mg/L	0.000081	0.000203	J
* Barium, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.0619	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.000228	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.00233	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.827	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.00149	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 15:21		1.015	0.632	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6

Location Code: WMWGREAP
Collected: 10/18/22 09:10
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19092

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.000178	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.0577	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.0000795	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.00237	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.830	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.00111	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	0.625	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:13	10/19/22 13:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	427	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	752	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	426	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	0.505	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 20:39	10/19/22 20:39		1	1.22	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6

Location Code: WMWGREAP
Collected: 10/18/22 09:10
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19092

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:33	10/24/22 12:33		5	45.0	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:27	10/25/22 14:27		1	0.154	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:23	10/31/22 13:23		10	179	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 09:06	10/18/22 09:06			1192.42	uS/cm			FA
pH	10/18/22 09:06	10/18/22 09:06			6.38	SU			FA
Temperature	10/18/22 09:06	10/18/22 09:06			19.78	C			FA
Turbidity	10/18/22 09:06	10/18/22 09:06			1.44	NTU			FA
Sulfide	10/18/22 09:06	10/18/22 09:06			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:10
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC19092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19092	Chloride	mg/L	0.0693	1.00	50.0	94.7	96.1	10.1	9.00 to 11.0	99.4	80.0 to 120	1.47	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19092	Fluoride	mg/L	0.0133	0.125	2.50	2.75	2.84	2.61	2.25 to 2.75	104	80.0 to 120	3.22	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:10
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC19092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19092	Sulfate	mg/L	0.110	2.0	200	391	379	19.3	18.0 to 22.0	106	80.0 to 120	3.12	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:10
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: BC19092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6 Dup

Location Code: WMWGREAP
Collected: 10/18/22 09:10
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19093

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:37		1.015	1.16	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:23		10.15	147	mg/L	0.70035	4.06	RA
* Iron, Total	10/19/22 11:08	10/21/22 15:37		1.015	0.474	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 15:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 15:37		1.015	23.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:37		1	20.2	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:37		1.015	9.46	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 11:23		10.15	153	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 16:00		1.015	1.16	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 11:51		10.15	137	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/20/22 08:03	10/21/22 16:00		1.015	0.375	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 16:00		1.015	0.00740	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 16:00		1.015	23.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 16:00		1	22.0	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 16:00		1.015	10.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 11:51		10.15	130	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:24		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.000255	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.0613	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.0000767	mg/L	0.000068	0.000203	J
* Chromium, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.000273	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.00234	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.829	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.00137	mg/L	0.000102	0.000203	
* Potassium, Total	10/19/22 11:08	10/20/22 15:24		1.015	0.633	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-6 Dup

Location Code: WMWGREAP
Collected: 10/18/22 09:10
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19093

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.000211	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.0599	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.000100	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.00235	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.834	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.000903	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	0.681	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 11:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/19/22 13:14	10/19/22 13:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	424	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/19/22 11:40	10/20/22 13:33		1	756	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	423	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	0.562	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/19/22 20:56	10/19/22 20:56		1	1.17	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description:	Greene County Ash Pond - MW-6 Dup	**Location Code:**	WMWGREAP
		Collected:	10/18/22 09:10
		Customer ID:	
Laboratory ID Number:	BC19093	**Submittal Date:**	10/19/22 08:48

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:01	10/24/22 13:01		4	45.0	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:38	10/25/22 14:38		1	0.182	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:49	10/31/22 13:49		10	194	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 09:06	10/18/22 09:06			1192.42	uS/cm			FA
pH	10/18/22 09:06	10/18/22 09:06			6.38	SU			FA
Temperature	10/18/22 09:06	10/18/22 09:06			19.78	C			FA
Turbidity	10/18/22 09:06	10/18/22 09:06			1.44	NTU			FA
Sulfide	10/18/22 09:06	10/18/22 09:06			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:10
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-6 Dup

Laboratory ID Number: BC19093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Aluminum, Dissolved	mg/L	-0.000576	0.010	0.100	0.0961	0.0960	0.0981	0.0850 to 0.115	96.1	70.0 to 130	0.104	20.0
BC19093	Aluminum, Total	mg/L	0.000774	0.010	0.100	0.0969	0.103	0.102	0.0850 to 0.115	96.9	70.0 to 130	6.10	20.0
BC19093	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0860	0.0857	0.0918	0.0850 to 0.115	86.0	70.0 to 130	0.349	20.0
BC19093	Antimony, Total	mg/L	0.000213	0.00100	0.100	0.0982	0.0994	0.0914	0.0850 to 0.115	98.2	70.0 to 130	1.21	20.0
BC19093	Arsenic, Dissolved	mg/L	0.000016	0.000176	0.100	0.0974	0.0997	0.100	0.0850 to 0.115	97.2	70.0 to 130	2.33	20.0
BC19093	Arsenic, Total	mg/L	0.000062	0.000176	0.100	0.0984	0.0990	0.0982	0.0850 to 0.115	98.1	70.0 to 130	0.608	20.0
BC19093	Barium, Dissolved	mg/L	0.0000097	0.00100	0.100	0.148	0.147	0.0971	0.0850 to 0.115	88.1	70.0 to 130	0.678	20.0
BC19093	Barium, Total	mg/L	0.0000013	0.00100	0.100	0.157	0.153	0.0966	0.0850 to 0.115	95.7	70.0 to 130	2.58	20.0
BC19093	Beryllium, Dissolved	mg/L	0.0000108	0.000880	0.100	0.0917	0.0923	0.103	0.0850 to 0.115	91.7	70.0 to 130	0.652	20.0
BC19093	Beryllium, Total	mg/L	0.0000116	0.000880	0.100	0.0914	0.0921	0.0971	0.0850 to 0.115	91.4	70.0 to 130	0.763	20.0
BC19093	Boron, Dissolved	mg/L	0.00147	0.0650	1.00	2.13	2.16	0.977	0.850 to 1.15	97.0	70.0 to 130	1.40	20.0
BC19093	Boron, Total	mg/L	-0.000157	0.0650	1.00	2.16	2.14	0.975	0.850 to 1.15	100	70.0 to 130	0.930	20.0
BC19093	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0945	0.0974	0.100	0.0850 to 0.115	94.4	70.0 to 130	3.02	20.0
BC19093	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0959	0.0979	0.0994	0.0850 to 0.115	95.8	70.0 to 130	2.06	20.0
BC19093	Calcium, Dissolved	mg/L	-0.00920	0.152	5.00	140	138	5.11	4.25 to 5.75	60.0	70.0 to 130	1.44	20.0
BC19093	Calcium, Total	mg/L	-0.0193	0.152	5.00	157	148	4.84	4.25 to 5.75	200	70.0 to 130	5.90	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19093	Chromium, Dissolved	mg/L	0.0000117	0.000440	0.100	0.0943	0.0938	0.0991	0.0850 to 0.115	94.3	70.0 to 130	0.532	20.0
BC19093	Chromium, Total	mg/L	0.0000791	0.000440	0.100	0.0931	0.0973	0.102	0.0850 to 0.115	92.8	70.0 to 130	4.41	20.0
BC19093	Cobalt, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0978	0.0991	0.102	0.0850 to 0.115	95.4	70.0 to 130	1.32	20.0
BC19093	Cobalt, Total	mg/L	-0.0000013	0.000147	0.100	0.0964	0.100	0.103	0.0850 to 0.115	94.1	70.0 to 130	3.67	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19093	Iron, Dissolved	mg/L	-0.00150	0.0176	0.2	0.571	0.571	0.203	0.170 to 0.230	98.0	70.0 to 130	0.00	20.0
BC19093	Iron, Total	mg/L	-0.000021	0.0176	0.2	0.667	0.654	0.193	0.170 to 0.230	96.5	70.0 to 130	1.97	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:10
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-6 Dup

Laboratory ID Number: BC19093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19093	Lead, Dissolved	mg/L	0.0000035	0.000147	0.100	0.0984	0.0977	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.714	20.0
BC19093	Lead, Total	mg/L	0.0000024	0.000147	0.100	0.0970	0.0977	0.0978	0.0850 to 0.115	97.0	70.0 to 130	0.719	20.0
BC19093	Lithium, Dissolved	mg/L	-4.210E-05	0.0154	0.200	0.239	0.241	0.192	0.170 to 0.230	116	70.0 to 130	0.833	20.0
BC19093	Lithium, Total	mg/L	0.000258	0.0154	0.200	0.203	0.211	0.195	0.170 to 0.230	102	70.0 to 130	3.86	20.0
BC19093	Magnesium, Dissolved	mg/L	-0.000226	0.0462	5.00	27.4	28.0	5.00	4.25 to 5.75	86.0	70.0 to 130	2.17	20.0
BC19093	Magnesium, Total	mg/L	0.0138	0.0462	5.00	28.3	28.2	4.87	4.25 to 5.75	94.0	70.0 to 130	0.354	20.0
BC19093	Manganese, Dissolved	mg/L	0.0000066	0.00033	0.100	0.922	0.921	0.104	0.0850 to 0.115	88.0	70.0 to 130	0.109	20.0
BC19093	Manganese, Total	mg/L	0.000028	0.00033	0.100	0.914	0.939	0.106	0.0850 to 0.115	85.0	70.0 to 130	2.70	20.0
BC19093	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00412	0.0041	0.00403	0.00340 to 0.00460	103	70.0 to 130	0.487	20.0
BC19093	Molybdenum, Dissolved	mg/L	-0.0000022	0.0002	0.100	0.0968	0.0980	0.0994	0.0850 to 0.115	95.9	70.0 to 130	1.23	20.0
BC19093	Molybdenum, Total	mg/L	0.0000051	0.0002	0.100	0.0988	0.0995	0.101	0.0850 to 0.115	97.4	70.0 to 130	0.706	20.0
BC19093	Potassium, Dissolved	mg/L	0.0138	0.367	10.0	10.2	10.4	9.82	8.50 to 11.5	95.2	70.0 to 130	1.94	20.0
BC19093	Potassium, Total	mg/L	0.00510	0.367	10.0	10.1	10.6	10.1	8.50 to 11.5	94.7	70.0 to 130	4.83	20.0
BC19093	Selenium, Dissolved	mg/L	0.0000199	0.00100	0.100	0.106	0.108	0.105	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC19093	Selenium, Total	mg/L	-0.0000245	0.00100	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC19093	Silicon, Dissolved	mg/L	-0.000222	0.0440	1.00	11.1	11.2	1.03	0.850 to 1.15	80.0	70.0 to 130	0.897	20.0
BC19093	Silicon, Total	mg/L	0.000132	0.0440	1.00	10.3	10.2	0.961	0.850 to 1.15	84.0	70.0 to 130	0.976	20.0
BC19093	Sodium, Dissolved	mg/L	-0.000595	0.0660	5.00	136	133	4.87	4.25 to 5.75	120	70.0 to 130	2.23	20.0
BC19093	Sodium, Total	mg/L	0.00172	0.0660	5.00	161	151	4.78	4.25 to 5.75	160	70.0 to 130	6.41	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19093	Thallium, Dissolved	mg/L	0.0000034	0.000147	0.100	0.100	0.0996	0.101	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BC19093	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19093	Total Organic Carbon	mg/L	0.281	1.00	10.0	10.8	10.7	23.6		96.3	80.0 to 120	0.930	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 09:10
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-6 Dup

Laboratory ID Number: BC19093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19093	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.01	0.009	2.05	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC19093	Solids, Dissolved	mg/L	2.00	25.0			756	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-7

Location Code: WMWGREAP
Collected: 10/18/22 10:00
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19094

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 15:59		1.015	0.0589	mg/L	0.030000	0.1015	J
* Calcium, Total	10/19/22 11:08	10/24/22 11:32		10.15	158	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 15:59		1.015	0.148	mg/L	0.008120	0.0406	
* Lithium, Total	10/19/22 11:08	10/21/22 15:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 15:59		1.015	17.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 15:59		1	18.3	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 15:59		1.015	8.54	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 11:32		10.15	259	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/20/22 08:03	10/21/22 16:24		1.015	0.0589	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	10/20/22 08:03	10/24/22 12:01		10.15	146	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 16:24		1.015	0.149	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/20/22 08:03	10/21/22 16:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 16:24		1.015	16.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 16:24		1	20.1	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 16:24		1.015	9.40	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 12:01		10.15	229	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 15:53		1.015	0.000148	mg/L	0.000081	0.000203	J
* Barium, Total	10/19/22 11:08	10/20/22 15:53		1.015	0.0840	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:53		1.015	0.000297	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:53		1.015	0.00301	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:53		1.015	0.875	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:53		1.015	0.000120	mg/L	0.000102	0.000203	J
* Potassium, Total	10/19/22 11:08	10/20/22 15:53		1.015	1.11	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-7

Location Code: WMWGREAP
Collected: 10/18/22 10:00
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19094

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 15:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	0.000112	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	0.0816	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	0.00290	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	0.881	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	1.13	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:28	10/21/22 11:28		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/31/22 13:55	10/31/22 16:19		1	353	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	1040	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	353	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	10/31/22 13:55	10/31/22 16:19		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 17:16	10/20/22 17:16		1	1.34	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-7

Location Code: WMWGREAP
Collected: 10/18/22 10:00
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19094

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:02	10/24/22 13:02		10	196	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:39	10/25/22 14:39		1	0.0649	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:51	10/31/22 13:51		16	256	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 09:58	10/18/22 09:58			1689.93	uS/cm			FA
pH	10/18/22 09:58	10/18/22 09:58			6.37	SU			FA
Temperature	10/18/22 09:58	10/18/22 09:58			19.45	C			FA
Turbidity	10/18/22 09:58	10/18/22 09:58			1.07	NTU			FA
Sulfide	10/18/22 09:58	10/18/22 09:58			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:00
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC19094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19096	Aluminum, Dissolved	mg/L	-0.0000108	0.010	0.100	0.0944	0.0951	0.0988	0.0850 to 0.115	94.4	70.0 to 130	0.739	20.0
BC19096	Aluminum, Total	mg/L	0.000426	0.010	0.100	0.100	0.0989	0.102	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BC19096	Antimony, Dissolved	mg/L	0.000218	0.00100	0.100	0.0964	0.0936	0.0915	0.0850 to 0.115	96.4	70.0 to 130	2.95	20.0
BC19096	Antimony, Total	mg/L	0.000172	0.00100	0.100	0.0972	0.0963	0.0926	0.0850 to 0.115	97.2	70.0 to 130	0.930	20.0
BC19096	Arsenic, Dissolved	mg/L	0.0000303	0.000176	0.100	0.106	0.105	0.0999	0.0850 to 0.115	98.4	70.0 to 130	0.948	20.0
BC19096	Arsenic, Total	mg/L	0.0000291	0.000176	0.100	0.106	0.104	0.0999	0.0850 to 0.115	98.1	70.0 to 130	1.90	20.0
BC19096	Barium, Dissolved	mg/L	0.0000187	0.00100	0.100	0.228	0.225	0.0956	0.0850 to 0.115	92.0	70.0 to 130	1.32	20.0
BC19096	Barium, Total	mg/L	0.0000099	0.00100	0.100	0.226	0.227	0.0929	0.0850 to 0.115	79.0	70.0 to 130	0.442	20.0
BC19096	Beryllium, Dissolved	mg/L	0.000012	0.000880	0.100	0.0937	0.0924	0.0964	0.0850 to 0.115	93.7	70.0 to 130	1.40	20.0
BC19096	Beryllium, Total	mg/L	-0.0000316	0.000880	0.100	0.0934	0.0931	0.0900	0.0850 to 0.115	93.4	70.0 to 130	0.322	20.0
BC19096	Boron, Dissolved	mg/L	0.00275	0.0650	1.00	2.16	2.15	0.999	0.850 to 1.15	101	70.0 to 130	0.464	20.0
BC19096	Boron, Total	mg/L	-0.000088	0.0650	1.00	2.14	2.15	0.998	0.850 to 1.15	99.0	70.0 to 130	0.466	20.0
BC19096	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0964	0.0952	0.102	0.0850 to 0.115	96.4	70.0 to 130	1.25	20.0
BC19096	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0971	0.0950	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.19	20.0
BC19096	Calcium, Dissolved	mg/L	-0.00677	0.152	5.00	95.4	105	5.15	4.25 to 5.75	0.00	70.0 to 130	9.58	20.0
BC19096	Calcium, Total	mg/L	-0.0182	0.152	5.00	121	116	4.93	4.25 to 5.75	200	70.0 to 130	4.22	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19096	Chromium, Dissolved	mg/L	0.000025	0.000440	0.100	0.0928	0.0937	0.0995	0.0850 to 0.115	92.6	70.0 to 130	0.965	20.0
BC19096	Chromium, Total	mg/L	-0.0000014	0.000440	0.100	0.0951	0.0939	0.0991	0.0850 to 0.115	94.9	70.0 to 130	1.27	20.0
BC19096	Cobalt, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.120	0.122	0.102	0.0850 to 0.115	92.2	70.0 to 130	1.65	20.0
BC19096	Cobalt, Total	mg/L	-0.0000066	0.000147	0.100	0.124	0.122	0.102	0.0850 to 0.115	94.3	70.0 to 130	1.63	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19096	Iron, Dissolved	mg/L	-0.00234	0.0176	0.2	11.0	12.0	0.203	0.170 to 0.230	-150	70.0 to 130	8.70	20.0
BC19096	Iron, Total	mg/L	0.00186	0.0176	0.2	12.7	11.8	0.201	0.170 to 0.230	150	70.0 to 130	7.35	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:00
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC19094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19096	Lead, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0988	0.0970	0.0994	0.0850 to 0.115	98.8	70.0 to 130	1.84	20.0
BC19096	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.0973	0.0963	0.0968	0.0850 to 0.115	97.3	70.0 to 130	1.03	20.0
BC19096	Lithium, Dissolved	mg/L	-7.020E-05	0.0154	0.200	0.256	0.255	0.194	0.170 to 0.230	115	70.0 to 130	0.391	20.0
BC19096	Lithium, Total	mg/L	-0.000091	0.0154	0.200	0.209	0.208	0.200	0.170 to 0.230	95.0	70.0 to 130	0.480	20.0
BC19096	Magnesium, Dissolved	mg/L	-0.00117	0.0462	5.00	31.6	31.2	5.03	4.25 to 5.75	100	70.0 to 130	1.27	20.0
BC19096	Magnesium, Total	mg/L	0.00354	0.0462	5.00	31.0	30.9	5.09	4.25 to 5.75	94.0	70.0 to 130	0.323	20.0
BC19096	Manganese, Dissolved	mg/L	0.0000373	0.00033	0.100	8.34	8.46	0.104	0.0850 to 0.115	70.0	70.0 to 130	1.43	20.0
BC19096	Manganese, Total	mg/L	0.0000496	0.00033	0.100	8.45	8.28	0.104	0.0850 to 0.115	180	70.0 to 130	2.03	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19096	Molybdenum, Dissolved	mg/L	-0.0000019	0.0002	0.100	0.0969	0.0972	0.101	0.0850 to 0.115	96.9	70.0 to 130	0.309	20.0
BC19096	Molybdenum, Total	mg/L	-0.0000023	0.0002	0.100	0.0969	0.0951	0.0996	0.0850 to 0.115	96.9	70.0 to 130	1.88	20.0
BC19096	Potassium, Dissolved	mg/L	0.0224	0.367	10.0	15.0	15.1	9.70	8.50 to 11.5	92.5	70.0 to 130	0.664	20.0
BC19096	Potassium, Total	mg/L	0.00299	0.367	10.0	15.5	15.5	9.85	8.50 to 11.5	91.8	70.0 to 130	0.00	20.0
BC19096	Selenium, Dissolved	mg/L	-0.0000162	0.00100	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC19096	Selenium, Total	mg/L	-0.0000268	0.00100	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19096	Silicon, Dissolved	mg/L	0.000276	0.0440	1.00	5.67	5.64	1.03	0.850 to 1.15	105	70.0 to 130	0.531	20.0
BC19096	Silicon, Total	mg/L	0.000576	0.0440	1.00	5.24	5.22	0.969	0.850 to 1.15	94.0	70.0 to 130	0.382	20.0
BC19096	Sodium, Dissolved	mg/L	6.410E-05	0.0660	5.00	99.7	110	4.89	4.25 to 5.75	-6.00	70.0 to 130	9.82	20.0
BC19096	Sodium, Total	mg/L	0.00858	0.0660	5.00	133	128	4.86	4.25 to 5.75	120	70.0 to 130	3.83	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19096	Thallium, Dissolved	mg/L	0.000004	0.000147	0.100	0.101	0.0987	0.101	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BC19096	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:00
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: BC19094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19094	Alkalinity to pH 4.5	mg CaCO3/L					352	50.0	45.0 to 55.0			0.284	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19254	Solids, Dissolved	mg/L	1.00	25.0			658	48.0	40.0 to 60.0			0.606	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-8

Location Code: WMWGREAP
Collected: 10/18/22 10:38
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19095

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 16:02		1.015	0.815	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:35		10.15	93.8	mg/L	0.70035	4.06	
* Iron, Total	10/19/22 11:08	10/21/22 16:02		1.015	0.0321	mg/L	0.008120	0.0406	J
* Lithium, Total	10/19/22 11:08	10/21/22 16:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/19/22 11:08	10/21/22 16:02		1.015	15.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 16:02		1	14.0	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 16:02		1.015	6.54	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 11:35		10.15	214	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/20/22 08:03	10/21/22 16:28		1.015	0.815	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 12:05		10.15	79.5	mg/L	0.70035	4.06	
* Iron, Dissolved	10/20/22 08:03	10/21/22 16:28		1.015	0.0330	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/20/22 08:03	10/21/22 16:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 16:28		1.015	15.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 16:28		1	15.3	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 16:28		1.015	7.13	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 12:05		10.15	174	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 15:57		1.015	0.000261	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 15:57		1.015	0.107	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 15:57		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 15:57		1.015	0.00537	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 15:57		1.015	0.991	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 15:57		1.015	0.703	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-8

Location Code: WMWGREAP
Collected: 10/18/22 10:38
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19095

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	0.000261	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	0.108	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	0.000208	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	0.00517	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	0.962	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	0.632	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:29	10/21/22 11:29		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 10:20		1	409	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	700	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 10:20		1	406	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 10:20		1	2.90	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 17:32	10/20/22 17:32		1	1.81	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-8

Location Code: WMWGREAP
Collected: 10/18/22 10:38
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19095

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:03	10/24/22 13:03		8	96.1	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:40	10/25/22 14:40		1	0.0981	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:52	10/31/22 13:52		4	84.8	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 10:34	10/18/22 10:34			1169.69	uS/cm			FA
pH	10/18/22 10:34	10/18/22 10:34			6.45	SU			FA
Temperature	10/18/22 10:34	10/18/22 10:34			19.10	C			FA
Turbidity	10/18/22 10:34	10/18/22 10:34			0.82	NTU			FA
Sulfide	10/18/22 10:34	10/18/22 10:34			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:38
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC19095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19096	Aluminum, Dissolved	mg/L	-0.0000108	0.010	0.100	0.0944	0.0951	0.0988	0.0850 to 0.115	94.4	70.0 to 130	0.739	20.0
BC19096	Aluminum, Total	mg/L	0.000426	0.010	0.100	0.100	0.0989	0.102	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BC19096	Antimony, Dissolved	mg/L	0.000218	0.00100	0.100	0.0964	0.0936	0.0915	0.0850 to 0.115	96.4	70.0 to 130	2.95	20.0
BC19096	Antimony, Total	mg/L	0.000172	0.00100	0.100	0.0972	0.0963	0.0926	0.0850 to 0.115	97.2	70.0 to 130	0.930	20.0
BC19096	Arsenic, Dissolved	mg/L	0.0000303	0.000176	0.100	0.106	0.105	0.0999	0.0850 to 0.115	98.4	70.0 to 130	0.948	20.0
BC19096	Arsenic, Total	mg/L	0.0000291	0.000176	0.100	0.106	0.104	0.0999	0.0850 to 0.115	98.1	70.0 to 130	1.90	20.0
BC19096	Barium, Dissolved	mg/L	0.0000187	0.00100	0.100	0.228	0.225	0.0956	0.0850 to 0.115	92.0	70.0 to 130	1.32	20.0
BC19096	Barium, Total	mg/L	0.0000099	0.00100	0.100	0.226	0.227	0.0929	0.0850 to 0.115	79.0	70.0 to 130	0.442	20.0
BC19096	Beryllium, Dissolved	mg/L	0.000012	0.000880	0.100	0.0937	0.0924	0.0964	0.0850 to 0.115	93.7	70.0 to 130	1.40	20.0
BC19096	Beryllium, Total	mg/L	-0.0000316	0.000880	0.100	0.0934	0.0931	0.0900	0.0850 to 0.115	93.4	70.0 to 130	0.322	20.0
BC19096	Boron, Dissolved	mg/L	0.00275	0.0650	1.00	2.16	2.15	0.999	0.850 to 1.15	101	70.0 to 130	0.464	20.0
BC19096	Boron, Total	mg/L	-0.000088	0.0650	1.00	2.14	2.15	0.998	0.850 to 1.15	99.0	70.0 to 130	0.466	20.0
BC19096	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0964	0.0952	0.102	0.0850 to 0.115	96.4	70.0 to 130	1.25	20.0
BC19096	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0971	0.0950	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.19	20.0
BC19096	Calcium, Dissolved	mg/L	-0.00677	0.152	5.00	95.4	105	5.15	4.25 to 5.75	0.00	70.0 to 130	9.58	20.0
BC19096	Calcium, Total	mg/L	-0.0182	0.152	5.00	121	116	4.93	4.25 to 5.75	200	70.0 to 130	4.22	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19096	Chromium, Dissolved	mg/L	0.000025	0.000440	0.100	0.0928	0.0937	0.0995	0.0850 to 0.115	92.6	70.0 to 130	0.965	20.0
BC19096	Chromium, Total	mg/L	-0.0000014	0.000440	0.100	0.0951	0.0939	0.0991	0.0850 to 0.115	94.9	70.0 to 130	1.27	20.0
BC19096	Cobalt, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.120	0.122	0.102	0.0850 to 0.115	92.2	70.0 to 130	1.65	20.0
BC19096	Cobalt, Total	mg/L	-0.0000066	0.000147	0.100	0.124	0.122	0.102	0.0850 to 0.115	94.3	70.0 to 130	1.63	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19096	Iron, Dissolved	mg/L	-0.00234	0.0176	0.2	11.0	12.0	0.203	0.170 to 0.230	-150	70.0 to 130	8.70	20.0
BC19096	Iron, Total	mg/L	0.00186	0.0176	0.2	12.7	11.8	0.201	0.170 to 0.230	150	70.0 to 130	7.35	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:38
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC19095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19096	Lead, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0988	0.0970	0.0994	0.0850 to 0.115	98.8	70.0 to 130	1.84	20.0
BC19096	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.0973	0.0963	0.0968	0.0850 to 0.115	97.3	70.0 to 130	1.03	20.0
BC19096	Lithium, Dissolved	mg/L	-7.020E-05	0.0154	0.200	0.256	0.255	0.194	0.170 to 0.230	115	70.0 to 130	0.391	20.0
BC19096	Lithium, Total	mg/L	-0.000091	0.0154	0.200	0.209	0.208	0.200	0.170 to 0.230	95.0	70.0 to 130	0.480	20.0
BC19096	Magnesium, Dissolved	mg/L	-0.00117	0.0462	5.00	31.6	31.2	5.03	4.25 to 5.75	100	70.0 to 130	1.27	20.0
BC19096	Magnesium, Total	mg/L	0.00354	0.0462	5.00	31.0	30.9	5.09	4.25 to 5.75	94.0	70.0 to 130	0.323	20.0
BC19096	Manganese, Dissolved	mg/L	0.0000373	0.00033	0.100	8.34	8.46	0.104	0.0850 to 0.115	70.0	70.0 to 130	1.43	20.0
BC19096	Manganese, Total	mg/L	0.0000496	0.00033	0.100	8.45	8.28	0.104	0.0850 to 0.115	180	70.0 to 130	2.03	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19096	Molybdenum, Dissolved	mg/L	-0.0000019	0.0002	0.100	0.0969	0.0972	0.101	0.0850 to 0.115	96.9	70.0 to 130	0.309	20.0
BC19096	Molybdenum, Total	mg/L	-0.0000023	0.0002	0.100	0.0969	0.0951	0.0996	0.0850 to 0.115	96.9	70.0 to 130	1.88	20.0
BC19096	Potassium, Dissolved	mg/L	0.0224	0.367	10.0	15.0	15.1	9.70	8.50 to 11.5	92.5	70.0 to 130	0.664	20.0
BC19096	Potassium, Total	mg/L	0.00299	0.367	10.0	15.5	15.5	9.85	8.50 to 11.5	91.8	70.0 to 130	0.00	20.0
BC19096	Selenium, Dissolved	mg/L	-0.0000162	0.00100	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC19096	Selenium, Total	mg/L	-0.0000268	0.00100	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19096	Silicon, Dissolved	mg/L	0.000276	0.0440	1.00	5.67	5.64	1.03	0.850 to 1.15	105	70.0 to 130	0.531	20.0
BC19096	Silicon, Total	mg/L	0.000576	0.0440	1.00	5.24	5.22	0.969	0.850 to 1.15	94.0	70.0 to 130	0.382	20.0
BC19096	Sodium, Dissolved	mg/L	6.410E-05	0.0660	5.00	99.7	110	4.89	4.25 to 5.75	-6.00	70.0 to 130	9.82	20.0
BC19096	Sodium, Total	mg/L	0.00858	0.0660	5.00	133	128	4.86	4.25 to 5.75	120	70.0 to 130	3.83	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19096	Thallium, Dissolved	mg/L	0.000004	0.000147	0.100	0.101	0.0987	0.101	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BC19096	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 10:38
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: BC19095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19254	Solids, Dissolved	mg/L	1.00	25.0			658	48.0	40.0 to 60.0			0.606	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9

Location Code: WMWGREAP
Collected: 10/18/22 11:15
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19096

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/19/22 11:08	10/21/22 16:05		1.015	1.15	mg/L	0.030000	0.1015	
* Calcium, Total	10/19/22 11:08	10/24/22 11:39		10.15	111	mg/L	0.70035	4.06	RA
* Iron, Total	10/19/22 11:08	10/24/22 11:39		10.15	12.4	mg/L	0.08120	0.406	RA
* Lithium, Total	10/19/22 11:08	10/21/22 16:05		1.015	0.0189	mg/L	0.007105	0.01999956	J
* Magnesium, Total	10/19/22 11:08	10/21/22 16:05		1.015	26.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/19/22 11:08	10/21/22 16:05		1	9.20	mg/L			
Silicon, Total	10/19/22 11:08	10/21/22 16:05		1.015	4.30	mg/L	0.02030	0.25375	
* Sodium, Total	10/19/22 11:08	10/24/22 11:39		10.15	127	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/20/22 08:03	10/21/22 16:31		1.015	1.15	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/20/22 08:03	10/24/22 12:08		10.15	95.4	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/20/22 08:03	10/24/22 12:08		10.15	11.3	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	10/20/22 08:03	10/21/22 16:31		1.015	0.0254	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/20/22 08:03	10/21/22 16:31		1.015	26.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/20/22 08:03	10/21/22 16:31		1	9.89	mg/L			
Silicon, Dissolved	10/20/22 08:03	10/21/22 16:31		1.015	4.62	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/20/22 08:03	10/24/22 12:08		10.15	100	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/19/22 11:08	10/20/22 16:01		1.015	0.00787	mg/L	0.000081	0.000203	
* Barium, Total	10/19/22 11:08	10/20/22 16:01		1.015	0.147	mg/L	0.000508	0.001015	
* Beryllium, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/19/22 11:08	10/20/22 16:01		1.015	0.000238	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/19/22 11:08	10/20/22 16:01		1.015	0.0297	mg/L	0.000068	0.000203	
* Lead, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/19/22 11:08	10/20/22 17:13		10.15	8.27	mg/L	0.001522	0.01015	RA
* Molybdenum, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/19/22 11:08	10/20/22 16:01		1.015	6.32	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9

Location Code: WMWGREAP
Collected: 10/18/22 11:15
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19096

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/19/22 11:08	10/20/22 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	0.00756	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	0.136	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	0.000207	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	0.0278	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/20/22 08:03	10/20/22 17:35		10.15	8.27	mg/L	0.001522	0.01015	RA
* Molybdenum, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	5.75	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/20/22 08:03	10/20/22 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 00:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:31	10/21/22 11:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 10:38		1	253	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	692	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 10:38		1	251	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 10:38		1	1.53	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 17:50	10/20/22 17:50		1	1.99	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-9

Location Code: WMWGREAP
Collected: 10/18/22 11:15
Customer ID:
Submittal Date: 10/19/22 08:48

Laboratory ID Number: BC19096

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:04	10/24/22 13:04		8	106	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:41	10/25/22 14:41		1	0.156	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:53	10/31/22 13:53		10	171	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 11:09	10/18/22 11:09			1124.35	uS/cm			FA
pH	10/18/22 11:09	10/18/22 11:09			6.27	SU			FA
Temperature	10/18/22 11:09	10/18/22 11:09			19.20	C			FA
Turbidity	10/18/22 11:09	10/18/22 11:09			0.93	NTU			FA
Sulfide	10/18/22 11:09	10/18/22 11:09			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:15
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC19096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19096	Aluminum, Dissolved	mg/L	-0.0000108	0.010	0.100	0.0944	0.0951	0.0988	0.0850 to 0.115	94.4	70.0 to 130	0.739	20.0
BC19096	Aluminum, Total	mg/L	0.000426	0.010	0.100	0.100	0.0989	0.102	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BC19096	Antimony, Dissolved	mg/L	0.000218	0.00100	0.100	0.0964	0.0936	0.0915	0.0850 to 0.115	96.4	70.0 to 130	2.95	20.0
BC19096	Antimony, Total	mg/L	0.000172	0.00100	0.100	0.0972	0.0963	0.0926	0.0850 to 0.115	97.2	70.0 to 130	0.930	20.0
BC19096	Arsenic, Dissolved	mg/L	0.0000303	0.000176	0.100	0.106	0.105	0.0999	0.0850 to 0.115	98.4	70.0 to 130	0.948	20.0
BC19096	Arsenic, Total	mg/L	0.0000291	0.000176	0.100	0.106	0.104	0.0999	0.0850 to 0.115	98.1	70.0 to 130	1.90	20.0
BC19096	Barium, Dissolved	mg/L	0.0000187	0.00100	0.100	0.228	0.225	0.0956	0.0850 to 0.115	92.0	70.0 to 130	1.32	20.0
BC19096	Barium, Total	mg/L	0.0000099	0.00100	0.100	0.226	0.227	0.0929	0.0850 to 0.115	79.0	70.0 to 130	0.442	20.0
BC19096	Beryllium, Dissolved	mg/L	0.000012	0.000880	0.100	0.0937	0.0924	0.0964	0.0850 to 0.115	93.7	70.0 to 130	1.40	20.0
BC19096	Beryllium, Total	mg/L	-0.0000316	0.000880	0.100	0.0934	0.0931	0.0900	0.0850 to 0.115	93.4	70.0 to 130	0.322	20.0
BC19096	Boron, Dissolved	mg/L	0.00275	0.0650	1.00	2.16	2.15	0.999	0.850 to 1.15	101	70.0 to 130	0.464	20.0
BC19096	Boron, Total	mg/L	-0.000088	0.0650	1.00	2.14	2.15	0.998	0.850 to 1.15	99.0	70.0 to 130	0.466	20.0
BC19096	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0964	0.0952	0.102	0.0850 to 0.115	96.4	70.0 to 130	1.25	20.0
BC19096	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0971	0.0950	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.19	20.0
BC19096	Calcium, Dissolved	mg/L	-0.00677	0.152	5.00	95.4	105	5.15	4.25 to 5.75	0.00	70.0 to 130	9.58	20.0
BC19096	Calcium, Total	mg/L	-0.0182	0.152	5.00	121	116	4.93	4.25 to 5.75	200	70.0 to 130	4.22	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19096	Chromium, Dissolved	mg/L	0.000025	0.000440	0.100	0.0928	0.0937	0.0995	0.0850 to 0.115	92.6	70.0 to 130	0.965	20.0
BC19096	Chromium, Total	mg/L	-0.0000014	0.000440	0.100	0.0951	0.0939	0.0991	0.0850 to 0.115	94.9	70.0 to 130	1.27	20.0
BC19096	Cobalt, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.120	0.122	0.102	0.0850 to 0.115	92.2	70.0 to 130	1.65	20.0
BC19096	Cobalt, Total	mg/L	-0.0000066	0.000147	0.100	0.124	0.122	0.102	0.0850 to 0.115	94.3	70.0 to 130	1.63	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19096	Iron, Dissolved	mg/L	-0.00234	0.0176	0.2	11.0	12.0	0.203	0.170 to 0.230	-150	70.0 to 130	8.70	20.0
BC19096	Iron, Total	mg/L	0.00186	0.0176	0.2	12.7	11.8	0.201	0.170 to 0.230	150	70.0 to 130	7.35	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:15
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC19096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19096	Lead, Dissolved	mg/L	0.0000055	0.000147	0.100	0.0988	0.0970	0.0994	0.0850 to 0.115	98.8	70.0 to 130	1.84	20.0
BC19096	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.0973	0.0963	0.0968	0.0850 to 0.115	97.3	70.0 to 130	1.03	20.0
BC19096	Lithium, Dissolved	mg/L	-7.020E-05	0.0154	0.200	0.256	0.255	0.194	0.170 to 0.230	115	70.0 to 130	0.391	20.0
BC19096	Lithium, Total	mg/L	-0.000091	0.0154	0.200	0.209	0.208	0.200	0.170 to 0.230	95.0	70.0 to 130	0.480	20.0
BC19096	Magnesium, Dissolved	mg/L	-0.00117	0.0462	5.00	31.6	31.2	5.03	4.25 to 5.75	100	70.0 to 130	1.27	20.0
BC19096	Magnesium, Total	mg/L	0.00354	0.0462	5.00	31.0	30.9	5.09	4.25 to 5.75	94.0	70.0 to 130	0.323	20.0
BC19096	Manganese, Dissolved	mg/L	0.0000373	0.00033	0.100	8.34	8.46	0.104	0.0850 to 0.115	70.0	70.0 to 130	1.43	20.0
BC19096	Manganese, Total	mg/L	0.0000496	0.00033	0.100	8.45	8.28	0.104	0.0850 to 0.115	180	70.0 to 130	2.03	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19096	Molybdenum, Dissolved	mg/L	-0.0000019	0.0002	0.100	0.0969	0.0972	0.101	0.0850 to 0.115	96.9	70.0 to 130	0.309	20.0
BC19096	Molybdenum, Total	mg/L	-0.0000023	0.0002	0.100	0.0969	0.0951	0.0996	0.0850 to 0.115	96.9	70.0 to 130	1.88	20.0
BC19096	Potassium, Dissolved	mg/L	0.0224	0.367	10.0	15.0	15.1	9.70	8.50 to 11.5	92.5	70.0 to 130	0.664	20.0
BC19096	Potassium, Total	mg/L	0.00299	0.367	10.0	15.5	15.5	9.85	8.50 to 11.5	91.8	70.0 to 130	0.00	20.0
BC19096	Selenium, Dissolved	mg/L	-0.0000162	0.00100	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC19096	Selenium, Total	mg/L	-0.0000268	0.00100	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19096	Silicon, Dissolved	mg/L	0.000276	0.0440	1.00	5.67	5.64	1.03	0.850 to 1.15	105	70.0 to 130	0.531	20.0
BC19096	Silicon, Total	mg/L	0.000576	0.0440	1.00	5.24	5.22	0.969	0.850 to 1.15	94.0	70.0 to 130	0.382	20.0
BC19096	Sodium, Dissolved	mg/L	6.410E-05	0.0660	5.00	99.7	110	4.89	4.25 to 5.75	-6.00	70.0 to 130	9.82	20.0
BC19096	Sodium, Total	mg/L	0.00858	0.0660	5.00	133	128	4.86	4.25 to 5.75	120	70.0 to 130	3.83	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19096	Thallium, Dissolved	mg/L	0.000004	0.000147	0.100	0.101	0.0987	0.101	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BC19096	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 11:15
Customer ID:
Delivery Date: 10/19/22 08:48

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: BC19096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19254	Solids, Dissolved	mg/L	1.00	25.0			658	48.0	40.0 to 60.0			0.606	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-25

Location Code: WMWGREAP
Collected: 10/18/22 14:58
Customer ID:
Submittal Date: 10/20/22 11:53

Laboratory ID Number: BC19252

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:31		1.015	0.124	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 11:31		1.015	38.2	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 11:31		1.015	1.89	mg/L	0.008120	0.0406	
* Lithium, Total	10/25/22 14:16	10/26/22 11:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 11:31		1.015	7.29	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:31		1	22.5	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:31		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 11:31		1.015	33.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	0.120	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	38.4	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	1.86	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	7.63	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:08		1	23.5	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:08		1.015	32.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.0250	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.000434	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.0704	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.0000834	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.00995	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.290	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 13:33		1.015	0.893	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-25

Location Code: WMWGREAP
Collected: 10/18/22 14:58
Customer ID:
Submittal Date: 10/20/22 11:53

Laboratory ID Number: BC19252

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.00697	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.000464	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.0704	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.0104	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.0000856	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.301	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	0.980	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:33	10/21/22 11:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 10:57		1	90.2	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	256	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 10:57		1	89.7	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 10:57		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 18:07	10/20/22 18:07		1	1.02	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-25

Location Code: WMWGREAP
Collected: 10/18/22 14:58
Customer ID:
Submittal Date: 10/20/22 11:53

Laboratory ID Number: BC19252

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:05	10/24/22 13:05		3	32.3	mg/L	1.50	3	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:42	10/25/22 14:42		1	0.0955	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:54	10/31/22 13:54		3	70.6	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 14:56	10/18/22 14:56			405.24	uS/cm			FA
pH	10/18/22 14:56	10/18/22 14:56			5.88	SU			FA
Temperature	10/18/22 14:56	10/18/22 14:56			20.06	C			FA
Turbidity	10/18/22 14:56	10/18/22 14:56			1.71	NTU			FA
Sulfide	10/18/22 14:56	10/18/22 14:56			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 14:58
Customer ID:
Delivery Date: 10/20/22 11:53

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC19252

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 14:58
Customer ID:
Delivery Date: 10/20/22 11:53

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC19252

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 14:58
Customer ID:
Delivery Date: 10/20/22 11:53

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: BC19252

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19254	Solids, Dissolved	mg/L	1.00	25.0			658	48.0	40.0 to 60.0			0.606	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10

Location Code: WMWGREAP
Collected: 10/18/22 15:53
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19253

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:34		1.015	2.13	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 13:43		10.15	105	mg/L	0.70035	4.06	
* Iron, Total	10/25/22 14:16	10/26/22 13:43		10.15	28.1	mg/L	0.08120	0.406	
* Lithium, Total	10/25/22 14:16	10/26/22 11:34		1.015	0.241	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 11:34		1.015	17.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:34		1	10.5	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:34		1.015	4.92	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 11:34		1.015	28.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:11		1.015	2.09	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:40		10.15	96.1	mg/L	0.70035	4.06	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:40		10.15	24.9	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:11		1.015	0.268	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:11		1.015	17.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:11		1	10.9	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:11		1.015	5.10	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:11		1.015	30.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 13:37		1.015	0.0117	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 13:37		1.015	0.248	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 13:37		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 13:37		1.015	0.0223	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 15:51		5.075	3.27	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:37		1.015	0.00750	mg/L	0.000102	0.000203	
* Potassium, Total	10/25/22 14:16	10/27/22 13:37		1.015	5.95	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10

Location Code: WMWGREAP
Collected: 10/18/22 15:53
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19253

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	0.0118	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	0.261	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	0.0233	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:19		5.075	3.05	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	0.00847	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	6.05	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:35	10/21/22 11:35		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 11:10		1	227	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	449	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 11:10		1	225	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 11:10		1	1.89	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 18:23	10/20/22 18:23		1	2.82	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-10

Location Code: WMWGREAP
Collected: 10/18/22 15:53
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19253

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:52	10/24/22 12:52		1	17.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:44	10/25/22 14:44		1	0.248	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:55	10/31/22 13:55		8	104	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 15:52	10/18/22 15:52			705.85	uS/cm			FA
pH	10/18/22 15:52	10/18/22 15:52			6.62	SU			FA
Temperature	10/18/22 15:52	10/18/22 15:52			18.35	C			FA
Turbidity	10/18/22 15:52	10/18/22 15:52			1.23	NTU			FA
Sulfide	10/18/22 15:52	10/18/22 15:52			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 15:53
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC19253

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 15:53
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC19253

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 15:53
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: BC19253

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19254	Solids, Dissolved	mg/L	1.00	25.0			658	48.0	40.0 to 60.0			0.606	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14

Location Code: WMWGREAP
Collected: 10/18/22 17:00
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19254

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:37		1.015	1.91	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 13:46		101.5	125	mg/L	7.0035	40.6	
* Iron, Total	10/25/22 14:16	10/26/22 13:46		101.5	69.8	mg/L	0.8120	4.06	
* Lithium, Total	10/25/22 14:16	10/26/22 11:37		1.015	0.478	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 11:37		1.015	26.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:37		1	13.6	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:37		1.015	6.36	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 11:37		1.015	31.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:15		1.015	1.85	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:44		101.5	109	mg/L	7.0035	40.6	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:44		101.5	58.6	mg/L	0.8120	4.06	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:15		1.015	0.551	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:15		1.015	27.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:15		1	13.8	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:15		1.015	6.45	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:15		1.015	34.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:40		1.015	0.00794	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/25/22 14:16	10/27/22 13:40		1.015	0.0269	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 13:40		1.015	0.103	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 13:40		1.015	0.0349	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 15:54		5.075	5.14	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:40		1.015	0.0181	mg/L	0.000102	0.000203	
* Potassium, Total	10/25/22 14:16	10/27/22 13:40		1.015	10.7	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14

Location Code: WMWGREAP
Collected: 10/18/22 17:00
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19254

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	0.0271	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	0.107	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	0.0357	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:23		5.075	4.93	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	0.0185	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	10.7	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:37	10/21/22 11:37		1	0.250	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 11:25		1	312	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	662	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 11:25		1	310	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 11:25		1	2.42	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 18:39	10/20/22 18:39		1	2.51	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-14

Location Code: WMWGREAP
Collected: 10/18/22 17:00
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19254

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:53	10/24/22 12:53		1	10.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:45	10/25/22 14:45		1	0.211	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:57	10/31/22 13:57		10	185	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/18/22 16:57	10/18/22 16:57			1010.33	uS/cm			FA
pH	10/18/22 16:57	10/18/22 16:57			6.46	SU			FA
Temperature	10/18/22 16:57	10/18/22 16:57			19.48	C			FA
Turbidity	10/18/22 16:57	10/18/22 16:57			1.47	NTU			FA
Sulfide	10/18/22 16:57	10/18/22 16:57			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 17:00
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC19254

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 17:00
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC19254

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 17:00
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: BC19254

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19254	Solids, Dissolved	mg/L	1.00	25.0			658	48.0	40.0 to 60.0			0.606	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-49H

Location Code: WMWGREAP
Collected: 10/19/22 06:53
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19255

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:40		1.015	0.437	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 11:40		1.015	32.4	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 11:40		1.015	0.169	mg/L	0.008120	0.0406	
* Lithium, Total	10/25/22 14:16	10/26/22 11:40		1.015	0.0722	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 11:40		1.015	8.83	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:40		1	6.38	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:40		1.015	2.98	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 11:40		1.015	19.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	0.434	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	31.6	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	0.153	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	0.0754	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	8.92	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:18		1	6.78	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	3.17	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:18		1.015	20.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.0840	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.000440	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.0545	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 13:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.000463	mg/L	0.000068	0.000203	
* Chromium, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.000244	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.00683	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 15:58		5.075	2.14	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:44		1.015	0.000541	mg/L	0.000102	0.000203	
* Potassium, Total	10/25/22 14:16	10/27/22 13:44		1.015	4.89	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-49H

Location Code: WMWGREAP
Collected: 10/19/22 06:53
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19255

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 13:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.0641	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.000443	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.0571	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.000338	mg/L	0.000068	0.000203	
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.00719	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:26		5.075	2.07	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.000238	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	5.09	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:32		1.015	0.0000723	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:39	10/21/22 11:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/1/22 17:50	11/1/22 18:34		1	35.5	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	211	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	35.5	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 18:56	10/20/22 18:56		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-49H

Location Code: WMWGREAP
Collected: 10/19/22 06:53
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19255

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:55	10/24/22 12:55		1	9.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:46	10/25/22 14:46		1	0.0628	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:58	10/31/22 13:58		8	109	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/19/22 06:49	10/19/22 06:49			343.52	uS/cm			FA
pH	10/19/22 06:49	10/19/22 06:49			5.60	SU			FA
Temperature	10/19/22 06:49	10/19/22 06:49			19.69	C			FA
Turbidity	10/19/22 06:49	10/19/22 06:49			0.39	NTU			FA
Sulfide	10/19/22 06:49	10/19/22 06:49			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 06:53
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC19255

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 06:53
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC19255

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 06:53
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-49H

Laboratory ID Number: BC19255

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19267	Alkalinity to pH 4.5	mg CaCO3/L					1.78	50.8	45.0 to 55.0			6.52	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-4

Location Code: WMWGREAPFB
Collected: 10/19/22 07:05
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19256

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:43		1	Not Detected	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/25/22 14:16	10/26/22 11:43		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:41	10/21/22 11:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-4

Location Code: WMWGREAPFB
Collected: 10/19/22 07:05
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19256

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 19:13	10/20/22 19:13		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:56	10/24/22 12:56		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:47	10/25/22 14:47		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:44	10/31/22 13:44		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/19/22 07:05
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond Field Blank-4

Laboratory ID Number: BC19256

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/19/22 07:05
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond Field Blank-4

Laboratory ID Number: BC19256

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/19/22 07:05
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond Field Blank-4

Laboratory ID Number: BC19256

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-34HA

Location Code: WMWGREAP
Collected: 10/19/22 07:50
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19257

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:46		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 11:46		1.015	12.1	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 11:46		1.015	0.0376	mg/L	0.008120	0.0406	J
* Lithium, Total	10/25/22 14:16	10/26/22 11:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 11:46		1.015	1.67	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:46		1	9.74	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:46		1.015	4.55	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 11:46		1.015	13.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	12.2	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	0.0133	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	1.70	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:21		1	10.2	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	4.77	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:21		1.015	13.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.0120	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.0000957	mg/L	0.000081	0.000203	J
* Barium, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.0444	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 13:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.000255	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.00114	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 13:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.00282	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.777	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-34HA

Location Code: WMWGREAP
Collected: 10/19/22 07:50
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19257

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 13:51		1.015	0.000622	mg/L	0.000508	0.001015	J
* Thallium, Total	10/25/22 14:16	10/27/22 13:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.000117	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.0431	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.000214	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.00119	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.00278	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.843	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	0.000625	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:42	10/21/22 11:42		1	1.01	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/1/22 17:50	11/1/22 18:34		1	34.1	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	86.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	34.1	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 19:29	10/20/22 19:29		1	1.29	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-34HA

Location Code: WMWGREAP
Collected: 10/19/22 07:50
Customer ID:
Submittal Date: 10/20/22 11:55

Laboratory ID Number: BC19257

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 12:57	10/24/22 12:57		1	3.71	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:48	10/25/22 14:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 13:46	10/31/22 13:46		1	22.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/19/22 07:48	10/19/22 07:48			136.77	uS/cm			FA
pH	10/19/22 07:48	10/19/22 07:48			5.42	SU			FA
Temperature	10/19/22 07:48	10/19/22 07:48			21.66	C			FA
Turbidity	10/19/22 07:48	10/19/22 07:48			2.35	NTU			FA
Sulfide	10/19/22 07:48	10/19/22 07:48			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 07:50
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC19257

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19257	Chloride	mg/L	0.0398	1.00	10.0	14.3	14.3	10.0	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19257	Fluoride	mg/L	0.0403	0.125	2.50	2.59	2.53	2.56	2.25 to 2.75	104	80.0 to 120	2.34	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 07:50
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC19257

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19257	Sulfate	mg/L	0.537	2.0	20.0	41.2	41.5	19.2	18.0 to 22.0	93.0	80.0 to 120	0.726	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 07:50
Customer ID:
Delivery Date: 10/20/22 11:55

Description: Greene County Ash Pond - MW-34HA

Laboratory ID Number: BC19257

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19267	Alkalinity to pH 4.5	mg CaCO3/L					1.78	50.8	45.0 to 55.0			6.52	10.0
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond Field Blank-5

Location Code: WMWGREAPFB
Collected: 10/19/22 08:15
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19258

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:50		1	Not Detected	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/25/22 14:16	10/26/22 11:50		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 13:55		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 11:44	10/21/22 11:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-5

Location Code: WMWGREAPFB
Collected: 10/19/22 08:15
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19258

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 19:43	10/20/22 19:43		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:26	10/24/22 13:26		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 14:59	10/25/22 14:59		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:09	10/31/22 14:09		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/19/22 08:15
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Field Blank-5

Laboratory ID Number: BC19258

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19257	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.0041	0.00409	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/19/22 08:15
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Field Blank-5

Laboratory ID Number: BC19258

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19258	Total Organic Carbon	mg/L	0.254	1.00	10.0	9.91	10.3	23.6		99.1	80.0 to 120	3.86	20.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/19/22 08:15
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Field Blank-5

Laboratory ID Number: BC19258

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19258	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.09	0.043	2.09	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/19/22 12:30
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19259

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:53		1	Not Detected	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/25/22 14:16	10/26/22 11:53		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 13:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:38	10/21/22 12:38		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/19/22 12:30
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19259

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 20:56	10/20/22 20:56		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:27	10/24/22 13:27		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:01	10/25/22 15:01		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:10	10/31/22 14:10		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/19/22 12:30
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC19259

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/19/22 12:30
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC19259

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/19/22 12:30
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC19259

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-2

Location Code: WMWGREAPEB
Collected: 10/19/22 12:50
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19260

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:56		1	Not Detected	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/25/22 14:16	10/26/22 11:56		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:40	10/21/22 12:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-2

Location Code: WMWGREAPEB
Collected: 10/19/22 12:50
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19260

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 21:08	10/20/22 21:08		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:29	10/24/22 13:29		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:02	10/25/22 15:02		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:11	10/31/22 14:11		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/19/22 12:50
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Equipment Blank-2

Laboratory ID Number: BC19260

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/19/22 12:50
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Equipment Blank-2

Laboratory ID Number: BC19260

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/19/22 12:50
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Equipment Blank-2

Laboratory ID Number: BC19260

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-16

Location Code: WMWGREAP
Collected: 10/18/22 14:25
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19261

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 11:59		1.015	2.14	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 13:49		10.15	128	mg/L	0.70035	4.06	RA
* Iron, Total	10/25/22 14:16	10/26/22 13:49		10.15	19.8	mg/L	0.08120	0.406	RA
* Lithium, Total	10/25/22 14:16	10/26/22 11:59		1.015	0.594	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 11:59		1.015	24.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 11:59		1	13.1	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 11:59		1.015	6.11	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 11:59		1.015	37.2	mg/L	0.03045	0.406	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:25		1.015	2.08	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:47		10.15	116	mg/L	0.70035	4.06	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:47		10.15	16.9	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:25		1.015	0.627	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:25		1.015	24.2	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:25		1	13.4	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:25		1.015	6.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:25		1.015	37.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:06		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.0653	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.103	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.0000692	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.000267	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.0143	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.0000894	mg/L	0.000068	0.000203	J
* Manganese, Total	10/25/22 14:16	10/27/22 16:02		5.075	3.72	mg/L	0.000761	0.005075	RA
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.000194	mg/L	0.000102	0.000203	J
* Potassium, Total	10/25/22 14:16	10/27/22 14:06		1.015	12.9	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-16

Location Code: WMWGREAP
Collected: 10/18/22 14:25
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19261

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:06		1.015	0.000337	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	0.0531	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	0.109	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	0.0149	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:30		5.075	3.36	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	0.000302	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	13.2	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:40		1.015	0.000378	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:42	10/21/22 12:42		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 12:00		1	411	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	486	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 12:00		1	405	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 12:00		1	5.90	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 21:22	10/20/22 21:22		1	2.08	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-16

Location Code: WMWGREAP
Collected: 10/18/22 14:25
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19261

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:19	10/24/22 13:19		1	10.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:03	10/25/22 15:03		1	0.270	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:23	10/31/22 14:23		2	42.4	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/18/22 14:21	10/18/22 14:21			785.75	uS/cm			FA
pH	10/18/22 14:21	10/18/22 14:21			6.53	SU			FA
Temperature	10/18/22 14:21	10/18/22 14:21			19.49	C			FA
Turbidity	10/18/22 14:21	10/18/22 14:21			4.8	NTU			FA
Sulfide	10/18/22 14:21	10/18/22 14:21			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 14:25
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC19261

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19261	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.100	0.0988	0.100	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19261	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0963	0.0976	0.0918	0.0850 to 0.115	96.3	70.0 to 130	1.34	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19261	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.165	0.168	0.0989	0.0850 to 0.115	99.7	70.0 to 130	1.80	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19261	Barium, Total	mg/L	0.000112	0.00100	0.100	0.192	0.202	0.0938	0.0850 to 0.115	89.0	70.0 to 130	5.08	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19261	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.108	0.107	0.0971	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19261	Boron, Total	mg/L	0.000915	0.0650	1.00	3.17	3.14	1.02	0.850 to 1.15	103	70.0 to 130	0.951	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19261	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0974	0.0970	0.0990	0.0850 to 0.115	97.3	70.0 to 130	0.412	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19261	Calcium, Total	mg/L	-0.0243	0.152	5.00	146	142	4.81	4.25 to 5.75	360	70.0 to 130	2.78	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19261	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0960	0.0947	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.36	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19261	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.111	0.110	0.103	0.0850 to 0.115	96.7	70.0 to 130	0.905	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19261	Iron, Total	mg/L	-0.00011	0.0176	0.2	21.8	21.4	0.209	0.170 to 0.230	1000	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 14:25
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC19261

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0959	0.0946	0.0973	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19261	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.768	0.773	0.219	0.170 to 0.230	87.0	70.0 to 130	0.649	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19261	Magnesium, Total	mg/L	0.00610	0.0462	5.00	28.9	28.6	5.13	4.25 to 5.75	90.0	70.0 to 130	1.04	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19261	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	3.51	3.54	0.102	0.0850 to 0.115	-210	70.0 to 130	0.851	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19261	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0969	0.0982	0.0981	0.0850 to 0.115	96.7	70.0 to 130	1.33	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19261	Potassium, Total	mg/L	0.000433	0.367	10.0	22.4	22.0	10.1	8.50 to 11.5	95.0	70.0 to 130	1.80	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19261	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.103	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19261	Silicon, Total	mg/L	-0.000017	0.0440	1.00	7.06	7.00	1.01	0.850 to 1.15	95.0	70.0 to 130	0.853	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19261	Sodium, Total	mg/L	0.00206	0.0660	5.00	40.6	40.9	5.41	4.25 to 5.75	68.0	70.0 to 130	0.736	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19261	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0995	0.0985	0.100	0.0850 to 0.115	99.2	70.0 to 130	1.01	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 14:25
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: BC19261

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H

Location Code: WMWGREAP
Collected: 10/18/22 15:20
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19262

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:15		1.015	2.07	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 13:59		10.15	131	mg/L	0.70035	4.06	
* Iron, Total	10/25/22 14:16	10/26/22 13:59		10.15	34.9	mg/L	0.08120	0.406	
* Lithium, Total	10/25/22 14:16	10/26/22 12:15		1.015	0.377	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 12:15		1.015	23.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:15		1	11.0	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:15		1.015	5.12	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:15		1.015	28.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:28		1.015	2.01	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:50		10.15	126	mg/L	0.70035	4.06	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:50		10.15	31.5	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:28		1.015	0.403	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:28		1.015	23.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:28		1	11.3	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:28		1.015	5.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:28		1.015	30.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 14:27		1.015	0.0603	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 14:27		1.015	0.210	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 14:27		1.015	0.0151	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 16:13		5.075	3.78	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:27		1.015	0.00284	mg/L	0.000102	0.000203	
* Potassium, Total	10/25/22 14:16	10/27/22 14:27		1.015	12.1	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H

Location Code: WMWGREAP
Collected: 10/18/22 15:20
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19262

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:27		1.015	0.000636	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	0.0615	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	0.220	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	0.0161	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:34		5.075	3.58	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	0.00311	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	12.8	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:43		1.015	0.000733	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 01:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:44	10/21/22 12:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 12:20		1	412	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	478	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 12:20		1	409	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 12:20		1	2.49	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 21:37	10/20/22 21:37		1	2.03	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-39H

Location Code: WMWGREAP
Collected: 10/18/22 15:20
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19262

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:20	10/24/22 13:20		1	6.02	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:04	10/25/22 15:04		1	0.423	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:14	10/31/22 14:14		1	25.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/18/22 15:18	10/18/22 15:18			784.10	uS/cm			FA
pH	10/18/22 15:18	10/18/22 15:18			6.59	SU			FA
Temperature	10/18/22 15:18	10/18/22 15:18			19.12	C			FA
Turbidity	10/18/22 15:18	10/18/22 15:18			1.6	NTU			FA
Sulfide	10/18/22 15:18	10/18/22 15:18			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 15:20
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC19262

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 15:20
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC19262

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 15:20
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-39H

Laboratory ID Number: BC19262

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-15

Location Code: WMWGREAP
Collected: 10/18/22 16:27
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19263

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:18		1.015	0.874	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 14:02		10.15	89.4	mg/L	0.70035	4.06	
* Iron, Total	10/25/22 14:16	10/26/22 12:18		1.015	1.42	mg/L	0.008120	0.0406	
* Lithium, Total	10/25/22 14:16	10/26/22 12:18		1.015	0.556	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 12:18		1.015	18.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:18		1	12.0	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:18		1.015	5.60	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:18		1.015	27.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:32		1.015	0.863	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:53		10.15	88.5	mg/L	0.70035	4.06	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:32		1.015	1.40	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:32		1.015	0.616	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:32		1.015	19.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:32		1	12.5	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:32		1.015	5.85	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:32		1.015	29.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 14:31		1.015	0.000379	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 14:31		1.015	0.0360	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:31		1.015	0.000135	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 14:31		1.015	0.0189	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 16:16		5.075	2.41	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:31		1.015	10.1	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-15

Location Code: WMWGREAP
Collected: 10/18/22 16:27
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19263

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:31		1.015	0.0000843	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	0.000434	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	0.0383	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	0.000126	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	0.0196	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:37		5.075	2.31	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	10.4	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:47		1.015	0.000107	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 02:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:46	10/21/22 12:46		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JS***								
Alkalinity to pH 4.5	11/1/22 09:40	11/1/22 13:30		1	191	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	423	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JS***								
Bicarbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 13:30		1	190	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 09:40	11/1/22 13:30		1	1.10	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 21:55	10/20/22 21:55		1	1.40	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-15

Location Code: WMWGREAP
Collected: 10/18/22 16:27
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19263

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:21	10/24/22 13:21		1	8.54	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:05	10/25/22 15:05		1	0.139	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:24	10/31/22 14:24		8	152	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/18/22 16:25	10/18/22 16:25			606.39	uS/cm			FA
pH	10/18/22 16:25	10/18/22 16:25			6.29	SU			FA
Temperature	10/18/22 16:25	10/18/22 16:25			18.56	C			FA
Turbidity	10/18/22 16:25	10/18/22 16:25			1.39	NTU			FA
Sulfide	10/18/22 16:25	10/18/22 16:25			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 16:27
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC19263

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 16:27
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC19263

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/18/22 16:27
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: BC19263

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19263	Alkalinity to pH 4.5	mg CaCO3/L					190	49.6	45.0 to 55.0			0.525	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-3

Location Code: WMWGREAPFB
Collected: 10/18/22 16:45
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19264

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:21		1	Not Detected	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/25/22 14:16	10/26/22 12:21		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 02:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:48	10/21/22 12:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/20/22 14:25	10/21/22 13:18		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-3

Location Code: WMWGREAPFB
Collected: 10/18/22 16:45
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19264

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 22:11	10/20/22 22:11		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:30	10/24/22 13:30		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:07	10/25/22 15:07		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:16	10/31/22 14:16		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/18/22 16:45
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Field Blank-3

Laboratory ID Number: BC19264

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/18/22 16:45
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Field Blank-3

Laboratory ID Number: BC19264

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments:

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/18/22 16:45
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond Field Blank-3

Laboratory ID Number: BC19264

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19263	Solids, Dissolved	mg/L	1.00	25.0			419	48.0	40.0 to 60.0			0.950	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-26

Location Code: WMWGREAP
Collected: 10/19/22 09:30
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19265

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:24		1.015	7.91	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 12:24		1.015	0.0213	mg/L	0.008120	0.0406	J
* Lithium, Total	10/25/22 14:16	10/26/22 12:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:24		1.015	0.984	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:24		1	12.3	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:24		1.015	5.75	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:24		1.015	3.97	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	8.11	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	0.0118	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	1.10	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:37		1	13.1	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	6.11	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:37		1.015	4.06	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.0757	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.000107	mg/L	0.000081	0.000203	J
* Barium, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.0340	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.000240	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.000438	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.0403	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:38		1.015	0.480	mg/L	0.169505	0.5075	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-26

Location Code: WMWGREAP
Collected: 10/19/22 09:30
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19265

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.0527	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.0000958	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.0341	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.000452	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.0414	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	0.497	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 02:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:49	10/21/22 12:49		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/1/22 17:50	11/1/22 18:34		1	14.3	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	54.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	14.3	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 22:24	10/20/22 22:24		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-26

Location Code: WMWGREAP
Collected: 10/19/22 09:30
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19265

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:23	10/24/22 13:23		1	2.84	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:08	10/25/22 15:08		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:17	10/31/22 14:17		1	12.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 09:26	10/19/22 09:26			67.42	uS/cm			FA
pH	10/19/22 09:26	10/19/22 09:26			5.55	SU			FA
Temperature	10/19/22 09:26	10/19/22 09:26			18.82	C			FA
Turbidity	10/19/22 09:26	10/19/22 09:26			1.01	NTU			FA
Sulfide	10/19/22 09:26	10/19/22 09:26			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 09:30
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC19265

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 09:30
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC19265

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 09:30
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: BC19265

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19267	Alkalinity to pH 4.5	mg CaCO3/L					1.78	50.8	45.0 to 55.0			6.52	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-27

Location Code: WMWGREAP
Collected: 10/19/22 10:17
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19266

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:28		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:28		1.015	1.02	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 12:28		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 12:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:28		1.015	0.519	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:28		1	10.4	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:28		1.015	4.84	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:28		1.015	2.82	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	1.16	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	0.567	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:41		1	11.0	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	5.16	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:41		1.015	2.90	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.0169	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.0608	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.000193	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.000290	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.000139	mg/L	0.000068	0.000203	J
* Lead, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.0156	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:42		1.015	0.805	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-27

Location Code: WMWGREAP
Collected: 10/19/22 10:17
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19266

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.00816	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.0660	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.000178	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.000208	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.000172	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.0162	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	0.853	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 12:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 02:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:51	10/21/22 12:51		1	0.599	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/1/22 17:50	11/1/22 18:34		1	2.66	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	26.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	2.66	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 22:40	10/20/22 22:40		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-27

Location Code: WMWGREAP
Collected: 10/19/22 10:17
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19266

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:24	10/24/22 13:24		1	2.01	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:09	10/25/22 15:09		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:18	10/31/22 14:18		1	3.95	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 10:14	10/19/22 10:14			29.65	uS/cm			FA
pH	10/19/22 10:14	10/19/22 10:14			5.02	SU			FA
Temperature	10/19/22 10:14	10/19/22 10:14			19.11	C			FA
Turbidity	10/19/22 10:14	10/19/22 10:14			1.4	NTU			FA
Sulfide	10/19/22 10:14	10/19/22 10:14			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 10:17
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC19266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.108	0.106	0.0980	0.0850 to 0.115	99.8	70.0 to 130	1.87	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19266	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.0981	0.0988	0.0926	0.0850 to 0.115	98.1	70.0 to 130	0.711	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19266	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19266	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.164	0.163	0.0983	0.0850 to 0.115	98.0	70.0 to 130	0.612	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19266	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0979	0.101	0.0991	0.0850 to 0.115	97.9	70.0 to 130	3.12	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19266	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	1.03	1.03	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19266	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19266	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	6.30	6.34	5.23	4.25 to 5.75	103	70.0 to 130	0.633	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19266	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19266	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19266	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	0.212	0.212	0.208	0.170 to 0.230	106	70.0 to 130	0.00	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 10:17
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC19266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19266	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19266	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.198	0.201	0.197	0.170 to 0.230	99.0	70.0 to 130	1.50	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19266	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	5.69	5.79	5.20	4.25 to 5.75	102	70.0 to 130	1.74	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19266	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	0.118	0.116	0.101	0.0850 to 0.115	102	70.0 to 130	1.71	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19266	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19266	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	11.2	11.0	10.6	8.50 to 11.5	103	70.0 to 130	1.80	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19266	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.106	0.104	0.107	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19266	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	6.21	6.21	1.05	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19266	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	7.94	8.03	5.11	4.25 to 5.75	101	70.0 to 130	1.13	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0
BC19266	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 10:17
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: BC19266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19267	Alkalinity to pH 4.5	mg CaCO3/L					1.78	50.8	45.0 to 55.0			6.52	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-27 Dup

Location Code: WMWGREAP
Collected: 10/19/22 10:17
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19267

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:31		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:31		1.015	1.00	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 12:31		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 12:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:31		1.015	0.502	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:31		1	10.3	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:31		1.015	4.80	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:31		1.015	2.74	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	1.08	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	0.537	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 14:58		1	11.0	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	5.16	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 14:58		1.015	2.90	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.0209	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.0604	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.000189	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.000294	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.000142	mg/L	0.000068	0.000203	J
* Lead, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.0156	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:45		1.015	0.837	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-27 Dup

Location Code: WMWGREAP
Collected: 10/19/22 10:17
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19267

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.00863	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.0628	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.000166	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.000208	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.000157	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.000148	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.0152	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	0.817	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 13:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 02:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:53	10/21/22 12:53		1	0.607	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/1/22 17:50	11/1/22 18:34		1	1.90	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	30.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	1.90	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/1/22 17:50	11/1/22 18:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 22:53	10/20/22 22:53		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-27 Dup

Location Code: WMWGREAP
Collected: 10/19/22 10:17
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19267

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:25	10/24/22 13:25		1	2.08	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:10	10/25/22 15:10		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:20	10/31/22 14:20		1	4.06	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 10:14	10/19/22 10:14			29.65	uS/cm			FA
pH	10/19/22 10:14	10/19/22 10:14			5.02	SU			FA
Temperature	10/19/22 10:14	10/19/22 10:14			19.11	C			FA
Turbidity	10/19/22 10:14	10/19/22 10:14			1.4	NTU			FA
Sulfide	10/19/22 10:14	10/19/22 10:14			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 10:17
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-27 Dup

Laboratory ID Number: BC19267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.0988	0.0971	0.0980	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19272	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.107	0.105	0.0926	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19272	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.116	0.115	0.104	0.0850 to 0.115	104	70.0 to 130	0.866	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19272	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.266	0.265	0.0983	0.0850 to 0.115	91.0	70.0 to 130	0.377	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19272	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0995	0.102	0.0991	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19272	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	2.23	2.21	1.01	0.850 to 1.15	101	70.0 to 130	0.901	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19272	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19272	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	134	118	5.23	4.25 to 5.75	380	70.0 to 130	12.7	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19267	Chloride	mg/L	0.0607	1.00	10.0	12.5	12.6	9.97	9.00 to 11.0	104	80.0 to 120	0.797	20.0
BC19272	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.0998	0.0999	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19272	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.123	0.123	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19267	Fluoride	mg/L	0.0486	0.125	2.50	2.40	2.36	2.56	2.25 to 2.75	96.0	80.0 to 120	1.68	20.0
BC19272	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	15.4	13.3	0.208	0.170 to 0.230	850	70.0 to 130	14.6	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 10:17
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-27 Dup

Laboratory ID Number: BC19267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.0985	0.100	0.103	0.0850 to 0.115	98.5	70.0 to 130	1.51	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19272	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.472	0.469	0.197	0.170 to 0.230	113	70.0 to 130	0.638	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19272	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	35.7	35.7	5.20	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19272	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	9.22	9.30	0.101	0.0850 to 0.115	270	70.0 to 130	0.864	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19272	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19272	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	19.1	18.9	10.6	8.50 to 11.5	103	70.0 to 130	1.05	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19272	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19272	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	5.56	5.55	1.05	0.850 to 1.15	99.0	70.0 to 130	0.180	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19272	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	71.9	63.9	5.11	4.25 to 5.75	260	70.0 to 130	11.8	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19267	Sulfate	mg/L	-0.028	2.0	20.0	24.3	24.3	19.0	18.0 to 22.0	101	80.0 to 120	0.00	20.0
BC19272	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.0983	0.0997	0.102	0.0850 to 0.115	98.3	70.0 to 130	1.41	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 10:17
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-27 Dup

Laboratory ID Number: BC19267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19267	Alkalinity to pH 4.5	mg CaCO3/L					1.78	50.8	45.0 to 55.0			6.52	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-28

Location Code: WMWGREAP
Collected: 10/19/22 11:20
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19268

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:34		1.015	1.83	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 12:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 12:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:34		1.015	1.56	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:34		1	7.94	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:34		1.015	3.71	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:34		1.015	1.19	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	1.92	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	1.58	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 15:01		1	8.32	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	3.89	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 15:01		1.015	1.24	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:49		1.015	0.0545	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:49		1.015	0.183	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:49		1.015	0.000400	mg/L	0.000068	0.000203	
* Chromium, Total	10/25/22 14:16	10/27/22 14:49		1.015	0.000678	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:49		1.015	0.000326	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:49		1.015	0.0620	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:49		1.015	1.65	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-28

Location Code: WMWGREAP
Collected: 10/19/22 11:20
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19268

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.0196	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.182	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.000430	mg/L	0.000068	0.000203	
* Chromium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.000527	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.000303	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.000114	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	0.0544	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	1.64	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 13:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/20/22 18:55	10/21/22 02:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 12:55	10/21/22 12:55		1	0.894	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/2/22 10:44	11/2/22 10:50		1	0.36	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	28.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 10:50		1	Not Detected	mg CaCO3/L		1	
Carbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 10:50		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/20/22 23:08	10/20/22 23:08		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-28

Location Code: WMWGREAP
Collected: 10/19/22 11:20
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19268

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:43	10/24/22 13:43		1	1.23	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:21	10/25/22 15:21		1	0.0698	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:40	10/31/22 14:40		1	8.96	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 11:18	10/19/22 11:18			40.67	uS/cm			FA
pH	10/19/22 11:18	10/19/22 11:18			4.87	SU			FA
Temperature	10/19/22 11:18	10/19/22 11:18			18.97	C			FA
Turbidity	10/19/22 11:18	10/19/22 11:18			0.95	NTU			FA
Sulfide	10/19/22 11:18	10/19/22 11:18			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 11:20
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC19268

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.0988	0.0971	0.0980	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19272	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.107	0.105	0.0926	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19272	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.116	0.115	0.104	0.0850 to 0.115	104	70.0 to 130	0.866	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19272	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.266	0.265	0.0983	0.0850 to 0.115	91.0	70.0 to 130	0.377	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19272	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0995	0.102	0.0991	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19272	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	2.23	2.21	1.01	0.850 to 1.15	101	70.0 to 130	0.901	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19272	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19272	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	134	118	5.23	4.25 to 5.75	380	70.0 to 130	12.7	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19272	Chloride	mg/L	0.0636	1.00	50.0	83.9	83.3	9.99	9.00 to 11.0	100	80.0 to 120	0.718	20.0
BC19272	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.0998	0.0999	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19272	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.123	0.123	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19272	Fluoride	mg/L	0.00336	0.125	2.50	2.87	2.77	2.60	2.25 to 2.75	109	80.0 to 120	3.55	20.0
BC19272	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	15.4	13.3	0.208	0.170 to 0.230	850	70.0 to 130	14.6	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 11:20
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC19268

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.0985	0.100	0.103	0.0850 to 0.115	98.5	70.0 to 130	1.51	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19272	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.472	0.469	0.197	0.170 to 0.230	113	70.0 to 130	0.638	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19272	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	35.7	35.7	5.20	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19272	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	9.22	9.30	0.101	0.0850 to 0.115	270	70.0 to 130	0.864	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19268	Mercury, Total by CVAA	mg/L	-3.000E-05	0.000500	0.004	0.00393	0.00384	0.00406	0.00340 to 0.00460	98.2	70.0 to 130	2.32	20.0
BC19272	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19272	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	19.1	18.9	10.6	8.50 to 11.5	103	70.0 to 130	1.05	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19272	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19272	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	5.56	5.55	1.05	0.850 to 1.15	99.0	70.0 to 130	0.180	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19272	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	71.9	63.9	5.11	4.25 to 5.75	260	70.0 to 130	11.8	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19272	Sulfate	mg/L	0.0398	2.0	200	335	322	19.1	18.0 to 22.0	113	80.0 to 120	3.96	20.0
BC19272	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.0983	0.0997	0.102	0.0850 to 0.115	98.3	70.0 to 130	1.41	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19268	Total Organic Carbon	mg/L	0.236	1.00	10.0	9.86	10.3	23.9		98.6	80.0 to 120	4.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 11:20
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: BC19268

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Alkalinity to pH 4.5	mg CaCO3/L					352	50.6	45.0 to 55.0			0.284	10.0
BC19268	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.87	0.914	2.11	1.80 to 2.20	98.8	90.0 to 110	2.21	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC19269

Location Code: WMWGREAP
Collected: 10/19/22 12:10
Customer ID:
Submittal Date: 10/20/22 11:56

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:37		1.015	0.158	mg/L	0.070035	0.406	J
* Iron, Total	10/25/22 14:16	10/26/22 12:37		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 12:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:37		1.015	0.274	mg/L	0.021315	0.406	J
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:37		1	8.43	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:37		1.015	3.94	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:37		1.015	0.935	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	0.202	mg/L	0.070035	0.406	J
* Iron, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	0.265	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 15:04		1	8.86	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	4.14	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 15:04		1.015	0.956	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.0217	mg/L	0.006090	0.01015	
* Arsenic, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.0379	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.000110	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.000354	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.00112	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.0142	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:53		1.015	0.834	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
2.5 mg residue requirement was not met for Total Dissolved Solids.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-29

Location Code: WMWGREAP
Collected: 10/19/22 12:10
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19269

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	0.00732	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	0.0394	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	0.0000957	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	0.00108	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	0.0118	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	0.828	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/24/22 12:24	10/24/22 16:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 13:03	10/21/22 13:03		1	0.464	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/2/22 10:44	11/2/22 11:54		1	0.70	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	Not Detected	mg/L		25	U
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	Not Detected	mg CaCO3/L		1	
Carbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/21/22 00:21	10/21/22 00:21		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
2.5 mg residue requirement was not met for Total Dissolved Solids.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-29

Location Code: WMWGREAP
Collected: 10/19/22 12:10
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19269

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:44	10/24/22 13:44		1	1.08	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:22	10/25/22 15:22		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:41	10/31/22 14:41		1	1.37	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 12:07	10/19/22 12:07			12.96	uS/cm			FA
pH	10/19/22 12:07	10/19/22 12:07			5.01	SU			FA
Temperature	10/19/22 12:07	10/19/22 12:07			18.65	C			FA
Turbidity	10/19/22 12:07	10/19/22 12:07			1.18	NTU			FA
Sulfide	10/19/22 12:07	10/19/22 12:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
2.5 mg residue requirement was not met for Total Dissolved Solids.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 12:10
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC19269

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.0988	0.0971	0.0980	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19272	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.107	0.105	0.0926	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19272	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.116	0.115	0.104	0.0850 to 0.115	104	70.0 to 130	0.866	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19272	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.266	0.265	0.0983	0.0850 to 0.115	91.0	70.0 to 130	0.377	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19272	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0995	0.102	0.0991	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19272	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	2.23	2.21	1.01	0.850 to 1.15	101	70.0 to 130	0.901	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19272	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19272	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	134	118	5.23	4.25 to 5.75	380	70.0 to 130	12.7	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19272	Chloride	mg/L	0.0636	1.00	50.0	83.9	83.3	9.99	9.00 to 11.0	100	80.0 to 120	0.718	20.0
BC19272	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.0998	0.0999	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19272	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.123	0.123	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19272	Fluoride	mg/L	0.00336	0.125	2.50	2.87	2.77	2.60	2.25 to 2.75	109	80.0 to 120	3.55	20.0
BC19272	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	15.4	13.3	0.208	0.170 to 0.230	850	70.0 to 130	14.6	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
2.5 mg residue requirement was not met for Total Dissolved Solids.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 12:10
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC19269

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.0985	0.100	0.103	0.0850 to 0.115	98.5	70.0 to 130	1.51	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19272	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.472	0.469	0.197	0.170 to 0.230	113	70.0 to 130	0.638	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19272	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	35.7	35.7	5.20	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19272	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	9.22	9.30	0.101	0.0850 to 0.115	270	70.0 to 130	0.864	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19272	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00402	0.00408	0.00403	0.00340 to 0.00460	100	70.0 to 130	1.48	20.0
BC19272	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19272	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	19.1	18.9	10.6	8.50 to 11.5	103	70.0 to 130	1.05	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19272	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19272	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	5.56	5.55	1.05	0.850 to 1.15	99.0	70.0 to 130	0.180	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19272	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	71.9	63.9	5.11	4.25 to 5.75	260	70.0 to 130	11.8	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19272	Sulfate	mg/L	0.0398	2.0	200	335	322	19.1	18.0 to 22.0	113	80.0 to 120	3.96	20.0
BC19272	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.0983	0.0997	0.102	0.0850 to 0.115	98.3	70.0 to 130	1.41	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19272	Total Organic Carbon	mg/L	0.258	1.00	10.0	11.5	11.8	23.8		95.6	80.0 to 120	2.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
2.5 mg residue requirement was not met for Total Dissolved Solids.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 12:10
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: BC19269

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Alkalinity to pH 4.5	mg CaCO3/L					352	50.6	45.0 to 55.0			0.284	10.0
BC19272	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.16	0.074	2.11	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
2.5 mg residue requirement was not met for Total Dissolved Solids.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-30

Location Code: WMWGREAP
Collected: 10/19/22 13:05
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19270

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:40		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/25/22 14:16	10/26/22 12:40		1.015	0.602	mg/L	0.070035	0.406	
* Iron, Total	10/25/22 14:16	10/26/22 12:40		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/25/22 14:16	10/26/22 12:40		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/25/22 14:16	10/26/22 12:40		1.015	0.155	mg/L	0.021315	0.406	J
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:40		1	10.6	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:40		1.015	4.93	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:40		1.015	4.52	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	0.633	mg/L	0.070035	0.406	
* Iron, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	0.153	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 15:08		1	11.1	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	5.19	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 15:08		1.015	4.48	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.00777	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.0246	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.000108	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.000423	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.0000798	mg/L	0.000068	0.000203	J
* Lead, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.00342	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/25/22 14:16	10/27/22 14:56		1.015	0.621	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-30

Location Code: WMWGREAP
Collected: 10/19/22 13:05
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19270

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	0.0260	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	0.000307	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	0.0000933	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	0.00324	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	0.634	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/24/22 12:24	10/24/22 16:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 13:04	10/21/22 13:04		1	0.730	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/2/22 10:44	11/2/22 11:54		1	4.08	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	28.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	4.08	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/21/22 00:38	10/21/22 00:38		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-30

Location Code: WMWGREAP
Collected: 10/19/22 13:05
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19270

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:45	10/24/22 13:45		1	3.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:24	10/25/22 15:24		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:43	10/31/22 14:43		1	1.27	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 13:01	10/19/22 13:01			27.58	uS/cm			FA
pH	10/19/22 13:01	10/19/22 13:01			5.29	SU			FA
Temperature	10/19/22 13:01	10/19/22 13:01			18.69	C			FA
Turbidity	10/19/22 13:01	10/19/22 13:01			0.95	NTU			FA
Sulfide	10/19/22 13:01	10/19/22 13:01			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 13:05
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC19270

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.0988	0.0971	0.0980	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19272	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.107	0.105	0.0926	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19272	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.116	0.115	0.104	0.0850 to 0.115	104	70.0 to 130	0.866	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19272	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.266	0.265	0.0983	0.0850 to 0.115	91.0	70.0 to 130	0.377	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19272	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0995	0.102	0.0991	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19272	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	2.23	2.21	1.01	0.850 to 1.15	101	70.0 to 130	0.901	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19272	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19272	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	134	118	5.23	4.25 to 5.75	380	70.0 to 130	12.7	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19272	Chloride	mg/L	0.0636	1.00	50.0	83.9	83.3	9.99	9.00 to 11.0	100	80.0 to 120	0.718	20.0
BC19272	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.0998	0.0999	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19272	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.123	0.123	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19272	Fluoride	mg/L	0.00336	0.125	2.50	2.87	2.77	2.60	2.25 to 2.75	109	80.0 to 120	3.55	20.0
BC19272	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	15.4	13.3	0.208	0.170 to 0.230	850	70.0 to 130	14.6	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 13:05
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC19270

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.0985	0.100	0.103	0.0850 to 0.115	98.5	70.0 to 130	1.51	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19272	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.472	0.469	0.197	0.170 to 0.230	113	70.0 to 130	0.638	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19272	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	35.7	35.7	5.20	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19272	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	9.22	9.30	0.101	0.0850 to 0.115	270	70.0 to 130	0.864	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19272	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00402	0.00408	0.00403	0.00340 to 0.00460	100	70.0 to 130	1.48	20.0
BC19272	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19272	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	19.1	18.9	10.6	8.50 to 11.5	103	70.0 to 130	1.05	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19272	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19272	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	5.56	5.55	1.05	0.850 to 1.15	99.0	70.0 to 130	0.180	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19272	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	71.9	63.9	5.11	4.25 to 5.75	260	70.0 to 130	11.8	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19272	Sulfate	mg/L	0.0398	2.0	200	335	322	19.1	18.0 to 22.0	113	80.0 to 120	3.96	20.0
BC19272	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.0983	0.0997	0.102	0.0850 to 0.115	98.3	70.0 to 130	1.41	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19272	Total Organic Carbon	mg/L	0.258	1.00	10.0	11.5	11.8	23.8		95.6	80.0 to 120	2.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 13:05
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: BC19270

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Alkalinity to pH 4.5	mg CaCO3/L					352	50.6	45.0 to 55.0			0.284	10.0
BC19272	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.16	0.074	2.11	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-42H

Location Code: WMWGREAP
Collected: 10/19/22 14:23
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19271

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 12:43		1.015	1.95	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 14:05		10.15	91.4	mg/L	0.70035	4.06	RA
* Iron, Total	10/25/22 14:16	10/26/22 14:05		10.15	24.5	mg/L	0.08120	0.406	RA
* Lithium, Total	10/25/22 14:16	10/26/22 12:43		1.015	0.0212	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 12:43		1.015	13.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 12:43		1	9.95	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 12:43		1.015	4.65	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 12:43		1.015	33.3	mg/L	0.03045	0.406	RA
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/24/22 13:30	10/24/22 15:11		1.015	1.92	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 15:35		10.15	83.1	mg/L	0.70035	4.06	
* Iron, Dissolved	10/24/22 13:30	10/24/22 15:35		10.15	21.3	mg/L	0.08120	0.406	
* Lithium, Dissolved	10/24/22 13:30	10/24/22 15:11		1.015	0.0240	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 15:11		1.015	13.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 15:11		1	10.5	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 15:11		1.015	4.89	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 15:11		1.015	34.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/25/22 14:16	10/27/22 15:00		1.015	0.00487	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 15:00		1.015	0.154	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 15:00		1.015	0.000187	mg/L	0.000068	0.000203	J
* Chromium, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/25/22 14:16	10/27/22 15:00		1.015	0.0693	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 16:20		10.15	6.07	mg/L	0.001522	0.01015	RA
* Molybdenum, Total	10/25/22 14:16	10/27/22 15:00		1.015	0.000531	mg/L	0.000102	0.000203	
* Potassium, Total	10/25/22 14:16	10/27/22 15:00		1.015	4.02	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-42H

Location Code: WMWGREAP
Collected: 10/19/22 14:23
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19271

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	0.00522	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	0.161	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	0.000202	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	0.0743	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:41		10.15	5.65	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	0.000517	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	4.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 13:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/24/22 12:24	10/24/22 16:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 13:05	10/21/22 13:05		1	0.226	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/2/22 10:44	11/2/22 11:54		1	135	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	431	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	135	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/21/22 00:51	10/21/22 00:51		1	2.34	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-42H

Location Code: WMWGREAP
Collected: 10/19/22 14:23
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19271

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 13:47	10/24/22 13:47		1	17.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:25	10/25/22 15:25		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:44	10/31/22 14:44		10	168	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 14:20	10/19/22 14:20			623.56	uS/cm			FA
pH	10/19/22 14:20	10/19/22 14:20			6.27	SU			FA
Temperature	10/19/22 14:20	10/19/22 14:20			19.95	C			FA
Turbidity	10/19/22 14:20	10/19/22 14:20			1.04	NTU			FA
Sulfide	10/19/22 14:20	10/19/22 14:20			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 14:23
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC19271

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.0988	0.0971	0.0980	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BC19271	Aluminum, Total	mg/L	0.000403	0.010	0.100	0.106	0.114	0.100	0.0850 to 0.115	106	70.0 to 130	7.27	20.0
BC19272	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.107	0.105	0.0926	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC19271	Antimony, Total	mg/L	0.000169	0.00100	0.100	0.0986	0.110	0.0918	0.0850 to 0.115	98.6	70.0 to 130	10.9	20.0
BC19272	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.116	0.115	0.104	0.0850 to 0.115	104	70.0 to 130	0.866	20.0
BC19271	Arsenic, Total	mg/L	-0.0000045	0.000176	0.100	0.104	0.115	0.0989	0.0850 to 0.115	99.1	70.0 to 130	10.0	20.0
BC19272	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.266	0.265	0.0983	0.0850 to 0.115	91.0	70.0 to 130	0.377	20.0
BC19271	Barium, Total	mg/L	0.000112	0.00100	0.100	0.253	0.276	0.0938	0.0850 to 0.115	99.0	70.0 to 130	8.70	20.0
BC19272	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0995	0.102	0.0991	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BC19271	Beryllium, Total	mg/L	0.000014	0.000880	0.100	0.0933	0.0953	0.0971	0.0850 to 0.115	93.3	70.0 to 130	2.12	20.0
BC19272	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	2.23	2.21	1.01	0.850 to 1.15	101	70.0 to 130	0.901	20.0
BC19271	Boron, Total	mg/L	0.000915	0.0650	1.00	2.98	2.95	1.02	0.850 to 1.15	103	70.0 to 130	1.01	20.0
BC19272	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19271	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0975	0.107	0.0990	0.0850 to 0.115	97.3	70.0 to 130	9.29	20.0
BC19272	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	134	118	5.23	4.25 to 5.75	380	70.0 to 130	12.7	20.0
BC19271	Calcium, Total	mg/L	-0.0243	0.152	5.00	90.8	94.4	4.81	4.25 to 5.75	-12.0	70.0 to 130	3.89	20.0
BC19272	Chloride	mg/L	0.0636	1.00	50.0	83.9	83.3	9.99	9.00 to 11.0	100	80.0 to 120	0.718	20.0
BC19272	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.0998	0.0999	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC19271	Chromium, Total	mg/L	-0.0000066	0.000440	0.100	0.0977	0.107	0.0999	0.0850 to 0.115	97.7	70.0 to 130	9.09	20.0
BC19272	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.123	0.123	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Cobalt, Total	mg/L	-0.0000005	0.000147	0.100	0.167	0.184	0.103	0.0850 to 0.115	97.7	70.0 to 130	9.69	20.0
BC19272	Fluoride	mg/L	0.00336	0.125	2.50	2.87	2.77	2.60	2.25 to 2.75	109	80.0 to 120	3.55	20.0
BC19272	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	15.4	13.3	0.208	0.170 to 0.230	850	70.0 to 130	14.6	20.0
BC19271	Iron, Total	mg/L	-0.00011	0.0176	0.2	22.9	23.9	0.209	0.170 to 0.230	-800	70.0 to 130	4.27	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 14:23
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC19271

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.0985	0.100	0.103	0.0850 to 0.115	98.5	70.0 to 130	1.51	20.0
BC19271	Lead, Total	mg/L	0.0000007	0.000147	0.100	0.0949	0.0954	0.0973	0.0850 to 0.115	94.9	70.0 to 130	0.525	20.0
BC19272	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.472	0.469	0.197	0.170 to 0.230	113	70.0 to 130	0.638	20.0
BC19271	Lithium, Total	mg/L	-0.000153	0.0154	0.200	0.218	0.214	0.219	0.170 to 0.230	98.4	70.0 to 130	1.85	20.0
BC19272	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	35.7	35.7	5.20	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BC19271	Magnesium, Total	mg/L	0.00610	0.0462	5.00	17.8	17.7	5.13	4.25 to 5.75	92.0	70.0 to 130	0.563	20.0
BC19272	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	9.22	9.30	0.101	0.0850 to 0.115	270	70.0 to 130	0.864	20.0
BC19271	Manganese, Total	mg/L	-0.0000147	0.00033	0.100	6.36	6.22	0.102	0.0850 to 0.115	290	70.0 to 130	2.23	20.0
BC19272	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00402	0.00408	0.00403	0.00340 to 0.00460	100	70.0 to 130	1.48	20.0
BC19272	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19271	Molybdenum, Total	mg/L	0.0000093	0.0002	0.100	0.0978	0.107	0.0981	0.0850 to 0.115	97.3	70.0 to 130	8.98	20.0
BC19272	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	19.1	18.9	10.6	8.50 to 11.5	103	70.0 to 130	1.05	20.0
BC19271	Potassium, Total	mg/L	0.000433	0.367	10.0	14.1	15.4	10.1	8.50 to 11.5	101	70.0 to 130	8.81	20.0
BC19272	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC19271	Selenium, Total	mg/L	-0.0000113	0.00100	0.100	0.102	0.110	0.103	0.0850 to 0.115	102	70.0 to 130	7.55	20.0
BC19272	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	5.56	5.55	1.05	0.850 to 1.15	99.0	70.0 to 130	0.180	20.0
BC19271	Silicon, Total	mg/L	-0.000017	0.0440	1.00	5.64	5.59	1.01	0.850 to 1.15	99.0	70.0 to 130	0.890	20.0
BC19272	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	71.9	63.9	5.11	4.25 to 5.75	260	70.0 to 130	11.8	20.0
BC19271	Sodium, Total	mg/L	0.00206	0.0660	5.00	37.3	36.7	5.41	4.25 to 5.75	80.0	70.0 to 130	1.62	20.0
BC19272	Sulfate	mg/L	0.0398	2.0	200	335	322	19.1	18.0 to 22.0	113	80.0 to 120	3.96	20.0
BC19272	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.0983	0.0997	0.102	0.0850 to 0.115	98.3	70.0 to 130	1.41	20.0
BC19271	Thallium, Total	mg/L	-0.0000066	0.000147	0.100	0.0984	0.0990	0.100	0.0850 to 0.115	98.4	70.0 to 130	0.608	20.0
BC19272	Total Organic Carbon	mg/L	0.258	1.00	10.0	11.5	11.8	23.8		95.6	80.0 to 120	2.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 14:23
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-42H

Laboratory ID Number: BC19271

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Alkalinity to pH 4.5	mg CaCO3/L					352	50.6	45.0 to 55.0			0.284	10.0
BC19272	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.16	0.074	2.11	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H

Location Code: WMWGREAP
Collected: 10/19/22 15:15
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19272

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/25/22 14:16	10/26/22 13:05		1.015	1.22	mg/L	0.030000	0.1015	
* Calcium, Total	10/25/22 14:16	10/26/22 14:14		10.15	119	mg/L	0.70035	4.06	RA
* Iron, Total	10/25/22 14:16	10/26/22 14:14		10.15	14.3	mg/L	0.08120	0.406	RA
* Lithium, Total	10/25/22 14:16	10/26/22 13:05		1.015	0.225	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/25/22 14:16	10/26/22 13:05		1.015	30.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/25/22 14:16	10/26/22 13:05		1	9.35	mg/L			
Silicon, Total	10/25/22 14:16	10/26/22 13:05		1.015	4.37	mg/L	0.02030	0.25375	
* Sodium, Total	10/25/22 14:16	10/26/22 14:14		10.15	58.2	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/24/22 13:30	10/24/22 15:15		1.015	1.22	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/24/22 13:30	10/24/22 15:38		10.15	115	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/24/22 13:30	10/24/22 15:38		10.15	13.7	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	10/24/22 13:30	10/24/22 15:15		1.015	0.246	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/24/22 13:30	10/24/22 15:15		1.015	30.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/24/22 13:30	10/24/22 15:15		1	9.78	mg/L			
Silicon, Dissolved	10/24/22 13:30	10/24/22 15:15		1.015	4.57	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/24/22 13:30	10/24/22 15:38		10.15	58.9	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/25/22 14:16	10/27/22 15:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/25/22 14:16	10/27/22 15:29		1.015	0.00784	mg/L	0.006090	0.01015	J
* Arsenic, Total	10/25/22 14:16	10/27/22 15:29		1.015	0.0113	mg/L	0.000081	0.000203	
* Barium, Total	10/25/22 14:16	10/27/22 15:29		1.015	0.164	mg/L	0.000508	0.001015	
* Beryllium, Total	10/25/22 14:16	10/27/22 15:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/25/22 14:16	10/27/22 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/25/22 14:16	10/27/22 15:29		1.015	0.000235	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/25/22 14:16	10/27/22 15:29		1.015	0.0200	mg/L	0.000068	0.000203	
* Lead, Total	10/25/22 14:16	10/27/22 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/25/22 14:16	10/27/22 16:31		10.15	9.80	mg/L	0.001522	0.01015	RA
* Molybdenum, Total	10/25/22 14:16	10/27/22 15:29		1.015	0.00283	mg/L	0.000102	0.000203	
* Potassium, Total	10/25/22 14:16	10/27/22 15:29		1.015	8.63	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H

Location Code: WMWGREAP
Collected: 10/19/22 15:15
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19272

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/25/22 14:16	10/27/22 15:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/25/22 14:16	10/27/22 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	0.0117	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	0.175	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	0.0206	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/24/22 13:30	10/26/22 15:45		10.15	8.95	mg/L	0.001522	0.01015	RA
* Molybdenum, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	0.00292	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	8.84	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/24/22 13:30	10/26/22 13:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/24/22 12:24	10/24/22 16:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/21/22 13:06	10/21/22 13:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	11/2/22 10:44	11/2/22 11:54		1	353	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/25/22 11:15	10/27/22 10:15		1	554	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	353	mg CaCO3/L		1	A
Carbonate Alkalinity, (calc.)	11/2/22 10:44	11/2/22 11:54		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	10/21/22 01:10	10/21/22 01:10		1	1.94	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-43H

Location Code: WMWGREAP
Collected: 10/19/22 15:15
Customer ID:
Submittal Date: 10/20/22 11:56

Laboratory ID Number: BC19272

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/24/22 14:00	10/24/22 14:00		5	33.9	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/25/22 15:26	10/25/22 15:26		1	0.134	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/31/22 14:45	10/31/22 14:45		10	109	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/19/22 15:12	10/19/22 15:12			877.68	uS/cm			FA
pH	10/19/22 15:12	10/19/22 15:12			6.53	SU			FA
Temperature	10/19/22 15:12	10/19/22 15:12			19.42	C			FA
Turbidity	10/19/22 15:12	10/19/22 15:12			3.36	NTU			FA
Sulfide	10/19/22 15:12	10/19/22 15:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 11/18/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 15:15
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC19272

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Aluminum, Dissolved	mg/L	-0.0000391	0.010	0.100	0.0988	0.0971	0.0980	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BC19272	Aluminum, Total	mg/L	0.00269	0.010	0.100	0.108	0.106	0.102	0.0850 to 0.115	100	70.0 to 130	1.87	20.0
BC19272	Antimony, Dissolved	mg/L	0.000372	0.00100	0.100	0.107	0.105	0.0926	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC19272	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.102	0.0956	0.0931	0.0850 to 0.115	102	70.0 to 130	6.48	20.0
BC19272	Arsenic, Dissolved	mg/L	0.0000341	0.000176	0.100	0.116	0.115	0.104	0.0850 to 0.115	104	70.0 to 130	0.866	20.0
BC19272	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.112	0.111	0.0998	0.0850 to 0.115	101	70.0 to 130	0.897	20.0
BC19272	Barium, Dissolved	mg/L	0.0000094	0.00100	0.100	0.266	0.265	0.0983	0.0850 to 0.115	91.0	70.0 to 130	0.377	20.0
BC19272	Barium, Total	mg/L	0.0000748	0.00100	0.100	0.263	0.247	0.0951	0.0850 to 0.115	99.0	70.0 to 130	6.27	20.0
BC19272	Beryllium, Dissolved	mg/L	0.0000376	0.000880	0.100	0.0995	0.102	0.0991	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BC19272	Beryllium, Total	mg/L	0.0000129	0.000880	0.100	0.0996	0.101	0.0960	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC19272	Boron, Dissolved	mg/L	0.00200	0.0650	1.00	2.23	2.21	1.01	0.850 to 1.15	101	70.0 to 130	0.901	20.0
BC19272	Boron, Total	mg/L	0.000831	0.0650	1.00	2.26	2.23	1.02	0.850 to 1.15	104	70.0 to 130	1.34	20.0
BC19272	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC19272	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0990	0.0954	0.0996	0.0850 to 0.115	99.0	70.0 to 130	3.70	20.0
BC19272	Calcium, Dissolved	mg/L	-0.00731	0.152	5.00	134	118	5.23	4.25 to 5.75	380	70.0 to 130	12.7	20.0
BC19272	Calcium, Total	mg/L	-0.0262	0.152	5.00	116	135	4.92	4.25 to 5.75	-60.0	70.0 to 130	15.1	20.0
BC19272	Chloride	mg/L	0.0636	1.00	50.0	83.9	83.3	9.99	9.00 to 11.0	100	80.0 to 120	0.718	20.0
BC19272	Chromium, Dissolved	mg/L	-0.0000946	0.000440	0.100	0.0998	0.0999	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.100	20.0
BC19272	Chromium, Total	mg/L	-0.000058	0.000440	0.100	0.0978	0.0958	0.100	0.0850 to 0.115	97.6	70.0 to 130	2.07	20.0
BC19272	Cobalt, Dissolved	mg/L	0.0000015	0.000147	0.100	0.123	0.123	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19272	Cobalt, Total	mg/L	-0.0000059	0.000147	0.100	0.119	0.117	0.103	0.0850 to 0.115	99.0	70.0 to 130	1.69	20.0
BC19272	Fluoride	mg/L	0.00336	0.125	2.50	2.87	2.77	2.60	2.25 to 2.75	109	80.0 to 120	3.55	20.0
BC19272	Iron, Dissolved	mg/L	-0.00107	0.0176	0.2	15.4	13.3	0.208	0.170 to 0.230	850	70.0 to 130	14.6	20.0
BC19272	Iron, Total	mg/L	0.000212	0.0176	0.2	13.7	15.5	0.209	0.170 to 0.230	-300	70.0 to 130	12.3	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 15:15
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC19272

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Lead, Dissolved	mg/L	0.0000094	0.000147	0.100	0.0985	0.100	0.103	0.0850 to 0.115	98.5	70.0 to 130	1.51	20.0
BC19272	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.0946	0.0952	0.0971	0.0850 to 0.115	94.6	70.0 to 130	0.632	20.0
BC19272	Lithium, Dissolved	mg/L	-5.380E-05	0.0154	0.200	0.472	0.469	0.197	0.170 to 0.230	113	70.0 to 130	0.638	20.0
BC19272	Lithium, Total	mg/L	-0.000195	0.0154	0.200	0.424	0.415	0.200	0.170 to 0.230	99.5	70.0 to 130	2.15	20.0
BC19272	Magnesium, Dissolved	mg/L	-0.000738	0.0462	5.00	35.7	35.7	5.20	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BC19272	Magnesium, Total	mg/L	0.00689	0.0462	5.00	34.4	33.9	4.87	4.25 to 5.75	84.0	70.0 to 130	1.46	20.0
BC19272	Manganese, Dissolved	mg/L	0.0000233	0.00033	0.100	9.22	9.30	0.101	0.0850 to 0.115	270	70.0 to 130	0.864	20.0
BC19272	Manganese, Total	mg/L	0.0000524	0.00033	0.100	10.3	9.67	0.102	0.0850 to 0.115	500	70.0 to 130	6.31	20.0
BC19272	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00402	0.00408	0.00403	0.00340 to 0.00460	100	70.0 to 130	1.48	20.0
BC19272	Molybdenum, Dissolved	mg/L	0.0000126	0.0002	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC19272	Molybdenum, Total	mg/L	-0.000003	0.0002	0.100	0.103	0.0982	0.0980	0.0850 to 0.115	100	70.0 to 130	4.77	20.0
BC19272	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	19.1	18.9	10.6	8.50 to 11.5	103	70.0 to 130	1.05	20.0
BC19272	Potassium, Total	mg/L	0.0113	0.367	10.0	18.6	18.8	10.2	8.50 to 11.5	99.7	70.0 to 130	1.07	20.0
BC19272	Selenium, Dissolved	mg/L	0.0000765	0.00100	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC19272	Selenium, Total	mg/L	0.0000048	0.00100	0.100	0.104	0.101	0.105	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BC19272	Silicon, Dissolved	mg/L	-0.000372	0.0440	1.00	5.56	5.55	1.05	0.850 to 1.15	99.0	70.0 to 130	0.180	20.0
BC19272	Silicon, Total	mg/L	-0.000286	0.0440	1.00	5.36	5.29	1.01	0.850 to 1.15	99.0	70.0 to 130	1.31	20.0
BC19272	Sodium, Dissolved	mg/L	-0.000991	0.0660	5.00	71.9	63.9	5.11	4.25 to 5.75	260	70.0 to 130	11.8	20.0
BC19272	Sodium, Total	mg/L	0.00541	0.0660	5.00	59.3	64.7	4.97	4.25 to 5.75	22.0	70.0 to 130	8.71	20.0
BC19272	Sulfate	mg/L	0.0398	2.0	200	335	322	19.1	18.0 to 22.0	113	80.0 to 120	3.96	20.0
BC19272	Thallium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.0983	0.0997	0.102	0.0850 to 0.115	98.3	70.0 to 130	1.41	20.0
BC19272	Thallium, Total	mg/L	-0.0000061	0.000147	0.100	0.0994	0.0992	0.0998	0.0850 to 0.115	99.4	70.0 to 130	0.201	20.0
BC19272	Total Organic Carbon	mg/L	0.258	1.00	10.0	11.5	11.8	23.8		95.6	80.0 to 120	2.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/19/22 15:15
Customer ID:
Delivery Date: 10/20/22 11:56

Description: Greene County Ash Pond - MW-43H

Laboratory ID Number: BC19272

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC19272	Alkalinity to pH 4.5	mg CaCO3/L					352	50.6	45.0 to 55.0			0.284	10.0
BC19272	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.16	0.074	2.11	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BC19272	Solids, Dissolved	mg/L	0.0000	25.0			560	51.0	40.0 to 60.0			1.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Definitions

Project Number: WMWGREAP_1388

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate;TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Relinquished to GSC shipping lab

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-31	10/05/2022	09:15	6	Groundwater		BC18505
MW-31Dup	10/05/2022	09:15	6	Sample Duplicate		BC18506
MW-33	10/05/2022	10:10	6	Groundwater		BC18507
FB-2	10/05/2022	10:50	5	Field Blank		BC18508
MW-32	10/05/2022	11:20	6	Groundwater		BC18509
PZ-4	10/05/2022	14:07	6	Groundwater		BC18510
MW-40H	10/05/2022	15:57	6	Groundwater		BC18511

Relinquished By	Received By	Date/Time
	Brooke Carter	10/06/2022 08:45

SmarTroll ID	7586-41443-5-2	All pH requirements have been met	☑
Turbidity ID	9830-57039-1-1	Cooler Temp	1.2 °C
Sample Event	1388	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-3	10/05/2022	08:34	6	Groundwater		BC18547
MW-2	10/05/2022	09:29	6	Groundwater		BC18548
FB-1	10/05/2022	09:55	5	Field Blank		BC18549
MW-1	10/05/2022	10:27	6	Groundwater		BC18550
MW-44H	10/05/2022	13:34	6	Groundwater		BC18551
MW-57H	10/05/2022	14:34	6	Groundwater		BC18552
MW-57H dup	10/05/2022	14:34	6	Sample Duplicate		BC18553
MW54H	10/05/2022	16:22	6	Groundwater		BC18554

Relinquished By	Received By	Date/Time
		10/06/2022 10:28

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	1.5 °C
Sample Event	1388	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete

☑ Lab Complete

☐ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL
2	Dissolved Metals	500 mL
3	Hg	250 mL
4	Nitrite/Nitrate;TOC	250 mL
5	TDS/Alkalinity	500 mL
6	Anions	250 mL
7	N/A	N/A
8	N/A	N/A

Comments: Samples relinquished to GSC building 8 shipping lab DFG 10/18/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-35H	10/17/2022	13:33	6	Groundwater		BC19089
MW-24	10/17/2022	14:25	6	Groundwater		BC19090
MW-23	10/17/2022	15:02	6	Groundwater		BC19091
MW-6	10/18/2022	09:10	6	Groundwater		BC19092
MW-6DUP	10/18/2022	09:10	6	Sample Duplicate		BC19093
MW-7	10/18/2022	10:00	6	Groundwater		BC19094
MW-8	10/18/2022	10:38	6	Groundwater		BC19095
MW-9	10/18/2022	11:15	6	Groundwater		BC19096

Relinquished By	Received By	Date/Time
		10/18/2022 13:03
		10/19/2022 08:32

SmarTroll ID	7586-41443-5-2	All pH requirements have been met	☑
Turbidity ID	9830-57039-1-1	Cooler Temp	0.9 °C
Sample Event	1388	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Samples relinquished to GSC building 8 shipping lab DFG 10/18/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-36H	10/17/2022	12:33	6	Groundwater		BC19074
MW-18	10/17/2022	13:42	6	Groundwater		BC19075
MW-37H	10/17/2022	15:20	6	Groundwater		BC19076
MW-17	10/18/2022	08:53	6	Groundwater		BC19077
MW-38H	10/18/2022	11:08	6	Groundwater		BC19078

Relinquished By	Received By	Date/Time
		10/18/2022 13:14
		10/19/2022 08:31

SmarTroll ID	7586-41446-5-5	All pH requirements have been met	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.5 °C
Sample Event	1388	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL
2	Dissolved Metals	500 mL
3	Hg	250 mL
4	Nitrate/Nitrite; TOC	250 mL
5	TDS/Alkalinity	500 mL
6	Anions	250 mL
7	N/A	N/A
8	N/A	N/A

Comments: Samples relinquished to GSC building 8 shipping lab DFG 10/18/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-53H	10/17/2022	11:43	6	Groundwater		BC19079
MW-5	10/17/2022	12:37	6	Groundwater		BC19080
MW-11	10/17/2022	13:39	6	Groundwater		BC19081
MW-21	10/17/2022	14:30	6	Groundwater		BC19082
MW-12	10/17/2022	15:25	6	Groundwater		BC19083
MW-13	10/17/2022	16:15	6	Groundwater		BC19084
MW-48H	10/18/2022	09:22	6	Groundwater		BC19085
MW-48H dup	10/18/2022	09:22	6	Sample Duplicate		BC19086
MW-45H	10/18/2022	10:30	6	Groundwater		BC19087
MW-41H	10/18/2022	11:22	6	Groundwater		BC19088

Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Carter	10/19/2022 08:32

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	9901-57263-1-1	Cooler Temp	1.5 °C
Sample Event	1388	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate:TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Relinquish to GSC shipping lab secure location 10192022 1300

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25	10/18/2022	14:58	6	Groundwater		BC19252
MW-10	10/18/2022	15:53	6	Groundwater		BC19253
MW-14	10/18/2022	17:00	6	Groundwater		BC19254
MW-49H	10/19/2022	06:53	6	Groundwater		BC19255
FB-4	10/19/2022	07:05	5	Field Blank		BC19256
MW-34HA	10/19/2022	07:50	6	Groundwater		BC19257
FB-5	10/19/2022	08:15	5	Field Blank		BC19258
EB-1	10/19/2022	12:30	5	Equipment Blank		BC19259
EB-2	10/19/2022	12:50	5	Equipment Blank		BC19260

Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2022.10.20 11:50:30 -05'00'	10/20/2022 11:50

SmarTroll ID	7586-41443-5-2	All pH requirements have been met	☑
Turbidity ID	9830-57039-1-1	Cooler Temp	1.5 °C
Sample Event	1388	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16	10/18/2022	14:25	6	Groundwater		BC19261
MW-39H	10/18/2022	15:20	6	Groundwater		BC19262
MW-15	10/18/2022	16:27	6	Groundwater		BC19263
FB-3	10/18/2022	16:45	5	Field Blank		BC19264
MW-26	10/19/2022	09:30	6	Groundwater		BC19265
MW-27	10/19/2022	10:17	6	Groundwater		BC19266
MW-27 Dup	10/19/2022	10:17	6	Sample Duplicate		BC19267
MW-28	10/19/2022	11:20	6	Groundwater		BC19268
MW-29	10/19/2022	12:10	6	Groundwater		BC19269
MW-30	10/19/2022	13:05	6	Groundwater		BC19270
MW-42H	10/19/2022	14:23	6	Groundwater		BC19271
MW-43H	10/19/2022	15:15	6	Groundwater		BC19272

Relinquished By	Received By	Date/Time
		10/20/2022 11:08

SmarTroll ID	7586-41446-5-5
Turbidity ID	4677-23343-4-2
Sample Event	1388

All pH requirements have been met ☑

Cooler Temp	1.5 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A
6	N/A	N/A
7	N/A	N/A
8	N/A	N/A

Comments: MS/MSD collected @ MW-33; Relinquished to GSC shipping lab

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-31	10/05/2022	09:15	1	Groundwater		BC18512
MW-31Dup	10/05/2022	09:15	1	Sample Duplicate		BC18513
MW-33	10/05/2022	10:10	3	Groundwater		BC18514
FB-2	10/05/2022	10:50	1	Field Blank		BC18515
MW-32	10/05/2022	11:20	1	Groundwater		BC18516
PZ-4	10/05/2022	14:07	1	Groundwater		BC18517
MW-40H	10/05/2022	15:57	1	Groundwater		BC18518

Relinquished By	Received By	Date/Time
	Brooke Carter	10/06/2022 08:45

SmarTroll ID	7586-41443-5-2
Turbidity ID	9830-57039-1-1
Sample Event	1388

All pH requirements have been met ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-44H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-3	10/05/2022	08:34	1	Groundwater		BC18555
MW-2	10/05/2022	09:29	1	Groundwater		BC18556
FB-1	10/05/2022	09:55	1	Field Blank		BC18557
MW-1	10/05/2022	10:27	1	Groundwater		BC18558
MW-44H	10/05/2022	13:34	3	Groundwater		BC18559
MW-57H	10/05/2022	14:34	1	Groundwater		BC18560
MW-57H dup	10/05/2022	14:34	1	Sample Duplicate		BC18561
MW54H	10/05/2022	16:22	1	Groundwater		BC18562

Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Carter	10/06/2022 10:28

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1388	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA ☐

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Samples relinquished to GSC building 8 shipping lab DFG 10/18/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-35H	10/17/2022	13:33	1	Groundwater		BC19112
MW-24	10/17/2022	14:25	1	Groundwater		BC19113
MW-23	10/17/2022	15:02	1	Groundwater		BC19114
MW-6	10/18/2022	09:10	1	Groundwater		BC19115
MW-6DUP	10/18/2022	09:10	1	Sample Duplicate		BC19116
MW-7	10/18/2022	10:00	1	Groundwater		BC19117
MW-8	10/18/2022	10:38	1	Groundwater		BC19118
MW-9	10/18/2022	11:15	1	Groundwater		BC19119

Relinquished By	Received By	Date/Time
		10/18/2022 13:03
	Brooke Carter	10/19/2022 08:36

SmarTroll ID	7586-41443-5-2
Turbidity ID	9830-57039
Sample Event	1388

All pH requirements have been met ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete

☑ Lab Complete

☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Rad MS/MSD @MW-36H
Samples relinquished to GSC building 8 shipping lab DFG 10/18/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-36H	10/17/2022	12:33	3	Groundwater		BC19097
MW-18	10/17/2022	13:42	1	Groundwater		BC19098
MW-37H	10/17/2022	15:20	1	Groundwater		BC19099
MW-17	10/18/2022	08:53	1	Groundwater		BC19100
MW-38H	10/18/2022	11:08	1	Groundwater		BC19101

Relinquished By	Received By	Date/Time
		10/18/2022 13:14
		10/19/2022 08:37

SmarTroll ID	7586-41446-5-5	All pH requirements have been met	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	N/A
Sample Event	1388	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Samples relinquished to GSC building 8 shipping lab DFG 10/18/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-53H	10/17/2022	11:43	1	Groundwater		BC19102
MW-5	10/17/2022	12:37	1	Groundwater		BC19103
MW-11	10/17/2022	13:39	1	Groundwater		BC19104
MW-21	10/17/2022	14:30	1	Groundwater		BC19105
MW-12	10/17/2022	15:25	1	Groundwater		BC19106
MW-13	10/17/2022	16:15	1	Groundwater		BC19107
MW-48H	10/18/2022	09:22	1	Groundwater		BC19108
MW-48H dup	10/18/2022	09:22	1	Sample Duplicate		BC19109
MW-45H	10/18/2022	10:30	1	Groundwater		BC19110
MW-41H	10/18/2022	11:22	1	Groundwater		BC19111

Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Carter	10/19/2022 08:37

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	9901-57263-1-1	Cooler Temp	N/A
Sample Event	1388	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine
Collector	Anthony Goggins
Results To	Dustin Brooks, Greg Dyer
Requested By	Greg Dyer
Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquish to GSC shipping lab secure location 10192022 1300

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25	10/18/2022	14:58	1	Groundwater		BC19273
MW-10	10/18/2022	15:53	1	Groundwater		BC19274
MW-14	10/18/2022	17:00	1	Groundwater		BC19275
MW-49H	10/19/2022	06:53	1	Groundwater		BC19276
FB-4	10/19/2022	07:05	1	Field Blank		BC19277
MW-34HA	10/19/2022	07:50	1	Groundwater		BC19278
FB-5	10/19/2022	08:15	1	Field Blank		BC19279
EB-1	10/19/2022	12:30	1	Equipment Blank		BC19280
EB-2	10/19/2022	12:50	1	Equipment Blank		BC19281

Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2022.10.20 11:50:49 -05'00'	10/20/2022 11:50

SmarTroll ID	7586-41443-5-2
Turbidity ID	9830-57039-1-1
Sample Event	1388

All pH requirements have been met ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16	10/18/2022	14:25	1	Groundwater		BC19282
MW-39H	10/18/2022	15:20	1	Groundwater		BC19283
MW-15	10/18/2022	16:27	1	Groundwater		BC19284
FB-3	10/18/2022	16:45	1	Field Blank		BC19285
MW-26	10/19/2022	09:30	1	Groundwater		BC19286
MW-27	10/19/2022	10:17	1	Groundwater		BC19287
MW-27 Dup	10/19/2022	10:17	1	Sample Duplicate		BC19288
MW-28	10/19/2022	11:20	1	Groundwater		BC19289
MW-29	10/19/2022	12:10	1	Groundwater		BC19290
MW-30	10/19/2022	13:05	1	Groundwater		BC19291
MW-42H	10/19/2022	14:23	1	Groundwater		BC19292
MW-43H	10/19/2022	15:15	1	Groundwater		BC19293

Relinquished By	Received By	Date/Time
		10/20/2022 11:08

SmarTroll ID	7586-41446-5-5	All pH requirements have been met	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	N/A
Sample Event	1388	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 23, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGREAP_1388
Pace Project No.: 30532495

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on October 25, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

CERTIFICATIONS

Project: WMWGREAP_1388
Pace Project No.: 30532495

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30532495001	**BC18512 MW-31**	Water	10/05/22 09:15	10/25/22 09:30
30532495002	**BC18513 MW-31 Dup**	Water	10/05/22 09:15	10/25/22 09:30
30532495003	**BC18514 MW-33**	Water	10/05/22 10:10	10/25/22 09:30
30532495004	**BC18514 MW-33 MS**	Water	10/05/22 10:10	10/25/22 09:30
30532495005	**BC18514 MW-33 MSD**	Water	10/05/22 10:10	10/25/22 09:30
30532495006	**BC18515 FB-2**	Water	10/05/22 10:50	10/25/22 09:30
30532495007	**BC18516 MW-32**	Water	10/05/22 11:20	10/25/22 09:30
30532495008	**BC18517 PZ-4**	Water	10/05/22 14:07	10/25/22 09:30
30532495009	**BC18518 MW-40H**	Water	10/05/22 15:57	10/25/22 09:30
30532495010	**BC18555 MW-3**	Water	10/05/22 08:34	10/25/22 09:30
30532495011	**BC18556 MW-2**	Water	10/05/22 09:29	10/25/22 09:30
30532495012	**BC18557 FB-1**	Water	10/05/22 09:55	10/25/22 09:30
30532495013	**BC18558 MW-1**	Water	10/05/22 10:27	10/25/22 09:30
30532495014	**BC18559 MW-44H**	Water	10/05/22 13:34	10/25/22 09:30
30532495015	**BC18559 MW-44H MS**	Water	10/05/22 13:34	10/25/22 09:30
30532495016	**BC18559 MW-44H MSD**	Water	10/05/22 13:34	10/25/22 09:30
30532495017	**BC18560 MW-57H**	Water	10/05/22 14:34	10/25/22 09:30
30532495018	**BC18561 MW-57H Dup**	Water	10/05/22 14:34	10/25/22 09:30
30532495019	**BC18562 MW-54H**	Water	10/05/22 16:22	10/25/22 09:30
30532495020	**BC19097 MW-36H**	Water	10/17/22 12:33	10/25/22 09:30
30532495021	**BC19097 MW-36H MS**	Water	10/17/22 12:33	10/25/22 09:30
30532495022	**BC19097 MW-36H MSD**	Water	10/17/22 12:33	10/25/22 09:30
30532495023	**BC19098 MW-18**	Water	10/17/22 13:42	10/25/22 09:30
30532495024	**BC19099 MW-37H**	Water	10/17/22 15:20	10/25/22 09:30
30532495025	**BC19100 MW-17**	Water	10/18/22 08:53	10/25/22 09:30
30532495026	**BC19101 MW-38H**	Water	10/18/22 11:08	10/25/22 09:30
30532495027	**BC19102 MW-53H**	Water	10/17/22 11:43	10/25/22 09:30
30532495028	**BC19103 MW-5**	Water	10/17/22 12:37	10/25/22 09:30
30532495029	**BC19104 MW-11**	Water	10/17/22 13:39	10/25/22 09:30
30532495030	**BC19105 MW-21**	Water	10/17/22 14:30	10/25/22 09:30
30532495031	**BC19106 MW-12**	Water	10/17/22 15:25	10/25/22 09:30
30532495032	**BC19107 MW-13**	Water	10/17/22 16:15	10/25/22 09:30
30532495033	**BC19108 MW-48H**	Water	10/18/22 09:22	10/25/22 09:30
30532495034	**BC19109 MW-48H Dup**	Water	10/18/22 09:22	10/25/22 09:30
30532495035	**BC19110 MW-45H**	Water	10/18/22 10:30	10/25/22 09:30
30532495036	**BC19111 MW-41H**	Water	10/18/22 11:22	10/25/22 09:30
30532495037	**BC19112 MW-35H**	Water	10/17/22 13:33	10/25/22 09:30

SAMPLE SUMMARY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30532495038	**BC19113 MW-24**	Water	10/17/22 14:25	10/25/22 09:30
30532495039	**BC19114 MW-23**	Water	10/17/22 15:02	10/25/22 09:30
30532495040	**BC19115 MW-6**	Water	10/18/22 09:10	10/25/22 09:30
30532495041	**BC19116 MW-6 Dup**	Water	10/18/22 09:10	10/25/22 09:30
30532495042	**BC19117 MW-7**	Water	10/18/22 10:00	10/25/22 09:30
30532495043	**BC19118 MW-8**	Water	10/18/22 10:38	10/25/22 09:30
30532495044	**BC19119 MW-9**	Water	10/18/22 11:15	10/25/22 09:30
30532495045	**BC19273 MW-25**	Water	10/18/22 14:58	10/25/22 09:30
30532495046	**BC19274 MW-10**	Water	10/18/22 15:53	10/25/22 09:30
30532495047	**BC19275 MW-14**	Water	10/18/22 17:00	10/25/22 09:30
30532495048	**BC19276 MW-49H**	Water	10/19/22 06:53	10/25/22 09:30
30532495049	**BC19277 FB-4**	Water	10/19/22 07:05	10/25/22 09:30
30532495050	**BC19278 MW-34HA**	Water	10/19/22 07:50	10/25/22 09:30
30532495051	**BC19279 FB-5**	Water	10/19/22 08:15	10/25/22 09:30
30532495052	**BC19280 EB-1**	Water	10/19/22 12:30	10/25/22 09:30
30532495053	**BC19281 EB-2**	Water	10/19/22 12:50	10/25/22 09:30
30532495054	**BC19282 MW-16**	Water	10/18/22 14:25	10/25/22 09:30
30532495055	**BC19283 MW-39H**	Water	10/18/22 15:20	10/25/22 09:30
30532495056	**BC19284 MW-15**	Water	10/18/22 16:27	10/25/22 09:30
30532495057	**BC19285 FB-3**	Water	10/18/22 16:45	10/25/22 09:30
30532495058	**BC19286 MW-26**	Water	10/19/22 09:30	10/25/22 09:30
30532495059	**BC19287 MW-27**	Water	10/19/22 10:17	10/25/22 09:30
30532495060	**BC19288 MW-27 Dup**	Water	10/19/22 10:17	10/25/22 09:30
30532495061	**BC19289 MW-28**	Water	10/19/22 11:20	10/25/22 09:30
30532495062	**BC19290 MW-29**	Water	10/19/22 12:10	10/25/22 09:30
30532495063	**BC19291 MW-30**	Water	10/19/22 13:05	10/25/22 09:30
30532495064	**BC19292 MW-42H**	Water	10/19/22 14:23	10/25/22 09:30
30532495065	**BC19293 MW-43H**	Water	10/19/22 15:15	10/25/22 09:30

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30532495001	**BC18512 MW-31**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495002	**BC18513 MW-31 Dup**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495003	**BC18514 MW-33**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495004	**BC18514 MW-33 MS**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30532495005	**BC18514 MW-33 MSD**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30532495006	**BC18515 FB-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495007	**BC18516 MW-32**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495008	**BC18517 PZ-4**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495009	**BC18518 MW-40H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495010	**BC18555 MW-3**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495011	**BC18556 MW-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495012	**BC18557 FB-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495013	**BC18558 MW-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30532495014	**BC18559 MW-44H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495015	**BC18559 MW-44H MS**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30532495016	**BC18559 MW-44H MSD**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30532495017	**BC18560 MW-57H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495018	**BC18561 MW-57H Dup**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495019	**BC18562 MW-54H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495020	**BC19097 MW-36H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495021	**BC19097 MW-36H MS**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30532495022	**BC19097 MW-36H MSD**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30532495023	**BC19098 MW-18**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495024	**BC19099 MW-37H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495025	**BC19100 MW-17**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495026	**BC19101 MW-38H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495027	**BC19102 MW-53H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
30532495028	**BC19103 MW-5**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495029	**BC19104 MW-11**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495030	**BC19105 MW-21**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495031	**BC19106 MW-12**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495032	**BC19107 MW-13**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495033	**BC19108 MW-48H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495034	**BC19109 MW-48H Dup**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495035	**BC19110 MW-45H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495036	**BC19111 MW-41H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495037	**BC19112 MW-35H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495038	**BC19113 MW-24**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495039	**BC19114 MW-23**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30532495040	**BC19115 MW-6**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495041	**BC19116 MW-6 Dup**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495042	**BC19117 MW-7**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495043	**BC19118 MW-8**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495044	**BC19119 MW-9**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495045	**BC19273 MW-25**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495046	**BC19274 MW-10**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495047	**BC19275 MW-14**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495048	**BC19276 MW-49H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495049	**BC19277 FB-4**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495050	**BC19278 MW-34HA**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495051	**BC19279 FB-5**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495052	**BC19280 EB-1**	EPA 9315	RMS	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495053	**BC19281 EB-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495054	**BC19282 MW-16**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495055	**BC19283 MW-39H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495056	**BC19284 MW-15**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495057	**BC19285 FB-3**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495058	**BC19286 MW-26**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495059	**BC19287 MW-27**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495060	**BC19288 MW-27 Dup**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495061	**BC19289 MW-28**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495062	**BC19290 MW-29**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495063	**BC19291 MW-30**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30532495064	**BC19292 MW-42H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
30532495065	**BC19293 MW-43H**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Method:	**EPA 9315**
Description:	9315 Total Radium
Client:	Alabama Power
Date:	November 23, 2022

General Information:
65 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: November 23, 2022

General Information:
65 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Method:	**Total Radium Calculation**
Description:	Total Radium 228+226
Client:	Alabama Power
Date:	November 23, 2022

General Information:
59 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18512 MW-31 **Lab ID: 30532495001** Collected: 10/05/22 09:15 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.212U ± 0.199 (0.377)** **C:97% T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.625U ± 0.368 (0.672)** **C:78% T:86%**	pCi/L	11/03/22 12:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.837U ± 0.567 (1.05)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18513 MW-31 Dup **Lab ID: 30532495002** Collected: 10/05/22 09:15 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.128U ± 0.156 (0.322)** **C:95% T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.782 ± 0.389 (0.665)** **C:81% T:83%**	pCi/L	11/03/22 12:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.910U ± 0.545 (0.987)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18514 MW-33 **Lab ID: 30532495003** Collected: 10/05/22 10:10 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.408 ± 0.196 (0.239)** **C:102% T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.611U ± 0.359 (0.654)** **C:84% T:88%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02 ± 0.555 (0.893)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18514 MW-33 MS **Lab ID: 30532495004** Collected: 10/05/22 10:10 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**98.09 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**99.13 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	11/03/22 12:55	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18514 MW-33 MSD **Lab ID: 30532495005** Collected: 10/05/22 10:10 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**115.50 %REC 16.3RPD ± NA (NA) C:NA T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**94.16 %REC 5.15RPD ± NA (NA) C:NA T:NA**	pCi/L	11/03/22 12:54	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18515 FB-2 **Lab ID: 30532495006** Collected: 10/05/22 10:50 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0671U ± 0.137 (0.317) C:98% T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.13 ± 0.628 (1.10) C:59% T:61%**	pCi/L	11/03/22 12:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.20U ± 0.765 (1.42)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18516 MW-32 **Lab ID: 30532495007** Collected: 10/05/22 11:20 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0670U ± 0.122 (0.277)** **C:100% T:NA**	pCi/L	11/21/22 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.400U ± 0.346 (0.696)** **C:78% T:88%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.467U ± 0.468 (0.973)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18517 PZ-4 **Lab ID: 30532495008** Collected: 10/05/22 14:07 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.851 ± 0.306 (0.277)** **C:99% T:NA**	pCi/L	11/21/22 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.880 ± 0.399 (0.651)** **C:75% T:90%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.73 ± 0.705 (0.928)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18518 MW-40H **Lab ID: 30532495009** Collected: 10/05/22 15:57 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.119U ± 0.142 (0.288)** **C:95% T:NA**	pCi/L	11/21/22 10:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.695U ± 0.406 (0.744)** **C:77% T:84%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.814U ± 0.548 (1.03)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18555 MW-3 **Lab ID: 30532495010** Collected: 10/05/22 08:34 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.240U ± 0.172 (0.280)** **C:104% T:NA**	pCi/L	11/21/22 10:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.448U ± 0.365 (0.729)** **C:80% T:86%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.688U ± 0.537 (1.01)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18556 MW-2 **Lab ID: 30532495011** Collected: 10/05/22 09:29 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.589 ± 0.246 (0.246)** **C:99% T:NA**	pCi/L	11/21/22 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.30 ± 0.445 (0.606)** **C:88% T:85%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.89 ± 0.691 (0.852)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18557 FB-1 **Lab ID: 30532495012** Collected: 10/05/22 09:55 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0557U ± 0.0944 (0.210)** **C:102% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.377U ± 0.313 (0.626)** **C:88% T:88%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.433U ± 0.407 (0.836)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18558 MW-1 **Lab ID: 30532495013** Collected: 10/05/22 10:27 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.275U ± 0.179 (0.275)** **C:96% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.840 ± 0.380 (0.612)** **C:80% T:84%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.12 ± 0.559 (0.887)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18559 MW-44H **Lab ID: 30532495014** Collected: 10/05/22 13:34 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.288 ± 0.171 (0.229)** **C:97% T:NA**	pCi/L	11/21/22 10:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.883 ± 0.423 (0.714)** **C:77% T:84%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.594 (0.943)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18559 MW-44H MS **Lab ID: 30532495015** Collected: 10/05/22 13:34 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**100.07 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	11/21/22 10:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**75.97 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	11/03/22 12:53	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18559 MW-44H MSD **Lab ID: 30532495016** Collected: 10/05/22 13:34 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**101.21 %REC 1.13RPD ± NA (NA) C:NA T:NA**	pCi/L	11/21/22 10:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**86.53 %REC 13.01RPD ± NA (NA) C:NA T:NA**	pCi/L	11/03/22 12:53	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18560 MW-57H **Lab ID: 30532495017** Collected: 10/05/22 14:34 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.359 ± 0.193 (0.262)** **C:97% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.816 ± 0.388 (0.640)** **C:79% T:83%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.18 ± 0.581 (0.902)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18561 MW-57H Dup **Lab ID: 30532495018** Collected: 10/05/22 14:34 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.286U ± 0.188 (0.301)** **C:98% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.565 ± 0.317 (0.562)** **C:82% T:91%**	pCi/L	11/03/22 12:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.851U ± 0.505 (0.863)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC18562 MW-54H **Lab ID: 30532495019** Collected: 10/05/22 16:22 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.672 ± 0.253 (0.248)** **C:99% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.884 ± 0.423 (0.721)** **C:78% T:86%**	pCi/L	11/03/22 12:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.56 ± 0.676 (0.969)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19097 MW-36H **Lab ID: 30532495020** Collected: 10/17/22 12:33 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.183U ± 0.148 (0.260)** **C:97% T:NA**	pCi/L	11/21/22 14:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.467U ± 0.330 (0.635)** **C:84% T:88%**	pCi/L	11/03/22 16:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.650U ± 0.478 (0.895)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19097 MW-36H MS **Lab ID: 30532495021** Collected: 10/17/22 12:33 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**104.51 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/21/22 14:49	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**83.62 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/03/22 16:13	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Sample: BC19097 MW-36H MSD **Lab ID: 30532495022** Collected: 10/17/22 12:33 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**103.02 %REC 1.43RPD ± NA (NA) C:NA T:NA**	pCi/L	11/21/22 14:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**82.79 %REC 1.00RPD ± NA (NA) C:NA T:NA**	pCi/L	11/03/22 16:13	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19098 MW-18 **Lab ID: 30532495023** Collected: 10/17/22 13:42 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.602 ± 0.234 (0.231)** **C:101% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.238U ± 0.328 (0.702)** **C:78% T:86%**	pCi/L	11/03/22 12:56	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.840U ± 0.562 (0.933)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19099 MW-37H **Lab ID: 30532495024** Collected: 10/17/22 15:20 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.135U ± 0.162 (0.340)** **C:108% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.746 ± 0.390 (0.688)** **C:84% T:83%**	pCi/L	11/03/22 12:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.881U ± 0.552 (1.03)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19100 MW-17 **Lab ID: 30532495025** Collected: 10/18/22 08:53 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.829 ± 0.306 (0.313)** **C:99% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.393U ± 0.321 (0.633)** **C:79% T:87%**	pCi/L	11/03/22 12:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.22 ± 0.627 (0.946)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19101 MW-38H **Lab ID: 30532495026** Collected: 10/18/22 11:08 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.182U ± 0.166 (0.299)** **C:97% T:NA**	pCi/L	11/21/22 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.358U ± 0.305 (0.606)** **C:78% T:89%**	pCi/L	11/03/22 12:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.540U ± 0.471 (0.905)**	pCi/L	11/21/22 16:56	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Sample: BC19102 MW-53H **Lab ID: 30532495027** Collected: 10/17/22 11:43 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.688 ± 0.250 (0.194)** **C:104% T:NA**	pCi/L	11/21/22 10:21	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.653U ± 0.391 (0.722)** **C:82% T:81%**	pCi/L	11/03/22 12:53	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**1.34 ± 0.641 (0.916)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19103 MW-5 **Lab ID: 30532495028** Collected: 10/17/22 12:37 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.878 ± 0.283 (0.195)** **C:103% T:NA**	pCi/L	11/21/22 10:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.05 ± 0.458 (0.735)** **C:77% T:77%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.93 ± 0.741 (0.930)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19104 MW-11 **Lab ID: 30532495029** Collected: 10/17/22 13:39 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.156U ± 0.133 (0.230)** **C:98% T:NA**	pCi/L	11/21/22 10:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0190U ± 0.234 (0.549)** **C:80% T:91%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.175U ± 0.367 (0.779)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19105 MW-21 **Lab ID: 30532495030** Collected: 10/17/22 14:30 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.169U ± 0.146 (0.257)** **C:95% T:NA**	pCi/L	11/21/22 10:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.603U ± 0.400 (0.763)** **C:80% T:81%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.772U ± 0.546 (1.02)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19106 MW-12 **Lab ID: 30532495031** Collected: 10/17/22 15:25 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0130U ± 0.174 (0.445)** **C:91% T:NA**	pCi/L	11/21/22 10:23	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.977 ± 0.417 (0.659)** **C:80% T:82%**	pCi/L	11/03/22 12:53	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.990U ± 0.591 (1.10)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19107 MW-13 **Lab ID: 30532495032** Collected: 10/17/22 16:15 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.153U ± 0.154 (0.300)** **C:98% T:NA**	pCi/L	11/21/22 10:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.376U ± 0.303 (0.593)** **C:81% T:83%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.529U ± 0.457 (0.893)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19108 MW-48H **Lab ID: 30532495033** Collected: 10/18/22 09:22 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0218U ± 0.0740 (0.238)** **C:97% T:NA**	pCi/L	11/21/22 12:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.152U ± 0.262 (0.573)** **C:82% T:81%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.152U ± 0.336 (0.811)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19109 MW-48H Dup **Lab ID: 30532495034** Collected: 10/18/22 09:22 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0647U ± 0.124 (0.285)** **C:92% T:NA**	pCi/L	11/21/22 12:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.434U ± 0.339 (0.667)** **C:80% T:84%**	pCi/L	11/03/22 12:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.499U ± 0.463 (0.952)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19110 MW-45H **Lab ID: 30532495035** Collected: 10/18/22 10:30 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.273U ± 0.186 (0.294)** **C:101% T:NA**	pCi/L	11/21/22 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.641U ± 0.392 (0.725)** **C:77% T:85%**	pCi/L	11/03/22 16:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.914U ± 0.578 (1.02)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19111 MW-41H **Lab ID: 30532495036** Collected: 10/18/22 11:22 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.498 ± 0.211 (0.215) C:101% T:NA**	pCi/L	11/21/22 12:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.15 ± 0.444 (0.654) C:81% T:84%**	pCi/L	11/03/22 16:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.65 ± 0.655 (0.869)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19112 MW-35H **Lab ID: 30532495037** Collected: 10/17/22 13:33 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.181U ± 0.149 (0.246)** **C:102% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.352U ± 0.357 (0.734)** **C:71% T:87%**	pCi/L	11/03/22 16:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.533U ± 0.506 (0.980)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19113 MW-24 **Lab ID: 30532495038** Collected: 10/17/22 14:25 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.424 ± 0.197 (0.239)** **C:97% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.851 ± 0.420 (0.715)** **C:77% T:83%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.28 ± 0.617 (0.954)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19114 MW-23 **Lab ID: 30532495039** Collected: 10/17/22 15:02 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0950U ± 0.130 (0.275)** **C:102% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.625U ± 0.361 (0.643)** **C:79% T:82%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.720U ± 0.491 (0.918)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Sample: BC19115 MW-6 **Lab ID: 30532495040** Collected: 10/18/22 09:10 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.384 ± 0.202 (0.282)** **C:98% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.640U ± 0.362 (0.649)** **C:79% T:89%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02 ± 0.564 (0.931)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19116 MW-6 Dup **Lab ID: 30532495041** Collected: 10/18/22 09:10 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.122U ± 0.135 (0.267)** **C:100% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.382U ± 0.320 (0.631)** **C:80% T:84%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.504U ± 0.455 (0.898)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Sample: BC19117 MW-7 **Lab ID: 30532495042** Collected: 10/18/22 10:00 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.425 ± 0.204 (0.247)** **C:99% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.760 ± 0.364 (0.595)** **C:79% T:86%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.19 ± 0.568 (0.842)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Sample: BC19118 MW-8 **Lab ID: 30532495043** Collected: 10/18/22 10:38 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0620U ± 0.161 (0.384)** **C:100% T:NA**	pCi/L	11/21/22 12:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.679 ± 0.377 (0.676)** **C:82% T:85%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.741U ± 0.538 (1.06)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19119 MW-9 **Lab ID: 30532495044** Collected: 10/18/22 11:15 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.742 ± 0.279 (0.246)** **C:98% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.545U ± 0.378 (0.723)** **C:82% T:85%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29 ± 0.657 (0.969)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19273 MW-25 **Lab ID: 30532495045** Collected: 10/18/22 14:58 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.365 ± 0.195 (0.263)** **C:96% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.252U ± 0.335 (0.714)** **C:81% T:83%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.617U ± 0.530 (0.977)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19274 MW-10 **Lab ID: 30532495046** Collected: 10/18/22 15:53 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.440 ± 0.214 (0.270)** **C:98% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.596U ± 0.386 (0.727)** **C:80% T:85%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.04 ± 0.600 (0.997)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19275 MW-14 **Lab ID: 30532495047** Collected: 10/18/22 17:00 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.384 ± 0.207 (0.294)** **C:97% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.865 ± 0.394 (0.629)** **C:80% T:82%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.25 ± 0.601 (0.923)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19276 MW-49H **Lab ID: 30532495048** Collected: 10/19/22 06:53 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.145U ± 0.147 (0.278)** **C:94% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.339U ± 0.341 (0.700)** **C:80% T:83%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.484U ± 0.488 (0.978)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19277 FB-4 **Lab ID: 30532495049** Collected: 10/19/22 07:05 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0794U ± 0.124 (0.272)** **C:99% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.102U ± 0.327 (0.738)** **C:80% T:86%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.181U ± 0.451 (1.01)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19278 MW-34HA **Lab ID: 30532495050** Collected: 10/19/22 07:50 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0666U ± 0.173 (0.413)** **C:98% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0138U ± 0.333 (0.771)** **C:77% T:88%**	pCi/L	11/03/22 16:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0804U ± 0.506 (1.18)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19279 FB-5 **Lab ID: 30532495051** Collected: 10/19/22 08:15 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.205U ± 0.171 (0.306)** **C:96% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.618U ± 0.388 (0.722)** **C:76% T:86%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.823U ± 0.559 (1.03)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19280 EB-1 **Lab ID: 30532495052** Collected: 10/19/22 12:30 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.142U ± 0.142 (0.264)** **C:100% T:NA**	pCi/L	11/21/22 15:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.496U ± 0.399 (0.792)** **C:77% T:83%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.638U ± 0.541 (1.06)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19281 EB-2 **Lab ID: 30532495053** Collected: 10/19/22 12:50 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.133U ± 0.156 (0.306)** **C:99% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.448U ± 0.311 (0.589)** **C:81% T:90%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.581U ± 0.467 (0.895)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19282 MW-16 **Lab ID: 30532495054** Collected: 10/18/22 14:25 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.390 ± 0.208 (0.282)** **C:99% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.382U ± 0.318 (0.628)** **C:80% T:86%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.772U ± 0.526 (0.910)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19283 MW-39H **Lab ID: 30532495055** Collected: 10/18/22 15:20 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.443 ± 0.220 (0.283)** **C:103% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.737 ± 0.365 (0.614)** **C:80% T:89%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.18 ± 0.585 (0.897)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19284 MW-15 **Lab ID: 30532495056** Collected: 10/18/22 16:27 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.337 ± 0.206 (0.316)** **C:97% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.353U ± 0.350 (0.721)** **C:82% T:85%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.690U ± 0.556 (1.04)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19285 FB-3 **Lab ID: 30532495057** Collected: 10/18/22 16:45 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0539U ± 0.123 (0.291)** **C:102% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0218U ± 0.303 (0.714)** **C:80% T:87%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0539U ± 0.426 (1.01)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19286 MW-26 **Lab ID: 30532495058** Collected: 10/19/22 09:30 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.147U ± 0.141 (0.260)** **C:97% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.151U ± 0.317 (0.702)** **C:79% T:90%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.298U ± 0.458 (0.962)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Sample: BC19287 MW-27 **Lab ID: 30532495059** Collected: 10/19/22 10:17 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.343U ± 0.246 (0.440)** **C:96% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.311U ± 0.345 (0.719)** **C:75% T:84%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.654U ± 0.591 (1.16)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19288 MW-27 Dup **Lab ID: 30532495060** Collected: 10/19/22 10:17 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.139U ± 0.155 (0.306)** **C:97% T:NA**	pCi/L	11/22/22 09:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.405U ± 0.333 (0.655)** **C:77% T:88%**	pCi/L	11/03/22 16:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.544U ± 0.488 (0.961)**	pCi/L	11/22/22 17:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19289 MW-28 **Lab ID: 30532495061** Collected: 10/19/22 11:20 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.353 ± 0.196 (0.252)** **C:98% T:NA**	pCi/L	11/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.16 ± 0.447 (0.658)** **C:74% T:89%**	pCi/L	11/01/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.51 ± 0.643 (0.910)**	pCi/L	11/22/22 17:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19290 MW-29 **Lab ID: 30532495062** Collected: 10/19/22 12:10 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.213U ± 0.225 (0.464)** **C:100% T:NA**	pCi/L	11/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.416U ± 0.343 (0.679)** **C:71% T:91%**	pCi/L	11/01/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.629U ± 0.568 (1.14)**	pCi/L	11/22/22 17:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19291 MW-30 **Lab ID: 30532495063** Collected: 10/19/22 13:05 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.169U ± 0.155 (0.285)** **C:98% T:NA**	pCi/L	11/22/22 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.312U ± 0.344 (0.717)** **C:71% T:88%**	pCi/L	11/01/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.481U ± 0.499 (1.00)**	pCi/L	11/22/22 17:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19292 MW-42H **Lab ID: 30532495064** Collected: 10/19/22 14:23 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.799 ± 0.303 (0.280)** **C:99% T:NA**	pCi/L	11/22/22 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.968 ± 0.408 (0.628)** **C:73% T:89%**	pCi/L	11/01/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.77 ± 0.711 (0.908)**	pCi/L	11/22/22 17:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

Sample: BC19293 MW-43H **Lab ID: 30532495065** Collected: 10/19/22 15:15 Received: 10/25/22 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.641 ± 0.259 (0.232)** **C:99% T:NA**	pCi/L	11/22/22 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.03 ± 0.448 (0.717)** **C:73% T:85%**	pCi/L	11/01/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.67 ± 0.707 (0.949)**	pCi/L	11/22/22 17:13	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

QC Batch:	542560	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495061, 30532495062, 30532495063, 30532495064, 30532495065

METHOD BLANK: 2632999 Matrix: Water

Associated Lab Samples: 30532495061, 30532495062, 30532495063, 30532495064, 30532495065

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0355 ± 0.0704 (0.163) C:100% T:NA	pCi/L	11/22/22 08:29	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

QC Batch: 542555
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495014, 30532495015, 30532495016, 30532495027, 30532495028, 30532495029, 30532495030, 30532495031, 30532495032, 30532495033, 30532495034, 30532495035, 30532495036, 30532495037, 30532495038, 30532495039, 30532495040, 30532495041, 30532495042, 30532495043

METHOD BLANK: 2632995 Matrix: Water

Associated Lab Samples: 30532495014, 30532495015, 30532495016, 30532495027, 30532495028, 30532495029, 30532495030, 30532495031, 30532495032, 30532495033, 30532495034, 30532495035, 30532495036, 30532495037, 30532495038, 30532495039, 30532495040, 30532495041, 30532495042, 30532495043

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.925 ± 0.414 (0.678) C:79% T:85%	pCi/L	11/03/22 12:52	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

QC Batch:	542554	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495014, 30532495015, 30532495016, 30532495027, 30532495028, 30532495029, 30532495030, 30532495031, 30532495032, 30532495033, 30532495034, 30532495035, 30532495036, 30532495037, 30532495038, 30532495039, 30532495040, 30532495041, 30532495042, 30532495043

METHOD BLANK: 2632994 Matrix: Water

Associated Lab Samples: 30532495014, 30532495015, 30532495016, 30532495027, 30532495028, 30532495029, 30532495030, 30532495031, 30532495032, 30532495033, 30532495034, 30532495035, 30532495036, 30532495037, 30532495038, 30532495039, 30532495040, 30532495041, 30532495042, 30532495043

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0360 ± 0.0618 (0.138) C:102% T:NA	pCi/L	11/21/22 10:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

QC Batch: 542557
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495020, 30532495021, 30532495022, 30532495044, 30532495045, 30532495046, 30532495047, 30532495048, 30532495049, 30532495050, 30532495051, 30532495052, 30532495053, 30532495054, 30532495055, 30532495056, 30532495057, 30532495058, 30532495059, 30532495060

METHOD BLANK: 2632997 Matrix: Water

Associated Lab Samples: 30532495020, 30532495021, 30532495022, 30532495044, 30532495045, 30532495046, 30532495047, 30532495048, 30532495049, 30532495050, 30532495051, 30532495052, 30532495053, 30532495054, 30532495055, 30532495056, 30532495057, 30532495058, 30532495059, 30532495060

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0290 ± 0.0596 (0.139) C:99% T:NA	pCi/L	11/21/22 14:48	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

QC Batch: 542551
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495001, 30532495002, 30532495003, 30532495004, 30532495005, 30532495006, 30532495007, 30532495008, 30532495009, 30532495010, 30532495011, 30532495012, 30532495013, 30532495017, 30532495018, 30532495019, 30532495023, 30532495024, 30532495025, 30532495026

METHOD BLANK: 2632990 Matrix: Water

Associated Lab Samples: 30532495001, 30532495002, 30532495003, 30532495004, 30532495005, 30532495006, 30532495007, 30532495008, 30532495009, 30532495010, 30532495011, 30532495012, 30532495013, 30532495017, 30532495018, 30532495019, 30532495023, 30532495024, 30532495025, 30532495026

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.429 ± 0.321 (0.626) C:78% T:91%	pCi/L	11/03/22 12:54	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGREAP_1388
Pace Project No.: 30532495

QC Batch:	542562	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495061, 30532495062, 30532495063, 30532495064, 30532495065

METHOD BLANK: 2633001 Matrix: Water

Associated Lab Samples: 30532495061, 30532495062, 30532495063, 30532495064, 30532495065

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.108 ± 0.317 (0.714) C:72% T:90%	pCi/L	11/01/22 15:33	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

QC Batch:	542548	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495001, 30532495002, 30532495003, 30532495004, 30532495005, 30532495006, 30532495007, 30532495008, 30532495009, 30532495010, 30532495011, 30532495012, 30532495013, 30532495017, 30532495018, 30532495019, 30532495023, 30532495024, 30532495025, 30532495026

METADATA BLANK: 2632986 Matrix: Water

Associated Lab Samples: 30532495001, 30532495002, 30532495003, 30532495004, 30532495005, 30532495006, 30532495007, 30532495008, 30532495009, 30532495010, 30532495011, 30532495012, 30532495013, 30532495017, 30532495018, 30532495019, 30532495023, 30532495024, 30532495025, 30532495026

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00226 ± 0.0767 (0.204) C:100% T:NA	pCi/L	11/21/22 10:04	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGREAP_1388
Pace Project No.:	30532495

QC Batch:	542558	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30532495020, 30532495021, 30532495022, 30532495044, 30532495045, 30532495046, 30532495047, 30532495048, 30532495049, 30532495050, 30532495051, 30532495052, 30532495053, 30532495054, 30532495055, 30532495056, 30532495057, 30532495058, 30532495059, 30532495060

METHOD BLANK: 2632998 Matrix: Water

Associated Lab Samples: 30532495020, 30532495021, 30532495022, 30532495044, 30532495045, 30532495046, 30532495047, 30532495048, 30532495049, 30532495050, 30532495051, 30532495052, 30532495053, 30532495054, 30532495055, 30532495056, 30532495057, 30532495058, 30532495059, 30532495060

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0454 ± 0.291 (0.694) C:83% T:81%	pCi/L	11/03/22 16:13	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project: WMWGREAP_1388
Pace Project No.: 30532495

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532495001	**BC18512 MW-31**	EPA 9315	542548		
30532495002	**BC18513 MW-31 Dup**	EPA 9315	542548		
30532495003	**BC18514 MW-33**	EPA 9315	542548		
30532495004	**BC18514 MW-33 MS**	EPA 9315	542548		
30532495005	**BC18514 MW-33 MSD**	EPA 9315	542548		
30532495006	**BC18515 FB-2**	EPA 9315	542548		
30532495007	**BC18516 MW-32**	EPA 9315	542548		
30532495008	**BC18517 PZ-4**	EPA 9315	542548		
30532495009	**BC18518 MW-40H**	EPA 9315	542548		
30532495010	**BC18555 MW-3**	EPA 9315	542548		
30532495011	**BC18556 MW-2**	EPA 9315	542548		
30532495012	**BC18557 FB-1**	EPA 9315	542548		
30532495013	**BC18558 MW-1**	EPA 9315	542548		
30532495014	**BC18559 MW-44H**	EPA 9315	542554		
30532495015	**BC18559 MW-44H MS**	EPA 9315	542554		
30532495016	**BC18559 MW-44H MSD**	EPA 9315	542554		
30532495017	**BC18560 MW-57H**	EPA 9315	542548		
30532495018	**BC18561 MW-57H Dup**	EPA 9315	542548		
30532495019	**BC18562 MW-54H**	EPA 9315	542548		
30532495020	**BC19097 MW-36H**	EPA 9315	542557		
30532495021	**BC19097 MW-36H MS**	EPA 9315	542557		
30532495022	**BC19097 MW-36H MSD**	EPA 9315	542557		
30532495023	**BC19098 MW-18**	EPA 9315	542548		
30532495024	**BC19099 MW-37H**	EPA 9315	542548		
30532495025	**BC19100 MW-17**	EPA 9315	542548		
30532495026	**BC19101 MW-38H**	EPA 9315	542548		
30532495027	**BC19102 MW-53H**	EPA 9315	542554		
30532495028	**BC19103 MW-5**	EPA 9315	542554		
30532495029	**BC19104 MW-11**	EPA 9315	542554		
30532495030	**BC19105 MW-21**	EPA 9315	542554		
30532495031	**BC19106 MW-12**	EPA 9315	542554		
30532495032	**BC19107 MW-13**	EPA 9315	542554		
30532495033	**BC19108 MW-48H**	EPA 9315	542554		
30532495034	**BC19109 MW-48H Dup**	EPA 9315	542554		
30532495035	**BC19110 MW-45H**	EPA 9315	542554		
30532495036	**BC19111 MW-41H**	EPA 9315	542554		
30532495037	**BC19112 MW-35H**	EPA 9315	542554		
30532495038	**BC19113 MW-24**	EPA 9315	542554		
30532495039	**BC19114 MW-23**	EPA 9315	542554		
30532495040	**BC19115 MW-6**	EPA 9315	542554		
30532495041	**BC19116 MW-6 Dup**	EPA 9315	542554		
30532495042	**BC19117 MW-7**	EPA 9315	542554		
30532495043	**BC19118 MW-8**	EPA 9315	542554		
30532495044	**BC19119 MW-9**	EPA 9315	542557		
30532495045	**BC19273 MW-25**	EPA 9315	542557		
30532495046	**BC19274 MW-10**	EPA 9315	542557		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGREAP_1388
Pace Project No.:	30532495

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532495047	**BC19275 MW-14**	EPA 9315	542557		
30532495048	**BC19276 MW-49H**	EPA 9315	542557		
30532495049	**BC19277 FB-4**	EPA 9315	542557		
30532495050	**BC19278 MW-34HA**	EPA 9315	542557		
30532495051	**BC19279 FB-5**	EPA 9315	542557		
30532495052	**BC19280 EB-1**	EPA 9315	542557		
30532495053	**BC19281 EB-2**	EPA 9315	542557		
30532495054	**BC19282 MW-16**	EPA 9315	542557		
30532495055	**BC19283 MW-39H**	EPA 9315	542557		
30532495056	**BC19284 MW-15**	EPA 9315	542557		
30532495057	**BC19285 FB-3**	EPA 9315	542557		
30532495058	**BC19286 MW-26**	EPA 9315	542557		
30532495059	**BC19287 MW-27**	EPA 9315	542557		
30532495060	**BC19288 MW-27 Dup**	EPA 9315	542557		
30532495061	**BC19289 MW-28**	EPA 9315	542560		
30532495062	**BC19290 MW-29**	EPA 9315	542560		
30532495063	**BC19291 MW-30**	EPA 9315	542560		
30532495064	**BC19292 MW-42H**	EPA 9315	542560		
30532495065	**BC19293 MW-43H**	EPA 9315	542560		
30532495001	**BC18512 MW-31**	EPA 9320	542551		
30532495002	**BC18513 MW-31 Dup**	EPA 9320	542551		
30532495003	**BC18514 MW-33**	EPA 9320	542551		
30532495004	**BC18514 MW-33 MS**	EPA 9320	542551		
30532495005	**BC18514 MW-33 MSD**	EPA 9320	542551		
30532495006	**BC18515 FB-2**	EPA 9320	542551		
30532495007	**BC18516 MW-32**	EPA 9320	542551		
30532495008	**BC18517 PZ-4**	EPA 9320	542551		
30532495009	**BC18518 MW-40H**	EPA 9320	542551		
30532495010	**BC18555 MW-3**	EPA 9320	542551		
30532495011	**BC18556 MW-2**	EPA 9320	542551		
30532495012	**BC18557 FB-1**	EPA 9320	542551		
30532495013	**BC18558 MW-1**	EPA 9320	542551		
30532495014	**BC18559 MW-44H**	EPA 9320	542555		
30532495015	**BC18559 MW-44H MS**	EPA 9320	542555		
30532495016	**BC18559 MW-44H MSD**	EPA 9320	542555		
30532495017	**BC18560 MW-57H**	EPA 9320	542551		
30532495018	**BC18561 MW-57H Dup**	EPA 9320	542551		
30532495019	**BC18562 MW-54H**	EPA 9320	542551		
30532495020	**BC19097 MW-36H**	EPA 9320	542558		
30532495021	**BC19097 MW-36H MS**	EPA 9320	542558		
30532495022	**BC19097 MW-36H MSD**	EPA 9320	542558		
30532495023	**BC19098 MW-18**	EPA 9320	542551		
30532495024	**BC19099 MW-37H**	EPA 9320	542551		
30532495025	**BC19100 MW-17**	EPA 9320	542551		
30532495026	**BC19101 MW-38H**	EPA 9320	542551		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532495027	**BC19102 MW-53H**	EPA 9320	542555		
30532495028	**BC19103 MW-5**	EPA 9320	542555		
30532495029	**BC19104 MW-11**	EPA 9320	542555		
30532495030	**BC19105 MW-21**	EPA 9320	542555		
30532495031	**BC19106 MW-12**	EPA 9320	542555		
30532495032	**BC19107 MW-13**	EPA 9320	542555		
30532495033	**BC19108 MW-48H**	EPA 9320	542555		
30532495034	**BC19109 MW-48H Dup**	EPA 9320	542555		
30532495035	**BC19110 MW-45H**	EPA 9320	542555		
30532495036	**BC19111 MW-41H**	EPA 9320	542555		
30532495037	**BC19112 MW-35H**	EPA 9320	542555		
30532495038	**BC19113 MW-24**	EPA 9320	542555		
30532495039	**BC19114 MW-23**	EPA 9320	542555		
30532495040	**BC19115 MW-6**	EPA 9320	542555		
30532495041	**BC19116 MW-6 Dup**	EPA 9320	542555		
30532495042	**BC19117 MW-7**	EPA 9320	542555		
30532495043	**BC19118 MW-8**	EPA 9320	542555		
30532495044	**BC19119 MW-9**	EPA 9320	542558		
30532495045	**BC19273 MW-25**	EPA 9320	542558		
30532495046	**BC19274 MW-10**	EPA 9320	542558		
30532495047	**BC19275 MW-14**	EPA 9320	542558		
30532495048	**BC19276 MW-49H**	EPA 9320	542558		
30532495049	**BC19277 FB-4**	EPA 9320	542558		
30532495050	**BC19278 MW-34HA**	EPA 9320	542558		
30532495051	**BC19279 FB-5**	EPA 9320	542558		
30532495052	**BC19280 EB-1**	EPA 9320	542558		
30532495053	**BC19281 EB-2**	EPA 9320	542558		
30532495054	**BC19282 MW-16**	EPA 9320	542558		
30532495055	**BC19283 MW-39H**	EPA 9320	542558		
30532495056	**BC19284 MW-15**	EPA 9320	542558		
30532495057	**BC19285 FB-3**	EPA 9320	542558		
30532495058	**BC19286 MW-26**	EPA 9320	542558		
30532495059	**BC19287 MW-27**	EPA 9320	542558		
30532495060	**BC19288 MW-27 Dup**	EPA 9320	542558		
30532495061	**BC19289 MW-28**	EPA 9320	542562		
30532495062	**BC19290 MW-29**	EPA 9320	542562		
30532495063	**BC19291 MW-30**	EPA 9320	542562		
30532495064	**BC19292 MW-42H**	EPA 9320	542562		
30532495065	**BC19293 MW-43H**	EPA 9320	542562		
30532495001	**BC18512 MW-31**	Total Radium Calculation	548672		
30532495002	**BC18513 MW-31 Dup**	Total Radium Calculation	548672		
30532495003	**BC18514 MW-33**	Total Radium Calculation	548672		
30532495006	**BC18515 FB-2**	Total Radium Calculation	548672		
30532495007	**BC18516 MW-32**	Total Radium Calculation	548672		
30532495008	**BC18517 PZ-4**	Total Radium Calculation	548672		
30532495009	**BC18518 MW-40H**	Total Radium Calculation	548672		
30532495010	**BC18555 MW-3**	Total Radium Calculation	548672		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532495011	**BC18556 MW-2**	Total Radium Calculation	548672		
30532495012	**BC18557 FB-1**	Total Radium Calculation	548672		
30532495013	**BC18558 MW-1**	Total Radium Calculation	548672		
30532495014	**BC18559 MW-44H**	Total Radium Calculation	549029		
30532495017	**BC18560 MW-57H**	Total Radium Calculation	548672		
30532495018	**BC18561 MW-57H Dup**	Total Radium Calculation	548672		
30532495019	**BC18562 MW-54H**	Total Radium Calculation	548672		
30532495020	**BC19097 MW-36H**	Total Radium Calculation	549027		
30532495023	**BC19098 MW-18**	Total Radium Calculation	548672		
30532495024	**BC19099 MW-37H**	Total Radium Calculation	548672		
30532495025	**BC19100 MW-17**	Total Radium Calculation	548672		
30532495026	**BC19101 MW-38H**	Total Radium Calculation	548672		
30532495027	**BC19102 MW-53H**	Total Radium Calculation	549029		
30532495028	**BC19103 MW-5**	Total Radium Calculation	549029		
30532495029	**BC19104 MW-11**	Total Radium Calculation	549029		
30532495030	**BC19105 MW-21**	Total Radium Calculation	549029		
30532495031	**BC19106 MW-12**	Total Radium Calculation	549029		
30532495032	**BC19107 MW-13**	Total Radium Calculation	549029		
30532495033	**BC19108 MW-48H**	Total Radium Calculation	549029		
30532495034	**BC19109 MW-48H Dup**	Total Radium Calculation	549029		
30532495035	**BC19110 MW-45H**	Total Radium Calculation	549029		
30532495036	**BC19111 MW-41H**	Total Radium Calculation	549029		
30532495037	**BC19112 MW-35H**	Total Radium Calculation	549029		
30532495038	**BC19113 MW-24**	Total Radium Calculation	549029		
30532495039	**BC19114 MW-23**	Total Radium Calculation	549029		
30532495040	**BC19115 MW-6**	Total Radium Calculation	549029		
30532495041	**BC19116 MW-6 Dup**	Total Radium Calculation	549029		
30532495042	**BC19117 MW-7**	Total Radium Calculation	549029		
30532495043	**BC19118 MW-8**	Total Radium Calculation	549029		
30532495044	**BC19119 MW-9**	Total Radium Calculation	549027		
30532495045	**BC19273 MW-25**	Total Radium Calculation	549027		
30532495046	**BC19274 MW-10**	Total Radium Calculation	549027		
30532495047	**BC19275 MW-14**	Total Radium Calculation	549027		
30532495048	**BC19276 MW-49H**	Total Radium Calculation	549027		
30532495049	**BC19277 FB-4**	Total Radium Calculation	549027		
30532495050	**BC19278 MW-34HA**	Total Radium Calculation	549027		
30532495051	**BC19279 FB-5**	Total Radium Calculation	549027		
30532495052	**BC19280 EB-1**	Total Radium Calculation	549027		
30532495053	**BC19281 EB-2**	Total Radium Calculation	549027		
30532495054	**BC19282 MW-16**	Total Radium Calculation	549027		
30532495055	**BC19283 MW-39H**	Total Radium Calculation	549027		
30532495056	**BC19284 MW-15**	Total Radium Calculation	549027		
30532495057	**BC19285 FB-3**	Total Radium Calculation	549027		
30532495058	**BC19286 MW-26**	Total Radium Calculation	549027		
30532495059	**BC19287 MW-27**	Total Radium Calculation	549027		
30532495060	**BC19288 MW-27 Dup**	Total Radium Calculation	549027		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGREAP_1388
Pace Project No.: 30532495

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532495061	**BC19289 MW-28**	Total Radium Calculation	549030		
30532495062	**BC19290 MW-29**	Total Radium Calculation	549030		
30532495063	**BC19291 MW-30**	Total Radium Calculation	549030		
30532495064	**BC19292 MW-42H**	Total Radium Calculation	549030		
30532495065	**BC19293 MW-43H**	Total Radium Calculation	549030		

WO#: 30532495

30532495

CHAIN-OF-

The Chain-of-Custo … d accurately.

Page : 1 Of 5

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	28 days

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1388

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	
1	BC18512	MW-31	APCO-GC-AP-MW-31	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	9:15	1			X		X	X	X		001
2	BC18513	MW-31 Dup	APCO-GC-AP-MW-31	APCO_GreeneCounty_AshPond	x			GW	G	10/5/2022	9:15	1			X		X	X	X		002
3	BC18514	MW-33	APCO-GC-AP-MW-33	APCO_GreeneCounty_AshPond		x		GW	G	10/5/2022	10:10	3			X		X	X	X		MS/MSD (N3) 004,005
4	BC18515	FB-2	APCO-GC-AP-FB-02	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	10:50	1			X		X	X	X		006
5	BC18516	MW-32	APCO-GC-AP-MW-32	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	11:20	1			X		X	X	X		007
6	BC18517	PZ-4	APCO-GC-AP-PZ-4	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	14:07	1			X		X	X	X		008
7	BC18518	MW-40H	APCO-GC-AP-MW-40H	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	15:57	1			X		X	X	X		009
8	BC18555	MW-3	APCO-GC-AP-MW-3	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	8:34	1			X		X	X	X		~~010~~ 010 MS/10/25/22
9	BC18556	MW-2	APCO-GC-AP-MW-2	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	9:29	1			X		X	X	X		011
10	BC18557	FB-1	APCO-GC-AP-FB-01	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	9:55	1			X		X	X	X		012
11	BC18558	MW-1	APCO-GC-AP-MW-1	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	10:27	1			X		X	X	X		013
12	BC18559	MW-44H	APCO-GC-AP-MW-44H	APCO_GreeneCounty_AshPond		x		GW	G	10/5/2022	13:34	3			X		X	X	X		MS/MSD 014,015,016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	10/20/2022	15:18	/ Pace	10/25/22	830	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30532495

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 5

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	28 days

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1388

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives H2SO4	Preservatives HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	
1	BC18560	MW-57H	APCO-GC-AP-MW-57H	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	14:34	1			X		X	X	X		017
2	BC18561	MW-57H Dup	APCO-GC-AP-MW-57H	APCO_GreeneCounty_AshPond	x			GW	G	10/5/2022	14:34	1			X		X	X	X		018
3	BC18562	MW-54H	APCO-GC-AP-MW-54H	APCO_GreeneCounty_AshPond				GW	G	10/5/2022	16:22	1			X		X	X	X		019
4	BC19097	MW-36H	APCO-GC-AP-MW-36H	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	12:33	1			X		X	X	X		MS/MSD (020,021,022
5	BC19098	MW-18	APCO-GC-AP-MW-18	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	13:42	1			X		X	X	X		023
6	BC19099	MW-37H	APCO-GC-AP-MW-37H	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	15:20	1			X		X	X	X		024
7	BC19100	MW-17	APCO-GC-AP-MW-17	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	8:53	1			X		X	X	X		025
8	BC19101	MW-38H	APCO-GC-AP-MW-38H	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	11:08	1			X		X	X	X		026
9	BC19102	MW-53H	APCO-GC-AP-MW-53H	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	11:43	1			X		X	X	X		027
10	BC19103	MW-5	APCO-GC-AP-MW-5	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	12:37	1			X		X	X	X		028
11	BC19104	MW-11	APCO-GC-AP-MW-11	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	13:39	1			X		X	X	X		029
12	BC19105	MW-21	APCO-GC-AP-MW-21	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	14:30	1			X		X	X	X		030

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	10/20/2022	15:18	Pace	10/25/22	930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30532495

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 3 Of 5

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101
Fax:	
Requested Due Date:	28 days

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1388

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

ITEM #	SAMPLE ID	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives H2SO4	Preservatives HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	
1	BC19106	MW-12	APCO-GC-AP-MW-12	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	15:25	1			X		X	X	X		031
2	BC19107	MW-13	APCO-GC-AP-MW-13	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	16:15	1			X		X	X	X		032
3	BC19108	MW-48H	APCO-GC-AP-MW-48H	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	9:22	1			X		X	X	X		033
4	BC19109	MW-48H Dup	APCO-GC-AP-MW-48H	APCO_GreeneCounty_AshPond	x			GW	G	10/18/2022	9:22	1			X		X	X	X		034
5	BC19110	MW-45H	APCO-GC-AP-MW-45H	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	10:30	1			X		X	X	X		035
6	BC19111	MW-41H	APCO-GC-AP-MW-41H	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	11:22	1			X		X	X	X		036
7	BC19112	MW-35H	APCO-GC-AP-MW-35H	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	13:33	1			X		X	X	X		037
8	BC19113	MW-24	APCO-GC-AP-MW-24	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	14:25	1			X		X	X	X		038
9	BC19114	MW-23	APCO-GC-AP-MW-23	APCO_GreeneCounty_AshPond				GW	G	10/17/2022	15:02	1			X		X	X	X		039
10	BC19115	MW-6	APCO-GC-AP-MW-6	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	9:10	1			X		X	X	X		040
11	BC19116	MW-6 Dup	APCO-GC-AP-MW-6	APCO_GreeneCounty_AshPond	x			GW	G	10/18/2022	9:10	1			X		X	X	X		041
12	BC19117	MW-7	APCO-GC-AP-MW-7	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	10:00	1			X		X	X	X		042

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	10/20/2022	15:18		10/25/22	930				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30532495

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 4 Of 5

Section A
Required Client Information:

Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: tbwill@southernco.com
Phone: 205-664-6101 Fax:
Requested Due Date: 28 days

Section B
Required Project Information:

Report To: Brooke Caton
Copy To: Renee Jernigan & Blaine Denton
Purchase Order #: APC10755638
Project Name: Plant Greene County Ash Pond
Project Number: WMWGREAP_1388

Section C
Invoice Information:

Attention: Brooke Caton
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	
1	BC19118	MW-8	APCO-GC-AP-MW-8	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	10:38	1			X		X	X	X		043
2	BC19119	MW-9	APCO-GC-AP-MW-9	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	11:15	1			X		X	X	X		044
3	BC19273	MW-25	APCO-GC-AP-MW-25	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	14:58	1			X		X	X	X		045
4	BC19274	MW-10	APCO-GC-AP-MW-10	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	15:53	1			X		X	X	X		046
5	BC19275	MW-14	APCO-GC-AP-MW-14	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	17:00	1			X		X	X	X		047
6	BC19276	MW-49H	APCO-GC-AP-MW-49H	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	6:53	1			X		X	X	X		048
7	BC19277	FB-4	APCO-GC-AP-FB-04	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	7:05	1			X		X	X	X		049
8	BC19278	MW-34HA	APCO-GC-AP-MW-34HA	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	7:50	1			X		X	X	X		050
9	BC19279	FB-5	APCO-GC-AP-FB-05	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	8:15	1			X		X	X	X		051
10	BC19280	EB-1	APCO-GC-AP-EB-01	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	12:30	1			X		X	X	X		052
11	BC19281	EB-2	APCO-GC-AP-EB-02	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	12:50	1			X		X	X	X		053
12	BC19282	MW-16	APCO-GC-AP-MW-16	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	14:25	1			X		X	X	X		054

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	10/20/2022	15:18		10/21/22	930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30532495

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 5 Of 5

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	28 days

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Greene County Ash Pond
Project Number:	WMWGREAP_1388

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives H2SO4	Preservatives HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	
1	BC19283	MW-39H	APCO-GC-AP-MW-39H	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	15:20	1			X		X	X	X		055
2	BC19284	MW-15	APCO-GC-AP-MW-15	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	16:27	1			X		X	X	X		056
3	BC19285	FB-3	APCO-GC-AP-FB-03	APCO_GreeneCounty_AshPond				GW	G	10/18/2022	16:45	1			X		X	X	X		057
4	BC19286	MW-26	APCO-GC-AP-MW-26	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	9:30	1			X		X	X	X		058
5	BC19287	MW-27	APCO-GC-AP-MW-27	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	10:17	1			X		X	X	X		059
6	BC19288	MW-27 Dup	APCO-GC-AP-MW-27	APCO_GreeneCounty_AshPond	X			GW	G	10/19/2022	10:17	1			X		X	X	X		060
7	BC19289	MW-28	APCO-GC-AP-MW-28	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	11:20	1			X		X	X	X		061
8	BC19290	MW-29	APCO-GC-AP-MW-29	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	12:10	1			X		X	X	X		062
9	BC19291	MW-30	APCO-GC-AP-MW-30	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	13:05	1			X		X	X	X		063
10	BC19292	MW-42H	APCO-GC-AP-MW-42H	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	14:23	1			X		X	X	X		064
11	BC19293	MW-43H	APCO-GC-AP-MW-43H	APCO_GreeneCounty_AshPond				GW	G	10/19/2022	15:15	1			X		X	X	X		065
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	10/20/2022	15:18		10/25/22	930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace ANALYTICAL SERVICES	**DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh**
	Effective Date: 10/03/2022

Client Name: Alabama Power Company **Project #:** 30532495

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 5870 1899 0032

Custody Seal on Cooler/Box Present: ☑ Yes ☐No **Seals Intact:** ☑ Yes ☐No

Thermometer Used: — **Type of Ice:** Wet Blue None

Examined By	TH
Labeled By	TH
Temped By	—

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot#	**D.P.D. Residual Chlorine Lot #**
10D2221	

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓	~~✓~~		5.
-Includes date/time/ID	TH 10/25/22			
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:				Initial when completed TH Date/Time of Preservation Lot# of added Preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed TH Date: 10/25/22 Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

Page 1 of 1

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: RMS
Date: 11/1/2022
Worklist: 69586
Matrix: DW

Method Blank Assessment	
MB Sample ID	2632986
MB concentration:	0.002
M/B Counting Uncertainty:	0.077
MB MDC:	0.204
MB Numerical Performance Indicator:	0.06
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69586	**LCSD69586**
Count Date:	11/21/2022	11/21/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.022	24.022
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.507	0.505
Target Conc. (pCi/L, g, F):	4.738	4.760
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.515	5.036
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.444	0.472
Numerical Performance Indicator:	-0.98	1.14
Percent Recovery:	95.29%	105.80%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS69586	
Duplicate Sample I.D.	LCSD69586	
Sample Result (pCi/L, g, F):	4.515	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.444	
Sample Duplicate Result (pCi/L, g, F):	5.036	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.472	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.574	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.45%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2022	
Sample I.D.	30532495003	
Sample MS I.D.	30532495004	
Sample MSD I.D.	30532495005	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.023	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.264	
MS Target Conc.(pCi/L, g, F):	18.174	
MSD Aliquot (L, g, F):	0.260	
MSD Target Conc. (pCi/L, g, F):	18.489	
MS Spike Uncertainty (calculated):	0.218	
MSD Spike Uncertainty (calculated):	0.222	
Sample Result:	0.408	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.187	
Sample Matrix Spike Result:	18.235	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.200	
Sample Matrix Spike Duplicate Result:	21.763	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.338	
MS Numerical Performance Indicator:	-0.551	
MSD Numerical Performance Indicator:	4.103	
MS Percent Recovery:	98.09%	
MSD Percent Recovery:	115.50%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30532495003	
Sample MS I.D.	30532495004	
Sample MSD I.D.	30532495005	
Sample Matrix Spike Result:	18.235	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.200	
Sample Matrix Spike Duplicate Result:	21.763	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.338	
Duplicate Numerical Performance Indicator:	-3.847	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	16.30%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 11/23/22

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 10/28/2022
Worklist: 69587
Matrix: WT

Method Blank Assessment	
MB Sample ID	2632990
MB concentration:	0.429
M/B 2 Sigma CSU:	0.321
MB MDC:	0.626
MB Numerical Performance Indicator:	2.62
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS69587	LCSD69587
Count Date:	11/3/2022	
Spike I.D.:	22-029	
Decay Corrected Spike Concentration (pCi/mL):	19.678	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.813	
Target Conc. (pCi/L, g, F):	4.839	
Uncertainty (Calculated):	0.348	
Result (pCi/L, g, F):	4.022	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.952	
Numerical Performance Indicator:	-1.58	
Percent Recovery:	83.12%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2022	
Sample I.D.	30532495003	
Sample MS I.D.	30532495004	
Sample MSD I.D.	30532495005	
Spike I.D.:	22-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	19.868	
Spike Volume Used in MS (mL):	0.40	
Spike Volume Used in MSD (mL):	0.40	
MS Aliquot (L, g, F):	0.809	
MS Target Conc.(pCi/L, g, F):	9.828	
MSD Aliquot (L, g, F):	0.808	
MSD Target Conc. (pCi/L, g, F):	9.831	
MS Spike Uncertainty (calculated):	0.708	
MSD Spike Uncertainty (calculated):	0.708	
Sample Result:	0.611	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.359	
Sample Matrix Spike Result:	10.353	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.030	
Sample Matrix Spike Duplicate Result:	9.868	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.108	
MS Numerical Performance Indicator:	-0.077	
MSD Numerical Performance Indicator:	-0.500	
MS Percent Recovery:	99.13%	
MSD Percent Recovery:	94.16%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30532495003	
Sample MS I.D.	30532495004	
Sample MSD I.D.	30532495005	
Sample Matrix Spike Result:	10.353	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.030	
Sample Matrix Spike Duplicate Result:	9.868	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.108	
Duplicate Numerical Performance Indicator:	0.325	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	5.15%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAM 11/23/22

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	RMS
Date:	11/1/2022
Worklist:	69588
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2632994
MB concentration:	0.036
M/B Counting Uncertainty:	0.062
MB MDC:	0.138
MB Numerical Performance Indicator:	1.14
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69588	**LCSD69588**
Count Date:	11/21/2022	11/21/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.022	24.022
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.510	0.508
Target Conc. (pCi/L, g, F):	4.707	4.730
Uncertainty (Calculated):	0.056	0.057
Result (pCi/L, g, F):	4.843	4.099
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.454	0.410
Numerical Performance Indicator:	0.58	-2.99
Percent Recovery:	102.88%	86.65%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS69588	
Duplicate Sample I.D.	LCSD69588	
Sample Result (pCi/L, g, F):	4.843	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.454	
Sample Duplicate Result (pCi/L, g, F):	4.099	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.410	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.384	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	17.13%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2022	
Sample I.D.	30532495014	
Sample MS I.D.	30532495015	
Sample MSD I.D.	30532495016	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.023	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.301	
MS Target Conc.(pCi/L, g, F):	15.969	
MSD Aliquot (L, g, F):	0.318	
MSD Target Conc. (pCi/L, g, F):	15.105	
MS Spike Uncertainty (calculated):	0.192	
MSD Spike Uncertainty (calculated):	0.181	
Sample Result:	0.288	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.165	
Sample Matrix Spike Result:	16.268	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.074	
Sample Matrix Spike Duplicate Result:	15.576	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.032	
MS Numerical Performance Indicator:	0.020	
MSD Numerical Performance Indicator:	0.338	
MS Percent Recovery:	100.07%	
MSD Percent Recovery:	101.21%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30532495014	
Sample MS I.D.	30532495015	
Sample MSD I.D.	30532495016	
Sample Matrix Spike Result:	16.268	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.074	
Sample Matrix Spike Duplicate Result:	15.576	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.032	
Duplicate Numerical Performance Indicator:	0.911	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	1.13%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAM 11/23/22

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test: Ra-228
Analyst: JJS1
Date: 10/28/2022
Worklist: 69589
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2632995
MB concentration:	0.925
M/B 2 Sigma CSU:	0.414
MB MDC:	0.678
MB Numerical Performance Indicator:	4.38
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS69589	LCSD69589
Count Date:	11/3/2022	
Spike I.D.:	22-029	
Decay Corrected Spike Concentration (pCi/mL):	19.677	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	4.917	
Uncertainty (Calculated):	0.354	
Result (pCi/L, g, F):	4.379	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.017	
Numerical Performance Indicator:	-0.98	
Percent Recovery:	89.07%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2022	
Sample I.D.	30532495014	
Sample MS I.D.	30532495015	
Sample MSD I.D.	30532495016	
Spike I.D.:	22-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	19.867	
Spike Volume Used in MS (mL):	0.40	
Spike Volume Used in MSD (mL):	0.40	
MS Aliquot (L, g, F):	0.808	
MS Target Conc.(pCi/L, g, F):	9.834	
MSD Aliquot (L, g, F):	0.801	
MSD Target Conc. (pCi/L, g, F):	9.920	
MS Spike Uncertainty (calculated):	0.708	
MSD Spike Uncertainty (calculated):	0.714	
Sample Result:	0.883	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.423	
Sample Matrix Spike Result:	8.354	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.682	
Sample Matrix Spike Duplicate Result:	9.467	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.871	
MS Numerical Performance Indicator:	-2.472	
MSD Numerical Performance Indicator:	-1.279	
MS Percent Recovery:	75.97%	
MSD Percent Recovery:	86.53%	
MS Status vs Numerical Indicator:	Warning	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30532495014	
Sample MS I.D.	30532495015	
Sample MSD I.D.	30532495016	
Sample Matrix Spike Result:	8.354	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.682	
Sample Matrix Spike Duplicate Result:	9.467	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.871	
Duplicate Numerical Performance Indicator:	-0.868	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	13.01%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

UAM 11/23/22

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	RMS
Date:	11/1/2022
Worklist:	69590
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2632997
MB concentration:	0.029
M/B Counting Uncertainty:	0.059
MB MDC:	0.139
MB Numerical Performance Indicator:	0.96
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69590	**LCSD69590**
Count Date:	11/22/2022	11/22/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.022	24.022
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.506
Target Conc. (pCi/L, g, F):	4.733	4.745
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.461	4.684
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.433	0.464
Numerical Performance Indicator:	-1.22	-0.25
Percent Recovery:	94.25%	98.72%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS69590	
Duplicate Sample I.D.	LCSD69590	
Sample Result (pCi/L, g, F):	4.461	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.433	
Sample Duplicate Result (pCi/L, g, F):	4.684	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.464	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.689	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.64%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/17/2022	
Sample I.D.	30532495020	
Sample MS I.D.	30532495021	
Sample MSD I.D.	30532495022	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.023	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.297	
MS Target Conc.(pCi/L, g, F):	16.174	
MSD Aliquot (L, g, F):	0.284	
MSD Target Conc. (pCi/L, g, F):	16.919	
MS Spike Uncertainty (calculated):	0.194	
MSD Spike Uncertainty (calculated):	0.203	
Sample Result:	0.183	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.145	
Sample Matrix Spike Result:	17.086	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.159	
Sample Matrix Spike Duplicate Result:	17.613	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.154	
MS Numerical Performance Indicator:	1.208	
MSD Numerical Performance Indicator:	0.848	
MS Percent Recovery:	104.51%	
MSD Percent Recovery:	103.02%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30532495020	
Sample MS I.D.	30532495021	
Sample MSD I.D.	30532495022	
Sample Matrix Spike Result:	17.086	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.159	
Sample Matrix Spike Duplicate Result:	17.613	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.154	
Duplicate Numerical Performance Indicator:	-0.631	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	1.43%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAM 11/23/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-228
Analyst: ZPC
Date: 10/28/2022
Worklist: 69591
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2632998
MB concentration:	-0.045
M/B 2 Sigma CSU:	0.291
MB MDC:	0.694
MB Numerical Performance Indicator:	-0.31
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS69591	**LCSD69591**
Count Date:	11/3/2022	
Spike I.D.:	22-029	
Decay Corrected Spike Concentration (pCi/mL):	19.677	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.812	
Target Conc. (pCi/L, g, F):	4.844	
Uncertainty (Calculated):	0.349	
Result (pCi/L, g, F):	3.718	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.901	
Numerical Performance Indicator:	-2.28	
Percent Recovery:	76.76%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/17/2022	
Sample I.D.	30532495020	
Sample MS I.D.	30532495021	
Sample MSD I.D.	30532495022	
Spike I.D.:	22-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	19.788	
Spike Volume Used in MS (mL):	0.40	
Spike Volume Used in MSD (mL):	0.40	
MS Aliquot (L, g, F):	0.810	
MS Target Conc.(pCi/L, g, F):	9.777	
MSD Aliquot (L, g, F):	0.802	
MSD Target Conc. (pCi/L, g, F):	9.872	
MS Spike Uncertainty (calculated):	0.704	
MSD Spike Uncertainty (calculated):	0.711	
Sample Result:	0.467	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.330	
Sample Matrix Spike Result:	8.642	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.729	
Sample Matrix Spike Duplicate Result:	8.640	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.738	
MS Numerical Performance Indicator:	-1.655	
MSD Numerical Performance Indicator:	-1.746	
MS Percent Recovery:	83.62%	
MSD Percent Recovery:	82.79%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30532495020	
Sample MS I.D.	30532495021	
Sample MSD I.D.	30532495022	
Sample Matrix Spike Result:	8.642	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.729	
Sample Matrix Spike Duplicate Result:	8.640	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.738	
Duplicate Numerical Performance Indicator:	0.002	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	1.00%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

uAm 11/23/22

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

PaceAnalytical™
www.pacelabs.com

Test: Ra-226
Analyst: RMS
Date: 11/1/2022
Worklist: 69592
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2632999
MB concentration:	0.035
M/B Counting Uncertainty:	0.070
MB MDC:	0.163
MB Numerical Performance Indicator:	0.99
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69592	**LCSD69592**
Count Date:	11/22/2022	11/22/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.022	24.022
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.507
Target Conc. (pCi/L, g, F):	4.770	4.735
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.288	4.633
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.428	0.446
Numerical Performance Indicator:	-2.19	-0.45
Percent Recovery:	89.89%	97.84%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS69592	
Duplicate Sample I.D.	LCSD69592	
Sample Result (pCi/L, g, F):	4.288	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.428	
Sample Duplicate Result (pCi/L, g, F):	4.633	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.446	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.094	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.47%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

iAm 11/23/22

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	10/28/2022
Worklist:	69593
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2633001
MB concentration:	0.108
M/B 2 Sigma CSU:	0.317
MB MDC:	0.714
MB Numerical Performance Indicator:	0.67
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69593	**LCSD69593**
Count Date:	11/1/2022	11/1/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.690	19.690
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.813	0.805
Target Conc. (pCi/L, g, F):	4.844	4.889
Uncertainty (Calculated):	0.349	0.352
Result (pCi/L, g, F):	5.042	4.131
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.132	0.994
Numerical Performance Indicator:	0.33	-1.41
Percent Recovery:	104.09%	84.48%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS69593	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD69593	
Sample Result (pCi/L, g, F):	5.042	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.132	
Sample Duplicate Result (pCi/L, g, F):	4.131	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.994	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.185	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	20.80%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

UAM 11/23/22

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-52HO	COND	Conductivity	10/3/2022 16:06	784.25	uS/cm
GC-AP-MW-52HO	DO	DO	10/3/2022 16:06	0.1	mg/L
GC-AP-MW-52HO	DTW	Depth to Water Detail	10/3/2022 16:06	10.58	ft
GC-AP-MW-52HO	ORP	Oxidation Reduction Potention	10/3/2022 16:06	-17.06	mv
GC-AP-MW-52HO	PH	pH	10/3/2022 16:06	5.83	SU
GC-AP-MW-52HO	TEMP	Temperature	10/3/2022 16:06	18.88	C
GC-AP-MW-52HO	TURB	Turbidity	10/3/2022 16:06	5.69	NTU
GC-AP-MW-52HO	COND	Conductivity	10/3/2022 16:11	758.3	uS/cm
GC-AP-MW-52HO	DO	DO	10/3/2022 16:11	0.09	mg/L
GC-AP-MW-52HO	DTW	Depth to Water Detail	10/3/2022 16:11	10.58	ft
GC-AP-MW-52HO	ORP	Oxidation Reduction Potention	10/3/2022 16:11	-5.06	mv
GC-AP-MW-52HO	PH	pH	10/3/2022 16:11	5.87	SU
GC-AP-MW-52HO	TEMP	Temperature	10/3/2022 16:11	18.91	C
GC-AP-MW-52HO	TURB	Turbidity	10/3/2022 16:11	4.86	NTU
GC-AP-MW-52HO	COND	Conductivity	10/3/2022 16:16	780.66	uS/cm
GC-AP-MW-52HO	DO	DO	10/3/2022 16:16	0.09	mg/L
GC-AP-MW-52HO	DTW	Depth to Water Detail	10/3/2022 16:16	10.58	ft
GC-AP-MW-52HO	ORP	Oxidation Reduction Potention	10/3/2022 16:16	9.21	mv
GC-AP-MW-52HO	PH	pH	10/3/2022 16:16	5.85	SU
GC-AP-MW-52HO	TEMP	Temperature	10/3/2022 16:16	18.95	C
GC-AP-MW-52HO	TURB	Turbidity	10/3/2022 16:16	4.23	NTU
GC-AP-MW-52HO	COND	Conductivity	10/3/2022 16:21	766.72	uS/cm
GC-AP-MW-52HO	DO	DO	10/3/2022 16:21	0.08	mg/L
GC-AP-MW-52HO	DTW	Depth to Water Detail	10/3/2022 16:21	10.58	ft
GC-AP-MW-52HO	ORP	Oxidation Reduction Potention	10/3/2022 16:21	22.05	mv
GC-AP-MW-52HO	PH	pH	10/3/2022 16:21	5.84	SU
GC-AP-MW-52HO	SULFIDE	Sulfide	10/3/2022 16:21	0	mg/L
GC-AP-MW-52HO	TEMP	Temperature	10/3/2022 16:21	18.91	C
GC-AP-MW-52HO	TURB	Turbidity	10/3/2022 16:21	3.17	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-46HO	COND	Conductivity	10/4/2022 8:18	445.48	uS/cm
GC-AP-MW-46HO	DO	DO	10/4/2022 8:18	0.16	mg/L
GC-AP-MW-46HO	DTW	Depth to Water Detail	10/4/2022 8:18	16.85	ft
GC-AP-MW-46HO	ORP	Oxidation Reduction Potention	10/4/2022 8:18	214.17	mv
GC-AP-MW-46HO	PH	pH	10/4/2022 8:18	6.34	SU
GC-AP-MW-46HO	TEMP	Temperature	10/4/2022 8:18	19.67	C
GC-AP-MW-46HO	TURB	Turbidity	10/4/2022 8:18	12.3	NTU
GC-AP-MW-46HO	COND	Conductivity	10/4/2022 8:23	442.27	uS/cm
GC-AP-MW-46HO	DO	DO	10/4/2022 8:23	0.12	mg/L
GC-AP-MW-46HO	DTW	Depth to Water Detail	10/4/2022 8:23	16.85	ft
GC-AP-MW-46HO	ORP	Oxidation Reduction Potention	10/4/2022 8:23	217.79	mv
GC-AP-MW-46HO	PH	pH	10/4/2022 8:23	6.29	SU
GC-AP-MW-46HO	TEMP	Temperature	10/4/2022 8:23	19.72	C
GC-AP-MW-46HO	TURB	Turbidity	10/4/2022 8:23	8.72	NTU
GC-AP-MW-46HO	COND	Conductivity	10/4/2022 8:28	439.59	uS/cm
GC-AP-MW-46HO	DO	DO	10/4/2022 8:28	0.1	mg/L
GC-AP-MW-46HO	DTW	Depth to Water Detail	10/4/2022 8:28	16.85	ft
GC-AP-MW-46HO	ORP	Oxidation Reduction Potention	10/4/2022 8:28	218.06	mv
GC-AP-MW-46HO	PH	pH	10/4/2022 8:28	6.27	SU
GC-AP-MW-46HO	TEMP	Temperature	10/4/2022 8:28	19.73	C
GC-AP-MW-46HO	TURB	Turbidity	10/4/2022 8:28	6.41	NTU
GC-AP-MW-46HO	COND	Conductivity	10/4/2022 8:33	439.19	uS/cm
GC-AP-MW-46HO	DO	DO	10/4/2022 8:33	0.09	mg/L
GC-AP-MW-46HO	DTW	Depth to Water Detail	10/4/2022 8:33	16.85	ft
GC-AP-MW-46HO	ORP	Oxidation Reduction Potention	10/4/2022 8:33	217.34	mv
GC-AP-MW-46HO	PH	pH	10/4/2022 8:33	6.27	SU
GC-AP-MW-46HO	SULFIDE	Sulfide	10/4/2022 8:33	0	mg/L
GC-AP-MW-46HO	TEMP	Temperature	10/4/2022 8:33	19.78	C
GC-AP-MW-46HO	TURB	Turbidity	10/4/2022 8:33	4.28	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-64HO	COND	Conductivity	10/4/2022 9:25	505.51	uS/cm
GC-AP-MW-64HO	DO	DO	10/4/2022 9:25	0.05	mg/L
GC-AP-MW-64HO	DTW	Depth to Water Detail	10/4/2022 9:25	21.12	ft
GC-AP-MW-64HO	ORP	Oxidation Reduction Potention	10/4/2022 9:25	26.23	mv
GC-AP-MW-64HO	PH	pH	10/4/2022 9:25	6.86	SU
GC-AP-MW-64HO	TEMP	Temperature	10/4/2022 9:25	19.52	C
GC-AP-MW-64HO	TURB	Turbidity	10/4/2022 9:25	7.92	NTU
GC-AP-MW-64HO	COND	Conductivity	10/4/2022 9:30	504.95	uS/cm
GC-AP-MW-64HO	DO	DO	10/4/2022 9:30	0.06	mg/L
GC-AP-MW-64HO	DTW	Depth to Water Detail	10/4/2022 9:30	21.12	ft
GC-AP-MW-64HO	ORP	Oxidation Reduction Potention	10/4/2022 9:30	21.65	mv
GC-AP-MW-64HO	PH	pH	10/4/2022 9:30	6.87	SU
GC-AP-MW-64HO	TEMP	Temperature	10/4/2022 9:30	19.53	C
GC-AP-MW-64HO	TURB	Turbidity	10/4/2022 9:30	6.07	NTU
GC-AP-MW-64HO	COND	Conductivity	10/4/2022 9:35	504.61	uS/cm
GC-AP-MW-64HO	DO	DO	10/4/2022 9:35	0.05	mg/L
GC-AP-MW-64HO	DTW	Depth to Water Detail	10/4/2022 9:35	21.12	ft
GC-AP-MW-64HO	ORP	Oxidation Reduction Potention	10/4/2022 9:35	19.45	mv
GC-AP-MW-64HO	PH	pH	10/4/2022 9:35	6.87	SU
GC-AP-MW-64HO	SULFIDE	Sulfide	10/4/2022 9:35	0	mg/L
GC-AP-MW-64HO	TEMP	Temperature	10/4/2022 9:35	19.53	C
GC-AP-MW-64HO	TURB	Turbidity	10/4/2022 9:35	4.66	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-47HO	COND	Conductivity	10/4/2022 8:13	260.81	uS/cm
GC-AP-MW-47HO	DO	DO	10/4/2022 8:13	0.77	mg/L
GC-AP-MW-47HO	DTW	Depth to Water Detail	10/4/2022 8:13	14.92	ft
GC-AP-MW-47HO	ORP	Oxidation Reduction Potention	10/4/2022 8:13	152.51	mv
GC-AP-MW-47HO	PH	pH	10/4/2022 8:13	5.79	SU
GC-AP-MW-47HO	TEMP	Temperature	10/4/2022 8:13	22.68	C
GC-AP-MW-47HO	TURB	Turbidity	10/4/2022 8:13	3.14	NTU
GC-AP-MW-47HO	COND	Conductivity	10/4/2022 8:18	262.06	uS/cm
GC-AP-MW-47HO	DO	DO	10/4/2022 8:18	1.04	mg/L
GC-AP-MW-47HO	DTW	Depth to Water Detail	10/4/2022 8:18	14.92	ft
GC-AP-MW-47HO	ORP	Oxidation Reduction Potention	10/4/2022 8:18	183.61	mv
GC-AP-MW-47HO	PH	pH	10/4/2022 8:18	5.82	SU
GC-AP-MW-47HO	TEMP	Temperature	10/4/2022 8:18	22.61	C
GC-AP-MW-47HO	TURB	Turbidity	10/4/2022 8:18	2.06	NTU
GC-AP-MW-47HO	COND	Conductivity	10/4/2022 8:23	262.19	uS/cm
GC-AP-MW-47HO	DO	DO	10/4/2022 8:23	1.23	mg/L
GC-AP-MW-47HO	DTW	Depth to Water Detail	10/4/2022 8:23	14.92	ft
GC-AP-MW-47HO	ORP	Oxidation Reduction Potention	10/4/2022 8:23	200.69	mv
GC-AP-MW-47HO	PH	pH	10/4/2022 8:23	5.83	SU
GC-AP-MW-47HO	TEMP	Temperature	10/4/2022 8:23	22.65	C
GC-AP-MW-47HO	TURB	Turbidity	10/4/2022 8:23	2.18	NTU
GC-AP-MW-47HO	COND	Conductivity	10/4/2022 8:28	262.85	uS/cm
GC-AP-MW-47HO	DO	DO	10/4/2022 8:28	1.28	mg/L
GC-AP-MW-47HO	DTW	Depth to Water Detail	10/4/2022 8:28	14.92	ft
GC-AP-MW-47HO	ORP	Oxidation Reduction Potention	10/4/2022 8:28	211.27	mv
GC-AP-MW-47HO	PH	pH	10/4/2022 8:28	5.85	SU
GC-AP-MW-47HO	TEMP	Temperature	10/4/2022 8:28	22.65	C
GC-AP-MW-47HO	TURB	Turbidity	10/4/2022 8:28	2.2	NTU
GC-AP-MW-47HO	COND	Conductivity	10/4/2022 8:33	265.11	uS/cm
GC-AP-MW-47HO	DO	DO	10/4/2022 8:33	1.33	mg/L
GC-AP-MW-47HO	DTW	Depth to Water Detail	10/4/2022 8:33	14.92	ft
GC-AP-MW-47HO	ORP	Oxidation Reduction Potention	10/4/2022 8:33	218.2	mv
GC-AP-MW-47HO	PH	pH	10/4/2022 8:33	5.87	SU
GC-AP-MW-47HO	SULFIDE	Sulfide	10/4/2022 8:33	0	mg/L
GC-AP-MW-47HO	TEMP	Temperature	10/4/2022 8:33	22.71	C
GC-AP-MW-47HO	TURB	Turbidity	10/4/2022 8:33	1.96	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-50HO	COND	Conductivity	10/4/2022 10:21	424.74	uS/cm
GC-AP-MW-50HO	DO	DO	10/4/2022 10:21	0.17	mg/L
GC-AP-MW-50HO	DTW	Depth to Water Detail	10/4/2022 10:21	9.6	ft
GC-AP-MW-50HO	ORP	Oxidation Reduction Potention	10/4/2022 10:21	64.93	mv
GC-AP-MW-50HO	PH	pH	10/4/2022 10:21	6.31	SU
GC-AP-MW-50HO	TEMP	Temperature	10/4/2022 10:21	19.12	C
GC-AP-MW-50HO	TURB	Turbidity	10/4/2022 10:21	2.39	NTU
GC-AP-MW-50HO	COND	Conductivity	10/4/2022 10:26	388.02	uS/cm
GC-AP-MW-50HO	DO	DO	10/4/2022 10:26	0.14	mg/L
GC-AP-MW-50HO	DTW	Depth to Water Detail	10/4/2022 10:26	9.6	ft
GC-AP-MW-50HO	ORP	Oxidation Reduction Potention	10/4/2022 10:26	82.88	mv
GC-AP-MW-50HO	PH	pH	10/4/2022 10:26	6.3	SU
GC-AP-MW-50HO	TEMP	Temperature	10/4/2022 10:26	19.17	C
GC-AP-MW-50HO	TURB	Turbidity	10/4/2022 10:26	2.04	NTU
GC-AP-MW-50HO	COND	Conductivity	10/4/2022 10:31	387.4	uS/cm
GC-AP-MW-50HO	DO	DO	10/4/2022 10:31	0.14	mg/L
GC-AP-MW-50HO	DTW	Depth to Water Detail	10/4/2022 10:31	9.6	ft
GC-AP-MW-50HO	ORP	Oxidation Reduction Potention	10/4/2022 10:31	98.33	mv
GC-AP-MW-50HO	PH	pH	10/4/2022 10:31	6.28	SU
GC-AP-MW-50HO	TEMP	Temperature	10/4/2022 10:31	19.19	C
GC-AP-MW-50HO	TURB	Turbidity	10/4/2022 10:31	2.08	NTU
GC-AP-MW-50HO	COND	Conductivity	10/4/2022 10:36	387.79	uS/cm
GC-AP-MW-50HO	DO	DO	10/4/2022 10:36	0.12	mg/L
GC-AP-MW-50HO	DTW	Depth to Water Detail	10/4/2022 10:36	9.6	ft
GC-AP-MW-50HO	ORP	Oxidation Reduction Potention	10/4/2022 10:36	111.71	mv
GC-AP-MW-50HO	PH	pH	10/4/2022 10:36	6.27	SU
GC-AP-MW-50HO	SULFIDE	Sulfide	10/4/2022 10:36	0	mg/L
GC-AP-MW-50HO	TEMP	Temperature	10/4/2022 10:36	19.26	C
GC-AP-MW-50HO	TURB	Turbidity	10/4/2022 10:36	1.9	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-55HO	COND	Conductivity	10/4/2022 15:52	156.78	uS/cm
GC-AP-MW-55HO	DO	DO	10/4/2022 15:52	6.42	mg/L
GC-AP-MW-55HO	DTW	Depth to Water Detail	10/4/2022 15:52	32.87	ft
GC-AP-MW-55HO	ORP	Oxidation Reduction Potention	10/4/2022 15:52	291.79	mv
GC-AP-MW-55HO	PH	pH	10/4/2022 15:52	4.98	SU
GC-AP-MW-55HO	TEMP	Temperature	10/4/2022 15:52	18.57	C
GC-AP-MW-55HO	TURB	Turbidity	10/4/2022 15:52	45.3	NTU
GC-AP-MW-55HO	COND	Conductivity	10/4/2022 15:57	157.08	uS/cm
GC-AP-MW-55HO	DO	DO	10/4/2022 15:57	6.36	mg/L
GC-AP-MW-55HO	DTW	Depth to Water Detail	10/4/2022 15:57	32.87	ft
GC-AP-MW-55HO	ORP	Oxidation Reduction Potention	10/4/2022 15:57	308.85	mv
GC-AP-MW-55HO	PH	pH	10/4/2022 15:57	5	SU
GC-AP-MW-55HO	TEMP	Temperature	10/4/2022 15:57	18.6	C
GC-AP-MW-55HO	TURB	Turbidity	10/4/2022 15:57	17.7	NTU
GC-AP-MW-55HO	COND	Conductivity	10/4/2022 16:02	155.98	uS/cm
GC-AP-MW-55HO	DO	DO	10/4/2022 16:02	6.29	mg/L
GC-AP-MW-55HO	DTW	Depth to Water Detail	10/4/2022 16:02	32.87	ft
GC-AP-MW-55HO	ORP	Oxidation Reduction Potention	10/4/2022 16:02	315.54	mv
GC-AP-MW-55HO	PH	pH	10/4/2022 16:02	5.02	SU
GC-AP-MW-55HO	TEMP	Temperature	10/4/2022 16:02	18.59	C
GC-AP-MW-55HO	TURB	Turbidity	10/4/2022 16:02	11.5	NTU
GC-AP-MW-55HO	COND	Conductivity	10/4/2022 16:07	157.8	uS/cm
GC-AP-MW-55HO	DO	DO	10/4/2022 16:07	6.26	mg/L
GC-AP-MW-55HO	DTW	Depth to Water Detail	10/4/2022 16:07	32.87	ft
GC-AP-MW-55HO	ORP	Oxidation Reduction Potention	10/4/2022 16:07	319.07	mv
GC-AP-MW-55HO	PH	pH	10/4/2022 16:07	5.03	SU
GC-AP-MW-55HO	TEMP	Temperature	10/4/2022 16:07	18.59	C
GC-AP-MW-55HO	TURB	Turbidity	10/4/2022 16:07	6.17	NTU
GC-AP-MW-55HO	COND	Conductivity	10/4/2022 16:12	158.32	uS/cm
GC-AP-MW-55HO	DO	DO	10/4/2022 16:12	6.23	mg/L
GC-AP-MW-55HO	DTW	Depth to Water Detail	10/4/2022 16:12	32.87	ft
GC-AP-MW-55HO	ORP	Oxidation Reduction Potention	10/4/2022 16:12	322.52	mv
GC-AP-MW-55HO	PH	pH	10/4/2022 16:12	5.03	SU
GC-AP-MW-55HO	SULFIDE	Sulfide	10/4/2022 16:12	0	mg/L
GC-AP-MW-55HO	TEMP	Temperature	10/4/2022 16:12	18.58	C
GC-AP-MW-55HO	TURB	Turbidity	10/4/2022 16:12	4.16	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-60HO	COND	Conductivity	10/4/2022 13:26	177.09	uS/cm
GC-AP-MW-60HO	DO	DO	10/4/2022 13:26	5.72	mg/L
GC-AP-MW-60HO	DTW	Depth to Water Detail	10/4/2022 13:26	21.81	ft
GC-AP-MW-60HO	ORP	Oxidation Reduction Potention	10/4/2022 13:26	289.91	mv
GC-AP-MW-60HO	PH	pH	10/4/2022 13:26	5.04	SU
GC-AP-MW-60HO	TEMP	Temperature	10/4/2022 13:26	18.61	C
GC-AP-MW-60HO	TURB	Turbidity	10/4/2022 13:26	8.28	NTU
GC-AP-MW-60HO	COND	Conductivity	10/4/2022 13:31	142.08	uS/cm
GC-AP-MW-60HO	DO	DO	10/4/2022 13:31	5.59	mg/L
GC-AP-MW-60HO	DTW	Depth to Water Detail	10/4/2022 13:31	21.81	ft
GC-AP-MW-60HO	ORP	Oxidation Reduction Potention	10/4/2022 13:31	294.78	mv
GC-AP-MW-60HO	PH	pH	10/4/2022 13:31	5.07	SU
GC-AP-MW-60HO	TEMP	Temperature	10/4/2022 13:31	18.6	C
GC-AP-MW-60HO	TURB	Turbidity	10/4/2022 13:31	7.2	NTU
GC-AP-MW-60HO	COND	Conductivity	10/4/2022 13:36	141.04	uS/cm
GC-AP-MW-60HO	DO	DO	10/4/2022 13:36	5.49	mg/L
GC-AP-MW-60HO	DTW	Depth to Water Detail	10/4/2022 13:36	21.81	ft
GC-AP-MW-60HO	ORP	Oxidation Reduction Potention	10/4/2022 13:36	299.39	mv
GC-AP-MW-60HO	PH	pH	10/4/2022 13:36	5.03	SU
GC-AP-MW-60HO	TEMP	Temperature	10/4/2022 13:36	18.67	C
GC-AP-MW-60HO	TURB	Turbidity	10/4/2022 13:36	7.42	NTU
GC-AP-MW-60HO	COND	Conductivity	10/4/2022 13:41	143.39	uS/cm
GC-AP-MW-60HO	DO	DO	10/4/2022 13:41	5.45	mg/L
GC-AP-MW-60HO	DTW	Depth to Water Detail	10/4/2022 13:41	21.81	ft
GC-AP-MW-60HO	ORP	Oxidation Reduction Potention	10/4/2022 13:41	309.79	mv
GC-AP-MW-60HO	PH	pH	10/4/2022 13:41	4.95	SU
GC-AP-MW-60HO	TEMP	Temperature	10/4/2022 13:41	18.65	C
GC-AP-MW-60HO	TURB	Turbidity	10/4/2022 13:41	5.56	NTU
GC-AP-MW-60HO	COND	Conductivity	10/4/2022 13:46	145.86	uS/cm
GC-AP-MW-60HO	DO	DO	10/4/2022 13:46	5.39	mg/L
GC-AP-MW-60HO	DTW	Depth to Water Detail	10/4/2022 13:46	21.81	ft
GC-AP-MW-60HO	ORP	Oxidation Reduction Potention	10/4/2022 13:46	321.23	mv
GC-AP-MW-60HO	PH	pH	10/4/2022 13:46	4.91	SU
GC-AP-MW-60HO	TEMP	Temperature	10/4/2022 13:46	18.67	C
GC-AP-MW-60HO	TURB	Turbidity	10/4/2022 13:46	5.25	NTU
GC-AP-MW-60HO	COND	Conductivity	10/4/2022 13:51	146.51	uS/cm
GC-AP-MW-60HO	DO	DO	10/4/2022 13:51	5.35	mg/L
GC-AP-MW-60HO	DTW	Depth to Water Detail	10/4/2022 13:51	21.81	ft
GC-AP-MW-60HO	ORP	Oxidation Reduction Potention	10/4/2022 13:51	325.99	mv
GC-AP-MW-60HO	PH	pH	10/4/2022 13:51	4.83	SU
GC-AP-MW-60HO	SULFIDE	Sulfide	10/4/2022 13:51	0	mg/L
GC-AP-MW-60HO	TEMP	Temperature	10/4/2022 13:51	18.59	C
GC-AP-MW-60HO	TURB	Turbidity	10/4/2022 13:51	4.56	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-61HO	COND	Conductivity	10/4/2022 14:32	165.22	uS/cm
GC-AP-MW-61HO	DO	DO	10/4/2022 14:32	6.47	mg/L
GC-AP-MW-61HO	DTW	Depth to Water Detail	10/4/2022 14:32	20.68	ft
GC-AP-MW-61HO	ORP	Oxidation Reduction Potention	10/4/2022 14:32	249.04	mv
GC-AP-MW-61HO	PH	pH	10/4/2022 14:32	5.6	SU
GC-AP-MW-61HO	TEMP	Temperature	10/4/2022 14:32	19.47	C
GC-AP-MW-61HO	TURB	Turbidity	10/4/2022 14:32	31.4	NTU
GC-AP-MW-61HO	COND	Conductivity	10/4/2022 14:37	170.91	uS/cm
GC-AP-MW-61HO	DO	DO	10/4/2022 14:37	6.45	mg/L
GC-AP-MW-61HO	DTW	Depth to Water Detail	10/4/2022 14:37	20.68	ft
GC-AP-MW-61HO	ORP	Oxidation Reduction Potention	10/4/2022 14:37	252.24	mv
GC-AP-MW-61HO	PH	pH	10/4/2022 14:37	5.65	SU
GC-AP-MW-61HO	TEMP	Temperature	10/4/2022 14:37	19.41	C
GC-AP-MW-61HO	TURB	Turbidity	10/4/2022 14:37	16	NTU
GC-AP-MW-61HO	COND	Conductivity	10/4/2022 14:42	172.87	uS/cm
GC-AP-MW-61HO	DO	DO	10/4/2022 14:42	6.3	mg/L
GC-AP-MW-61HO	DTW	Depth to Water Detail	10/4/2022 14:42	20.68	ft
GC-AP-MW-61HO	ORP	Oxidation Reduction Potention	10/4/2022 14:42	256.8	mv
GC-AP-MW-61HO	PH	pH	10/4/2022 14:42	5.62	SU
GC-AP-MW-61HO	TEMP	Temperature	10/4/2022 14:42	19.37	C
GC-AP-MW-61HO	TURB	Turbidity	10/4/2022 14:42	12.1	NTU
GC-AP-MW-61HO	COND	Conductivity	10/4/2022 14:47	171.91	uS/cm
GC-AP-MW-61HO	DO	DO	10/4/2022 14:47	6.38	mg/L
GC-AP-MW-61HO	DTW	Depth to Water Detail	10/4/2022 14:47	20.68	ft
GC-AP-MW-61HO	ORP	Oxidation Reduction Potention	10/4/2022 14:47	260.46	mv
GC-AP-MW-61HO	PH	pH	10/4/2022 14:47	5.55	SU
GC-AP-MW-61HO	TEMP	Temperature	10/4/2022 14:47	19.37	C
GC-AP-MW-61HO	TURB	Turbidity	10/4/2022 14:47	7.49	NTU
GC-AP-MW-61HO	COND	Conductivity	10/4/2022 14:52	174.76	uS/cm
GC-AP-MW-61HO	DO	DO	10/4/2022 14:52	6.33	mg/L
GC-AP-MW-61HO	DTW	Depth to Water Detail	10/4/2022 14:52	20.68	ft
GC-AP-MW-61HO	ORP	Oxidation Reduction Potention	10/4/2022 14:52	262.65	mv
GC-AP-MW-61HO	PH	pH	10/4/2022 14:52	5.53	SU
GC-AP-MW-61HO	TEMP	Temperature	10/4/2022 14:52	19.41	C
GC-AP-MW-61HO	TURB	Turbidity	10/4/2022 14:52	5.62	NTU
GC-AP-MW-61HO	COND	Conductivity	10/4/2022 14:57	176.11	uS/cm
GC-AP-MW-61HO	DO	DO	10/4/2022 14:57	6.34	mg/L
GC-AP-MW-61HO	DTW	Depth to Water Detail	10/4/2022 14:57	20.68	ft
GC-AP-MW-61HO	ORP	Oxidation Reduction Potention	10/4/2022 14:57	264.96	mv
GC-AP-MW-61HO	PH	pH	10/4/2022 14:57	5.51	SU
GC-AP-MW-61HO	SULFIDE	Sulfide	10/4/2022 14:57	0	mg/L
GC-AP-MW-61HO	TEMP	Temperature	10/4/2022 14:57	19.48	C
GC-AP-MW-61HO	TURB	Turbidity	10/4/2022 14:57	4.57	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-63HO	COND	Conductivity	10/4/2022 9:14	198.91	uS/cm
GC-AP-MW-63HO	DO	DO	10/4/2022 9:14	8.1	mg/L
GC-AP-MW-63HO	DTW	Depth to Water Detail	10/4/2022 9:14	11.8	ft
GC-AP-MW-63HO	ORP	Oxidation Reduction Potention	10/4/2022 9:14	310.63	mv
GC-AP-MW-63HO	PH	pH	10/4/2022 9:14	4.8	SU
GC-AP-MW-63HO	TEMP	Temperature	10/4/2022 9:14	19.12	C
GC-AP-MW-63HO	TURB	Turbidity	10/4/2022 9:14	7.72	NTU
GC-AP-MW-63HO	COND	Conductivity	10/4/2022 9:19	201.46	uS/cm
GC-AP-MW-63HO	DO	DO	10/4/2022 9:19	7.41	mg/L
GC-AP-MW-63HO	DTW	Depth to Water Detail	10/4/2022 9:19	11.8	ft
GC-AP-MW-63HO	ORP	Oxidation Reduction Potention	10/4/2022 9:19	299.6	mv
GC-AP-MW-63HO	PH	pH	10/4/2022 9:19	5.23	SU
GC-AP-MW-63HO	TEMP	Temperature	10/4/2022 9:19	19.15	C
GC-AP-MW-63HO	TURB	Turbidity	10/4/2022 9:19	5.51	NTU
GC-AP-MW-63HO	COND	Conductivity	10/4/2022 9:24	201.65	uS/cm
GC-AP-MW-63HO	DO	DO	10/4/2022 9:24	7.3	mg/L
GC-AP-MW-63HO	DTW	Depth to Water Detail	10/4/2022 9:24	11.8	ft
GC-AP-MW-63HO	ORP	Oxidation Reduction Potention	10/4/2022 9:24	293.13	mv
GC-AP-MW-63HO	PH	pH	10/4/2022 9:24	5.37	SU
GC-AP-MW-63HO	TEMP	Temperature	10/4/2022 9:24	19.16	C
GC-AP-MW-63HO	TURB	Turbidity	10/4/2022 9:24	3.64	NTU
GC-AP-MW-63HO	COND	Conductivity	10/4/2022 9:29	202.37	uS/cm
GC-AP-MW-63HO	DO	DO	10/4/2022 9:29	7.31	mg/L
GC-AP-MW-63HO	DTW	Depth to Water Detail	10/4/2022 9:29	11.8	ft
GC-AP-MW-63HO	ORP	Oxidation Reduction Potention	10/4/2022 9:29	293.36	mv
GC-AP-MW-63HO	PH	pH	10/4/2022 9:29	5.38	SU
GC-AP-MW-63HO	SULFIDE	Sulfide	10/4/2022 9:29	0	mg/L
GC-AP-MW-63HO	TEMP	Temperature	10/4/2022 9:29	19.19	C
GC-AP-MW-63HO	TURB	Turbidity	10/4/2022 9:29	2.84	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:21	44.69	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:21	8.28	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:21	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:21	208.8	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:21	5.62	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:21	20.51	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:21	40.2	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:26	54.38	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:26	7.5	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:26	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:26	212.74	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:26	5.63	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:26	20.6	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:26	25.3	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:31	61.69	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:31	6.46	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:31	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:31	212.49	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:31	5.67	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:31	20.6	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:31	18.9	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:36	66.6	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:36	4.93	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:36	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:36	210.2	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:36	5.72	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:36	20.72	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:36	12.2	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:41	69.19	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:41	6.41	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:41	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:41	211.49	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:41	5.69	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:41	20.68	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:41	10.09	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:46	70.37	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:46	5.97	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:46	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:46	209.73	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:46	5.73	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:46	20.65	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:46	7.04	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:51	73.43	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:51	4.52	mg/L

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:51	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:51	205.89	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:51	5.78	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:51	20.24	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:51	7.3	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 13:56	73.49	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 13:56	6.66	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 13:56	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 13:56	205.18	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 13:56	5.77	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 13:56	20.33	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 13:56	4.91	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 14:01	74.17	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 14:01	6.65	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 14:01	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 14:01	203.81	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 14:01	5.78	SU
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 14:01	20.34	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 14:01	4.57	NTU
GC-AP-MW-62HO	COND	Conductivity	10/4/2022 14:06	75.23	uS/cm
GC-AP-MW-62HO	DO	DO	10/4/2022 14:06	6.62	mg/L
GC-AP-MW-62HO	DTW	Depth to Water Detail	10/4/2022 14:06	10.35	ft
GC-AP-MW-62HO	ORP	Oxidation Reduction Potention	10/4/2022 14:06	202.15	mv
GC-AP-MW-62HO	PH	pH	10/4/2022 14:06	5.82	SU
GC-AP-MW-62HO	SULFIDE	Sulfide	10/4/2022 14:06	0	mg/L
GC-AP-MW-62HO	TEMP	Temperature	10/4/2022 14:06	20.3	C
GC-AP-MW-62HO	TURB	Turbidity	10/4/2022 14:06	3.87	NTU

Field Parameters Summary
Plant Greene County Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GC-AP-MW-59HO	COND	Conductivity	10/4/2022 14:47	593.27	uS/cm
GC-AP-MW-59HO	DO	DO	10/4/2022 14:47	0.1	mg/L
GC-AP-MW-59HO	DTW	Depth to Water Detail	10/4/2022 14:47	11.69	ft
GC-AP-MW-59HO	ORP	Oxidation Reduction Potention	10/4/2022 14:47	23.61	mv
GC-AP-MW-59HO	PH	pH	10/4/2022 14:47	6.12	SU
GC-AP-MW-59HO	TEMP	Temperature	10/4/2022 14:47	19.1	C
GC-AP-MW-59HO	TURB	Turbidity	10/4/2022 14:47	18.7	NTU
GC-AP-MW-59HO	COND	Conductivity	10/4/2022 14:52	592.4	uS/cm
GC-AP-MW-59HO	DO	DO	10/4/2022 14:52	0.08	mg/L
GC-AP-MW-59HO	DTW	Depth to Water Detail	10/4/2022 14:52	11.69	ft
GC-AP-MW-59HO	ORP	Oxidation Reduction Potention	10/4/2022 14:52	24.53	mv
GC-AP-MW-59HO	PH	pH	10/4/2022 14:52	6.1	SU
GC-AP-MW-59HO	TEMP	Temperature	10/4/2022 14:52	18.93	C
GC-AP-MW-59HO	TURB	Turbidity	10/4/2022 14:52	13.5	NTU
GC-AP-MW-59HO	COND	Conductivity	10/4/2022 14:57	591.12	uS/cm
GC-AP-MW-59HO	DO	DO	10/4/2022 14:57	0.07	mg/L
GC-AP-MW-59HO	DTW	Depth to Water Detail	10/4/2022 14:57	11.69	ft
GC-AP-MW-59HO	ORP	Oxidation Reduction Potention	10/4/2022 14:57	26.72	mv
GC-AP-MW-59HO	PH	pH	10/4/2022 14:57	6.08	SU
GC-AP-MW-59HO	TEMP	Temperature	10/4/2022 14:57	18.99	C
GC-AP-MW-59HO	TURB	Turbidity	10/4/2022 14:57	7.93	NTU
GC-AP-MW-59HO	COND	Conductivity	10/4/2022 15:02	589.55	uS/cm
GC-AP-MW-59HO	DO	DO	10/4/2022 15:02	0.06	mg/L
GC-AP-MW-59HO	DTW	Depth to Water Detail	10/4/2022 15:02	11.69	ft
GC-AP-MW-59HO	ORP	Oxidation Reduction Potention	10/4/2022 15:02	30.56	mv
GC-AP-MW-59HO	PH	pH	10/4/2022 15:02	6.06	SU
GC-AP-MW-59HO	SULFIDE	Sulfide	10/4/2022 15:02	0	mg/L
GC-AP-MW-59HO	TEMP	Temperature	10/4/2022 15:02	19.04	C
GC-AP-MW-59HO	TURB	Turbidity	10/4/2022 15:02	5.99	NTU

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 MW-52HO (Land Trust) Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1387

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

October 31, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on October 05, 2022.
All results reported herein conform to the laboratory’s most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.10.31
08:56:28 -05'00'

Supervision: Renee Jernigan

Digitally signed by Renee Jernigan
Date: 2022.10.31
15:22:42 -05'00'

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18419	738258	WMWGREAP_1387
BC18420	738258	WMWGREAP_1387
BC18421	738258	WMWGREAP_1387
BC18422	738258	WMWGREAP_1387

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18420	Calcium, Sodium	10.15
BC18421	Calcium, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18420	738207	WMWGREAP_1387
BC18421	738207	WMWGREAP_1387

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

Revision 5

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18421 Calcium and Sodium MS/MSD spike levels were <30% of the sample concentration.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18420	Calcium, Sodium	10.15
BC18421	Calcium, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18419	738830	WMWGREAP_1387
BC18420	738830	WMWGREAP_1387
BC18421	738830	WMWGREAP_1387
BC18422	738830	WMWGREAP_1387

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC18420	Manganese	10.15
BC18421	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18420	738113	WMWGREAP_1387
BC18421	738113	WMWGREAP_1387

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18421 Manganese MS/MSD spike level was <30% of the sample concentration.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18420	Manganese	10.15
BC18421	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18419	738234	WMWGREAP_1387
BC18420	738234	WMWGREAP_1387
BC18421	738234	WMWGREAP_1387
BC18422	738234	WMWGREAP_1387

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.

Revision 5

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18419	737921	WMWGREAP_1387
BC18420	737921	WMWGREAP_1387
BC18421	737921	WMWGREAP_1387
BC18422	737921	WMWGREAP_1387

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BC18419
    - BC18422

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18420	738731, 738732	WMWGREAP_1387
BC18421	738731, 738732	WMWGREAP_1387

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18419	738293, 738348, 738434	WMWGREAP_1387
BC18420	738293, 738348, 738434	WMWGREAP_1387
BC18421	738293, 738348, 738434	WMWGREAP_1387
BC18422	738293, 738348, 738434	WMWGREAP_1387

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18420	Chloride	10
BC18421	Chloride	10

8. The raw data results are shown with dilution factors included.

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18419	737926	WMWGREAP_1387
BC18420	737926	WMWGREAP_1387
BC18421	737926	WMWGREAP_1387
BC18422	737926	WMWGREAP_1387

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1387

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18419	737915	WMWGREAP_1387
BC18420	737915	WMWGREAP_1387
BC18421	737915	WMWGREAP_1387
BC18422	737915	WMWGREAP_1387

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/3/22 16:10
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18419

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/5/22 14:15	10/10/22 13:20		1	Not Detected	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/5/22 14:15	10/10/22 13:20		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 15:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/11/22 10:41	10/11/22 12:46		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/5/22 14:15	10/5/22 15:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/5/22 14:15	10/5/22 15:45		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/11/22 10:41	10/11/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 15:13	10/5/22 15:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 10/31/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/3/22 16:10
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18419

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 17:50	10/10/22 17:50		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:49	10/10/22 12:49		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:31	10/11/22 12:31		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 09:50	10/18/22 09:50		1	1.03	mg/L	0.6	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/3/22 16:10
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18419

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18422	Aluminum, Total	mg/L	0.00265	0.010	0.100	0.116	0.111	0.111	0.0850 to 0.115	90.6	70.0 to 130	4.41	20.0
BC18422	Antimony, Total	mg/L	0.000225	0.00100	0.100	0.0935	0.0998	0.0934	0.0850 to 0.115	93.5	70.0 to 130	6.52	20.0
BC18422	Arsenic, Total	mg/L	0.0000101	0.000176	0.100	0.0975	0.0997	0.102	0.0850 to 0.115	97.5	70.0 to 130	2.23	20.0
BC18422	Barium, Total	mg/L	0.0000243	0.00100	0.100	0.0947	0.0975	0.104	0.0850 to 0.115	94.7	70.0 to 130	2.91	20.0
BC18422	Beryllium, Total	mg/L	0.0000138	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC18422	Boron, Total	mg/L	-0.000359	0.0650	1.00	0.982	0.991	0.977	0.850 to 1.15	98.2	70.0 to 130	0.912	20.0
BC18422	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0977	0.101	0.104	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BC18422	Calcium, Total	mg/L	0.00476	0.152	5.00	4.83	5.09	4.73	4.25 to 5.75	96.6	70.0 to 130	5.24	20.0
BC18422	Chloride	mg/L	-0.0816	1.00	10.0	11.3	11.0	10.0	9.00 to 11.0	113	80.0 to 120	2.69	20.0
BC18422	Chromium, Total	mg/L	-0.0000123	0.000440	0.100	0.100	0.100	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.00	20.0
BC18422	Cobalt, Total	mg/L	-0.0000004	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18422	Fluoride	mg/L	0.0462	0.125	2.50	2.53	2.53	2.55	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC18422	Iron, Total	mg/L	-0.000343	0.0176	0.2	0.199	0.201	0.197	0.170 to 0.230	99.5	70.0 to 130	1.00	20.0
BC18422	Lead, Total	mg/L	0.0000032	0.000147	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.8	70.0 to 130	1.20	20.0
BC18422	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.210	0.195	0.205	0.170 to 0.230	105	70.0 to 130	7.41	20.0
BC18422	Magnesium, Total	mg/L	-0.00194	0.0462	5.00	5.15	5.05	4.98	4.25 to 5.75	103	70.0 to 130	1.96	20.0
BC18422	Manganese, Total	mg/L	0.0000297	0.00033	0.100	0.0994	0.0999	0.104	0.0850 to 0.115	99.0	70.0 to 130	0.502	20.0
BC18421	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00395	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.508	20.0
BC18422	Molybdenum, Total	mg/L	0.0000104	0.0002	0.100	0.0987	0.100	0.0994	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BC18422	Potassium, Total	mg/L	0.0245	0.367	10.0	9.82	10.4	9.30	8.50 to 11.5	98.2	70.0 to 130	5.74	20.0
BC18422	Selenium, Total	mg/L	0.000108	0.00100	0.100	0.0992	0.101	0.103	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BC18422	Silicon, Total	mg/L	-0.000094	0.0440	1.00	0.994	1.00	0.983	0.850 to 1.15	99.4	70.0 to 130	0.602	20.0
BC18422	Sodium, Total	mg/L	0.0101	0.0660	5.00	5.12	4.80	5.01	4.25 to 5.75	102	70.0 to 130	6.45	20.0
BC18422	Sulfate	mg/L	0.495	2.0	20.0	20.7	21.1	19.8	18.0 to 22.0	100	80.0 to 120	1.91	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/3/22 16:10
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18419

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18422	Thallium, Total	mg/L	-0.0000053	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18421	Total Organic Carbon	mg/L	0.264	1.00	10.0	11.2	11.2	24.0		97.0	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/3/22 16:10
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18419

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18422	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	0.087	1.87	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18421	Solids, Dissolved	mg/L	0.0000	25.0			429	49.0	40.0 to 60.0			0.702	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO

Location Code: WMWGREAP
Collected: 10/3/22 16:24
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18420

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 13:23		1.015	1.39	mg/L	0.030000	0.1015	
* Calcium, Total	10/5/22 14:15	10/12/22 12:47		10.15	91.4	mg/L	0.70035	4.06	
* Iron, Total	10/5/22 14:15	10/10/22 13:23		1.015	0.195	mg/L	0.008120	0.0406	
* Lithium, Total	10/5/22 14:15	10/10/22 13:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/5/22 14:15	10/10/22 13:23		1.015	21.2	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/5/22 14:15	10/10/22 13:23		1	8.15	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 13:23		1.015	3.81	mg/L	0.02030	0.25375	
* Sodium, Total	10/5/22 14:15	10/19/22 15:14		10.15	76.0	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/5/22 11:29	10/10/22 14:14		1.015	1.40	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/5/22 11:29	10/12/22 13:09		10.15	95.5	mg/L	0.70035	4.06	
* Iron, Dissolved	10/5/22 11:29	10/10/22 14:14		1.015	0.185	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/5/22 11:29	10/10/22 14:14		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/5/22 11:29	10/10/22 14:14		1.015	20.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/5/22 11:29	10/10/22 14:14		1	8.13	mg/L			
Silicon, Dissolved	10/5/22 11:29	10/10/22 14:14		1.015	3.80	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/5/22 11:29	10/19/22 12:54		10.15	82.2	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 15:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/11/22 10:41	10/11/22 12:49		1.015	0.0307	mg/L	0.006090	0.01015	
* Arsenic, Total	10/11/22 10:41	10/11/22 12:49		1.015	0.000144	mg/L	0.000081	0.000203	J
* Barium, Total	10/11/22 10:41	10/11/22 12:49		1.015	0.165	mg/L	0.000508	0.001015	
* Beryllium, Total	10/11/22 10:41	10/11/22 12:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/11/22 10:41	10/11/22 12:49		1.015	0.0000979	mg/L	0.000068	0.000203	J
* Chromium, Total	10/11/22 10:41	10/11/22 12:49		1.015	0.000213	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/11/22 10:41	10/11/22 12:49		1.015	0.0122	mg/L	0.000068	0.000203	
* Lead, Total	10/11/22 10:41	10/11/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/11/22 10:41	10/11/22 13:07		10.15	11.3	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/5/22 14:15	10/5/22 15:49		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/5/22 14:15	10/5/22 15:49		1.015	4.42	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO

Location Code: WMWGREAP
Collected: 10/3/22 16:24
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18420

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/11/22 10:41	10/11/22 12:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/11/22 10:41	10/11/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	0.000156	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	0.158	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	0.000101	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	0.0120	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/5/22 11:29	10/5/22 13:52		10.15	10.3	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	4.60	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/5/22 11:29	10/5/22 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 15:14	10/5/22 15:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:02	10/13/22 14:51		1	274	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	425	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:02	10/13/22 14:51		1	274	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:02	10/13/22 14:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 18:03	10/10/22 18:03		1	1.85	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/31/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-52HO

Location Code: WMWGREAP
Collected: 10/3/22 16:24
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18420

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:51	10/10/22 12:51		10	62.4	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:32	10/11/22 12:32		1	0.102	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 09:44	10/18/22 09:44		1	37.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/3/22 16:21	10/3/22 16:21			766.72	uS/cm			FA
pH	10/3/22 16:21	10/3/22 16:21			5.84	SU			FA
Temperature	10/3/22 16:21	10/3/22 16:21			18.91	C			FA
Turbidity	10/3/22 16:21	10/3/22 16:21			3.17	NTU			FA
Sulfide	10/3/22 16:21	10/3/22 16:21			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/3/22 16:24
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC18420

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18421	Aluminum, Dissolved	mg/L	-0.000338	0.010	0.100	0.100	0.103	0.103	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BC18422	Aluminum, Total	mg/L	0.00265	0.010	0.100	0.116	0.111	0.111	0.0850 to 0.115	90.6	70.0 to 130	4.41	20.0
BC18421	Antimony, Dissolved	mg/L	0.000205	0.00100	0.100	0.0882	0.0880	0.0924	0.0850 to 0.115	88.2	70.0 to 130	0.227	20.0
BC18422	Antimony, Total	mg/L	0.000225	0.00100	0.100	0.0935	0.0998	0.0934	0.0850 to 0.115	93.5	70.0 to 130	6.52	20.0
BC18421	Arsenic, Dissolved	mg/L	-0.0000025	0.000176	0.100	0.100	0.103	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.96	20.0
BC18422	Arsenic, Total	mg/L	0.0000101	0.000176	0.100	0.0975	0.0997	0.102	0.0850 to 0.115	97.5	70.0 to 130	2.23	20.0
BC18421	Barium, Dissolved	mg/L	-0.0000006	0.00100	0.100	0.260	0.253	0.0995	0.0850 to 0.115	98.0	70.0 to 130	2.73	20.0
BC18422	Barium, Total	mg/L	0.0000243	0.00100	0.100	0.0947	0.0975	0.104	0.0850 to 0.115	94.7	70.0 to 130	2.91	20.0
BC18421	Beryllium, Dissolved	mg/L	0.0000068	0.000880	0.100	0.0965	0.0963	0.0946	0.0850 to 0.115	96.5	70.0 to 130	0.207	20.0
BC18422	Beryllium, Total	mg/L	0.0000138	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC18421	Boron, Dissolved	mg/L	-0.000278	0.0650	1.00	2.42	2.41	0.982	0.850 to 1.15	102	70.0 to 130	0.414	20.0
BC18422	Boron, Total	mg/L	-0.000359	0.0650	1.00	0.982	0.991	0.977	0.850 to 1.15	98.2	70.0 to 130	0.912	20.0
BC18421	Cadmium, Dissolved	mg/L	0.0000134	0.000147	0.100	0.0953	0.0963	0.0981	0.0850 to 0.115	95.2	70.0 to 130	1.04	20.0
BC18422	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0977	0.101	0.104	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BC18421	Calcium, Dissolved	mg/L	-0.000455	0.152	5.00	94.3	87.6	5.06	4.25 to 5.75	296	70.0 to 130	7.37	20.0
BC18422	Calcium, Total	mg/L	0.00476	0.152	5.00	4.83	5.09	4.73	4.25 to 5.75	96.6	70.0 to 130	5.24	20.0
BC18422	Chloride	mg/L	-0.0816	1.00	10.0	11.3	11.0	10.0	9.00 to 11.0	113	80.0 to 120	2.69	20.0
BC18421	Chromium, Dissolved	mg/L	-0.0000945	0.000440	0.100	0.0964	0.0996	0.101	0.0850 to 0.115	96.4	70.0 to 130	3.27	20.0
BC18422	Chromium, Total	mg/L	-0.0000123	0.000440	0.100	0.100	0.100	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.00	20.0
BC18421	Cobalt, Dissolved	mg/L	-0.0000168	0.000147	0.100	0.108	0.111	0.103	0.0850 to 0.115	96.4	70.0 to 130	2.74	20.0
BC18422	Cobalt, Total	mg/L	-0.0000004	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18422	Fluoride	mg/L	0.0462	0.125	2.50	2.53	2.53	2.55	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC18421	Iron, Dissolved	mg/L	0.000160	0.0176	0.2	0.385	0.384	0.200	0.170 to 0.230	100	70.0 to 130	0.260	20.0
BC18422	Iron, Total	mg/L	-0.000343	0.0176	0.2	0.199	0.201	0.197	0.170 to 0.230	99.5	70.0 to 130	1.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/3/22 16:24
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC18420

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18421	Lead, Dissolved	mg/L	0.0000044	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC18422	Lead, Total	mg/L	0.0000032	0.000147	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.8	70.0 to 130	1.20	20.0
BC18421	Lithium, Dissolved	mg/L	0.000071	0.0154	0.200	0.198	0.199	0.194	0.170 to 0.230	99.0	70.0 to 130	0.504	20.0
BC18422	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.210	0.195	0.205	0.170 to 0.230	105	70.0 to 130	7.41	20.0
BC18421	Magnesium, Dissolved	mg/L	-0.00477	0.0462	5.00	25.8	25.6	5.01	4.25 to 5.75	110	70.0 to 130	0.778	20.0
BC18422	Magnesium, Total	mg/L	-0.00194	0.0462	5.00	5.15	5.05	4.98	4.25 to 5.75	103	70.0 to 130	1.96	20.0
BC18421	Manganese, Dissolved	mg/L	-0.0000139	0.00033	0.100	10.5	10.4	0.101	0.0850 to 0.115	100	70.0 to 130	0.957	20.0
BC18422	Manganese, Total	mg/L	0.0000297	0.00033	0.100	0.0994	0.0999	0.104	0.0850 to 0.115	99.0	70.0 to 130	0.502	20.0
BC18421	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00395	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.508	20.0
BC18421	Molybdenum, Dissolved	mg/L	0.000	0.0002	0.100	0.0951	0.0971	0.0975	0.0850 to 0.115	95.1	70.0 to 130	2.08	20.0
BC18422	Molybdenum, Total	mg/L	0.0000104	0.0002	0.100	0.0987	0.100	0.0994	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BC18421	Potassium, Dissolved	mg/L	0.00635	0.367	10.0	14.5	14.8	10.5	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BC18422	Potassium, Total	mg/L	0.0245	0.367	10.0	9.82	10.4	9.30	8.50 to 11.5	98.2	70.0 to 130	5.74	20.0
BC18421	Selenium, Dissolved	mg/L	0.000046	0.00100	0.100	0.104	0.106	0.102	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC18422	Selenium, Total	mg/L	0.000108	0.00100	0.100	0.0992	0.101	0.103	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BC18421	Silicon, Dissolved	mg/L	0.000026	0.0440	1.00	4.79	4.78	0.998	0.850 to 1.15	98.0	70.0 to 130	0.209	20.0
BC18422	Silicon, Total	mg/L	-0.000094	0.0440	1.00	0.994	1.00	0.983	0.850 to 1.15	99.4	70.0 to 130	0.602	20.0
BC18421	Sodium, Dissolved	mg/L	0.00869	0.0660	5.00	76.6	78.9	4.78	4.25 to 5.75	-36.0	70.0 to 130	2.96	20.0
BC18422	Sodium, Total	mg/L	0.0101	0.0660	5.00	5.12	4.80	5.01	4.25 to 5.75	102	70.0 to 130	6.45	20.0
BC18422	Sulfate	mg/L	0.495	2.0	20.0	20.7	21.1	19.8	18.0 to 22.0	100	80.0 to 120	1.91	20.0
BC18421	Thallium, Dissolved	mg/L	-0.0000504	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18422	Thallium, Total	mg/L	-0.0000053	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18421	Total Organic Carbon	mg/L	0.264	1.00	10.0	11.2	11.2	24.0		97.0	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/3/22 16:24
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond - MW-52HO

Laboratory ID Number: BC18420

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18421	Alkalinity to pH 4.5	mg CaCO3/L					279	50.5	45.0 to 55.0			2.17	10.0
BC18422	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	0.087	1.87	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18421	Solids, Dissolved	mg/L	0.0000	25.0			429	49.0	40.0 to 60.0			0.702	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO Dup

Location Code: WMWGREAP
Collected: 10/3/22 16:24
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18421

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 13:26		1.015	1.40	mg/L	0.030000	0.1015	
* Calcium, Total	10/5/22 14:15	10/12/22 12:50		10.15	88.0	mg/L	0.70035	4.06	
* Iron, Total	10/5/22 14:15	10/10/22 13:26		1.015	0.198	mg/L	0.008120	0.0406	
* Lithium, Total	10/5/22 14:15	10/10/22 13:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/5/22 14:15	10/10/22 13:26		1.015	21.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/5/22 14:15	10/10/22 13:26		1	8.17	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 13:26		1.015	3.82	mg/L	0.02030	0.25375	
* Sodium, Total	10/5/22 14:15	10/19/22 15:17		10.15	80.1	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/5/22 11:29	10/10/22 14:17		1.015	1.40	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/5/22 11:29	10/12/22 13:12		10.15	79.5	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/5/22 11:29	10/10/22 14:17		1.015	0.184	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/5/22 11:29	10/10/22 14:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/5/22 11:29	10/10/22 14:17		1.015	20.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/5/22 11:29	10/10/22 14:17		1	8.15	mg/L			
Silicon, Dissolved	10/5/22 11:29	10/10/22 14:17		1.015	3.81	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/5/22 11:29	10/19/22 12:57		10.15	78.4	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 15:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/11/22 10:41	10/11/22 12:53		1.015	0.0435	mg/L	0.006090	0.01015	
* Arsenic, Total	10/11/22 10:41	10/11/22 12:53		1.015	0.000177	mg/L	0.000081	0.000203	J
* Barium, Total	10/11/22 10:41	10/11/22 12:53		1.015	0.170	mg/L	0.000508	0.001015	
* Beryllium, Total	10/11/22 10:41	10/11/22 12:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/11/22 10:41	10/11/22 12:53		1.015	0.0000848	mg/L	0.000068	0.000203	J
* Chromium, Total	10/11/22 10:41	10/11/22 12:53		1.015	0.000270	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/11/22 10:41	10/11/22 12:53		1.015	0.0121	mg/L	0.000068	0.000203	
* Lead, Total	10/11/22 10:41	10/11/22 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/11/22 10:41	10/11/22 13:11		10.15	10.4	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/5/22 14:15	10/5/22 15:52		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/5/22 14:15	10/5/22 15:52		1.015	4.50	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO Dup

Location Code: WMWGREAP
Collected: 10/3/22 16:24
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18421

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/11/22 10:41	10/11/22 12:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/11/22 10:41	10/11/22 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	0.000114	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	0.162	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	0.000102	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	0.0116	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/5/22 11:29	10/5/22 13:56		10.15	10.4	mg/L	0.001522	0.01015	RA
* Molybdenum, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	4.46	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/5/22 11:29	10/5/22 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 15:14	10/5/22 15:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:02	10/13/22 14:51		1	273	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	426	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:02	10/13/22 14:51		1	273	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:02	10/13/22 14:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 18:33	10/10/22 18:33		1	1.50	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-52HO Dup

Location Code: WMWGREAP
Collected: 10/3/22 16:24
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18421

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:52	10/10/22 12:52		10	68.3	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:33	10/11/22 12:33		1	0.0862	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 09:45	10/18/22 09:45		1	37.4	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/3/22 16:21	10/3/22 16:21			766.72	uS/cm			FA
pH	10/3/22 16:21	10/3/22 16:21			5.84	SU			FA
Temperature	10/3/22 16:21	10/3/22 16:21			18.91	C			FA
Turbidity	10/3/22 16:21	10/3/22 16:21			3.17	NTU			FA
Sulfide	10/3/22 16:21	10/3/22 16:21			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/3/22 16:24
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond - MW-52HO Dup

Laboratory ID Number: BC18421

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18421	Aluminum, Dissolved	mg/L	-0.000338	0.010	0.100	0.100	0.103	0.103	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BC18422	Aluminum, Total	mg/L	0.00265	0.010	0.100	0.116	0.111	0.111	0.0850 to 0.115	90.6	70.0 to 130	4.41	20.0
BC18421	Antimony, Dissolved	mg/L	0.000205	0.00100	0.100	0.0882	0.0880	0.0924	0.0850 to 0.115	88.2	70.0 to 130	0.227	20.0
BC18422	Antimony, Total	mg/L	0.000225	0.00100	0.100	0.0935	0.0998	0.0934	0.0850 to 0.115	93.5	70.0 to 130	6.52	20.0
BC18421	Arsenic, Dissolved	mg/L	-0.0000025	0.000176	0.100	0.100	0.103	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.96	20.0
BC18422	Arsenic, Total	mg/L	0.0000101	0.000176	0.100	0.0975	0.0997	0.102	0.0850 to 0.115	97.5	70.0 to 130	2.23	20.0
BC18421	Barium, Dissolved	mg/L	-0.0000006	0.00100	0.100	0.260	0.253	0.0995	0.0850 to 0.115	98.0	70.0 to 130	2.73	20.0
BC18422	Barium, Total	mg/L	0.0000243	0.00100	0.100	0.0947	0.0975	0.104	0.0850 to 0.115	94.7	70.0 to 130	2.91	20.0
BC18421	Beryllium, Dissolved	mg/L	0.0000068	0.000880	0.100	0.0965	0.0963	0.0946	0.0850 to 0.115	96.5	70.0 to 130	0.207	20.0
BC18422	Beryllium, Total	mg/L	0.0000138	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC18421	Boron, Dissolved	mg/L	-0.000278	0.0650	1.00	2.42	2.41	0.982	0.850 to 1.15	102	70.0 to 130	0.414	20.0
BC18422	Boron, Total	mg/L	-0.000359	0.0650	1.00	0.982	0.991	0.977	0.850 to 1.15	98.2	70.0 to 130	0.912	20.0
BC18421	Cadmium, Dissolved	mg/L	0.0000134	0.000147	0.100	0.0953	0.0963	0.0981	0.0850 to 0.115	95.2	70.0 to 130	1.04	20.0
BC18422	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0977	0.101	0.104	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BC18421	Calcium, Dissolved	mg/L	-0.000455	0.152	5.00	94.3	87.6	5.06	4.25 to 5.75	296	70.0 to 130	7.37	20.0
BC18422	Calcium, Total	mg/L	0.00476	0.152	5.00	4.83	5.09	4.73	4.25 to 5.75	96.6	70.0 to 130	5.24	20.0
BC18422	Chloride	mg/L	-0.0816	1.00	10.0	11.3	11.0	10.0	9.00 to 11.0	113	80.0 to 120	2.69	20.0
BC18421	Chromium, Dissolved	mg/L	-0.0000945	0.000440	0.100	0.0964	0.0996	0.101	0.0850 to 0.115	96.4	70.0 to 130	3.27	20.0
BC18422	Chromium, Total	mg/L	-0.0000123	0.000440	0.100	0.100	0.100	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.00	20.0
BC18421	Cobalt, Dissolved	mg/L	-0.0000168	0.000147	0.100	0.108	0.111	0.103	0.0850 to 0.115	96.4	70.0 to 130	2.74	20.0
BC18422	Cobalt, Total	mg/L	-0.0000004	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18422	Fluoride	mg/L	0.0462	0.125	2.50	2.53	2.53	2.55	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC18421	Iron, Dissolved	mg/L	0.000160	0.0176	0.2	0.385	0.384	0.200	0.170 to 0.230	100	70.0 to 130	0.260	20.0
BC18422	Iron, Total	mg/L	-0.000343	0.0176	0.2	0.199	0.201	0.197	0.170 to 0.230	99.5	70.0 to 130	1.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/3/22 16:24
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond - MW-52HO Dup

Laboratory ID Number: BC18421

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18421	Lead, Dissolved	mg/L	0.0000044	0.000147	0.100	0.103	0.104	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC18422	Lead, Total	mg/L	0.0000032	0.000147	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.8	70.0 to 130	1.20	20.0
BC18421	Lithium, Dissolved	mg/L	0.000071	0.0154	0.200	0.198	0.199	0.194	0.170 to 0.230	99.0	70.0 to 130	0.504	20.0
BC18422	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.210	0.195	0.205	0.170 to 0.230	105	70.0 to 130	7.41	20.0
BC18421	Magnesium, Dissolved	mg/L	-0.00477	0.0462	5.00	25.8	25.6	5.01	4.25 to 5.75	110	70.0 to 130	0.778	20.0
BC18422	Magnesium, Total	mg/L	-0.00194	0.0462	5.00	5.15	5.05	4.98	4.25 to 5.75	103	70.0 to 130	1.96	20.0
BC18421	Manganese, Dissolved	mg/L	-0.0000139	0.00033	0.100	10.5	10.4	0.101	0.0850 to 0.115	100	70.0 to 130	0.957	20.0
BC18422	Manganese, Total	mg/L	0.0000297	0.00033	0.100	0.0994	0.0999	0.104	0.0850 to 0.115	99.0	70.0 to 130	0.502	20.0
BC18421	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00395	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.508	20.0
BC18421	Molybdenum, Dissolved	mg/L	0.000	0.0002	0.100	0.0951	0.0971	0.0975	0.0850 to 0.115	95.1	70.0 to 130	2.08	20.0
BC18422	Molybdenum, Total	mg/L	0.0000104	0.0002	0.100	0.0987	0.100	0.0994	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BC18421	Potassium, Dissolved	mg/L	0.00635	0.367	10.0	14.5	14.8	10.5	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BC18422	Potassium, Total	mg/L	0.0245	0.367	10.0	9.82	10.4	9.30	8.50 to 11.5	98.2	70.0 to 130	5.74	20.0
BC18421	Selenium, Dissolved	mg/L	0.000046	0.00100	0.100	0.104	0.106	0.102	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC18422	Selenium, Total	mg/L	0.000108	0.00100	0.100	0.0992	0.101	0.103	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BC18421	Silicon, Dissolved	mg/L	0.000026	0.0440	1.00	4.79	4.78	0.998	0.850 to 1.15	98.0	70.0 to 130	0.209	20.0
BC18422	Silicon, Total	mg/L	-0.000094	0.0440	1.00	0.994	1.00	0.983	0.850 to 1.15	99.4	70.0 to 130	0.602	20.0
BC18421	Sodium, Dissolved	mg/L	0.00869	0.0660	5.00	76.6	78.9	4.78	4.25 to 5.75	-36.0	70.0 to 130	2.96	20.0
BC18422	Sodium, Total	mg/L	0.0101	0.0660	5.00	5.12	4.80	5.01	4.25 to 5.75	102	70.0 to 130	6.45	20.0
BC18422	Sulfate	mg/L	0.495	2.0	20.0	20.7	21.1	19.8	18.0 to 22.0	100	80.0 to 120	1.91	20.0
BC18421	Thallium, Dissolved	mg/L	-0.0000504	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18422	Thallium, Total	mg/L	-0.0000053	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18421	Total Organic Carbon	mg/L	0.264	1.00	10.0	11.2	11.2	24.0		97.0	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/3/22 16:24
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond - MW-52HO Dup

Laboratory ID Number: BC18421

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18421	Alkalinity to pH 4.5	mg CaCO3/L					279	50.5	45.0 to 55.0			2.17	10.0
BC18422	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	0.087	1.87	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18421	Solids, Dissolved	mg/L	0.0000	25.0			429	49.0	40.0 to 60.0			0.702	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/3/22 16:50
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18422

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/5/22 14:15	10/10/22 13:30		1	Not Detected	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/5/22 14:15	10/10/22 13:30		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 15:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/11/22 10:41	10/11/22 12:56		1.015	0.0254	mg/L	0.006090	0.01015	
* Arsenic, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/11/22 10:41	10/11/22 12:56		1.015	0.000296	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/11/22 10:41	10/11/22 12:56		1.015	0.000398	mg/L	0.000152	0.001015	J
* Molybdenum, Total	10/5/22 14:15	10/5/22 15:56		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/5/22 14:15	10/5/22 15:56		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/11/22 10:41	10/11/22 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 15:15	10/5/22 15:15		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/3/22 16:50
Customer ID:
Submittal Date: 10/5/22 07:50

Laboratory ID Number: BC18422

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 18:20	10/10/22 18:20		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:53	10/10/22 12:53		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:34	10/11/22 12:34		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 09:53	10/18/22 09:53		1	0.668	mg/L	0.6	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/3/22 16:50
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18422

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18422	Aluminum, Total	mg/L	0.00265	0.010	0.100	0.116	0.111	0.111	0.0850 to 0.115	90.6	70.0 to 130	4.41	20.0
BC18422	Antimony, Total	mg/L	0.000225	0.00100	0.100	0.0935	0.0998	0.0934	0.0850 to 0.115	93.5	70.0 to 130	6.52	20.0
BC18422	Arsenic, Total	mg/L	0.0000101	0.000176	0.100	0.0975	0.0997	0.102	0.0850 to 0.115	97.5	70.0 to 130	2.23	20.0
BC18422	Barium, Total	mg/L	0.0000243	0.00100	0.100	0.0947	0.0975	0.104	0.0850 to 0.115	94.7	70.0 to 130	2.91	20.0
BC18422	Beryllium, Total	mg/L	0.0000138	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC18422	Boron, Total	mg/L	-0.000359	0.0650	1.00	0.982	0.991	0.977	0.850 to 1.15	98.2	70.0 to 130	0.912	20.0
BC18422	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0977	0.101	0.104	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BC18422	Calcium, Total	mg/L	0.00476	0.152	5.00	4.83	5.09	4.73	4.25 to 5.75	96.6	70.0 to 130	5.24	20.0
BC18422	Chloride	mg/L	-0.0816	1.00	10.0	11.3	11.0	10.0	9.00 to 11.0	113	80.0 to 120	2.69	20.0
BC18422	Chromium, Total	mg/L	-0.0000123	0.000440	0.100	0.100	0.100	0.103	0.0850 to 0.115	99.7	70.0 to 130	0.00	20.0
BC18422	Cobalt, Total	mg/L	-0.0000004	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18422	Fluoride	mg/L	0.0462	0.125	2.50	2.53	2.53	2.55	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC18422	Iron, Total	mg/L	-0.000343	0.0176	0.2	0.199	0.201	0.197	0.170 to 0.230	99.5	70.0 to 130	1.00	20.0
BC18422	Lead, Total	mg/L	0.0000032	0.000147	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.8	70.0 to 130	1.20	20.0
BC18422	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.210	0.195	0.205	0.170 to 0.230	105	70.0 to 130	7.41	20.0
BC18422	Magnesium, Total	mg/L	-0.00194	0.0462	5.00	5.15	5.05	4.98	4.25 to 5.75	103	70.0 to 130	1.96	20.0
BC18422	Manganese, Total	mg/L	0.0000297	0.00033	0.100	0.0994	0.0999	0.104	0.0850 to 0.115	99.0	70.0 to 130	0.502	20.0
BC18421	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00395	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.508	20.0
BC18422	Molybdenum, Total	mg/L	0.0000104	0.0002	0.100	0.0987	0.100	0.0994	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BC18422	Potassium, Total	mg/L	0.0245	0.367	10.0	9.82	10.4	9.30	8.50 to 11.5	98.2	70.0 to 130	5.74	20.0
BC18422	Selenium, Total	mg/L	0.000108	0.00100	0.100	0.0992	0.101	0.103	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BC18422	Silicon, Total	mg/L	-0.000094	0.0440	1.00	0.994	1.00	0.983	0.850 to 1.15	99.4	70.0 to 130	0.602	20.0
BC18422	Sodium, Total	mg/L	0.0101	0.0660	5.00	5.12	4.80	5.01	4.25 to 5.75	102	70.0 to 130	6.45	20.0
BC18422	Sulfate	mg/L	0.495	2.0	20.0	20.7	21.1	19.8	18.0 to 22.0	100	80.0 to 120	1.91	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/3/22 16:50
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18422

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18422	Thallium, Total	mg/L	-0.0000053	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18421	Total Organic Carbon	mg/L	0.264	1.00	10.0	11.2	11.2	24.0		97.0	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/3/22 16:50
Customer ID:
Delivery Date: 10/5/22 07:50

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18422

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18422	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	0.087	1.87	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18421	Solids, Dissolved	mg/L	0.0000	25.0			429	49.0	40.0 to 60.0			0.702	10.0

Comments:

Definitions

Project Number: WMWGREAP_1387

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: sample event changed from 1386 to 1387. BC 10/05/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	10/03/2022	16:10	5	Field Blank		BC18419
MW-52HO	10/03/2022	16:24	6	Groundwater		BC18420
MW-52HO dup	10/03/2022	16:24	6	Sample Duplicate		BC18421
EB-1	10/03/2022	16:50	5	Equipment Blank		BC18422

Relinquished By	Received By	Date/Time
Dallas Gentry		10/04/2022 11:12
		10/04/2022 15:00

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	2.0 °C
Sample Event	1387	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments
MS/MSD sampled @ MW52HO
sample event changed from 1386 to 1387. BC 10/05/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	10/03/2022	16:10	1	Field Blank		BC18433
MW-52HO	10/03/2022	16:24	3	Groundwater		BC18434
MW-52HO dup	10/03/2022	16:24	1	Sample Duplicate		BC18435
EB-1	10/03/2022	16:50	1	Equipment Blank		BC18436

Relinquished By	Received By	Date/Time
		10/04/2022 11:12
		10/04/2022 15:01

SmarTroll ID	7586-41444-5-3
Turbidity ID	3901-20010-2-2
Sample Event	1387

All pH requirements have been met ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Strong Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group :	WMWGREAP_1386
Project/Site :	Greene County Ash Pond Demopolis, AL 36732
For :	Southern Company Services 3535 Colonade Parkway Birmingham, AL 35243
Attention :	Dustin Brooks & Greg Dyer
Released By :	Brooke Caton tbwill@southernco.com (205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Alabama Power

October 31, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on October 05, 2022.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.11.01
07:44:46 -05'00'

Supervision: Renee Jernigan

Digitally signed by Renee Jernigan
Date: 2022.11.01
07:59:01 -05'00'

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	738246	WMWGREAP_1386
BC18410	738246	WMWGREAP_1386
BC18411	738246	WMWGREAP_1386
BC18412	738246	WMWGREAP_1386
BC18413	738246	WMWGREAP_1386

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18410	Calcium	10.15
BC18411	Calcium	10.15
BC18412	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18410	738216	WMWGREAP_1386
BC18411	738216	WMWGREAP_1386
BC18412	738216	WMWGREAP_1386

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Case Narrative

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18412 Calcium MS/MSD spike levels were <30% of the sample concentrations.
-
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC18410	Calcium	10.15
BC18411	Calcium	10.15
BC18412	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	738845	WMWGREAP_1386
BC18410	738845	WMWGREAP_1386
BC18411	738845	WMWGREAP_1386
BC18412	738845	WMWGREAP_1386
BC18413	738845	WMWGREAP_1386

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18410	Manganese	5.075
BC18411	Manganese	5.075
BC18412	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18410	738092	WMWGREAP_1386
BC18411	738092	WMWGREAP_1386
BC18412	738092	WMWGREAP_1386

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC18412 Manganese MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18410	Manganese	5.075
BC18411	Manganese	5.075
BC18412	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	738231	WMWGREAP_1386
BC18410	738231	WMWGREAP_1386
BC18411	738231	WMWGREAP_1386
BC18412	738231	WMWGREAP_1386
BC18413	738231	WMWGREAP_1386

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	737920	WMWGREAP_1386
BC18410	737920	WMWGREAP_1386
BC18411	737920	WMWGREAP_1386
BC18412	737920	WMWGREAP_1386
BC18413	737920	WMWGREAP_1386

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BC18409
    - BC18413

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18410	738945, 738946	WMWGREAP_1386
BC18411	738945, 738946	WMWGREAP_1386
BC18412	738945, 738946	WMWGREAP_1386

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	738291, 738347, 738432	WMWGREAP_1386
BC18410	738291, 738347, 738432	WMWGREAP_1386
BC18411	738291, 738347, 738432	WMWGREAP_1386
BC18412	738291, 738347, 738432	WMWGREAP_1386
BC18413	738291, 738347, 738432	WMWGREAP_1386

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18410	Sulfate	4
BC18411	Sulfate	8
BC18412	Sulfate	8

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	737924	WMWGREAP_1386
BC18410	737924	WMWGREAP_1386
BC18411	737924	WMWGREAP_1386
BC18412	737924	WMWGREAP_1386
BC18413	737924	WMWGREAP_1386

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Revision 5

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1386

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18409	738275	WMWGREAP_1386
BC18410	738275	WMWGREAP_1386
BC18411	738275	WMWGREAP_1386
BC18412	738275	WMWGREAP_1386
BC18413	738275	WMWGREAP_1386

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Revision 5

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/4/22 08:20
Customer ID:
Submittal Date: 10/5/22 07:48

Laboratory ID Number: BC18409

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/5/22 14:15	10/10/22 12:52		1	Not Detected	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/5/22 14:15	10/10/22 12:52		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/5/22 14:15	10/5/22 16:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 20:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 13:57	10/5/22 13:57		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/4/22 08:20
Customer ID:
Submittal Date: 10/5/22 07:48

Laboratory ID Number: BC18409

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 13:33	10/10/22 13:33		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:10	10/10/22 12:10		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 11:47	10/11/22 11:47		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 14:37	10/17/22 14:37		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/4/22 08:20
Customer ID:
Delivery Date: 10/5/22 07:48

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18409

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18413	Aluminum, Total	mg/L	0.000348	0.010	0.100	0.102	0.105	0.106	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18413	Antimony, Total	mg/L	0.000233	0.00100	0.100	0.0943	0.0932	0.0929	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BC18413	Arsenic, Total	mg/L	-0.0000096	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC18413	Barium, Total	mg/L	0.0000183	0.00100	0.100	0.104	0.0986	0.101	0.0850 to 0.115	104	70.0 to 130	5.33	20.0
BC18413	Beryllium, Total	mg/L	0.0000160	0.000880	0.100	0.0947	0.0940	0.0943	0.0850 to 0.115	94.7	70.0 to 130	0.742	20.0
BC18413	Boron, Total	mg/L	-0.00009	0.0650	1.00	0.976	0.974	0.986	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC18413	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18413	Calcium, Total	mg/L	0.0104	0.152	5.00	4.85	4.78	4.82	4.25 to 5.75	97.0	70.0 to 130	1.45	20.0
BC18413	Chloride	mg/L	-0.0604	1.00	10.0	10.1	10.3	10.1	9.00 to 11.0	101	80.0 to 120	1.96	20.0
BC18413	Chromium, Total	mg/L	-0.0000392	0.000440	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18413	Cobalt, Total	mg/L	-0.0000178	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18413	Fluoride	mg/L	0.0220	0.125	2.50	2.59	2.60	2.57	2.25 to 2.75	104	80.0 to 120	0.385	20.0
BC18413	Iron, Total	mg/L	-0.000218	0.0176	0.2	0.197	0.198	0.197	0.170 to 0.230	98.5	70.0 to 130	0.506	20.0
BC18413	Lead, Total	mg/L	0.0000257	0.000147	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18413	Lithium, Total	mg/L	0.000223	0.0154	0.200	0.203	0.205	0.204	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC18413	Magnesium, Total	mg/L	0.00136	0.0462	5.00	5.04	5.02	5.00	4.25 to 5.75	101	70.0 to 130	0.398	20.0
BC18413	Manganese, Total	mg/L	0.0000386	0.00033	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00393	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.00	20.0
BC18413	Molybdenum, Total	mg/L	0.0000033	0.0002	0.100	0.0999	0.102	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.08	20.0
BC18413	Potassium, Total	mg/L	0.0206	0.367	10.0	10.1	10.5	10.5	8.50 to 11.5	101	70.0 to 130	3.88	20.0
BC18413	Selenium, Total	mg/L	0.0000140	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC18413	Silicon, Total	mg/L	0.000388	0.0440	1.00	0.993	0.989	0.994	0.850 to 1.15	99.3	70.0 to 130	0.404	20.0
BC18413	Sodium, Total	mg/L	0.0151	0.0660	5.00	5.01	5.06	5.10	4.25 to 5.75	100	70.0 to 130	0.993	20.0
BC18413	Sulfate	mg/L	-0.224	2.0	20.0	19.9	19.1	18.4	18.0 to 22.0	99.5	80.0 to 120	4.10	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/4/22 08:20
Customer ID:
Delivery Date: 10/5/22 07:48

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18409

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18413	Thallium, Total	mg/L	-0.0000464	0.000147	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC18413	Total Organic Carbon	mg/L	0.219	1.00	10.0	9.71	10.2	21.8		97.1	80.0 to 120	4.92	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/4/22 08:20
Customer ID:
Delivery Date: 10/5/22 07:48

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18409

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18413	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.025	1.89	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC18412	Solids, Dissolved	mg/L	0.0000	25.0			330	49.0	40.0 to 60.0			3.08	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO

Location Code: WMWGREAP
Collected: 10/4/22 08:35
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18410

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 12:55		1.015	0.302	mg/L	0.030000	0.1015	
* Calcium, Total	10/5/22 14:15	10/12/22 12:37		10.15	61.5	mg/L	0.70035	4.06	
* Iron, Total	10/5/22 14:15	10/10/22 12:55		1.015	0.0603	mg/L	0.008120	0.0406	
* Lithium, Total	10/5/22 14:15	10/10/22 12:55		1.015	0.125	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/5/22 14:15	10/10/22 12:55		1.015	16.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/5/22 14:15	10/10/22 12:55		1	5.61	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 12:55		1.015	2.62	mg/L	0.02030	0.25375	
* Sodium, Total	10/5/22 14:15	10/10/22 12:55		1.015	14.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/5/22 11:29	10/10/22 13:52		1.015	0.308	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/5/22 11:29	10/12/22 12:53		10.15	68.3	mg/L	0.70035	4.06	
* Iron, Dissolved	10/5/22 11:29	10/10/22 13:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/5/22 11:29	10/10/22 13:52		1.015	0.119	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/5/22 11:29	10/10/22 13:52		1.015	16.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/5/22 11:29	10/10/22 13:52		1	5.54	mg/L			
Silicon, Dissolved	10/5/22 11:29	10/10/22 13:52		1.015	2.59	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/5/22 11:29	10/10/22 13:52		1.015	13.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 16:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.0979	mg/L	0.006090	0.01015	
* Arsenic, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.000268	mg/L	0.000081	0.000203	
* Barium, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.0574	mg/L	0.000508	0.001015	
* Beryllium, Total	10/5/22 14:15	10/5/22 16:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.0000956	mg/L	0.000068	0.000203	J
* Chromium, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.000215	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.00561	mg/L	0.000068	0.000203	
* Lead, Total	10/5/22 14:15	10/5/22 16:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/5/22 14:15	10/5/22 16:58		5.075	4.21	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/5/22 14:15	10/5/22 16:36		1.015	0.0442	mg/L	0.000102	0.000203	
* Potassium, Total	10/5/22 14:15	10/5/22 16:36		1.015	5.82	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO

Location Code: WMWGREAP
Collected: 10/4/22 08:35
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18410

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/5/22 14:15	10/5/22 16:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/5/22 14:15	10/5/22 16:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	0.000281	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	0.0573	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	0.000120	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	0.00558	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	0.0000987	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/5/22 11:29	10/5/22 14:07		5.075	4.04	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	0.0465	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	5.88	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/5/22 11:29	10/5/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 20:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 13:58	10/5/22 13:58		1	1.94	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:53	10/13/22 15:44		1	125	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	257	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	125	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 13:47	10/10/22 13:47		1	1.50	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-46HO

Location Code: WMWGREAP
Collected: 10/4/22 08:35
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18410

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:03	10/10/22 12:03		1	5.71	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 11:48	10/11/22 11:48		1	0.151	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 14:46	10/17/22 14:46		4	82.2	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/4/22 08:33	10/4/22 08:33			439.19	uS/cm			FA
pH	10/4/22 08:33	10/4/22 08:33			6.27	SU			FA
Temperature	10/4/22 08:33	10/4/22 08:33			19.78	C			FA
Turbidity	10/4/22 08:33	10/4/22 08:33			4.28	NTU			FA
Sulfide	10/4/22 08:33	10/4/22 08:33			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:35
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC18410

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18412	Aluminum, Dissolved	mg/L	-0.0000822	0.010	0.100	0.101	0.0992	0.103	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC18413	Aluminum, Total	mg/L	0.000348	0.010	0.100	0.102	0.105	0.106	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18412	Antimony, Dissolved	mg/L	0.000244	0.00100	0.100	0.0903	0.0905	0.0922	0.0850 to 0.115	90.3	70.0 to 130	0.221	20.0
BC18413	Antimony, Total	mg/L	0.000233	0.00100	0.100	0.0943	0.0932	0.0929	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BC18412	Arsenic, Dissolved	mg/L	-0.0000038	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18413	Arsenic, Total	mg/L	-0.0000096	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC18412	Barium, Dissolved	mg/L	-0.0000023	0.00100	0.100	0.164	0.164	0.101	0.0850 to 0.115	96.8	70.0 to 130	0.00	20.0
BC18413	Barium, Total	mg/L	0.0000183	0.00100	0.100	0.104	0.0986	0.101	0.0850 to 0.115	104	70.0 to 130	5.33	20.0
BC18412	Beryllium, Dissolved	mg/L	0.0000125	0.000880	0.100	0.0966	0.0967	0.0970	0.0850 to 0.115	96.6	70.0 to 130	0.103	20.0
BC18413	Beryllium, Total	mg/L	0.0000160	0.000880	0.100	0.0947	0.0940	0.0943	0.0850 to 0.115	94.7	70.0 to 130	0.742	20.0
BC18412	Boron, Dissolved	mg/L	-0.000315	0.0650	1.00	1.43	1.42	0.977	0.850 to 1.15	101	70.0 to 130	0.702	20.0
BC18413	Boron, Total	mg/L	-0.00009	0.0650	1.00	0.976	0.974	0.986	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC18412	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0969	0.0973	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.412	20.0
BC18413	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18412	Calcium, Dissolved	mg/L	0.00275	0.152	5.00	77.2	68.4	5.04	4.25 to 5.75	178	70.0 to 130	12.1	20.0
BC18413	Calcium, Total	mg/L	0.0104	0.152	5.00	4.85	4.78	4.82	4.25 to 5.75	97.0	70.0 to 130	1.45	20.0
BC18413	Chloride	mg/L	-0.0604	1.00	10.0	10.1	10.3	10.1	9.00 to 11.0	101	80.0 to 120	1.96	20.0
BC18412	Chromium, Dissolved	mg/L	-0.000100	0.000440	0.100	0.0992	0.0963	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.97	20.0
BC18413	Chromium, Total	mg/L	-0.0000392	0.000440	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Cobalt, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.0993	0.104	0.0850 to 0.115	100	70.0 to 130	3.66	20.0
BC18413	Cobalt, Total	mg/L	-0.0000178	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18413	Fluoride	mg/L	0.0220	0.125	2.50	2.59	2.60	2.57	2.25 to 2.75	104	80.0 to 120	0.385	20.0
BC18412	Iron, Dissolved	mg/L	-0.000284	0.0176	0.2	0.217	0.214	0.200	0.170 to 0.230	101	70.0 to 130	1.39	20.0
BC18413	Iron, Total	mg/L	-0.000218	0.0176	0.2	0.197	0.198	0.197	0.170 to 0.230	98.5	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:35
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC18410

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18412	Lead, Dissolved	mg/L	0.0000048	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18413	Lead, Total	mg/L	0.0000257	0.000147	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18412	Lithium, Dissolved	mg/L	0.000230	0.0154	0.200	0.345	0.342	0.188	0.170 to 0.230	99.0	70.0 to 130	0.873	20.0
BC18413	Lithium, Total	mg/L	0.000223	0.0154	0.200	0.203	0.205	0.204	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC18412	Magnesium, Dissolved	mg/L	0.00613	0.0462	5.00	22.6	22.3	4.90	4.25 to 5.75	106	70.0 to 130	1.34	20.0
BC18413	Magnesium, Total	mg/L	0.00136	0.0462	5.00	5.04	5.02	5.00	4.25 to 5.75	101	70.0 to 130	0.398	20.0
BC18412	Manganese, Dissolved	mg/L	0.0000455	0.00033	0.100	4.67	4.75	0.103	0.0850 to 0.115	40.0	70.0 to 130	1.70	20.0
BC18413	Manganese, Total	mg/L	0.0000386	0.00033	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00393	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.00	20.0
BC18412	Molybdenum, Dissolved	mg/L	0.0000031	0.0002	0.100	0.163	0.163	0.101	0.0850 to 0.115	95.7	70.0 to 130	0.00	20.0
BC18413	Molybdenum, Total	mg/L	0.0000033	0.0002	0.100	0.0999	0.102	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.08	20.0
BC18412	Potassium, Dissolved	mg/L	0.0182	0.367	10.0	15.1	14.8	10.3	8.50 to 11.5	102	70.0 to 130	2.01	20.0
BC18413	Potassium, Total	mg/L	0.0206	0.367	10.0	10.1	10.5	10.5	8.50 to 11.5	101	70.0 to 130	3.88	20.0
BC18412	Selenium, Dissolved	mg/L	0.0000628	0.00100	0.100	0.0996	0.101	0.104	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC18413	Selenium, Total	mg/L	0.0000140	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC18412	Silicon, Dissolved	mg/L	0.000044	0.0440	1.00	3.73	3.70	0.991	0.850 to 1.15	100	70.0 to 130	0.808	20.0
BC18413	Silicon, Total	mg/L	0.000388	0.0440	1.00	0.993	0.989	0.994	0.850 to 1.15	99.3	70.0 to 130	0.404	20.0
BC18412	Sodium, Dissolved	mg/L	0.00670	0.0660	5.00	23.9	23.7	4.65	4.25 to 5.75	104	70.0 to 130	0.840	20.0
BC18413	Sodium, Total	mg/L	0.0151	0.0660	5.00	5.01	5.06	5.10	4.25 to 5.75	100	70.0 to 130	0.993	20.0
BC18413	Sulfate	mg/L	-0.224	2.0	20.0	19.9	19.1	18.4	18.0 to 22.0	99.5	80.0 to 120	4.10	20.0
BC18412	Thallium, Dissolved	mg/L	-0.0000499	0.000147	0.100	0.102	0.105	0.105	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18413	Thallium, Total	mg/L	-0.0000464	0.000147	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC18413	Total Organic Carbon	mg/L	0.219	1.00	10.0	9.71	10.2	21.8		97.1	80.0 to 120	4.92	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:35
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-46HO

Laboratory ID Number: BC18410

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18417	Alkalinity to pH 4.5	mg CaCO3/L					4.76	50.5	45.0 to 55.0			2.12	10.0
BC18413	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.025	1.89	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC18412	Solids, Dissolved	mg/L	0.0000	25.0			330	49.0	40.0 to 60.0			3.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/31/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO

Location Code: WMWGREAP
Collected: 10/4/22 09:38
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18411

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 12:58		1.015	0.419	mg/L	0.030000	0.1015	
* Calcium, Total	10/5/22 14:15	10/12/22 12:41		10.15	69.8	mg/L	0.70035	4.06	
* Iron, Total	10/5/22 14:15	10/10/22 12:58		1.015	0.0755	mg/L	0.008120	0.0406	
* Lithium, Total	10/5/22 14:15	10/10/22 12:58		1.015	0.160	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/5/22 14:15	10/10/22 12:58		1.015	17.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/5/22 14:15	10/10/22 12:58		1	5.93	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 12:58		1.015	2.77	mg/L	0.02030	0.25375	
* Sodium, Total	10/5/22 14:15	10/10/22 12:58		1.015	20.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/5/22 11:29	10/10/22 13:55		1.015	0.422	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/5/22 11:29	10/12/22 12:56		10.15	64.9	mg/L	0.70035	4.06	
* Iron, Dissolved	10/5/22 11:29	10/10/22 13:55		1.015	0.0160	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/5/22 11:29	10/10/22 13:55		1.015	0.148	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/5/22 11:29	10/10/22 13:55		1.015	17.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/5/22 11:29	10/10/22 13:55		1	5.84	mg/L			
Silicon, Dissolved	10/5/22 11:29	10/10/22 13:55		1.015	2.73	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/5/22 11:29	10/10/22 13:55		1.015	19.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 16:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.137	mg/L	0.006090	0.01015	
* Arsenic, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.000267	mg/L	0.000081	0.000203	
* Barium, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.0681	mg/L	0.000508	0.001015	
* Beryllium, Total	10/5/22 14:15	10/5/22 16:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.000167	mg/L	0.000068	0.000203	J
* Chromium, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.000348	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.00315	mg/L	0.000068	0.000203	
* Lead, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.000109	mg/L	0.000068	0.000203	J
* Manganese, Total	10/5/22 14:15	10/5/22 17:01		5.075	4.80	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/5/22 14:15	10/5/22 16:40		1.015	0.0686	mg/L	0.000102	0.000203	
* Potassium, Total	10/5/22 14:15	10/5/22 16:40		1.015	5.00	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO

Location Code: WMWGREAP
Collected: 10/4/22 09:38
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18411

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/5/22 14:15	10/5/22 16:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/5/22 14:15	10/5/22 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	0.000256	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	0.0653	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	0.00314	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	0.0000911	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/5/22 11:29	10/5/22 14:10		5.075	4.67	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	0.0658	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	4.89	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/5/22 11:29	10/5/22 12:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 20:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 13:58	10/5/22 13:58		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:53	10/13/22 15:44		1	97.1	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	330	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	96.8	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 14:04	10/10/22 14:04		1	1.13	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO

Location Code: WMWGREAP
Collected: 10/4/22 09:38
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18411

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:04	10/10/22 12:04		1	9.90	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 11:49	10/11/22 11:49		1	0.212	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 14:47	10/17/22 14:47		8	146	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/4/22 09:35	10/4/22 09:35			504.61	uS/cm			FA
pH	10/4/22 09:35	10/4/22 09:35			6.87	SU			FA
Temperature	10/4/22 09:35	10/4/22 09:35			19.53	C			FA
Turbidity	10/4/22 09:35	10/4/22 09:35			4.66	NTU			FA
Sulfide	10/4/22 09:35	10/4/22 09:35			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:38
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC18411

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18412	Aluminum, Dissolved	mg/L	-0.0000822	0.010	0.100	0.101	0.0992	0.103	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC18413	Aluminum, Total	mg/L	0.000348	0.010	0.100	0.102	0.105	0.106	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18412	Antimony, Dissolved	mg/L	0.000244	0.00100	0.100	0.0903	0.0905	0.0922	0.0850 to 0.115	90.3	70.0 to 130	0.221	20.0
BC18413	Antimony, Total	mg/L	0.000233	0.00100	0.100	0.0943	0.0932	0.0929	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BC18412	Arsenic, Dissolved	mg/L	-0.0000038	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18413	Arsenic, Total	mg/L	-0.0000096	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC18412	Barium, Dissolved	mg/L	-0.0000023	0.00100	0.100	0.164	0.164	0.101	0.0850 to 0.115	96.8	70.0 to 130	0.00	20.0
BC18413	Barium, Total	mg/L	0.0000183	0.00100	0.100	0.104	0.0986	0.101	0.0850 to 0.115	104	70.0 to 130	5.33	20.0
BC18412	Beryllium, Dissolved	mg/L	0.0000125	0.000880	0.100	0.0966	0.0967	0.0970	0.0850 to 0.115	96.6	70.0 to 130	0.103	20.0
BC18413	Beryllium, Total	mg/L	0.0000160	0.000880	0.100	0.0947	0.0940	0.0943	0.0850 to 0.115	94.7	70.0 to 130	0.742	20.0
BC18412	Boron, Dissolved	mg/L	-0.000315	0.0650	1.00	1.43	1.42	0.977	0.850 to 1.15	101	70.0 to 130	0.702	20.0
BC18413	Boron, Total	mg/L	-0.00009	0.0650	1.00	0.976	0.974	0.986	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC18412	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0969	0.0973	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.412	20.0
BC18413	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18412	Calcium, Dissolved	mg/L	0.00275	0.152	5.00	77.2	68.4	5.04	4.25 to 5.75	178	70.0 to 130	12.1	20.0
BC18413	Calcium, Total	mg/L	0.0104	0.152	5.00	4.85	4.78	4.82	4.25 to 5.75	97.0	70.0 to 130	1.45	20.0
BC18413	Chloride	mg/L	-0.0604	1.00	10.0	10.1	10.3	10.1	9.00 to 11.0	101	80.0 to 120	1.96	20.0
BC18412	Chromium, Dissolved	mg/L	-0.000100	0.000440	0.100	0.0992	0.0963	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.97	20.0
BC18413	Chromium, Total	mg/L	-0.0000392	0.000440	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Cobalt, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.0993	0.104	0.0850 to 0.115	100	70.0 to 130	3.66	20.0
BC18413	Cobalt, Total	mg/L	-0.0000178	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18413	Fluoride	mg/L	0.0220	0.125	2.50	2.59	2.60	2.57	2.25 to 2.75	104	80.0 to 120	0.385	20.0
BC18412	Iron, Dissolved	mg/L	-0.000284	0.0176	0.2	0.217	0.214	0.200	0.170 to 0.230	101	70.0 to 130	1.39	20.0
BC18413	Iron, Total	mg/L	-0.000218	0.0176	0.2	0.197	0.198	0.197	0.170 to 0.230	98.5	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:38
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC18411

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18412	Lead, Dissolved	mg/L	0.0000048	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18413	Lead, Total	mg/L	0.0000257	0.000147	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18412	Lithium, Dissolved	mg/L	0.000230	0.0154	0.200	0.345	0.342	0.188	0.170 to 0.230	99.0	70.0 to 130	0.873	20.0
BC18413	Lithium, Total	mg/L	0.000223	0.0154	0.200	0.203	0.205	0.204	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC18412	Magnesium, Dissolved	mg/L	0.00613	0.0462	5.00	22.6	22.3	4.90	4.25 to 5.75	106	70.0 to 130	1.34	20.0
BC18413	Magnesium, Total	mg/L	0.00136	0.0462	5.00	5.04	5.02	5.00	4.25 to 5.75	101	70.0 to 130	0.398	20.0
BC18412	Manganese, Dissolved	mg/L	0.0000455	0.00033	0.100	4.67	4.75	0.103	0.0850 to 0.115	40.0	70.0 to 130	1.70	20.0
BC18413	Manganese, Total	mg/L	0.0000386	0.00033	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00393	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.00	20.0
BC18412	Molybdenum, Dissolved	mg/L	0.0000031	0.0002	0.100	0.163	0.163	0.101	0.0850 to 0.115	95.7	70.0 to 130	0.00	20.0
BC18413	Molybdenum, Total	mg/L	0.0000033	0.0002	0.100	0.0999	0.102	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.08	20.0
BC18412	Potassium, Dissolved	mg/L	0.0182	0.367	10.0	15.1	14.8	10.3	8.50 to 11.5	102	70.0 to 130	2.01	20.0
BC18413	Potassium, Total	mg/L	0.0206	0.367	10.0	10.1	10.5	10.5	8.50 to 11.5	101	70.0 to 130	3.88	20.0
BC18412	Selenium, Dissolved	mg/L	0.0000628	0.00100	0.100	0.0996	0.101	0.104	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC18413	Selenium, Total	mg/L	0.0000140	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC18412	Silicon, Dissolved	mg/L	0.000044	0.0440	1.00	3.73	3.70	0.991	0.850 to 1.15	100	70.0 to 130	0.808	20.0
BC18413	Silicon, Total	mg/L	0.000388	0.0440	1.00	0.993	0.989	0.994	0.850 to 1.15	99.3	70.0 to 130	0.404	20.0
BC18412	Sodium, Dissolved	mg/L	0.00670	0.0660	5.00	23.9	23.7	4.65	4.25 to 5.75	104	70.0 to 130	0.840	20.0
BC18413	Sodium, Total	mg/L	0.0151	0.0660	5.00	5.01	5.06	5.10	4.25 to 5.75	100	70.0 to 130	0.993	20.0
BC18413	Sulfate	mg/L	-0.224	2.0	20.0	19.9	19.1	18.4	18.0 to 22.0	99.5	80.0 to 120	4.10	20.0
BC18412	Thallium, Dissolved	mg/L	-0.0000499	0.000147	0.100	0.102	0.105	0.105	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18413	Thallium, Total	mg/L	-0.0000464	0.000147	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC18413	Total Organic Carbon	mg/L	0.219	1.00	10.0	9.71	10.2	21.8		97.1	80.0 to 120	4.92	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:38
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-64HO

Laboratory ID Number: BC18411

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18417	Alkalinity to pH 4.5	mg CaCO3/L					4.76	50.5	45.0 to 55.0			2.12	10.0
BC18413	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.025	1.89	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC18412	Solids, Dissolved	mg/L	0.0000	25.0			330	49.0	40.0 to 60.0			3.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO Dup

Location Code: WMWGREAP
Collected: 10/4/22 09:38
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18412

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 13:01		1.015	0.419	mg/L	0.030000	0.1015	
* Calcium, Total	10/5/22 14:15	10/12/22 12:44		10.15	70.7	mg/L	0.70035	4.06	
* Iron, Total	10/5/22 14:15	10/10/22 13:01		1.015	0.0721	mg/L	0.008120	0.0406	
* Lithium, Total	10/5/22 14:15	10/10/22 13:01		1.015	0.161	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/5/22 14:15	10/10/22 13:01		1.015	17.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/5/22 14:15	10/10/22 13:01		1	5.93	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 13:01		1.015	2.77	mg/L	0.02030	0.25375	
* Sodium, Total	10/5/22 14:15	10/10/22 13:01		1.015	20.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/5/22 11:29	10/10/22 13:58		1.015	0.424	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/5/22 11:29	10/12/22 12:59		10.15	68.3	mg/L	0.70035	4.06	RA
* Iron, Dissolved	10/5/22 11:29	10/10/22 13:58		1.015	0.0154	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	10/5/22 11:29	10/10/22 13:58		1.015	0.147	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/5/22 11:29	10/10/22 13:58		1.015	17.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/5/22 11:29	10/10/22 13:58		1	5.84	mg/L			
Silicon, Dissolved	10/5/22 11:29	10/10/22 13:58		1.015	2.73	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/5/22 11:29	10/10/22 13:58		1.015	18.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 16:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.136	mg/L	0.006090	0.01015	
* Arsenic, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.000309	mg/L	0.000081	0.000203	
* Barium, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.0677	mg/L	0.000508	0.001015	
* Beryllium, Total	10/5/22 14:15	10/5/22 16:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.000145	mg/L	0.000068	0.000203	J
* Chromium, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.000394	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.00310	mg/L	0.000068	0.000203	
* Lead, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.000102	mg/L	0.000068	0.000203	J
* Manganese, Total	10/5/22 14:15	10/5/22 17:05		5.075	4.85	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/5/22 14:15	10/5/22 16:43		1.015	0.0678	mg/L	0.000102	0.000203	
* Potassium, Total	10/5/22 14:15	10/5/22 16:43		1.015	4.97	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO Dup

Location Code: WMWGREAP
Collected: 10/4/22 09:38
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18412

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/5/22 14:15	10/5/22 16:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/5/22 14:15	10/5/22 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	0.000271	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	0.0672	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	0.00298	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/5/22 11:29	10/5/22 14:14		5.075	4.63	mg/L	0.000761	0.005075	RA
* Molybdenum, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	0.0673	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	4.90	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/5/22 11:29	10/5/22 12:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 20:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 13:59	10/5/22 13:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:53	10/13/22 15:44		1	96.6	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	320	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	96.3	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 14:18	10/10/22 14:18		1	1.17	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-64HO Dup

Location Code: WMWGREAP
Collected: 10/4/22 09:38
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18412

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:06	10/10/22 12:06		1	9.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 11:50	10/11/22 11:50		1	0.211	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 14:48	10/17/22 14:48		8	141	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/4/22 09:35	10/4/22 09:35			504.61	uS/cm			FA
pH	10/4/22 09:35	10/4/22 09:35			6.87	SU			FA
Temperature	10/4/22 09:35	10/4/22 09:35			19.53	C			FA
Turbidity	10/4/22 09:35	10/4/22 09:35			4.66	NTU			FA
Sulfide	10/4/22 09:35	10/4/22 09:35			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:38
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-64HO Dup

Laboratory ID Number: BC18412

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18412	Aluminum, Dissolved	mg/L	-0.0000822	0.010	0.100	0.101	0.0992	0.103	0.0850 to 0.115	101	70.0 to 130	1.80	20.0
BC18413	Aluminum, Total	mg/L	0.000348	0.010	0.100	0.102	0.105	0.106	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18412	Antimony, Dissolved	mg/L	0.000244	0.00100	0.100	0.0903	0.0905	0.0922	0.0850 to 0.115	90.3	70.0 to 130	0.221	20.0
BC18413	Antimony, Total	mg/L	0.000233	0.00100	0.100	0.0943	0.0932	0.0929	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BC18412	Arsenic, Dissolved	mg/L	-0.0000038	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18413	Arsenic, Total	mg/L	-0.0000096	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC18412	Barium, Dissolved	mg/L	-0.0000023	0.00100	0.100	0.164	0.164	0.101	0.0850 to 0.115	96.8	70.0 to 130	0.00	20.0
BC18413	Barium, Total	mg/L	0.0000183	0.00100	0.100	0.104	0.0986	0.101	0.0850 to 0.115	104	70.0 to 130	5.33	20.0
BC18412	Beryllium, Dissolved	mg/L	0.0000125	0.000880	0.100	0.0966	0.0967	0.0970	0.0850 to 0.115	96.6	70.0 to 130	0.103	20.0
BC18413	Beryllium, Total	mg/L	0.0000160	0.000880	0.100	0.0947	0.0940	0.0943	0.0850 to 0.115	94.7	70.0 to 130	0.742	20.0
BC18412	Boron, Dissolved	mg/L	-0.000315	0.0650	1.00	1.43	1.42	0.977	0.850 to 1.15	101	70.0 to 130	0.702	20.0
BC18413	Boron, Total	mg/L	-0.00009	0.0650	1.00	0.976	0.974	0.986	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC18412	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0969	0.0973	0.100	0.0850 to 0.115	96.9	70.0 to 130	0.412	20.0
BC18413	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18412	Calcium, Dissolved	mg/L	0.00275	0.152	5.00	77.2	68.4	5.04	4.25 to 5.75	178	70.0 to 130	12.1	20.0
BC18413	Calcium, Total	mg/L	0.0104	0.152	5.00	4.85	4.78	4.82	4.25 to 5.75	97.0	70.0 to 130	1.45	20.0
BC18413	Chloride	mg/L	-0.0604	1.00	10.0	10.1	10.3	10.1	9.00 to 11.0	101	80.0 to 120	1.96	20.0
BC18412	Chromium, Dissolved	mg/L	-0.000100	0.000440	0.100	0.0992	0.0963	0.103	0.0850 to 0.115	99.2	70.0 to 130	2.97	20.0
BC18413	Chromium, Total	mg/L	-0.0000392	0.000440	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Cobalt, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.0993	0.104	0.0850 to 0.115	100	70.0 to 130	3.66	20.0
BC18413	Cobalt, Total	mg/L	-0.0000178	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18413	Fluoride	mg/L	0.0220	0.125	2.50	2.59	2.60	2.57	2.25 to 2.75	104	80.0 to 120	0.385	20.0
BC18412	Iron, Dissolved	mg/L	-0.000284	0.0176	0.2	0.217	0.214	0.200	0.170 to 0.230	101	70.0 to 130	1.39	20.0
BC18413	Iron, Total	mg/L	-0.000218	0.0176	0.2	0.197	0.198	0.197	0.170 to 0.230	98.5	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:38
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-64HO Dup

Laboratory ID Number: BC18412

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18412	Lead, Dissolved	mg/L	0.0000048	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18413	Lead, Total	mg/L	0.0000257	0.000147	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18412	Lithium, Dissolved	mg/L	0.000230	0.0154	0.200	0.345	0.342	0.188	0.170 to 0.230	99.0	70.0 to 130	0.873	20.0
BC18413	Lithium, Total	mg/L	0.000223	0.0154	0.200	0.203	0.205	0.204	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC18412	Magnesium, Dissolved	mg/L	0.00613	0.0462	5.00	22.6	22.3	4.90	4.25 to 5.75	106	70.0 to 130	1.34	20.0
BC18413	Magnesium, Total	mg/L	0.00136	0.0462	5.00	5.04	5.02	5.00	4.25 to 5.75	101	70.0 to 130	0.398	20.0
BC18412	Manganese, Dissolved	mg/L	0.0000455	0.00033	0.100	4.67	4.75	0.103	0.0850 to 0.115	40.0	70.0 to 130	1.70	20.0
BC18413	Manganese, Total	mg/L	0.0000386	0.00033	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00393	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.00	20.0
BC18412	Molybdenum, Dissolved	mg/L	0.0000031	0.0002	0.100	0.163	0.163	0.101	0.0850 to 0.115	95.7	70.0 to 130	0.00	20.0
BC18413	Molybdenum, Total	mg/L	0.0000033	0.0002	0.100	0.0999	0.102	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.08	20.0
BC18412	Potassium, Dissolved	mg/L	0.0182	0.367	10.0	15.1	14.8	10.3	8.50 to 11.5	102	70.0 to 130	2.01	20.0
BC18413	Potassium, Total	mg/L	0.0206	0.367	10.0	10.1	10.5	10.5	8.50 to 11.5	101	70.0 to 130	3.88	20.0
BC18412	Selenium, Dissolved	mg/L	0.0000628	0.00100	0.100	0.0996	0.101	0.104	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC18413	Selenium, Total	mg/L	0.0000140	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC18412	Silicon, Dissolved	mg/L	0.000044	0.0440	1.00	3.73	3.70	0.991	0.850 to 1.15	100	70.0 to 130	0.808	20.0
BC18413	Silicon, Total	mg/L	0.000388	0.0440	1.00	0.993	0.989	0.994	0.850 to 1.15	99.3	70.0 to 130	0.404	20.0
BC18412	Sodium, Dissolved	mg/L	0.00670	0.0660	5.00	23.9	23.7	4.65	4.25 to 5.75	104	70.0 to 130	0.840	20.0
BC18413	Sodium, Total	mg/L	0.0151	0.0660	5.00	5.01	5.06	5.10	4.25 to 5.75	100	70.0 to 130	0.993	20.0
BC18413	Sulfate	mg/L	-0.224	2.0	20.0	19.9	19.1	18.4	18.0 to 22.0	99.5	80.0 to 120	4.10	20.0
BC18412	Thallium, Dissolved	mg/L	-0.0000499	0.000147	0.100	0.102	0.105	0.105	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18413	Thallium, Total	mg/L	-0.0000464	0.000147	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC18413	Total Organic Carbon	mg/L	0.219	1.00	10.0	9.71	10.2	21.8		97.1	80.0 to 120	4.92	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:38
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-64HO Dup

Laboratory ID Number: BC18412

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18417	Alkalinity to pH 4.5	mg CaCO3/L					4.76	50.5	45.0 to 55.0			2.12	10.0
BC18413	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.025	1.89	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC18412	Solids, Dissolved	mg/L	0.0000	25.0			330	49.0	40.0 to 60.0			3.08	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/4/22 10:00
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18413

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/5/22 14:15	10/10/22 13:04		1	Not Detected	mg/L			
Silicon, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/5/22 14:15	10/10/22 13:04		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/5/22 14:15	10/5/22 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 20:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 14:00	10/5/22 14:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:57	10/6/22 13:02		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/4/22 10:00
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18413

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 14:32	10/10/22 14:32		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:07	10/10/22 12:07		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 11:52	10/11/22 11:52		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 14:42	10/17/22 14:42		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 10/31/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/4/22 10:00
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18413

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18413	Aluminum, Total	mg/L	0.000348	0.010	0.100	0.102	0.105	0.106	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BC18413	Antimony, Total	mg/L	0.000233	0.00100	0.100	0.0943	0.0932	0.0929	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BC18413	Arsenic, Total	mg/L	-0.0000096	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC18413	Barium, Total	mg/L	0.0000183	0.00100	0.100	0.104	0.0986	0.101	0.0850 to 0.115	104	70.0 to 130	5.33	20.0
BC18413	Beryllium, Total	mg/L	0.0000160	0.000880	0.100	0.0947	0.0940	0.0943	0.0850 to 0.115	94.7	70.0 to 130	0.742	20.0
BC18413	Boron, Total	mg/L	-0.00009	0.0650	1.00	0.976	0.974	0.986	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC18413	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18413	Calcium, Total	mg/L	0.0104	0.152	5.00	4.85	4.78	4.82	4.25 to 5.75	97.0	70.0 to 130	1.45	20.0
BC18413	Chloride	mg/L	-0.0604	1.00	10.0	10.1	10.3	10.1	9.00 to 11.0	101	80.0 to 120	1.96	20.0
BC18413	Chromium, Total	mg/L	-0.0000392	0.000440	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18413	Cobalt, Total	mg/L	-0.0000178	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC18413	Fluoride	mg/L	0.0220	0.125	2.50	2.59	2.60	2.57	2.25 to 2.75	104	80.0 to 120	0.385	20.0
BC18413	Iron, Total	mg/L	-0.000218	0.0176	0.2	0.197	0.198	0.197	0.170 to 0.230	98.5	70.0 to 130	0.506	20.0
BC18413	Lead, Total	mg/L	0.0000257	0.000147	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18413	Lithium, Total	mg/L	0.000223	0.0154	0.200	0.203	0.205	0.204	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC18413	Magnesium, Total	mg/L	0.00136	0.0462	5.00	5.04	5.02	5.00	4.25 to 5.75	101	70.0 to 130	0.398	20.0
BC18413	Manganese, Total	mg/L	0.0000386	0.00033	0.100	0.101	0.103	0.104	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC18412	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00393	0.00393	0.00392	0.00340 to 0.00460	98.2	70.0 to 130	0.00	20.0
BC18413	Molybdenum, Total	mg/L	0.0000033	0.0002	0.100	0.0999	0.102	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.08	20.0
BC18413	Potassium, Total	mg/L	0.0206	0.367	10.0	10.1	10.5	10.5	8.50 to 11.5	101	70.0 to 130	3.88	20.0
BC18413	Selenium, Total	mg/L	0.0000140	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC18413	Silicon, Total	mg/L	0.000388	0.0440	1.00	0.993	0.989	0.994	0.850 to 1.15	99.3	70.0 to 130	0.404	20.0
BC18413	Sodium, Total	mg/L	0.0151	0.0660	5.00	5.01	5.06	5.10	4.25 to 5.75	100	70.0 to 130	0.993	20.0
BC18413	Sulfate	mg/L	-0.224	2.0	20.0	19.9	19.1	18.4	18.0 to 22.0	99.5	80.0 to 120	4.10	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/4/22 10:00
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18413

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18413	Thallium, Total	mg/L	-0.0000464	0.000147	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC18413	Total Organic Carbon	mg/L	0.219	1.00	10.0	9.71	10.2	21.8		97.1	80.0 to 120	4.92	20.0

Comments:

Reported: 10/31/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/4/22 10:00
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18413

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18413	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.025	1.89	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC18412	Solids, Dissolved	mg/L	0.0000	25.0			330	49.0	40.0 to 60.0			3.08	10.0

Comments:

Definitions

Project Number: WMWGREAP_1386

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate/TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	10/04/2022	08:20	5	Field Blank		BC18409
MW-46HO	10/04/2022	08:35	6	Groundwater		BC18410
MW-64HO	10/04/2022	09:38	6	Groundwater		BC18411
MW-64HODUP	10/04/2022	09:38	6	Groundwater		BC18412
EB-1	10/04/2022	10:00	5	Equipment Blank		BC18413

Relinquished By	Received By	Date/Time
		10/04/2022 10:50
		10/04/2022 14:54

SmarTroll ID	7586-41443-5-2
Turbidity ID	9830-57039-1-1
Sample Event	1386

All pH requirements have been met ☑

Cooler Temp	2.0 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD sampled @ MW46HO

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	10/04/2022	08:20	1	Field Blank		BC18423
MW-46HO	10/04/2022	08:35	3	Groundwater		BC18424
MW-64HO	10/04/2022	09:38	1	Groundwater		BC18425
MW-64HODUP	10/04/2022	09:38	1	Groundwater		BC18426
EB-1	10/04/2022	10:00	1	Equipment Blank		BC18427

Relinquished By	Received By	Date/Time
		10/04/2022 12:00
		10/04/2022 14:56

SmarTroll ID	7586-41443-5-2	All pH requirements have been met	☑
Turbidity ID	9830-57039-1-1	Cooler Temp	N/A
Sample Event	1386	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Greene County Ash Pond

2022 Sewell Off-Site Wells Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGREAP_1385

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

October 31, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between October 05, 2022 and October 06, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton Digitally signed by Brooke Caton Date: 2022.10.31 08:39:15 -05'00'

Supervision: Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.10.31 10:49:46 -05'00'

Case Narrative

Total Metals ICP

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	739221	WMWGREAP_1385
BC18415	739221	WMWGREAP_1385
BC18416	739221	WMWGREAP_1385
BC18417	739221	WMWGREAP_1385
BC18418	739221	WMWGREAP_1385
BC18501	739221	WMWGREAP_1385
BC18502	739221	WMWGREAP_1385
BC18519	739221	WMWGREAP_1385
BC18520	739221	WMWGREAP_1385
BC18521	739221	WMWGREAP_1385
BC18522	739222	WMWGREAP_1385

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.

Revision 5

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18502	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICP

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	739105	WMWGREAP_1385
BC18415	739105	WMWGREAP_1385
BC18417	739105	WMWGREAP_1385
BC18418	739105	WMWGREAP_1385
BC18501	739105	WMWGREAP_1385
BC18502	739105	WMWGREAP_1385
BC18519	739105	WMWGREAP_1385
BC18521	739105	WMWGREAP_1385
BC18522	739105	WMWGREAP_1385

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any

qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC18502	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	738709	WMWGREAP_1385
BC18415	738709	WMWGREAP_1385
BC18416	738709	WMWGREAP_1385
BC18417	738709	WMWGREAP_1385
BC18418	738709	WMWGREAP_1385
BC18501	738709	WMWGREAP_1385
BC18502	738709	WMWGREAP_1385
BC18519	738709	WMWGREAP_1385
BC18520	738709	WMWGREAP_1385
BC18521	738709	WMWGREAP_1385
BC18522	738710	WMWGREAP_1385

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Revision 5

Case Narrative

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC18418	Manganese	5.075
BC18502	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	738771	WMWGREAP_1385
BC18415	738771	WMWGREAP_1385
BC18417	738771	WMWGREAP_1385
BC18418	738771	WMWGREAP_1385
BC18501	738771	WMWGREAP_1385
BC18502	738771	WMWGREAP_1385
BC18519	738771	WMWGREAP_1385
BC18521	738771	WMWGREAP_1385
BC18522	738771	WMWGREAP_1385

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional

QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BC18418	Manganese	5.075
BC18502	Manganese	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Mercury

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	738232	WMWGREAP_1385
BC18415	738232	WMWGREAP_1385
BC18416	738232	WMWGREAP_1385
BC18417	738232	WMWGREAP_1385
BC18418	738232	WMWGREAP_1385
BC18501	738232	WMWGREAP_1385
BC18502	738232	WMWGREAP_1385
BC18519	738232	WMWGREAP_1385
BC18520	738232	WMWGREAP_1385
BC18521	738232	WMWGREAP_1385
BC18522	738233	WMWGREAP_1385

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Dissolved Solids

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18414	737919	WMWGREAP_1385
BC18415	737919	WMWGREAP_1385
BC18416	737919	WMWGREAP_1385
BC18417	737919	WMWGREAP_1385
BC18418	737919	WMWGREAP_1385
BC18501	738155	WMWGREAP_1385
BC18502	738155	WMWGREAP_1385
BC18519	738155	WMWGREAP_1385
BC18520	738155	WMWGREAP_1385
BC18521	738155	WMWGREAP_1385
BC18522	738155	WMWGREAP_1385

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BC18416
    - BC18520

Case Narrative

Alkalinity

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	738945, 738946	WMWGREAP_1385
BC18415	738945, 738946	WMWGREAP_1385
BC18417	738945, 738946	WMWGREAP_1385
BC18418	738972, 738973	WMWGREAP_1385
BC18501	738972, 738973	WMWGREAP_1385
BC18502	738972, 738973	WMWGREAP_1385
BC18519	738972, 738973	WMWGREAP_1385
BC18521	738972, 738973	WMWGREAP_1385
BC18522	738972, 738973	WMWGREAP_1385

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Case Narrative

Anions

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC18414	738292, 738345, 738433	WMWGREAP_1385
BC18415	738292, 738345, 738433	WMWGREAP_1385
BC18416	738292, 738345, 738433	WMWGREAP_1385
BC18417	738292, 738345, 738433	WMWGREAP_1385
BC18418	738292, 738345, 738433	WMWGREAP_1385
BC18501	738292, 738345, 738433	WMWGREAP_1385
BC18502	738292, 738345, 738433	WMWGREAP_1385
BC18519	738292, 738345, 738433	WMWGREAP_1385
BC18520	738292, 738345, 738433	WMWGREAP_1385
BC18521	738292, 738345, 738433	WMWGREAP_1385
BC18522	738294, 738346, 738437	WMWGREAP_1385

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC18414	Sulfate	2
BC18415	Sulfate	2
BC18418	Sulfate	4
BC18502	Sulfate	10

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Nitrate-Nitrite

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18414	737925	WMWGREAP_1385
BC18415	737925	WMWGREAP_1385
BC18416	737925	WMWGREAP_1385
BC18417	737925	WMWGREAP_1385
BC18418	737925	WMWGREAP_1385
BC18501	738164	WMWGREAP_1385
BC18502	738164	WMWGREAP_1385
BC18519	738164	WMWGREAP_1385
BC18520	738164	WMWGREAP_1385
BC18521	738164	WMWGREAP_1385
BC18522	738164	WMWGREAP_1385

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

Revision 5

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Greene Co. Ash Pond

WMWGREAP_1385

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BC18414	737914	WMWGREAP_1385
BC18415	737914	WMWGREAP_1385
BC18416	737914	WMWGREAP_1385
BC18417	737914	WMWGREAP_1385
BC18418	737914	WMWGREAP_1385
BC18501	738439	WMWGREAP_1385
BC18502	738439	WMWGREAP_1385
BC18519	738439	WMWGREAP_1385
BC18520	738439	WMWGREAP_1385
BC18521	738439	WMWGREAP_1385
BC18522	738439	WMWGREAP_1385

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

Revision 5

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO

Location Code: WMWGREAP
Collected: 10/4/22 08:36
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18414

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 12:57		1.015	0.115	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:51	10/20/22 12:57		1.015	13.0	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 12:57		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:51	10/20/22 12:57		1.015	0.0422	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/7/22 13:51	10/20/22 12:57		1.015	3.73	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 12:57		1	6.78	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 12:57		1.015	3.17	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 12:57		1.015	11.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	0.113	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	13.6	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	0.0399	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	3.65	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:33		1	7.04	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	3.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:33		1.015	10.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 11:39		1.015	0.0238	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 11:39		1.015	0.000117	mg/L	0.000068	0.000203	J
* Lead, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 11:39		1.015	0.0377	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 11:39		1.015	3.14	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO

Location Code: WMWGREAP
Collected: 10/4/22 08:36
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18414

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 11:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	0.0242	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	0.000117	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	0.0372	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	3.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 14:38	10/5/22 14:38		1	0.287	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:53	10/13/22 15:44		1	23.3	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:30	10/6/22 12:45		1	98.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	23.3	mg CaCO3/L		1	
Carbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 15:46	10/10/22 15:46		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO

Location Code: WMWGREAP
Collected: 10/4/22 08:36
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18414

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:21	10/10/22 12:21		1	3.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:07	10/11/22 12:07		1	0.0647	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:25	10/17/22 15:25		2	42.8	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 08:33	10/4/22 08:33			265.11	uS/cm			FA
pH	10/4/22 08:33	10/4/22 08:33			5.87	SU			FA
Temperature	10/4/22 08:33	10/4/22 08:33			22.71	C			FA
Turbidity	10/4/22 08:33	10/4/22 08:33			1.96	NTU			FA
Sulfide	10/4/22 08:33	10/4/22 08:33			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/31/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:36
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC18414

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:36
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC18414

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18418	Total Organic Carbon	mg/L	0.277	1.00	10.0	10.4	10.6	23.8		104	80.0 to 120	1.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:36
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-47HO

Laboratory ID Number: BC18414

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18417	Alkalinity to pH 4.5	mg CaCO3/L					4.76	50.5	45.0 to 55.0			2.12	10.0
BC18418	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	-0.023	1.89	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18418	Solids, Dissolved	mg/L	1.00	25.0			226	51.0	40.0 to 60.0			4.06	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO Dup

Location Code: WMWGREAP
Collected: 10/4/22 08:36
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18415

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:00		1.015	0.115	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:51	10/20/22 13:00		1.015	13.2	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:00		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:51	10/20/22 13:00		1.015	0.0422	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/7/22 13:51	10/20/22 13:00		1.015	3.78	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:00		1	6.72	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:00		1.015	3.14	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:00		1.015	11.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	0.113	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	13.3	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	0.0406	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	3.65	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:36		1	7.00	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	3.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:36		1.015	10.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 11:43		1.015	0.0000912	mg/L	0.000081	0.000203	J
* Barium, Total	10/7/22 13:51	10/10/22 11:43		1.015	0.0246	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 11:43		1.015	0.000210	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 11:43		1.015	0.000119	mg/L	0.000068	0.000203	J
* Lead, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 11:43		1.015	0.0370	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 11:43		1.015	3.13	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO Dup

Location Code: WMWGREAP
Collected: 10/4/22 08:36
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18415

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 11:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	0.0000877	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	0.0247	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	0.000103	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	0.0369	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	3.15	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 14:39	10/5/22 14:39		1	0.291	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:53	10/13/22 15:44		1	23.8	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:30	10/6/22 12:45		1	105	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	23.8	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 15:59	10/10/22 15:59		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-47HO Dup

Location Code: WMWGREAP
Collected: 10/4/22 08:36
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18415

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:22	10/10/22 12:22		1	3.87	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:08	10/11/22 12:08		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:26	10/17/22 15:26		2	43.5	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 08:33	10/4/22 08:33			265.11	uS/cm			FA
pH	10/4/22 08:33	10/4/22 08:33			5.87	SU			FA
Temperature	10/4/22 08:33	10/4/22 08:33			22.71	C			FA
Turbidity	10/4/22 08:33	10/4/22 08:33			1.96	NTU			FA
Sulfide	10/4/22 08:33	10/4/22 08:33			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:36
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-47HO Dup

Laboratory ID Number: BC18415

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:36
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-47HO Dup

Laboratory ID Number: BC18415

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18418	Total Organic Carbon	mg/L	0.277	1.00	10.0	10.4	10.6	23.8		104	80.0 to 120	1.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 08:36
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-47HO Dup

Laboratory ID Number: BC18415

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18417	Alkalinity to pH 4.5	mg CaCO3/L					4.76	50.5	45.0 to 55.0			2.12	10.0
BC18418	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	-0.023	1.89	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18418	Solids, Dissolved	mg/L	1.00	25.0			226	51.0	40.0 to 60.0			4.06	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/4/22 08:56
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18416

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:03		1	Not Detected	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/7/22 13:51	10/20/22 13:03		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: CRB***							
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	10/5/22 14:40	10/5/22 14:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	10/5/22 11:30	10/6/22 12:45		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Field Blank-1

Location Code: WMWGREAPFB
Collected: 10/4/22 08:56
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18416

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 16:11	10/10/22 16:11		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:33	10/10/22 12:33		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:10	10/11/22 12:10		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:37	10/17/22 15:37		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/4/22 08:56
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18416

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/4/22 08:56
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18416

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18418	Total Organic Carbon	mg/L	0.277	1.00	10.0	10.4	10.6	23.8		104	80.0 to 120	1.90	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAPFB
Sample Date: 10/4/22 08:56
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond Field Blank-1

Laboratory ID Number: BC18416

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18418	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	-0.023	1.89	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18418	Solids, Dissolved	mg/L	1.00	25.0			226	51.0	40.0 to 60.0			4.06	10.0

Comments:

Reported: 10/31/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-63HO

Location Code: WMWGREAP
Collected: 10/4/22 09:32
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18417

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:10		1.015	0.0360	mg/L	0.030000	0.1015	J
* Calcium, Total	10/7/22 13:51	10/20/22 13:10		1.015	7.09	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:10		1.015	0.114	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:51	10/20/22 13:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:10		1.015	1.38	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:10		1	6.23	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:10		1.015	2.91	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:10		1.015	3.05	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	0.0350	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	7.52	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	1.38	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:39		1	6.40	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	2.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:39		1.015	2.98	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 11:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.115	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.000133	mg/L	0.000081	0.000203	J
* Barium, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.0548	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 11:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.0000838	mg/L	0.000068	0.000203	J
* Chromium, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.000384	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.000312	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.000134	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.0185	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 11:50		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 11:50		1.015	0.906	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-63HO

Location Code: WMWGREAP
Collected: 10/4/22 09:32
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18417

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 11:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 11:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	0.00916	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	0.0522	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	0.000228	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	0.000155	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	0.0114	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	0.892	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 14:41	10/5/22 14:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/13/22 14:53	10/13/22 15:44		1	4.66	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:30	10/6/22 12:45		1	48.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	4.66	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/13/22 14:53	10/13/22 15:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 16:24	10/10/22 16:24		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-63HO

Location Code: WMWGREAP
Collected: 10/4/22 09:32
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18417

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:24	10/10/22 12:24		1	2.58	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:11	10/11/22 12:11		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:27	10/17/22 15:27		1	19.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 09:29	10/4/22 09:29			202.37	uS/cm			FA
pH	10/4/22 09:29	10/4/22 09:29			5.38	SU			FA
Temperature	10/4/22 09:29	10/4/22 09:29			19.19	C			FA
Turbidity	10/4/22 09:29	10/4/22 09:29			2.84	NTU			FA
Sulfide	10/4/22 09:29	10/4/22 09:29			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:32
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC18417

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:32
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC18417

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18418	Total Organic Carbon	mg/L	0.277	1.00	10.0	10.4	10.6	23.8		104	80.0 to 120	1.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 09:32
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-63HO

Laboratory ID Number: BC18417

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18417	Alkalinity to pH 4.5	mg CaCO3/L					4.76	50.5	45.0 to 55.0			2.12	10.0
BC18418	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	-0.023	1.89	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18418	Solids, Dissolved	mg/L	1.00	25.0			226	51.0	40.0 to 60.0			4.06	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-50HO

Location Code: WMWGREAP
Collected: 10/4/22 10:39
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18418

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:13		1.015	0.328	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:51	10/20/22 13:13		1.015	37.2	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:13		1.015	0.0509	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:51	10/20/22 13:13		1.015	0.0749	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/7/22 13:51	10/20/22 13:13		1.015	6.93	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:13		1	6.81	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:13		1.015	3.18	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:13		1.015	23.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	0.328	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	37.6	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	0.0730	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	6.82	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:42		1	7.10	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	3.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:42		1.015	23.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 11:53		1.015	0.0426	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 11:53		1.015	0.000164	mg/L	0.000081	0.000203	J
* Barium, Total	10/7/22 13:51	10/10/22 11:53		1.015	0.0696	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 11:53		1.015	0.000218	mg/L	0.000068	0.000203	
* Chromium, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 11:53		1.015	0.00685	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 12:58		5.075	4.83	mg/L	0.000761	0.005075	
* Molybdenum, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 11:53		1.015	5.42	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-50HO

Location Code: WMWGREAP
Collected: 10/4/22 10:39
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18418

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	0.000118	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	0.0711	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	0.000223	mg/L	0.000068	0.000203	
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	0.00671	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:50		5.075	4.73	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	5.30	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/5/22 14:42	10/5/22 14:42		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 10:28	10/18/22 10:31		1	86.0	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/5/22 11:30	10/6/22 12:45		1	217	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 10:31		1	85.9	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 10:31		1	0.0826	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/10/22 16:39	10/10/22 16:39		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-50HO

Location Code: WMWGREAP
Collected: 10/4/22 10:39
Customer ID:
Submittal Date: 10/5/22 07:49

Laboratory ID Number: BC18418

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:25	10/10/22 12:25		1	12.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:12	10/11/22 12:12		1	0.157	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:28	10/17/22 15:28		4	79.4	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 10:36	10/4/22 10:36			387.79	uS/cm			FA
pH	10/4/22 10:36	10/4/22 10:36			6.27	SU			FA
Temperature	10/4/22 10:36	10/4/22 10:36			19.26	C			FA
Turbidity	10/4/22 10:36	10/4/22 10:36			1.9	NTU			FA
Sulfide	10/4/22 10:36	10/4/22 10:36			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 10:39
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC18418

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 10:39
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC18418

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18418	Total Organic Carbon	mg/L	0.277	1.00	10.0	10.4	10.6	23.8		104	80.0 to 120	1.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 10:39
Customer ID:
Delivery Date: 10/5/22 07:49

Description: Greene County Ash Pond - MW-50HO

Laboratory ID Number: BC18418

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Alkalinity to pH 4.5	mg CaCO3/L					10.2	50.3	45.0 to 55.0			2.58	10.0
BC18418	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.03	-0.023	1.89	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BC18418	Solids, Dissolved	mg/L	1.00	25.0			226	51.0	40.0 to 60.0			4.06	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-62HO

Location Code: WMWGREAP
Collected: 10/4/22 14:10
Customer ID:
Submittal Date: 10/6/22 09:08

Laboratory ID Number: BC18501

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:16		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:51	10/20/22 13:16		1.015	9.58	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:16		1.015	0.0774	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:51	10/20/22 13:16		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:16		1.015	1.22	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:16		1	6.31	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:16		1.015	2.95	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:16		1.015	2.55	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	9.29	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	1.17	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:46		1	6.46	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	3.02	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:46		1.015	2.71	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 11:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.0964	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.000145	mg/L	0.000081	0.000203	J
* Barium, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.0737	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 11:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.000435	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.000286	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.0000832	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.0264	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.000145	mg/L	0.000102	0.000203	J
* Potassium, Total	10/7/22 13:51	10/10/22 11:57		1.015	0.830	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Greene County Ash Pond - MW-62HO

Location Code: WMWGREAP
Collected: 10/4/22 14:10
Customer ID:
Submittal Date: 10/6/22 09:08

Laboratory ID Number: BC18501

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 11:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.00812	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.0000817	mg/L	0.000081	0.000203	J
* Barium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.0698	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.000314	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.000124	mg/L	0.000068	0.000203	J
* Lead, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.0000694	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.0189	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.000126	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	0.841	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 10:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 08:23	10/7/22 08:23		1	0.244	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 10:28	10/18/22 11:51		1	13.9	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	42.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	13.9	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 12:19	10/12/22 12:19		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-62HO

Location Code: WMWGREAP
Collected: 10/4/22 14:10
Customer ID:
Submittal Date: 10/6/22 09:08

Laboratory ID Number: BC18501

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:26	10/10/22 12:26		1	2.99	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:13	10/11/22 12:13		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:29	10/17/22 15:29		1	14.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/4/22 14:06	10/4/22 14:06			75.23	uS/cm			FA
pH	10/4/22 14:06	10/4/22 14:06			5.82	SU			FA
Temperature	10/4/22 14:06	10/4/22 14:06			20.30	C			FA
Turbidity	10/4/22 14:06	10/4/22 14:06			3.87	NTU			FA
Sulfide	10/4/22 14:06	10/4/22 14:06			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 14:10
Customer ID:
Delivery Date: 10/6/22 09:08

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC18501

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 14:10
Customer ID:
Delivery Date: 10/6/22 09:08

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC18501

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Total Organic Carbon	mg/L	0.247	1.00	10.0	10.1	10.2	24.2		101	80.0 to 120	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 14:10
Customer ID:
Delivery Date: 10/6/22 09:08

Description: Greene County Ash Pond - MW-62HO

Laboratory ID Number: BC18501

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Alkalinity to pH 4.5	mg CaCO3/L					10.2	50.3	45.0 to 55.0			2.58	10.0
BC18522	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.26	0.332	1.96	1.80 to 2.20	97.0	90.0 to 110	3.37	15.0
BC18502	Solids, Dissolved	mg/L	1.00	25.0			384	53.0	40.0 to 60.0			1.84	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-59HO

Location Code: WMWGREAP
Collected: 10/4/22 15:05
Customer ID:
Submittal Date: 10/6/22 09:08

Laboratory ID Number: BC18502

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:19		1.015	0.206	mg/L	0.030000	0.1015	
* Calcium, Total	10/7/22 13:51	10/20/22 14:35		10.15	71.6	mg/L	0.70035	4.06	
* Iron, Total	10/7/22 13:51	10/20/22 13:19		1.015	0.457	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:51	10/20/22 13:19		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:19		1.015	14.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:19		1	7.02	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:19		1.015	3.28	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:19		1.015	24.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:49		1.015	0.204	mg/L	0.030000	0.1015	
* Calcium, Dissolved	10/7/22 14:31	10/19/22 15:27		10.15	79.1	mg/L	0.70035	4.06	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:49		1.015	0.136	mg/L	0.008120	0.0406	
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:49		1.015	14.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:49		1	7.21	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:49		1.015	3.37	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:49		1.015	24.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 12:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.0408	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.000935	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.0602	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 12:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 12:01		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.0187	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.0000945	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 13:01		10.15	11.3	mg/L	0.001522	0.01015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.000225	mg/L	0.000102	0.000203	
* Potassium, Total	10/7/22 13:51	10/10/22 12:01		1.015	3.73	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/31/2022
Version: 3.5
COA_CCR

Description: Greene County Ash Pond - MW-59HO

Location Code: WMWGREAP
Collected: 10/4/22 15:05
Customer ID:
Submittal Date: 10/6/22 09:08

Laboratory ID Number: BC18502

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 12:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 12:01		1.015	0.0000876	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	0.000287	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	0.0562	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	0.0187	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	0.0000879	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	10/7/22 14:31	10/10/22 12:54		10.15	10.7	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	0.000201	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	3.75	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:00		1.015	0.0000976	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 08:25	10/7/22 08:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 10:28	10/18/22 11:51		1	83.8	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	377	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	83.7	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 12:32	10/12/22 12:32		1	1.47	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-59HO

Location Code: WMWGREAP
Collected: 10/4/22 15:05
Customer ID:
Submittal Date: 10/6/22 09:08

Laboratory ID Number: BC18502

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:27	10/10/22 12:27		1	9.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:14	10/11/22 12:14		1	0.0929	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:31	10/17/22 15:31		10	193	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/4/22 15:02	10/4/22 15:02			589.55	uS/cm			FA
pH	10/4/22 15:02	10/4/22 15:02			6.06	SU			FA
Temperature	10/4/22 15:02	10/4/22 15:02			19.04	C			FA
Turbidity	10/4/22 15:02	10/4/22 15:02			5.99	NTU			FA
Sulfide	10/4/22 15:02	10/4/22 15:02			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/31/2022
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 15:05
Customer ID:
Delivery Date: 10/6/22 09:08

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC18502

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 15:05
Customer ID:
Delivery Date: 10/6/22 09:08

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC18502

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Total Organic Carbon	mg/L	0.247	1.00	10.0	10.1	10.2	24.2		101	80.0 to 120	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 15:05
Customer ID:
Delivery Date: 10/6/22 09:08

Description: Greene County Ash Pond - MW-59HO

Laboratory ID Number: BC18502

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Alkalinity to pH 4.5	mg CaCO3/L					10.2	50.3	45.0 to 55.0			2.58	10.0
BC18522	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.26	0.332	1.96	1.80 to 2.20	97.0	90.0 to 110	3.37	15.0
BC18502	Solids, Dissolved	mg/L	1.00	25.0			384	53.0	40.0 to 60.0			1.84	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-60HO

Location Code: WMWGREAP
Collected: 10/4/22 13:54
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18519

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:22		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:51	10/20/22 13:22		1.015	2.98	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:22		1.015	0.0205	mg/L	0.008120	0.0406	J
* Lithium, Total	10/7/22 13:51	10/20/22 13:22		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:22		1.015	0.903	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:22		1	9.63	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:22		1.015	4.50	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:22		1.015	5.50	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	3.09	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	0.900	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:52		1	10.1	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	4.74	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:52		1.015	5.43	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 12:04		1.015	0.0452	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 12:04		1.015	0.0400	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 12:04		1.015	0.000421	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 12:04		1.015	0.000730	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 12:04		1.015	0.0144	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 12:04		1.015	1.12	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-60HO

Location Code: WMWGREAP
Collected: 10/4/22 13:54
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18519

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 12:04		1.015	0.00118	mg/L	0.000508	0.001015	
* Thallium, Total	10/7/22 13:51	10/10/22 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	0.0127	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	0.0378	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	0.000268	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	0.000681	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	0.0131	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	1.14	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	0.00120	mg/L	0.000508	0.001015	
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 08:25	10/7/22 08:25		1	0.204	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 10:28	10/18/22 11:51		1	12.1	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	28.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	12.1	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 12:49	10/12/22 12:49		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-60HO

Location Code: WMWGREAP
Collected: 10/4/22 13:54
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18519

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:28	10/10/22 12:28		1	3.66	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:16	10/11/22 12:16		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:32	10/17/22 15:32		1	6.49	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 13:51	10/4/22 13:51			146.51	uS/cm			FA
pH	10/4/22 13:51	10/4/22 13:51			4.83	SU			FA
Temperature	10/4/22 13:51	10/4/22 13:51			18.59	C			FA
Turbidity	10/4/22 13:51	10/4/22 13:51			4.56	NTU			FA
Sulfide	10/4/22 13:51	10/4/22 13:51			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Alabama Power

Customer Account: WMWGREAP
Sample Date: 10/4/22 13:54
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC18519

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 13:54
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC18519

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Total Organic Carbon	mg/L	0.247	1.00	10.0	10.1	10.2	24.2		101	80.0 to 120	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 13:54
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-60HO

Laboratory ID Number: BC18519

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Alkalinity to pH 4.5	mg CaCO3/L					10.2	50.3	45.0 to 55.0			2.58	10.0
BC18522	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.26	0.332	1.96	1.80 to 2.20	97.0	90.0 to 110	3.37	15.0
BC18502	Solids, Dissolved	mg/L	1.00	25.0			384	53.0	40.0 to 60.0			1.84	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/4/22 14:15
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18520

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:25		1	Not Detected	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	10/7/22 13:51	10/20/22 13:25		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 12:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 08:26	10/7/22 08:26		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond Equipment Blank-1

Location Code: WMWGREAPEB
Collected: 10/4/22 14:15
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18520

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 13:04	10/12/22 13:04		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:34	10/10/22 12:34		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:17	10/11/22 12:17		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:38	10/17/22 15:38		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/4/22 14:15
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18520

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/4/22 14:15
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18520

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Total Organic Carbon	mg/L	0.247	1.00	10.0	10.1	10.2	24.2		101	80.0 to 120	0.985	20.0

Comments:

Batch QC Summary

Customer Account: WMWGREAPEB
Sample Date: 10/4/22 14:15
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond Equipment Blank-1

Laboratory ID Number: BC18520

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.26	0.332	1.96	1.80 to 2.20	97.0	90.0 to 110	3.37	15.0
BC18502	Solids, Dissolved	mg/L	1.00	25.0			384	53.0	40.0 to 60.0			1.84	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-61HO

Location Code: WMWGREAP
Collected: 10/4/22 15:00
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18521

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:29		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/7/22 13:51	10/20/22 13:29		1.015	16.6	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:29		1.015	0.0498	mg/L	0.008120	0.0406	
* Lithium, Total	10/7/22 13:51	10/20/22 13:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:29		1.015	1.24	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:29		1	7.28	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:29		1.015	3.40	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:29		1.015	1.30	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	17.3	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	1.24	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:55		1	7.58	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	3.54	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:55		1.015	1.28	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 12:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.0846	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.000353	mg/L	0.000081	0.000203	
* Barium, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.0413	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 12:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 12:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.000587	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.000471	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.0000800	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.0135	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.000323	mg/L	0.000102	0.000203	
* Potassium, Total	10/7/22 13:51	10/10/22 12:12		1.015	1.28	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-61HO

Location Code: WMWGREAP
Collected: 10/4/22 15:00
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18521

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 12:12		1.015	0.000631	mg/L	0.000508	0.001015	J
* Thallium, Total	10/7/22 13:51	10/10/22 12:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.00764	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.000313	mg/L	0.000081	0.000203	
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.0413	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.000382	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.000405	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.0109	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.000312	mg/L	0.000102	0.000203	
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	1.23	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	0.000600	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 22:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 08:27	10/7/22 08:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 10:28	10/18/22 11:51		1	40.1	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	54.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	40.1	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 13:21	10/12/22 13:21		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-61HO

Location Code: WMWGREAP
Collected: 10/4/22 15:00
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18521

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 12:29	10/10/22 12:29		1	1.75	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 12:18	10/11/22 12:18		1	0.0748	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/17/22 15:33	10/17/22 15:33		1	8.60	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 14:57	10/4/22 14:57			176.11	uS/cm			FA
pH	10/4/22 14:57	10/4/22 14:57			5.51	SU			FA
Temperature	10/4/22 14:57	10/4/22 14:57			19.48	C			FA
Turbidity	10/4/22 14:57	10/4/22 14:57			4.57	NTU			FA
Sulfide	10/4/22 14:57	10/4/22 14:57			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 15:00
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC18521

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18521	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.203	0.195	0.105	0.0850 to 0.115	118	70.0 to 130	4.02	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18521	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0950	0.0922	0.0943	0.0850 to 0.115	95.0	70.0 to 130	2.99	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18521	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18521	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.150	0.144	0.107	0.0850 to 0.115	109	70.0 to 130	4.08	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18521	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0954	0.0932	0.0959	0.0850 to 0.115	95.4	70.0 to 130	2.33	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18521	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.01	1.01	0.850 to 1.15	103	70.0 to 130	1.96	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18521	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0994	0.101	0.0850 to 0.115	102	70.0 to 130	2.58	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18521	Calcium, Total	mg/L	-0.00138	0.152	5.00	21.6	21.3	4.98	4.25 to 5.75	100	70.0 to 130	1.40	20.0
BC18521	Chloride	mg/L	-0.0726	1.00	10.0	11.9	12.2	10.1	9.00 to 11.0	102	80.0 to 120	2.49	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18521	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.106	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18521	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.111	0.111	0.111	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC18521	Fluoride	mg/L	0.0314	0.125	2.50	2.68	2.71	2.56	2.25 to 2.75	104	80.0 to 120	1.11	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18521	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.244	0.247	0.203	0.170 to 0.230	97.1	70.0 to 130	1.22	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 15:00
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC18521

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18521	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.112	0.108	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18521	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.198	0.190	0.206	0.170 to 0.230	99.0	70.0 to 130	4.12	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18521	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.22	6.04	5.15	4.25 to 5.75	99.6	70.0 to 130	2.94	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18521	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.120	0.121	0.105	0.0850 to 0.115	106	70.0 to 130	0.830	20.0
BC18521	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00395	0.00391	0.00392	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18521	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18521	Potassium, Total	mg/L	0.0165	0.367	10.0	11.7	11.7	10.5	8.50 to 11.5	104	70.0 to 130	0.00	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18521	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	1.98	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18521	Silicon, Total	mg/L	-0.000423	0.0440	1.00	4.59	4.55	0.984	0.850 to 1.15	119	70.0 to 130	0.875	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18521	Sodium, Total	mg/L	0.0132	0.0660	5.00	6.12	5.88	5.04	4.25 to 5.75	96.4	70.0 to 130	4.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18521	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.112	0.106	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Total Organic Carbon	mg/L	0.247	1.00	10.0	10.1	10.2	24.2		101	80.0 to 120	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 15:00
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-61HO

Laboratory ID Number: BC18521

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Alkalinity to pH 4.5	mg CaCO3/L					10.2	50.3	45.0 to 55.0			2.58	10.0
BC18522	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.26	0.332	1.96	1.80 to 2.20	97.0	90.0 to 110	3.37	15.0
BC18502	Solids, Dissolved	mg/L	1.00	25.0			384	53.0	40.0 to 60.0			1.84	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-55HO

Location Code: WMWGREAP
Collected: 10/4/22 16:15
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18522

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	10/7/22 13:51	10/20/22 13:44		1.015	0.0305	mg/L	0.030000	0.1015	J
* Calcium, Total	10/7/22 13:51	10/20/22 13:44		1.015	2.52	mg/L	0.070035	0.406	
* Iron, Total	10/7/22 13:51	10/20/22 13:44		1.015	0.0313	mg/L	0.008120	0.0406	J
* Lithium, Total	10/7/22 13:51	10/20/22 13:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/7/22 13:51	10/20/22 13:44		1.015	1.73	mg/L	0.021315	0.406	
Silica, Total (calc.)	10/7/22 13:51	10/20/22 13:44		1	10.3	mg/L			
Silicon, Total	10/7/22 13:51	10/20/22 13:44		1.015	4.80	mg/L	0.02030	0.25375	
* Sodium, Total	10/7/22 13:51	10/20/22 13:44		1.015	5.03	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	2.48	mg/L	0.070035	0.406	
* Iron, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	1.73	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	10/7/22 14:31	10/19/22 14:58		1	10.4	mg/L			
Silicon, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	4.88	mg/L	0.02030	0.25375	
* Sodium, Dissolved	10/7/22 14:31	10/19/22 14:58		1.015	5.10	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/7/22 13:51	10/10/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.0762	mg/L	0.006090	0.01015	
* Arsenic, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.000103	mg/L	0.000081	0.000203	J
* Barium, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.0351	mg/L	0.000508	0.001015	
* Beryllium, Total	10/7/22 13:51	10/10/22 12:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/7/22 13:51	10/10/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.000584	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.000975	mg/L	0.000068	0.000203	
* Lead, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.0000801	mg/L	0.000068	0.000203	J
* Manganese, Total	10/7/22 13:51	10/10/22 12:36		1.015	0.0105	mg/L	0.000152	0.001015	
* Molybdenum, Total	10/7/22 13:51	10/10/22 12:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	10/7/22 13:51	10/10/22 12:36		1.015	1.96	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Greene County Ash Pond - MW-55HO

Location Code: WMWGREAP
Collected: 10/4/22 16:15
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18522

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	10/7/22 13:51	10/10/22 12:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/7/22 13:51	10/10/22 12:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	0.0106	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	0.0343	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	0.000419	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	0.000936	mg/L	0.000068	0.000203	
* Lead, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	0.00988	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	1.94	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	10/7/22 14:31	10/10/22 11:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/7/22 16:42	10/7/22 21:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	10/7/22 08:28	10/7/22 08:28		1	0.321	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity to pH 4.5	10/18/22 10:28	10/18/22 11:51		1	9.94	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/6/22 13:30	10/11/22 13:18		1	38.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	9.94	mg CaCO3/L			
Carbonate Alkalinity, (calc.)	10/18/22 10:28	10/18/22 11:51		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	10/12/22 13:39	10/12/22 13:39		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Greene County Ash Pond - MW-55HO

Location Code: WMWGREAP
Collected: 10/4/22 16:15
Customer ID:
Submittal Date: 10/6/22 10:55

Laboratory ID Number: BC18522

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	10/10/22 13:47	10/10/22 13:47		1	4.27	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	10/11/22 13:27	10/11/22 13:27		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: CES***								
* Sulfate	10/18/22 11:16	10/18/22 11:16		1	9.00	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/4/22 16:12	10/4/22 16:12			158.32	uS/cm			FA
pH	10/4/22 16:12	10/4/22 16:12			5.03	SU			FA
Temperature	10/4/22 16:12	10/4/22 16:12			18.58	C			FA
Turbidity	10/4/22 16:12	10/4/22 16:12			4.16	NTU			FA
Sulfide	10/4/22 16:12	10/4/22 16:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 16:15
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC18522

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Aluminum, Dissolved	mg/L	-0.000122	0.010	0.100	0.117	0.118	0.106	0.0850 to 0.115	106	70.0 to 130	0.851	20.0
BC18522	Aluminum, Total	mg/L	0.000339	0.010	0.100	0.194	0.190	0.105	0.0850 to 0.115	118	70.0 to 130	2.08	20.0
BC18522	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0985	0.0965	0.0928	0.0850 to 0.115	98.5	70.0 to 130	2.05	20.0
BC18522	Antimony, Total	mg/L	0.000354	0.00100	0.100	0.0964	0.0939	0.0943	0.0850 to 0.115	96.4	70.0 to 130	2.63	20.0
BC18522	Arsenic, Dissolved	mg/L	0.0000118	0.000176	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC18522	Arsenic, Total	mg/L	0.0000196	0.000176	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC18522	Barium, Dissolved	mg/L	0.0000366	0.00100	0.100	0.143	0.141	0.105	0.0850 to 0.115	109	70.0 to 130	1.41	20.0
BC18522	Barium, Total	mg/L	0.0000305	0.00100	0.100	0.141	0.140	0.107	0.0850 to 0.115	106	70.0 to 130	0.712	20.0
BC18522	Beryllium, Dissolved	mg/L	0.0000222	0.000880	0.100	0.0981	0.0982	0.0979	0.0850 to 0.115	98.1	70.0 to 130	0.102	20.0
BC18522	Beryllium, Total	mg/L	0.0000093	0.000880	0.100	0.0971	0.0944	0.0959	0.0850 to 0.115	97.1	70.0 to 130	2.82	20.0
BC18522	Boron, Dissolved	mg/L	-0.00137	0.0650	1.00	1.03	1.04	1.02	0.850 to 1.15	103	70.0 to 130	0.966	20.0
BC18522	Boron, Total	mg/L	-0.000012	0.0650	1.00	1.03	1.04	1.01	0.850 to 1.15	100	70.0 to 130	0.966	20.0
BC18522	Cadmium, Dissolved	mg/L	0.0000044	0.000147	0.100	0.100	0.0995	0.102	0.0850 to 0.115	100	70.0 to 130	0.501	20.0
BC18522	Cadmium, Total	mg/L	0.0000067	0.000147	0.100	0.102	0.0989	0.101	0.0850 to 0.115	102	70.0 to 130	3.09	20.0
BC18522	Calcium, Dissolved	mg/L	-0.000069	0.152	5.00	7.47	7.44	4.84	4.25 to 5.75	99.8	70.0 to 130	0.402	20.0
BC18522	Calcium, Total	mg/L	-0.00138	0.152	5.00	7.56	7.53	4.98	4.25 to 5.75	101	70.0 to 130	0.398	20.0
BC18522	Chloride	mg/L	-0.116	1.00	10.0	14.5	14.7	9.85	9.00 to 11.0	102	80.0 to 120	1.37	20.0
BC18522	Chromium, Dissolved	mg/L	-0.0000794	0.000440	0.100	0.106	0.104	0.105	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC18522	Chromium, Total	mg/L	-0.0000746	0.000440	0.100	0.106	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	1.90	20.0
BC18522	Cobalt, Dissolved	mg/L	-0.0000247	0.000147	0.100	0.113	0.112	0.111	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BC18522	Cobalt, Total	mg/L	-0.0000288	0.000147	0.100	0.114	0.110	0.111	0.0850 to 0.115	113	70.0 to 130	3.57	20.0
BC18522	Fluoride	mg/L	0.0673	0.125	2.50	2.48	2.51	2.52	2.25 to 2.75	99.2	80.0 to 120	1.20	20.0
BC18522	Iron, Dissolved	mg/L	-0.000097	0.0176	0.2	0.203	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BC18522	Iron, Total	mg/L	-0.000111	0.0176	0.2	0.226	0.235	0.203	0.170 to 0.230	97.4	70.0 to 130	3.90	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 16:15
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC18522

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Lead, Dissolved	mg/L	0.0000052	0.000147	0.100	0.112	0.112	0.110	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BC18522	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.111	0.108	0.108	0.0850 to 0.115	111	70.0 to 130	2.74	20.0
BC18522	Lithium, Dissolved	mg/L	0.000244	0.0154	0.200	0.199	0.204	0.212	0.170 to 0.230	99.5	70.0 to 130	2.48	20.0
BC18522	Lithium, Total	mg/L	-0.00015	0.0154	0.200	0.199	0.199	0.206	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC18522	Magnesium, Dissolved	mg/L	0.000130	0.0462	5.00	6.69	6.75	5.13	4.25 to 5.75	99.2	70.0 to 130	0.893	20.0
BC18522	Magnesium, Total	mg/L	-0.00117	0.0462	5.00	6.72	6.69	5.15	4.25 to 5.75	99.8	70.0 to 130	0.447	20.0
BC18522	Manganese, Dissolved	mg/L	0.0000162	0.00033	0.100	0.116	0.116	0.106	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC18522	Manganese, Total	mg/L	0.0000202	0.00033	0.100	0.118	0.114	0.105	0.0850 to 0.115	108	70.0 to 130	3.45	20.0
BC18522	Mercury, Total by CVAA	mg/L	-0.0001	0.000500	0.004	0.00381	0.00385	0.00392	0.00340 to 0.00460	95.2	70.0 to 130	1.04	20.0
BC18522	Molybdenum, Dissolved	mg/L	0.0000093	0.0002	0.100	0.0989	0.101	0.103	0.0850 to 0.115	98.9	70.0 to 130	2.10	20.0
BC18522	Molybdenum, Total	mg/L	0.0000196	0.0002	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC18522	Potassium, Dissolved	mg/L	0.0137	0.367	10.0	12.4	12.5	10.6	8.50 to 11.5	105	70.0 to 130	0.803	20.0
BC18522	Potassium, Total	mg/L	0.0165	0.367	10.0	12.6	12.2	10.5	8.50 to 11.5	106	70.0 to 130	3.23	20.0
BC18522	Selenium, Dissolved	mg/L	0.0000384	0.00100	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BC18522	Selenium, Total	mg/L	0.0000310	0.00100	0.100	0.102	0.0999	0.101	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BC18522	Silicon, Dissolved	mg/L	0.000195	0.0440	1.00	5.85	5.85	1.00	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC18522	Silicon, Total	mg/L	-0.000423	0.0440	1.00	5.85	5.90	0.984	0.850 to 1.15	105	70.0 to 130	0.851	20.0
BC18522	Sodium, Dissolved	mg/L	0.00211	0.0660	5.00	9.81	9.99	5.04	4.25 to 5.75	94.2	70.0 to 130	1.82	20.0
BC18522	Sodium, Total	mg/L	0.0132	0.0660	5.00	9.83	9.81	5.04	4.25 to 5.75	96.0	70.0 to 130	0.204	20.0
BC18522	Sulfate	mg/L	0.0138	2.0	20.0	29.4	29.4	19.5	18.0 to 22.0	102	80.0 to 120	0.00	20.0
BC18522	Thallium, Dissolved	mg/L	-0.0000351	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BC18522	Thallium, Total	mg/L	-0.0000271	0.000147	0.100	0.111	0.105	0.106	0.0850 to 0.115	111	70.0 to 130	5.56	20.0
BC18522	Total Organic Carbon	mg/L	0.247	1.00	10.0	10.1	10.2	24.2		101	80.0 to 120	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGREAP
Sample Date: 10/4/22 16:15
Customer ID:
Delivery Date: 10/6/22 10:55

Description: Greene County Ash Pond - MW-55HO

Laboratory ID Number: BC18522

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC18522	Alkalinity to pH 4.5	mg CaCO3/L					10.2	50.3	45.0 to 55.0			2.58	10.0
BC18522	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.26	0.332	1.96	1.80 to 2.20	97.0	90.0 to 110	3.37	15.0
BC18502	Solids, Dissolved	mg/L	1.00	25.0			384	53.0	40.0 to 60.0			1.84	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Definitions

Project Number: WMWGREAP_1385

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: collection time updated on MW-50 HO from 10:25 to 10:39 per sample container. BC 10/05/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-47HO	10/04/2022	08:36	6	Groundwater		BC18414
MW-47HO dup	10/04/2022	08:36	6	Sample Duplicate		BC18415
FB-1	10/04/2022	08:56	5	Field Blank		BC18416
MW-63HO	10/04/2022	09:32	6	Groundwater		BC18417
MW-50 HO	10/04/2022	10:39	6	Groundwater		BC18418

Relinquished By	Received By	Date/Time
		10/04/2022 11:12
		10/04/2022 14:57

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	2.0 °C
Sample Event	1385	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate;TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Relinquished to GSC shipping lab

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-62HO	10/04/2022	14:10	6	Groundwater		BC18501
MW-59HO	10/04/2022	15:05	6	Groundwater		BC18502

Relinquished By	Received By	Date/Time
	Brooke Carter	10/06/2022 08:45

SmarTroll ID	7586-41443-5-2	All pH requirements have been met	☑
Turbidity ID	9830-57039-1-1	Cooler Temp	1.2 °C
Sample Event	1385	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-60HO	10/04/2022	13:54	6	Groundwater		BC18519
EB-1	10/04/2022	14:15	5	Equipment Blank		BC18520
MW-61HO	10/04/2022	15:00	6	Groundwater		BC18521
MW-55HO	10/04/2022	16:15	6	Groundwater		BC18522

Relinquished By	Received By	Date/Time
		10/06/2022 10:28

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	1.5 °C
Sample Event	1385	Thermometer ID	7044-38281-2-1
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: collection time updated on MW-50 HO from 10:25 to 10:39 per sample container. BC 10/05/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-47HO	10/04/2022	08:36	1	Groundwater		BC18428
MW-47HO dup	10/04/2022	08:36	1	Sample Duplicate		BC18429
FB-1	10/04/2022	08:56	1	Field Blank		BC18430
MW-63HO	10/04/2022	09:32	1	Groundwater		BC18431
MW-50 HO	10/04/2022	10:39	1	Groundwater		BC18432

Relinquished By	Received By	Date/Time
Dallas Gentry		10/04/2022 11:12
	Blake Caton	10/04/2022 14:59

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1385	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL
Total Metals and Alkalinity are not performed on Dissolved Sets
Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquished to GSC shipping lab

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-62HO	10/04/2022	14:10	1	Groundwater		BC18503
MW-59HO	10/04/2022	15:05	1	Groundwater		BC18504

Relinquished By	Received By	Date/Time
	Brooke Carter	10/06/2022 08:45

SmarTroll ID	7586-41443-5-2	All pH requirements have been met	☑
Turbidity ID	9830-57039-1-1	Cooler Temp	N/A
Sample Event	1385	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Greene Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-60HO

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-60HO	10/04/2022	13:54	3	Groundwater		BC18523
EB-1	10/04/2022	14:15	1	Equipment Blank		BC18524
MW-61HO	10/04/2022	15:00	1	Groundwater		BC18525
MW-55HO	10/04/2022	16:15	1	Groundwater		BC18526

Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Carter	10/06/2022 10:28

SmarTroll ID	7586-41444-5-3	All pH requirements have been met	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1385	Thermometer ID	N/A
		pH Strip ID	10429-60246-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Appendix D

Appendix D. Horizontal Groundwater Flow Velocity Calculations

Plant Greene County Ash Pond

2022 Annual Groundwater Monitorng Period

Date of Measurement	MW-25	MW-18	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K	n	(ft/d)	(ft/yr)
3/22/2022	91.18	80.46	1815.0	0.006	51.93	0.25	1.23	447.81
10/3/2022	89.42	74.59	1815.0	0.008	51.93	0.25	1.70	619.49
Date of Measurement	**MW-6**	**MW-7**	**Distance**	**Hydraulic Gradient**	**Hydraulic Conductivity**	**Effective Porosity**	**Calculated Groundwater Flow Velocity**	**Calculated Groundwater Flow Velocity**
	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K	n	(ft/d)	(ft/yr)
3/22/2022	90.84	86.65	1230.0	0.003	51.93	0.25	0.71	258.27
10/3/2022	85.87	83.02	1230.0	0.002	51.93	0.25	0.48	175.68

Notes:

ft = feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

Appendix E

GROUNDWATER STATS
CONSULTING

June 13, 2022

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Greene County Ash Pond
1st Semi-Annual Event - April 2022

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the April 2022 1st semi-annual sample event for Alabama Power Company's Plant Greene County Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at this site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GC-AP-MW-23, GC-AP-MW-24, GC-AP-MW-26, GC-AP-MW-27, GC-AP-MW-28, GC-AP-MW-29, and GC-AP-MW-30

- **Downgradient wells:** GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-31, GC-AP-MW-32, and GC-AP-MW-33

- **Delineation wells:** GC-AP-PZ-4, GC-AP-MW-34HA, GC-AP-MW-35H, GC-AP-MW-36H, GC-AP-MW-37H, GC-AP-MW-38H, GC-AP-MW-39H, GC-AP-MW-40H, GC-AP-MW-41H, GC-AP-MW-42H, GC-AP-MW-43H, GC-AP-MW-44H, GC-AP-MW-45H, GC-AP-MW-46HO, GC-AP-MW-47HO, GC-AP-MW-48H, GC-AP-MW-49H, GC-AP-MW-50HO, GC-AP-MW-52HO, GC-AP-MW-53H, GC-AP-MW-54H, GC-AP-MW-55HO, GC-AP-MW-57H, GC-AP-MW-59HO, GC-AP-MW-60HO, GC-AP-MW-61HO, GC-AP-MW-62HO, GC-AP-MW-63HO, and GC-AP-MW-64HO

Note that delineation wells do not require statistics; therefore, data are plotted only on time series and box plots. Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, Ph.D. Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
Appendix IV (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility;

and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples: 126
- # Constituents: 7
- # Downgradient wells: 22

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, interwell prediction limits were utilized in the analysis of this site.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false-positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half of the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summary

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate trends, as well as for outliers over the entire record. Interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, pH, sulfate, and TDS.

Proposed background data at upgradient wells were originally screened for outliers and trends in May 2019 for the constituents listed above. Both Tukey's Test and visual screening were used to identify potential outliers. When identified, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. Potential outliers that were identified by Tukey's test but were not greatly different from the rest of the data were not flagged. Also, outliers that are not identified as important by Tukey's test may be identified visually and flagged in the database for construction of more conservative (lower) statistical limits.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, deselection of the earlier portion of data may be required prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Several statistically significant trends were noted in upgradient wells, and the results were submitted with the September 2019 background update. These trends required no adjustments, however, because the period of record was short and/or the magnitudes of the trends were low relative to the average concentrations in background.

One exception was upgradient well GC-AP-MW-24 which had statistically significantly increasing trends for calcium, sulfate, and TDS. However, the more recent reported observations for calcium and TDS were similar to those observed in upgradient well GC-AP-MW-23; therefore, no adjustments were required for these constituents. Additionally, no adjustment was required for sulfate since the statistical limit resulted in a nonparametric prediction limit which is constructed based on the highest report concentration among the upgradient wells. All data at upgradient wells are continually monitored, as mentioned earlier, and will be adjusted in future analyses as necessary. A summary of any adjusted records will accompany the report.

As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of previously flagged values follows this letter.

Evaluation of Appendix III Parameters – April 2022

Outlier Screening

Prior to performing prediction limits, background (upgradient) well data for Appendix III constituents were re-assessed for potential outliers and trends during this analysis. No new values were flagged and no adjustments were required to account for trending data. Values in background which have been previously flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for all Appendix III parameters (Figure D). Interwell prediction limits pool upgradient well data through April 2022 to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. When no resamples are collected, any initial exceedances are considered SSIs. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. Several exceedances for interwell prediction limits were identified.

Trend Tests – Prediction Limit Exceedances

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of natural variability in groundwater which may be unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GC-AP-MW-1, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, and GC-AP-MW-25
- Calcium: GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17 and GC-AP-MW-24 (upgradient)
- Chloride: GC-AP-MW-9
- Fluoride: GC-AP-MW-14, GC-AP-MW-16, and GC-AP-MW-18
- Sulfate: GC-AP-MW-24, GC-AP-MW-27, GC-AP-MW-28 (all upgradient), GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, and GC-AP-MW-14
- TDS: GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-24 (upgradient), and GC-AP-MW-25

Decreasing:

- Boron: GC-AP-MW-6 and GC-AP-MW-18
- Calcium: GC-AP-MW-23, GC-AP-MW-28, GC-AP-MW-29 (all upgradient), and GC-AP-MW-1

- Chloride: GC-AP-MW-5, GC-AP-MW-14, and GC-AP-MW-23 (upgradient)
- Sulfate: GC-AP-MW-23 (upgradient) and GC-AP-MW-15
- TDS: GC-AP-MW-23 and GC-AP-MW-29 (both upgradient)

Evaluation of Appendix IV Parameters – April 2022

Data from all upgradient wells for Appendix IV parameters were reassessed for outliers during the previous analysis. No changes to previously flagged outliers were made. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) were updated during the 2021 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2023 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using upper tolerance limits (UTLs) constructed from pooled upgradient well data through August 2021 (Figure F). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed.

Groundwater Protection Standards

These background limits are then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two is used as the GWPS (Figure G) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through April 2022 for each of the Appendix IV parameters (Figure H). These intervals were either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. Note that during this analysis, a resample of 0.0452 mg/L was collected in May 2022 for selenium in downgradient well GC-AP-MW-13. The April 2022 sample of 0.111 mg/L was flagged for being spurious and a confidence interval using the 8 most recent samples through May 2022 was constructed for this well/constituent pair.

As mentioned above, well/constituent pairs containing 100% non-detects in the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter. Exceedances were noted for the following well/constituent pairs:

- Arsenic: GC-AP-MW-1, GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, and GC-AP-MW-18
- Cobalt: GC-AP-MW-1, GC-AP-MW-14, and GC-AP-MW-15
- Lithium: GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, and GC-AP-MW-21

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Greene County Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

A Collins

Easton Rayner
Groundwater Analyst

Andrew Collins
Project Manager

Kristina Rayner

Kristina Rayner
Senior Statistician

100% Non-Detects: Appendix IV Downdgradient

Analysis Run 6/1/2022 4:40 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Antimony (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-18, GC-AP-MW-2, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-8, GC-AP-MW-9

Beryllium (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-2, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Cadmium (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-7, GC-AP-MW-9

Fluoride (mg/L)
GC-AP-MW-31

Lead (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8

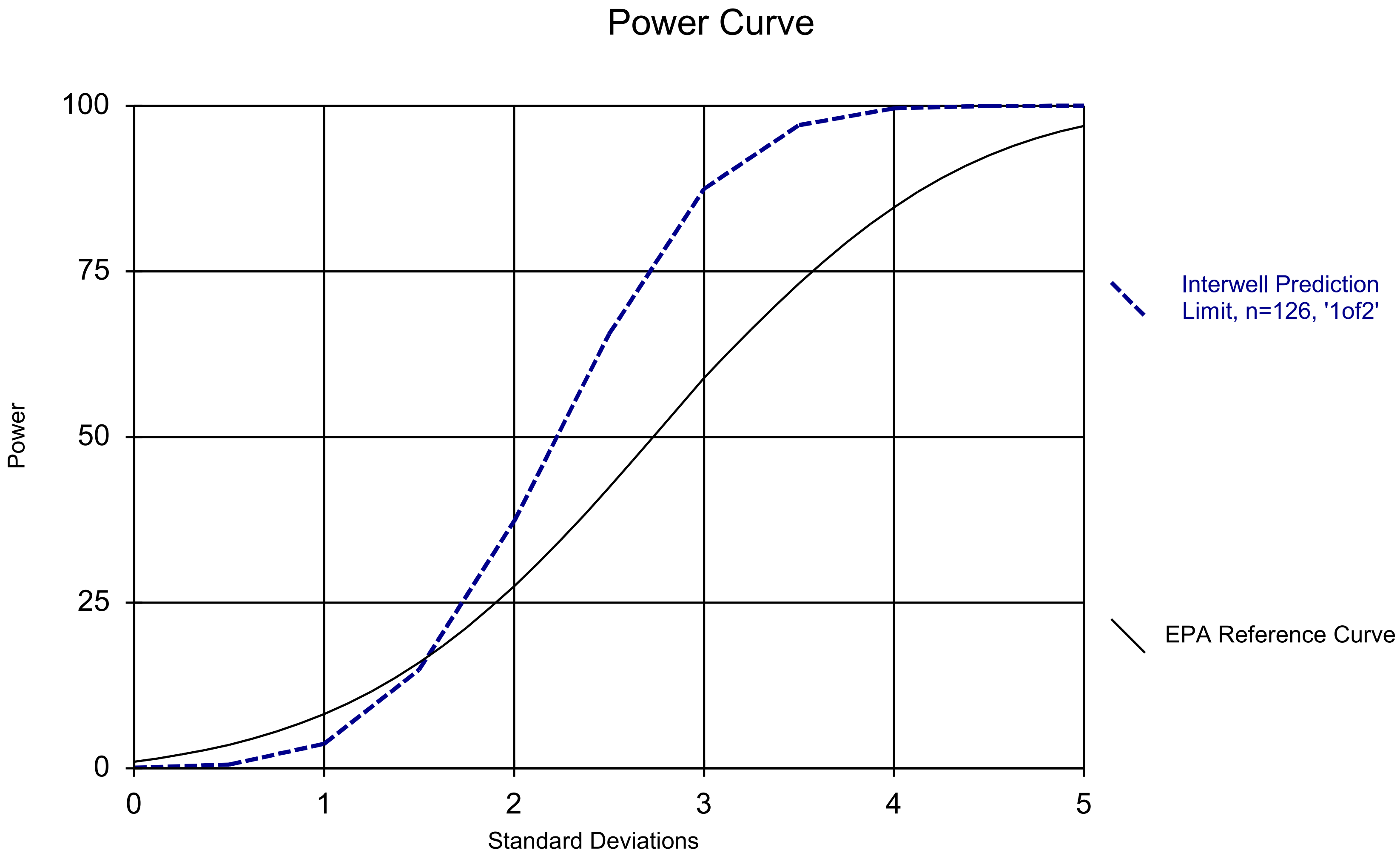
Lithium (mg/L)
GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-7

Mercury (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-2, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Molybdenum (mg/L)
GC-AP-MW-15, GC-AP-MW-3, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-9

Selenium (mg/L)
GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-31, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Thallium (mg/L)
GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9



Kappa = 2.128, based on 22 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/1/2022 1:50 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	4/4/2022	0.269	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	4/4/2022	1.92	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	3/30/2022	0.472	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	3/29/2022	0.416	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	4/6/2022	0.26	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	4/4/2022	1.89	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	3/29/2022	0.848	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	4/6/2022	2.17	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	4/4/2022	2.32	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	4/6/2022	1.6	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	3/28/2022	0.125	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	3/30/2022	0.696	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	3/29/2022	0.122	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	4/4/2022	0.615	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	3/29/2022	1.39	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	3/29/2022	1.08	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	3/29/2022	0.71	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	4/4/2022	106	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	4/4/2022	93.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	3/29/2022	52	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	4/6/2022	55.5	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	4/4/2022	117	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	3/29/2022	75.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	4/6/2022	101	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	4/4/2022	104	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	4/6/2022	96.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	3/28/2022	157	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	3/30/2022	51	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	4/5/2022	67.4	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	4/4/2022	98.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	3/29/2022	128	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	3/29/2022	126	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	3/29/2022	92.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	3/29/2022	72.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.842	n/a	4/4/2022	41.75	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.842	n/a	4/4/2022	16.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.842	n/a	3/30/2022	12.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.842	n/a	3/29/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.842	n/a	4/4/2022	9.875	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.842	n/a	3/29/2022	10.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.842	n/a	4/6/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.842	n/a	4/4/2022	8.06	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.842	n/a	4/6/2022	24.35	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.842	n/a	3/28/2022	11.5	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.842	n/a	3/30/2022	12.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.842	n/a	3/29/2022	29.6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.842	n/a	4/5/2022	21.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.842	n/a	3/28/2022	6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.842	n/a	4/4/2022	9.63	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.842	n/a	3/29/2022	45.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.842	n/a	3/29/2022	94.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.842	n/a	3/29/2022	95.4	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.842	n/a	3/29/2022	225	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	4/4/2022	0.2785	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-14	0.159	n/a	4/4/2022	0.226	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-16	0.159	n/a	4/6/2022	0.2395	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-17	0.159	n/a	4/4/2022	0.5855	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-5	0.159	n/a	4/4/2022	0.216	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-6	0.159	n/a	3/29/2022	0.193	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	GC-AP-MW-1	103	n/a	4/4/2022	812.5	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-10	103	n/a	4/4/2022	116.5	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-11	103	n/a	3/30/2022	125	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-12	103	n/a	3/29/2022	108	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-13	103	n/a	4/6/2022	157	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-14	103	n/a	4/4/2022	195.5	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-15	103	n/a	3/29/2022	165	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-2	103	n/a	3/28/2022	563	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-21	103	n/a	3/30/2022	115	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**4/4/2022**	**160**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**3/29/2022**	**190**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**3/29/2022**	**187**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**3/29/2022**	**193**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**4/4/2022**	**1310**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**4/4/2022**	**443.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**3/30/2022**	**280**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**3/29/2022**	**290**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**4/6/2022**	**298**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**4/4/2022**	**644**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**3/29/2022**	**406**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**4/6/2022**	**472**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**4/4/2022**	**553**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**4/6/2022**	**408.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**3/28/2022**	**868**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**3/30/2022**	**320**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**3/29/2022**	**247**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**4/5/2022**	**338**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**4/4/2022**	**488**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**3/29/2022**	**722**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**3/29/2022**	**894**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**3/29/2022**	**730**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**3/29/2022**	**800**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	4/4/2022	0.269	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	4/4/2022	1.92	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	3/30/2022	0.472	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	3/29/2022	0.416	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	4/6/2022	0.26	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	4/4/2022	1.89	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	3/29/2022	0.848	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	4/6/2022	2.17	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	4/4/2022	2.32	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	4/6/2022	1.6	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	3/28/2022	0.125	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	3/30/2022	0.696	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	3/29/2022	0.122	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-3	0.1015	n/a	4/5/2022	0.0453J	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-31	0.1015	n/a	3/28/2022	0.1015ND	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-32	0.1015	n/a	3/28/2022	0.1015ND	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-33	0.1015	n/a	3/28/2022	0.1015ND	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	4/4/2022	0.615	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	3/29/2022	1.39	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-7	0.1015	n/a	3/29/2022	0.0842J	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	3/29/2022	1.08	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	3/29/2022	0.71	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	4/4/2022	106	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	4/4/2022	93.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-11	42.8	n/a	3/30/2022	39.6	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	3/29/2022	52	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	4/6/2022	55.5	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	4/4/2022	117	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	3/29/2022	75.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	4/6/2022	101	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	4/4/2022	104	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	4/6/2022	96.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	3/28/2022	157	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	3/30/2022	51	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-25	42.8	n/a	3/29/2022	31.9	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	4/5/2022	67.4	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-31	42.8	n/a	3/28/2022	5.95	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-32	42.8	n/a	3/28/2022	9.61	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-33	42.8	n/a	3/28/2022	2.21	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	4/4/2022	98.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	3/29/2022	128	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	3/29/2022	126	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	3/29/2022	92.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	3/29/2022	72.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.842	n/a	4/4/2022	41.75	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.842	n/a	4/4/2022	16.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.842	n/a	3/30/2022	12.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.842	n/a	3/29/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-13	5.842	n/a	4/6/2022	3.71	No	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.842	n/a	4/4/2022	9.875	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.842	n/a	3/29/2022	10.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.842	n/a	4/6/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.842	n/a	4/4/2022	8.06	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.842	n/a	4/6/2022	24.35	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.842	n/a	3/28/2022	11.5	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.842	n/a	3/30/2022	12.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.842	n/a	3/29/2022	29.6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.842	n/a	4/5/2022	21.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.842	n/a	3/28/2022	6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-32	5.842	n/a	3/28/2022	3.98	No	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-33	5.842	n/a	3/28/2022	5.47	No	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.842	n/a	4/4/2022	9.63	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.842	n/a	3/29/2022	45.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.842	n/a	3/29/2022	94.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.842	n/a	3/29/2022	95.4	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.842	n/a	3/29/2022	225	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-1	0.159	n/a	4/4/2022	0.124	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	4/4/2022	0.2785	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2

Interwell Prediction Limits - All Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 6/1/2022, 4:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-11	0.159	n/a	3/30/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-12	0.159	n/a	3/29/2022	0.107J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-13	0.159	n/a	4/6/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-14**	**0.159**	**n/a**	**4/4/2022**	**0.226**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-15	0.159	n/a	3/29/2022	0.117J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-16**	**0.159**	**n/a**	**4/6/2022**	**0.2395**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.159**	**n/a**	**4/4/2022**	**0.5855**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-18	0.159	n/a	4/6/2022	0.1385	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-2	0.159	n/a	3/28/2022	0.105J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-21	0.159	n/a	3/30/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-25	0.159	n/a	3/29/2022	0.0724J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-3	0.159	n/a	4/5/2022	0.146	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-31	0.159	n/a	3/28/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-32	0.159	n/a	3/28/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-33	0.159	n/a	3/28/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-5**	**0.159**	**n/a**	**4/4/2022**	**0.216**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-6**	**0.159**	**n/a**	**3/29/2022**	**0.193**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-7	0.159	n/a	3/29/2022	0.104J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-8	0.159	n/a	3/29/2022	0.108J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-9	0.159	n/a	3/29/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
pH (SU)	GC-AP-MW-1	6.8	3.78	4/4/2022	5.17	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-10	6.8	3.78	4/4/2022	6.21	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-11	6.8	3.78	3/30/2022	6.02	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-12	6.8	3.78	3/29/2022	6.44	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-13	6.8	3.78	4/6/2022	6.24	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-14	6.8	3.78	4/4/2022	6.39	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-15	6.8	3.78	3/29/2022	5.81	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-16	6.8	3.78	4/6/2022	6.42	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-17	6.8	3.78	4/4/2022	6.71	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-18	6.8	3.78	4/6/2022	6.29	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-2	6.8	3.78	3/28/2022	5.32	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-21	6.8	3.78	3/30/2022	6.09	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-25	6.8	3.78	3/29/2022	5.26	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-3	6.8	3.78	4/5/2022	6.27	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-31	6.8	3.78	3/28/2022	5.05	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-32	6.8	3.78	3/28/2022	5.01	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-33	6.8	3.78	3/28/2022	4.29	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-5	6.8	3.78	4/4/2022	6.42	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-6	6.8	3.78	3/29/2022	5.99	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-7	6.8	3.78	3/29/2022	6.62	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-8	6.8	3.78	3/29/2022	6.21	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-9	6.8	3.78	3/29/2022	5.61	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-1**	**103**	**n/a**	**4/4/2022**	**812.5**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-10**	**103**	**n/a**	**4/4/2022**	**116.5**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-11**	**103**	**n/a**	**3/30/2022**	**125**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-12**	**103**	**n/a**	**3/29/2022**	**108**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-13**	**103**	**n/a**	**4/6/2022**	**157**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-14**	**103**	**n/a**	**4/4/2022**	**195.5**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-15**	**103**	**n/a**	**3/29/2022**	**165**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-16	103	n/a	4/6/2022	45.3	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-17	103	n/a	4/4/2022	68.9	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-18	103	n/a	4/6/2022	16.05	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-2**	**103**	**n/a**	**3/28/2022**	**563**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-21**	**103**	**n/a**	**3/30/2022**	**115**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-25	103	n/a	3/29/2022	68.6	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-3	103	n/a	4/5/2022	14.95	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-31	103	n/a	3/28/2022	3.34	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-32	103	n/a	3/28/2022	2.55	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-33	103	n/a	3/28/2022	11.8	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**4/4/2022**	**160**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**3/29/2022**	**190**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**3/29/2022**	**187**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-8	103	n/a	3/29/2022	75.3	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**3/29/2022**	**193**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**4/4/2022**	**1310**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**4/4/2022**	**443.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**3/30/2022**	**280**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**3/29/2022**	**290**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 6/1/2022, 4:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**4/6/2022**	**298**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**4/4/2022**	**644**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**3/29/2022**	**406**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**4/6/2022**	**472**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**4/4/2022**	**553**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**4/6/2022**	**408.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**3/28/2022**	**868**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**3/30/2022**	**320**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**3/29/2022**	**247**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**4/5/2022**	**338**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GC-AP-MW-31	179	n/a	3/28/2022	43.3	No	133	n/a	n/a	15.79	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-32	179	n/a	3/28/2022	51.3	No	133	n/a	n/a	15.79	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-33	179	n/a	3/28/2022	57.3	No	133	n/a	n/a	15.79	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**4/4/2022**	**488**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**3/29/2022**	**722**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**3/29/2022**	**894**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**3/29/2022**	**730**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**3/29/2022**	**800**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**

Trend Test - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-1**	**0.0172**	**76**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-14**	**0.2078**	**104**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.07797**	**124**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1243**	**90**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08488**	**78**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.05048**	**-71**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**99**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-5**	**0.03094**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.08416**	**-84**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-9**	**0.2024**	**111**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-16.33**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**2.867**	**75**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-13**	**6.611**	**93**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**17.34**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**4.579**	**103**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.345**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**9.432**	**117**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-2**	**13.77**	**100**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.384**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.704**	**153**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1803**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1907**	**-103**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-5**	**7.139**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-9**	**18.09**	**102**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8313**	**-80**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.07045**	**-88**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-5**	**-1.062**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-9**	**5.013**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02341**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.01461**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.03135**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-10**	**13.22**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**12.94**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-14**	**26.41**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-7.9**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**43.7**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.304**	**-125**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**17.51**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-27 (bg)**	**0.4499**	**82**	**74**	**Yes**	**19**	**26.32**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.6488**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-5**	**30.28**	**137**	**74**	**Yes**	**19**	**5.263**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-9**	**19.82**	**80**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-10**	**16.36**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**21.14**	**129**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-14**	**81.94**	**76**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-16**	**27.67**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**28.55**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-2**	**56.1**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.395**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**26.07**	**108**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**16.37**	**121**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-6.287**	**-102**	**-74**	**Yes**	**19**	**57.89**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-5**	**36.19**	**127**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-9**	**87.78**	**148**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-1**	**0.0172**	**76**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-10	0.07468	38	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-11	-0.03205	-51	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-12	0.02144	17	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-13	0.02241	21	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-14**	**0.2078**	**104**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.07797**	**124**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1243**	**90**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08488**	**78**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.05048**	**-71**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-2	0.001889	32	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-21	0.002128	5	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-23 (bg)	0	34	68	No	18	83.33	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-24 (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**99**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-26 (bg)	0	7	68	No	18	94.44	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-27 (bg)	0	21	68	No	18	88.89	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-28 (bg)	0	7	68	No	18	94.44	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-29 (bg)	0	11	68	No	18	94.44	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-5**	**0.03094**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.08416**	**-84**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-8	0.05165	28	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-9**	**0.2024**	**111**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-16.33**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**2.867**	**75**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-12	2.844	69	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-13**	**6.611**	**93**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**17.34**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**4.579**	**103**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.345**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**9.432**	**117**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-18	-0.8245	-18	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-2**	**13.77**	**100**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-21	0.4469	19	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.384**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.704**	**153**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-26 (bg)	-0.3246	-39	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-27 (bg)	0.04491	25	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1803**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1907**	**-103**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-3	-3.793	-39	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-5**	**7.139**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-6	3.117	59	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-7	-0.7706	-4	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-8	2.659	57	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-9**	**18.09**	**102**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-1	-0.1215	-6	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-10	0.1169	8	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-11	-0.6636	-52	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-12	-0.4994	-34	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8313**	**-80**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-15	-0.1127	-18	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-16	-0.4083	-52	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-17	-1.015	-54	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-18	0.4917	72	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-2	-0.3644	-38	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-21	0.2131	17	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.07045**	**-88**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-24 (bg)	0.01314	1	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-25	-0.77	-41	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-26 (bg)	-0.02146	-12	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-27 (bg)	0.0869	63	74	No	19	5.263	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-28 (bg)	-0.06692	-57	-74	No	19	10.53	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-29 (bg)	-0.2286	-70	-74	No	19	10.53	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-3	-0.2765	-45	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-31	0.05755	53	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-5**	**-1.062**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-6	2.111	68	74	No	19	0	n/a	n/a	0.01	NP

Trend Test - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	GC-AP-MW-7	6.316	71	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-8	2.111	18	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-9**	**5.013**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-10	0.00487	33	74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02341**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.01461**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.03135**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-23 (bg)	0.002137	37	74	No	19	5.263	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-24 (bg)	0	60	74	No	19	63.16	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-26 (bg)	0	3	53	No	15	46.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-27 (bg)	0	17	68	No	18	94.44	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-28 (bg)	0	11	68	No	18	88.89	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-29 (bg)	0	33	74	No	19	89.47	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-5	0.002335	23	74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-6	0.003724	31	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-1	20.65	51	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-10**	**13.22**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**12.94**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-12	1.353	5	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-13	11.74	46	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-14**	**26.41**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-7.9**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**43.7**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-21	-6.219	-67	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.304**	**-125**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**17.51**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-26 (bg)	-1.736	-63	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-27 (bg)**	**0.4499**	**82**	**74**	**Yes**	**19**	**26.32**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.6488**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-29 (bg)	0	26	74	No	19	52.63	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-5**	**30.28**	**137**	**74**	**Yes**	**19**	**5.263**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-6	11.48	61	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-7	-1.965	-6	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-9**	**19.82**	**80**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-1	18.43	20	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-10**	**16.36**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**21.14**	**129**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-12	10.43	45	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-13	18.79	60	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-14**	**81.94**	**76**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-15	7.03	36	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-16**	**27.67**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**28.55**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-18	-10.17	-43	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-2**	**56.1**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-21	-2.005	-5	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.395**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**26.07**	**108**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**16.37**	**121**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-26 (bg)	-3.514	-53	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-27 (bg)	0.7289	46	74	No	19	26.32	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-28 (bg)	-2.224	-69	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-6.287**	**-102**	**-74**	**Yes**	**19**	**57.89**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-3	-5.087	-58	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-5**	**36.19**	**127**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-6	21.04	60	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-7	3.847	12	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-8	10.43	27	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-9**	**87.78**	**148**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits Summary Table

Plant Greene County Client: Southern Company Data: Greene County AP Printed 11/18/2021, 6:28 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00137	119	n/a	n/a	91.6	n/a	n/a	0.002234	NP Inter(NDs)
Arsenic (mg/L)	0.0044	119	n/a	n/a	83.19	n/a	n/a	0.002234	NP Inter(NDs)
Barium (mg/L)	0.347	119	n/a	n/a	0	n/a	n/a	0.002234	NP Inter(normality)
Beryllium (mg/L)	0.00226	119	n/a	n/a	86.55	n/a	n/a	0.002234	NP Inter(NDs)
Cadmium (mg/L)	0.000912	119	n/a	n/a	74.79	n/a	n/a	0.002234	NP Inter(normality)
Chromium (mg/L)	0.01	119	n/a	n/a	88.24	n/a	n/a	0.002234	NP Inter(NDs)
Cobalt (mg/L)	0.0167	119	n/a	n/a	57.98	n/a	n/a	0.002234	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	3.88	119	n/a	n/a	3.361	n/a	n/a	0.002234	NP Inter(normality)
Fluoride (mg/L)	0.159	120	n/a	n/a	67.5	n/a	n/a	0.002122	NP Inter(normality)
Lead (mg/L)	0.0002	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)
Lithium (mg/L)	0.02	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Mercury (mg/L)	0.0005	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Molybdenum (mg/L)	0.00308	119	n/a	n/a	97.48	n/a	n/a	0.002234	NP Inter(NDs)
Selenium (mg/L)	0.0072	119	n/a	n/a	89.92	n/a	n/a	0.002234	NP Inter(NDs)
Thallium (mg/L)	0.00039	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)

GREENE COUNTY ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00137	0.006
Arsenic	mg/L	0.0044	0.01
Barium	mg/L	0.347	2
Beryllium	mg/L	0.00226	0.004
Cadmium	mg/L	0.000912	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0167	0.0167
Combined Radium-226/228	pCi/L	3.88	5
Fluoride	mg/L	0.159	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00308	0.1
Selenium	mg/L	0.0072	0.05
Thallium	mg/L	0.00039	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

Confidence Interval Summary Table - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02595**	**0.0184**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01419**	**0.01173**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02872**	**0.02023**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1032**	**0.06832**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.8918**	**0.3339**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05079**	**0.04798**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4587**	**0.3915**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2714**	**0.1196**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04267**	**0.02178**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01958**	**0.01687**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-10**	**0.329**	**0.11**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1327**	**0.0719**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.1441**	**0.06377**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.4979**	**0.1204**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9722**	**0.5893**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6241**	**0.5512**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6624**	**0.5563**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3944**	**0.3251**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1376**	**0.1026**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GC-AP-MW-12	0.00121	0.00102	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-13	0.00341	0.00185	0.006	No	8	0	No	0.01	Param.
Antimony (mg/L)	GC-AP-MW-17	0.00102	0.000897	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-21	0.00102	0.000964	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-6	0.00141	0.00102	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-7	0.00102	0.00066	0.006	No	8	75	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02595**	**0.0184**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01419**	**0.01173**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-11	0.005879	0.001998	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-12	0.000251	0.0002	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-13	0.004863	0.001584	0.01	No	8	0	sqrt(x)	0.01	Param.
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02872**	**0.02023**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-15	0.00046	0.0002	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1032**	**0.06832**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.8918**	**0.3339**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05079**	**0.04798**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-2	0.01567	0.003015	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-21	0.000216	0.00014	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-25	0.00033	0.0002	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-3	0.01105	0.006592	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-31	0.0002	0.000111	0.01	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GC-AP-MW-32	0.0002	0.000142	0.01	No	8	75	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-33	0.0002	0.00015	0.01	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4587**	**0.3915**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-6	0.000303	0.00013	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-7	0.0002	0.00008	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-8	0.00027	0.00015	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-9	0.01092	0.007675	0.01	No	8	0	x^4	0.01	Param.
Barium (mg/L)	GC-AP-MW-1	0.03052	0.02016	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-10	0.2676	0.1709	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-11	0.09464	0.05316	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-12	0.03552	0.02178	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-13	0.2005	0.06695	2	No	8	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GC-AP-MW-14	0.1149	0.066	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-15	0.03905	0.02942	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-16	0.1042	0.06739	2	No	8	0	x^2	0.01	Param.
Barium (mg/L)	GC-AP-MW-17	0.3297	0.229	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-18	0.1086	0.07623	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-2	0.03604	0.02986	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-21	0.1024	0.04561	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-25	0.1084	0.07735	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-3	0.1527	0.09772	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-31	0.0321	0.02377	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-32	0.0764	0.0123	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-33	0.0995	0.02902	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-5	0.323	0.131	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-6	0.07849	0.05964	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-7	0.08588	0.07039	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-8	0.1335	0.09094	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-9	0.1886	0.1436	2	No	8	0	No	0.01	Param.
Cadmium (mg/L)	GC-AP-MW-11	0.000347	0.0002	0.005	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-13	0.0002	0.00008	0.005	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-15	0.00046	0.00012	0.005	No	8	62.5	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-2	0.0002	0.00012	0.005	No	8	75	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-21	0.0002	0.00007	0.005	No	8	75	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-25	0.0002	0.00007	0.005	No	8	75	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-6	0.00278	0.00018	0.005	No	8	62.5	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-8	0.000241	0.0002	0.005	No	8	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GC-AP-MW-1	0.00102	0.00034	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-10	0.00102	0.000357	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-11	0.00102	0.00023	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-12	0.00102	0.000224	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-13	0.00102	0.00026	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-14	0.00102	0.00023	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-15	0.00102	0.00027	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-16	0.00102	0.00034	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-17	0.00102	0.000216	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-18	0.00102	0.00023	0.1	No	8	62.5	No	0.004	NP (normality)

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GC-AP-MW-2	0.00267	0.0003	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-21	0.00102	0.00022	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-25	0.00102	0.00028	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-3	0.00102	0.00032	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-31	0.00102	0.00039	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-32	0.00102	0.00038	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-33	0.00102	0.00044	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-5	0.00102	0.00025	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-6	0.00102	0.00026	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-7	0.00102	0.00024	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-8	0.00102	0.00027	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-9	0.00102	0.00027	0.1	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2714**	**0.1196**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-10	0.04203	0.014	0.0167	No	8	0	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-11	0.03895	0.01457	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-12	0.00118	0.0002	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-13	0.00126	0.00007	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04267**	**0.02178**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01958**	**0.01687**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-16	0.01672	0.01423	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-17	0.0321	0.0109	0.0167	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-18	0.01792	0.01573	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-2	0.02973	0.01292	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-21	0.00284	0.0002	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-25	0.01322	0.009578	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-3	0.00463	0.0002	0.0167	No	8	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-31	0.000624	0.0002	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-32	0.00105	0.0002	0.0167	No	8	75	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-33	0.00099	0.0002	0.0167	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GC-AP-MW-5	0.008915	0.005452	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-6	0.003646	0.002109	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-7	0.003817	0.001626	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-8	0.01065	0.005562	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-9	0.02726	0.01437	0.0167	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-1	1.479	0.8662	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-10	1.647	0.7269	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-11	0.6939	0.4979	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-12	1.043	0.0003309	5	No	8	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-13	0.5627	0.3043	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-14	1.374	0.7391	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-15	0.7216	0.248	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-16	1.288	0.4672	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-17	2.248	1.082	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-18	1.552	0.8931	5	No	8	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-2	1.383	0.4359	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-21	0.7428	0.04578	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-25	0.7915	0.1545	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-3	1.317	0.6006	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-31	0.7125	0.1816	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-32	1.976	-0.3098	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-33	2.296	0.7576	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-5	2.033	1.13	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-6	1.244	0.5642	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-7	1.129	0.512	5	No	8	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-8	1.446	0.3853	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-9	1.653	1.047	5	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-1	0.1819	0.08232	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-10	0.2932	0.204	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-11	0.1802	0.08211	4	No	8	12.5	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-12	0.2389	0.1444	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-13	0.1287	0.06755	4	No	8	12.5	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-14	0.2691	0.2077	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-15	0.1502	0.1104	4	No	8	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-16	0.3018	0.2416	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-17	0.6008	0.4711	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-18	0.2075	0.1534	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-2	0.1577	0.06995	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-21	0.2197	0.09989	4	No	8	12.5	No	0.01	Param.

Confidence Interval Summary Table - All Results

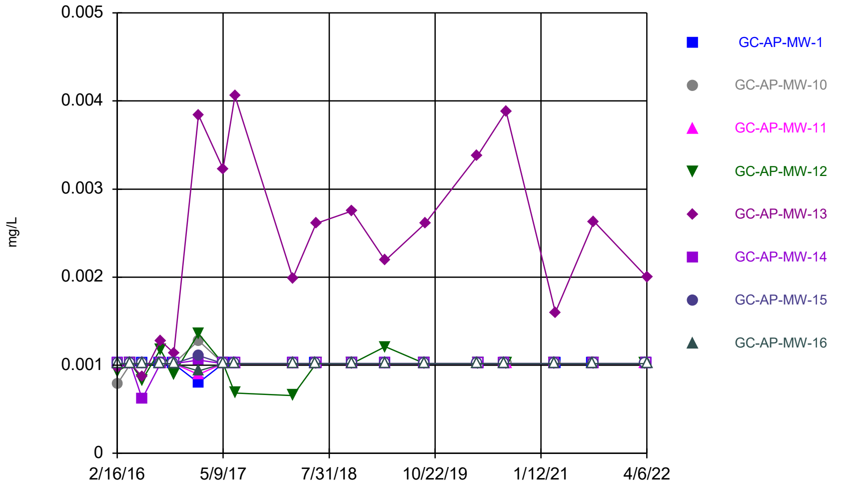
Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-25	0.104	0.0625	4	No	8	62.5	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-3	0.1914	0.1013	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-32	0.0625	0.0518	4	No	8	87.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-33	0.08	0.0625	4	No	8	87.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-5	0.322	0.2	4	No	8	0	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-6	0.241	0.1753	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-7	0.1058	0.08642	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-8	0.162	0.108	4	No	8	0	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-9	0.2172	0.1159	4	No	8	12.5	No	0.01	Param.
Lead (mg/L)	GC-AP-MW-16	0.0002	0.00009	0.015	No	8	62.5	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-2	0.000736	0.0002	0.015	No	8	62.5	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-25	0.0002	0.0000884	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-31	0.0002	0.00015	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-32	0.0002	0.000121	0.015	No	8	75	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-33	0.0002	0.00015	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-9	0.0002	0.0000784	0.015	No	8	87.5	No	0.004	NP (NDs)
Lithium (mg/L)	**GC-AP-MW-10**	**0.329**	**0.11**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1327**	**0.0719**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.1441**	**0.06377**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.4979**	**0.1204**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9722**	**0.5893**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6241**	**0.5512**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6624**	**0.5563**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3944**	**0.3251**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1376**	**0.1026**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GC-AP-MW-6	0.03337	0.008532	0.04	No	8	12.5	sqrt(x)	0.01	Param.
Lithium (mg/L)	GC-AP-MW-8	0.07163	0.01377	0.04	No	8	0	No	0.01	Param.
Lithium (mg/L)	GC-AP-MW-9	0.1005	0.0254	0.04	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-1	0.0002	0.000117	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-10	0.0132	0.00747	0.1	No	8	0	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-11	0.01754	0.006512	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-12	0.1169	0.05569	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-13	0.08885	0.01377	0.1	No	8	0	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-14	0.01812	0.01196	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-16	0.0002	0.000113	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-17	0.06869	0.04624	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-18	0.0004	0.0002	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-2	0.0002	0.0000804	0.1	No	8	75	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-21	0.06508	0.01395	0.1	No	8	0	x^2	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-25	0.0002	0.0000843	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-31	0.0002	0.0000741	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-5	0.003495	0.002752	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-6	0.0024	0.0002	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-7	0.0002	0.00013	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-8	0.0002	0.0000812	0.1	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-1	0.00221	0.00102	0.05	No	8	62.5	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-12	0.00281	0.00102	0.05	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-13	0.02915	0.001838	0.05	No	8	25	No	0.01	Param.
Selenium (mg/L)	GC-AP-MW-2	0.00102	0.00054	0.05	No	8	75	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-3	0.00102	0.00074	0.05	No	8	62.5	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-32	0.00102	0.00059	0.05	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-33	0.00102	0.00071	0.05	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	GC-AP-MW-1	0.0002	0.000107	0.002	No	8	62.5	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-11	0.0002	0.00007	0.002	No	8	62.5	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-13	0.001712	0.0002843	0.002	No	8	0	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-15	0.0002	0.0000878	0.002	No	8	75	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-16	0.0003935	0.0003285	0.002	No	8	0	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-2	0.0002	0.000101	0.002	No	8	62.5	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-21	0.0002	0.000106	0.002	No	8	75	No	0.004	NP (normality)

FIGURE A.

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

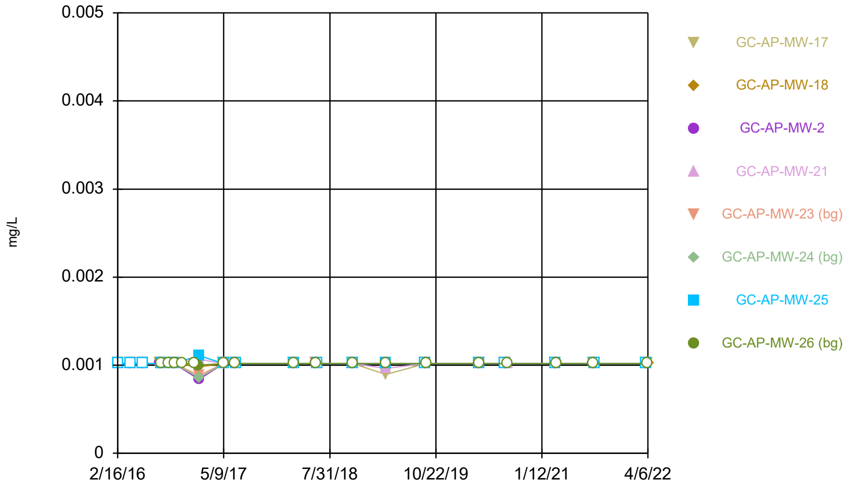
Time Series



Constituent: Antimony Analysis Run 6/10/2022 12:53 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

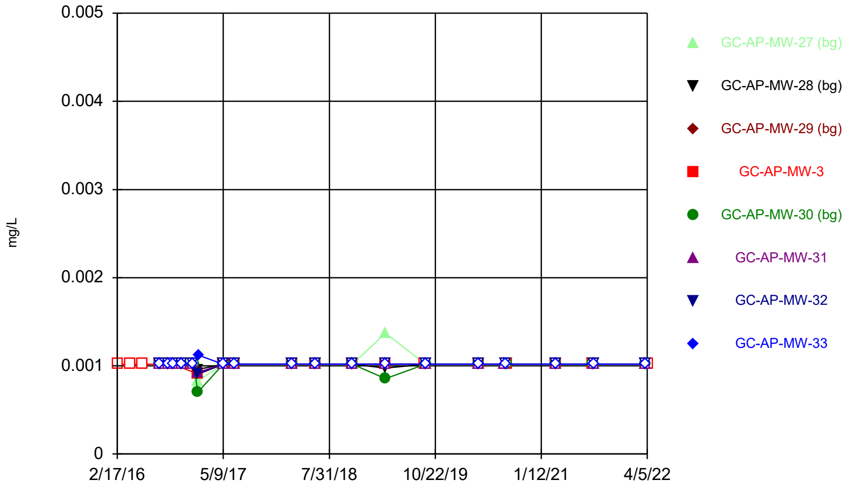
Time Series



Constituent: Antimony Analysis Run 6/10/2022 12:53 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

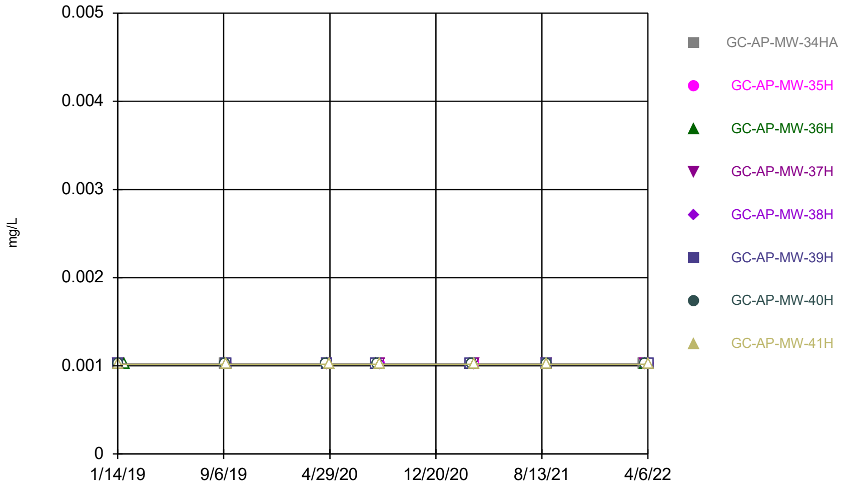
Time Series



Constituent: Antimony Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

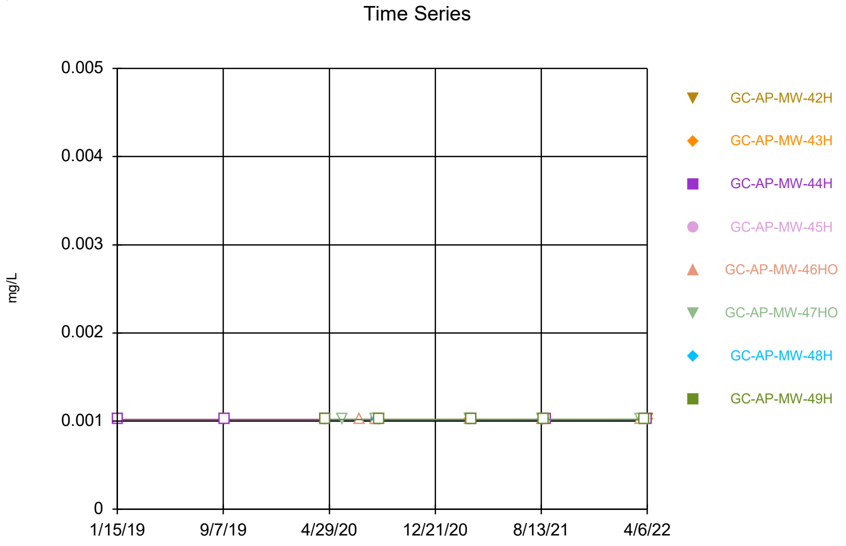
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Time Series



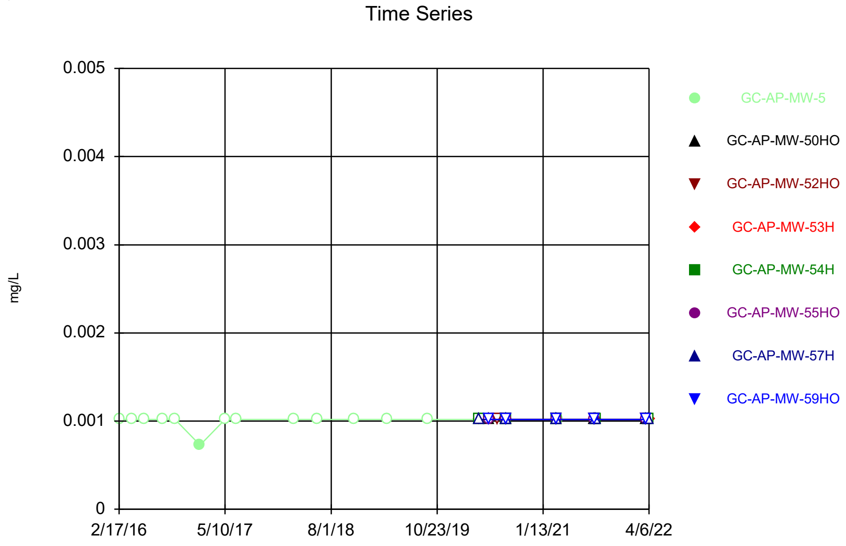
Constituent: Antimony Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



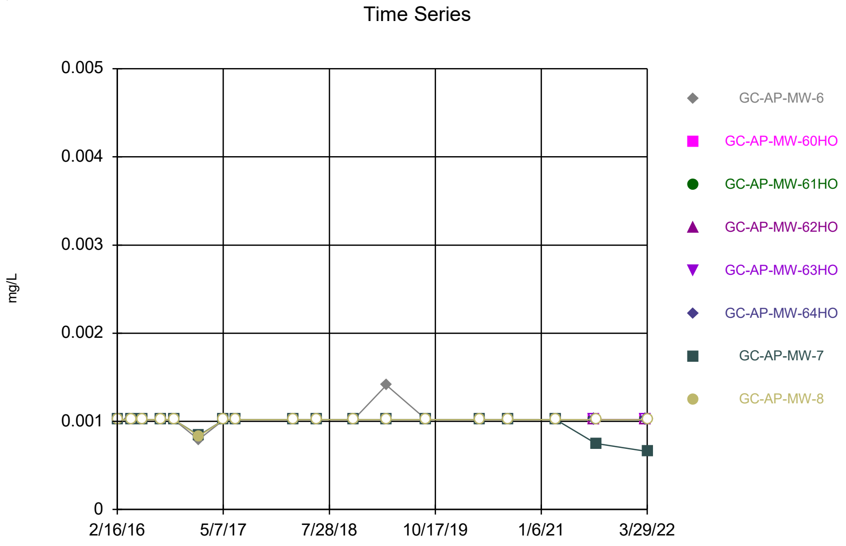
Constituent: Antimony Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



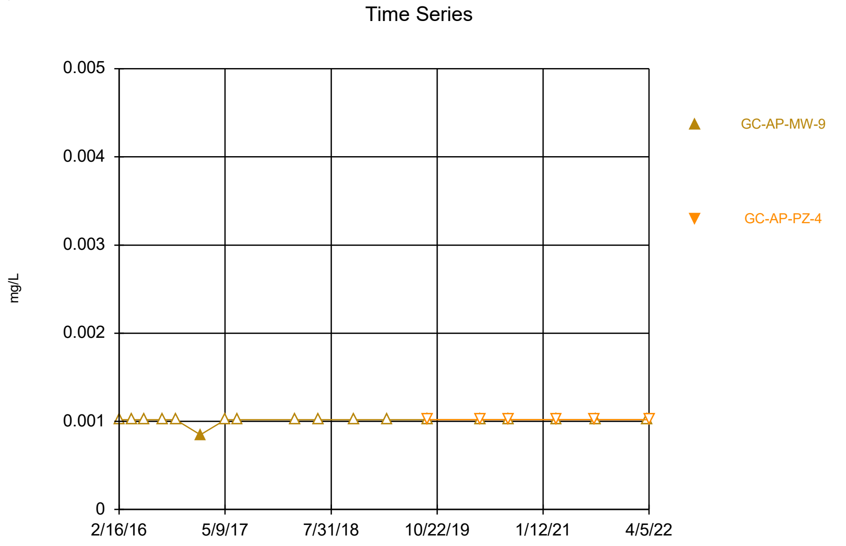
Constituent: Antimony Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Antimony Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

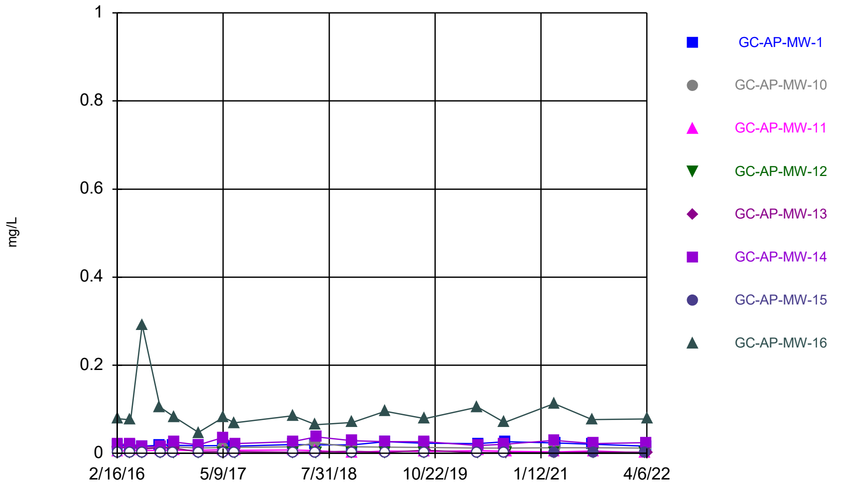
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Antimony Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

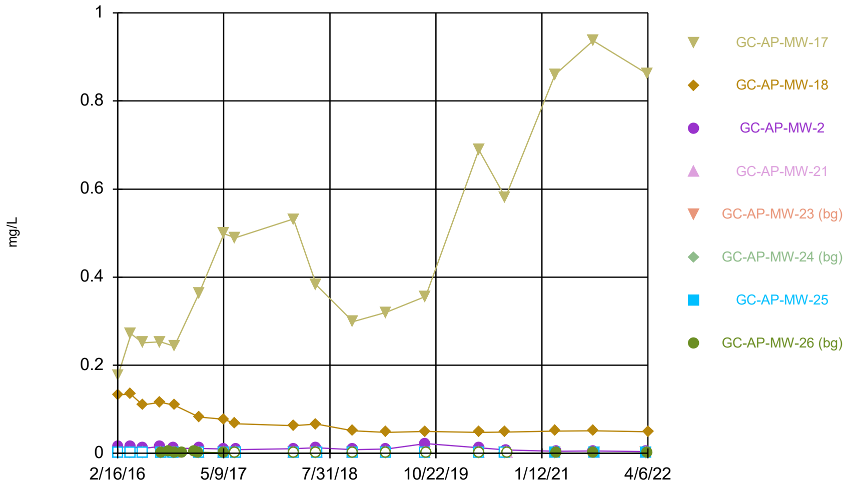
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

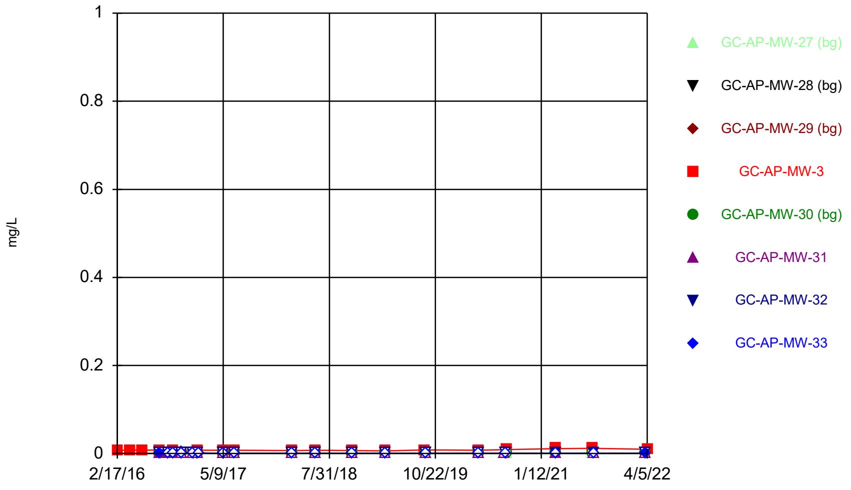
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

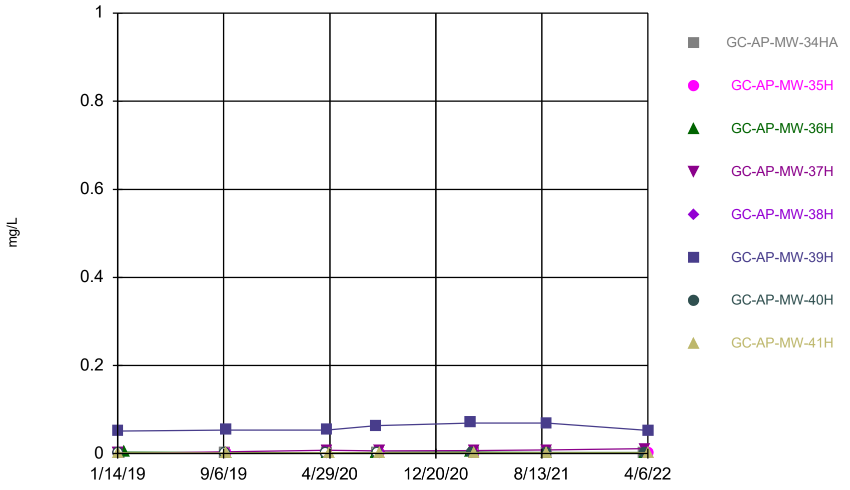
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

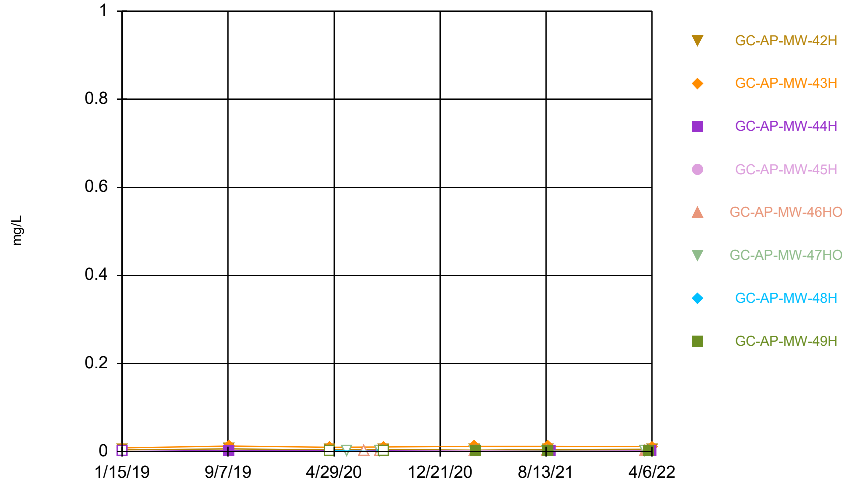
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

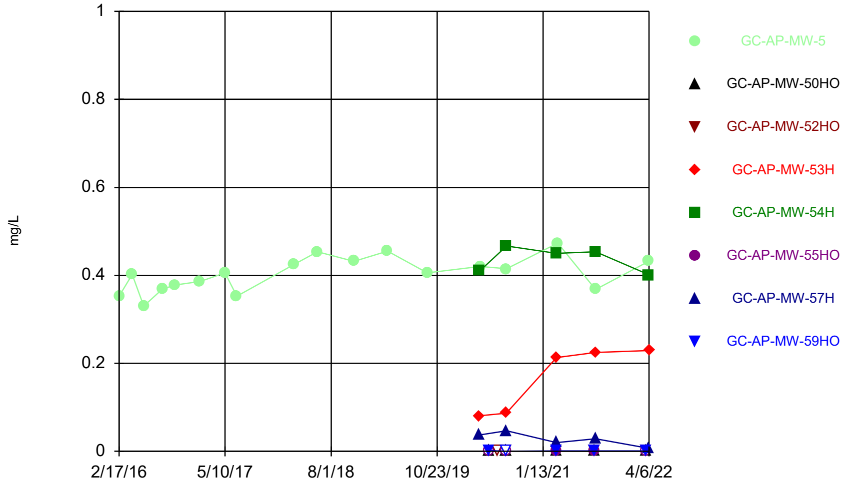
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

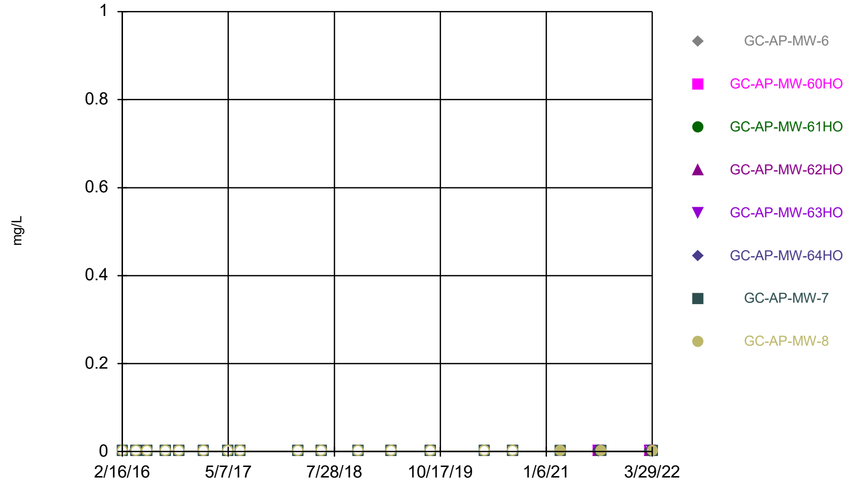
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

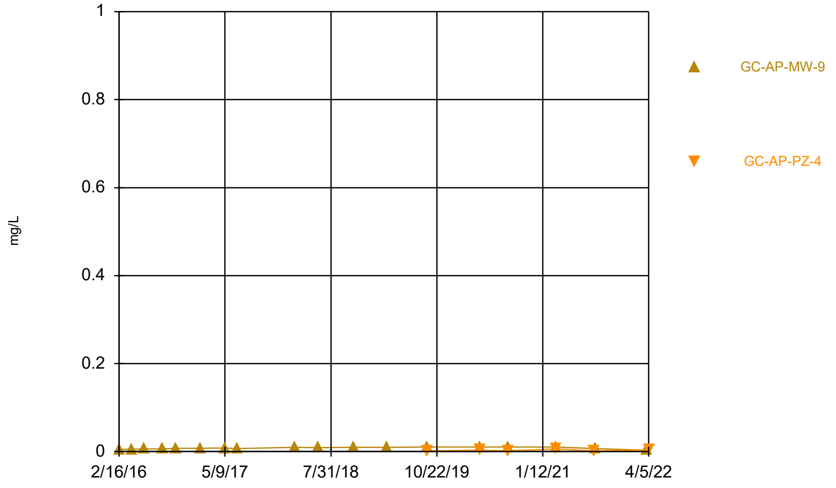
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

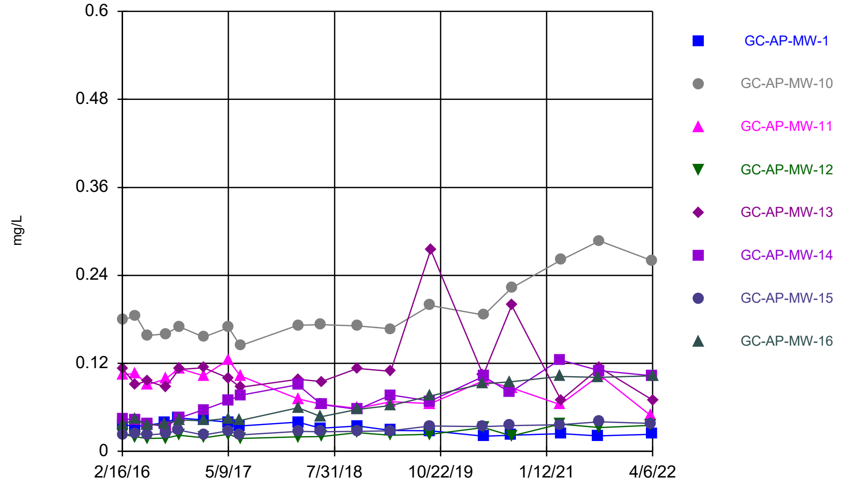
Time Series



Constituent: Arsenic Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

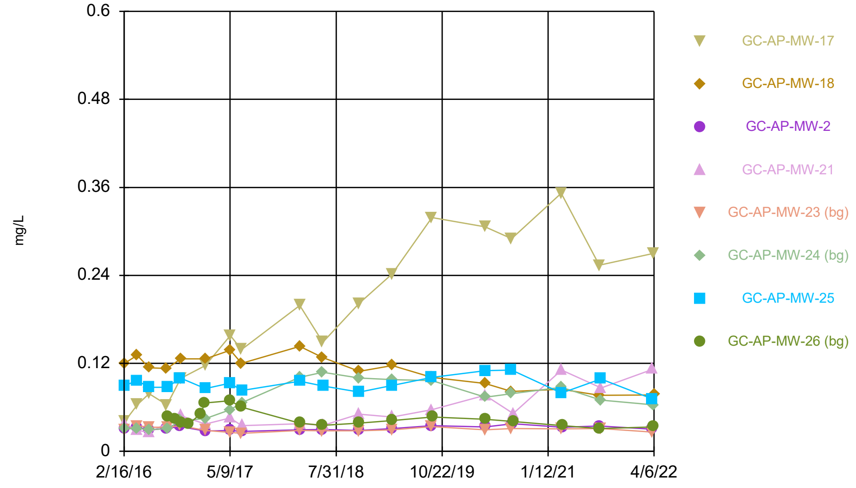
Time Series



Constituent: Barium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

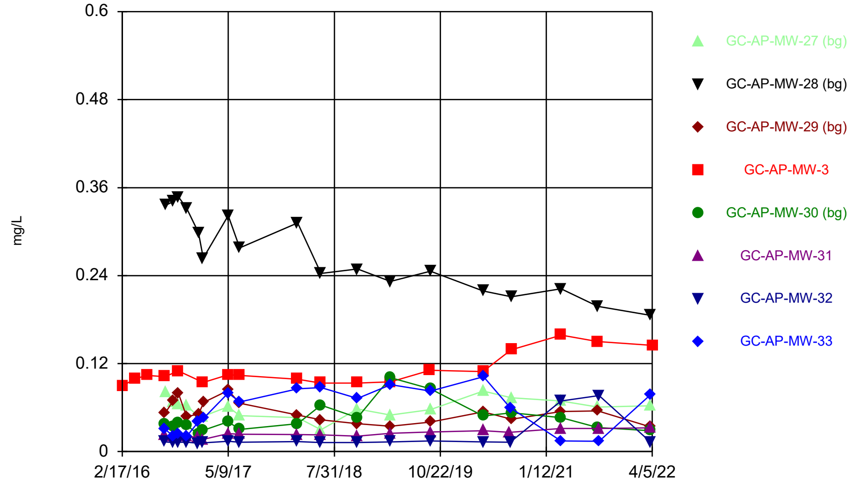
Time Series



Constituent: Barium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

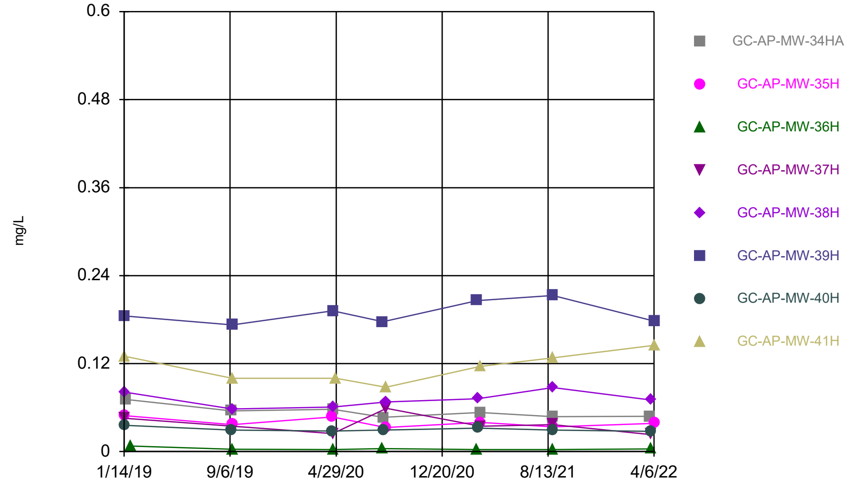
Time Series



Constituent: Barium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

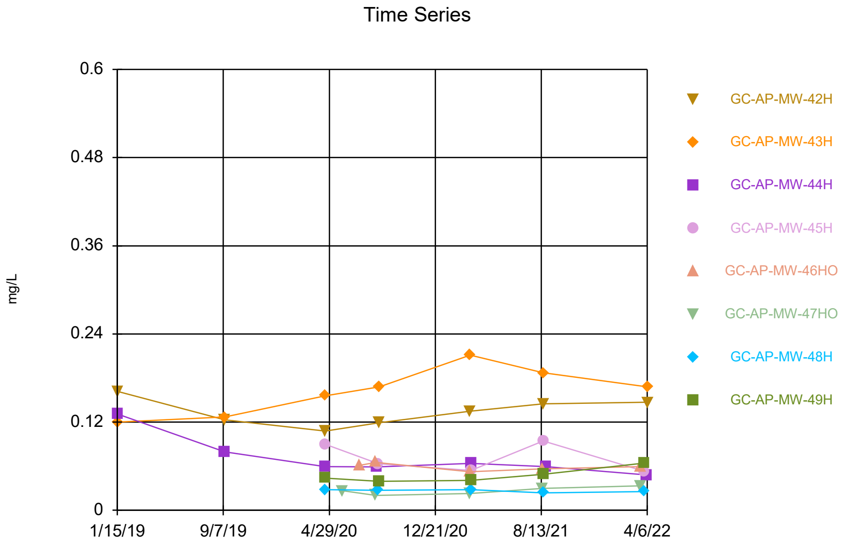
Sanitas™ v.9.6.34 . UG

Time Series



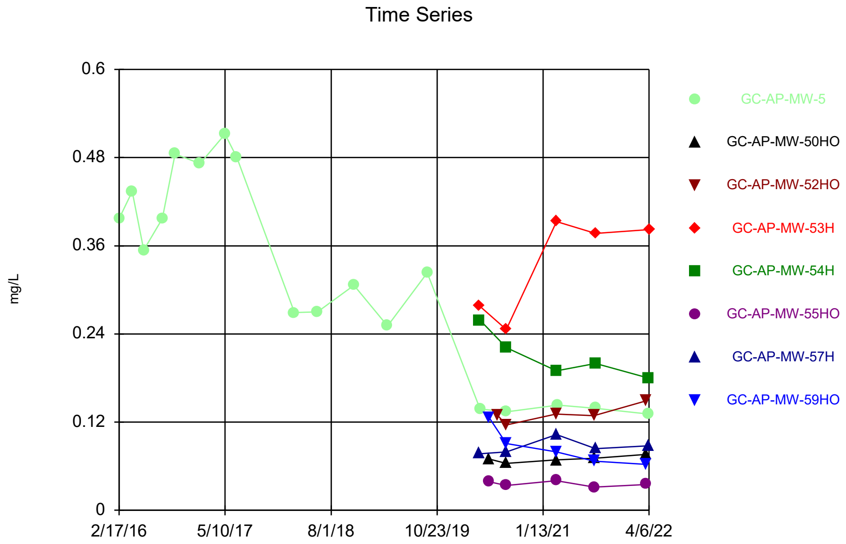
Constituent: Barium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



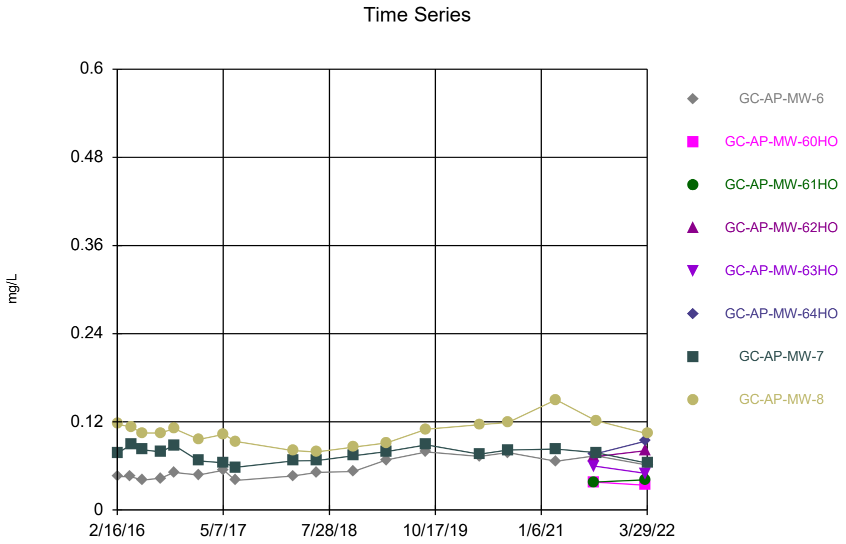
Constituent: Barium   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



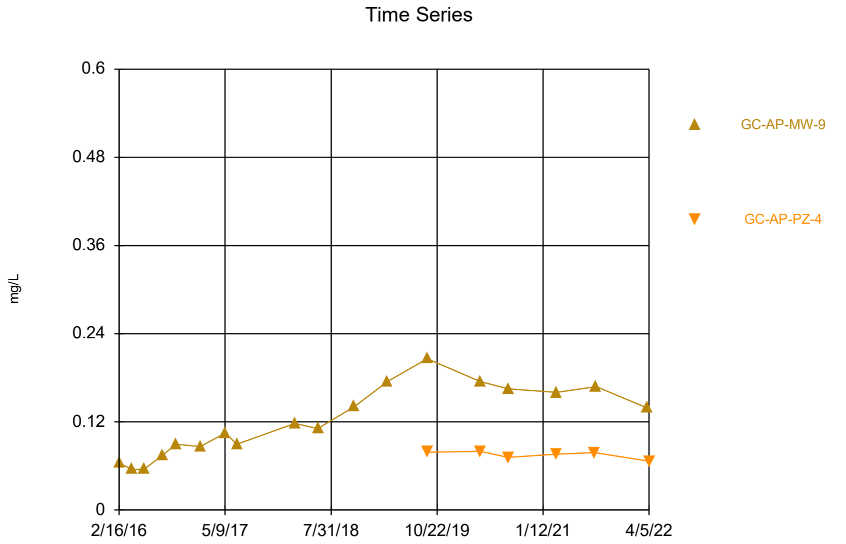
Constituent: Barium   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Barium   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

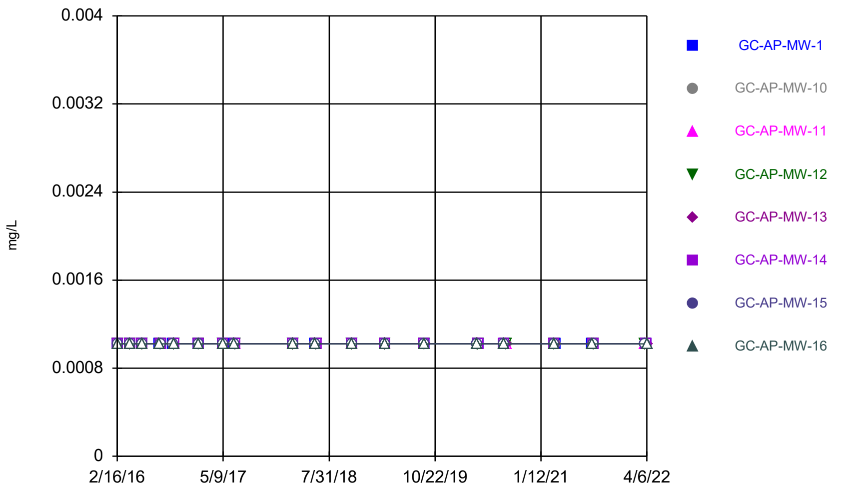
Sanitas™ v.9.6.34 . UG



Constituent: Barium   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

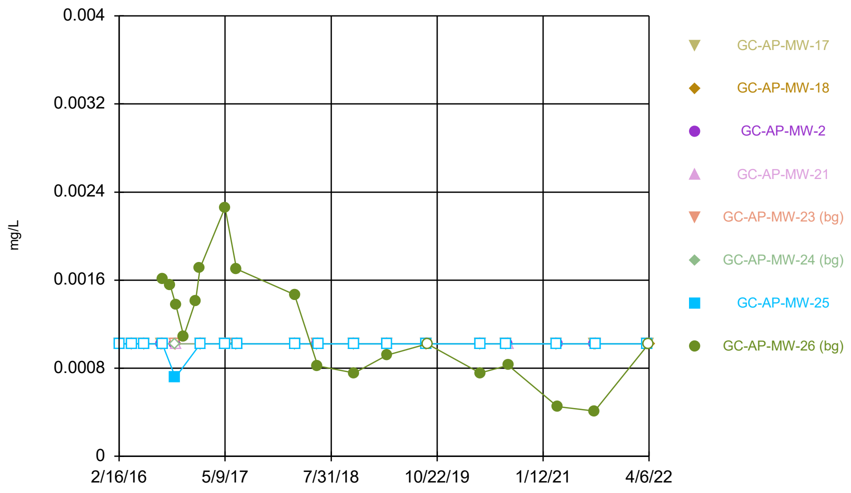
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

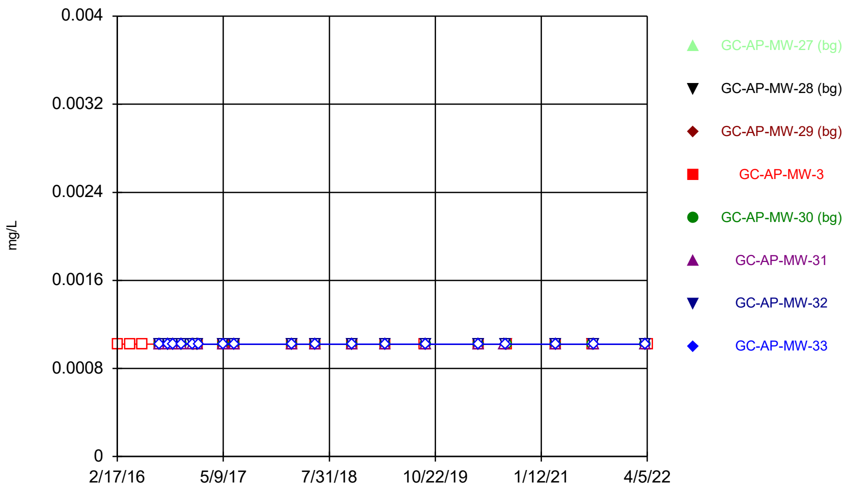
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

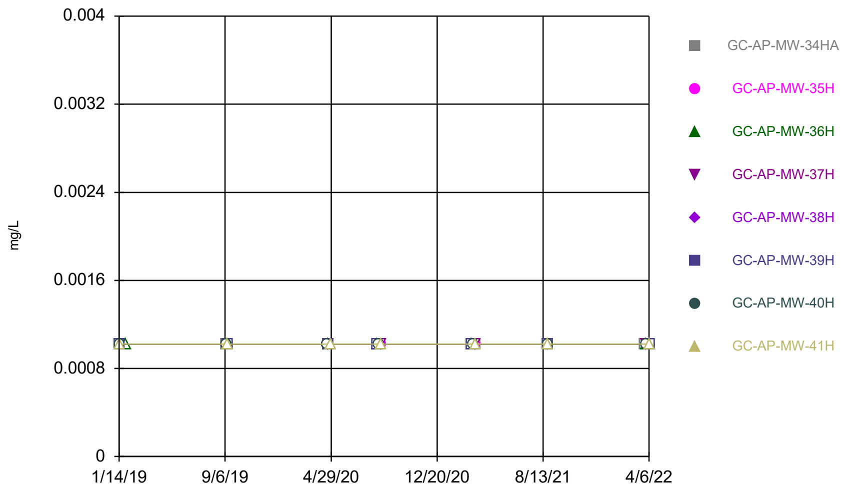
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

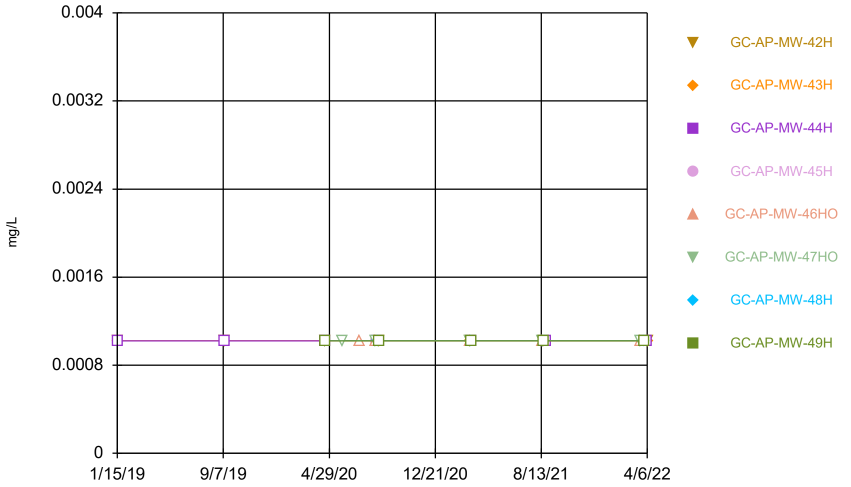
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

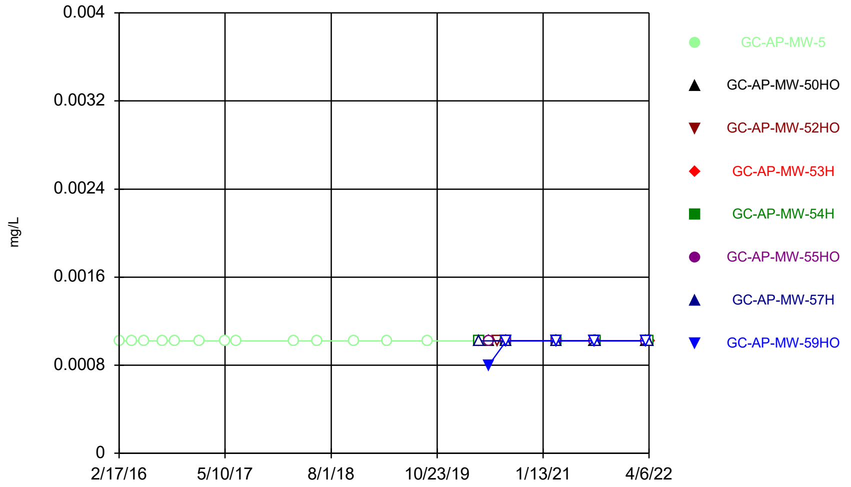
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

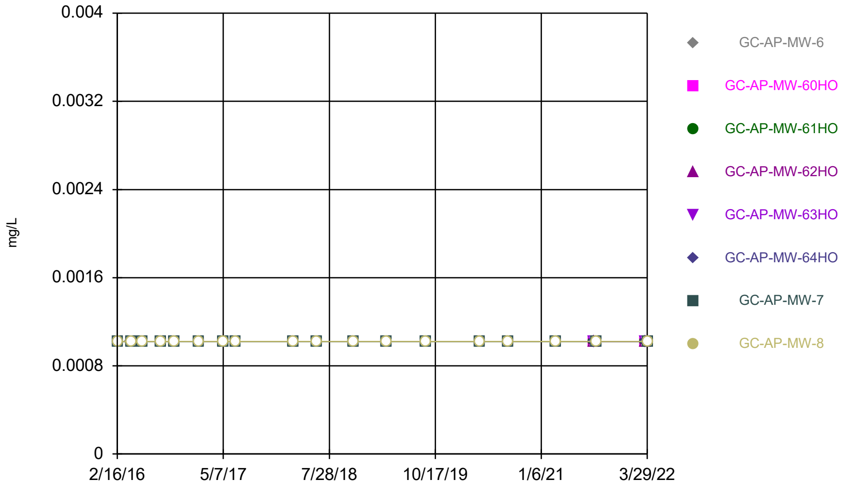
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

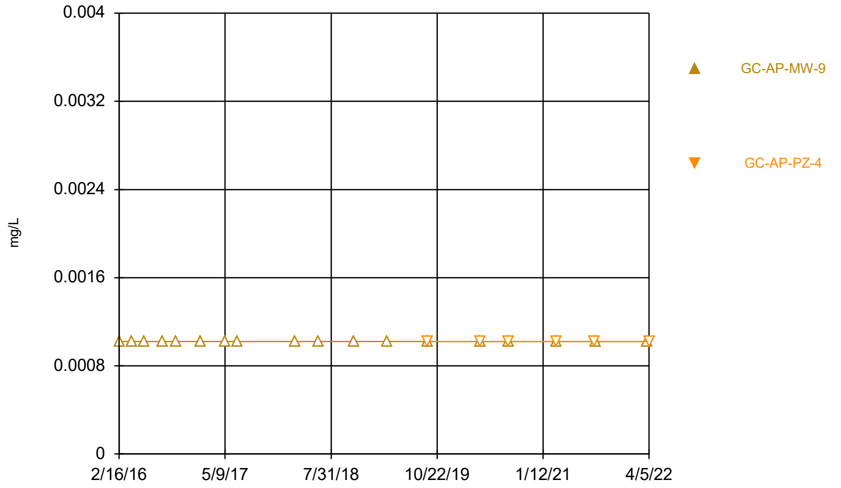
Time Series



Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

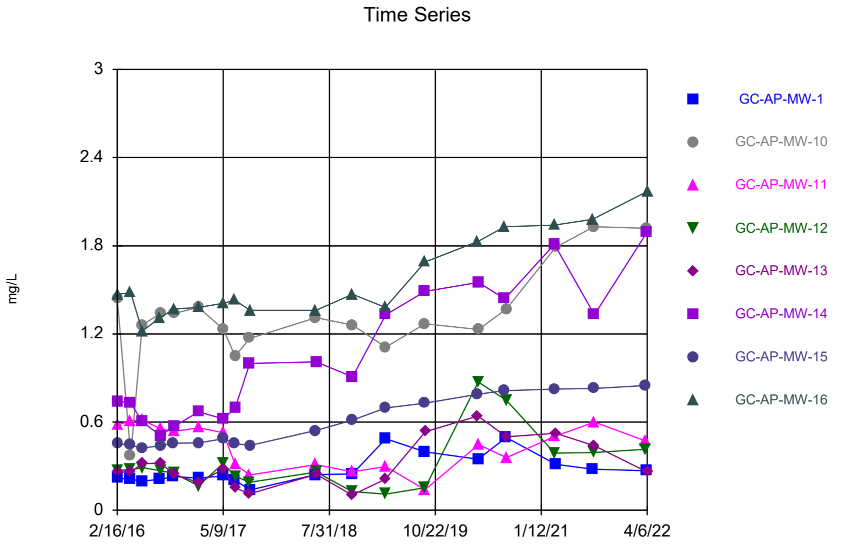
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Time Series



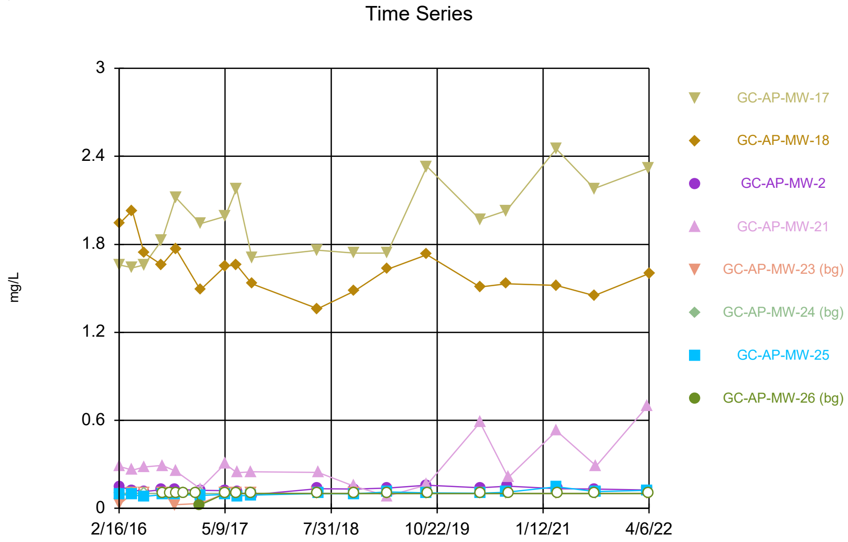
Constituent: Beryllium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



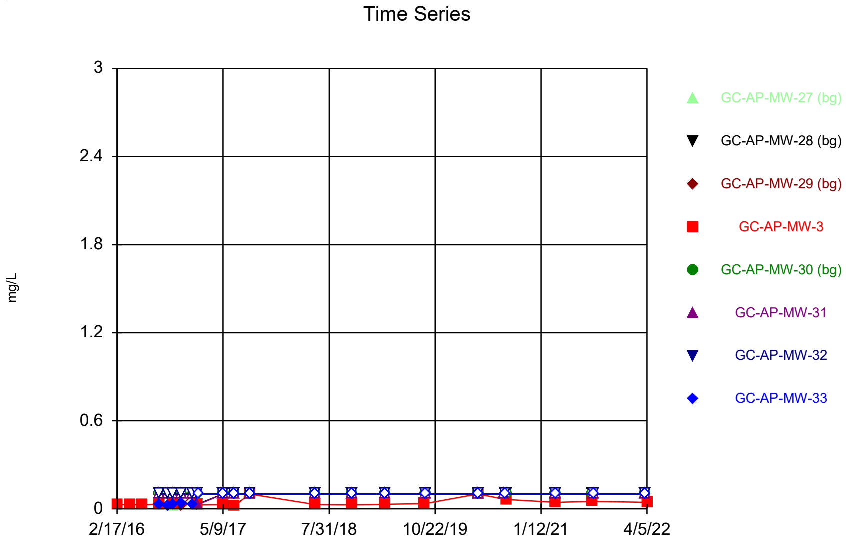
Constituent: Boron   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



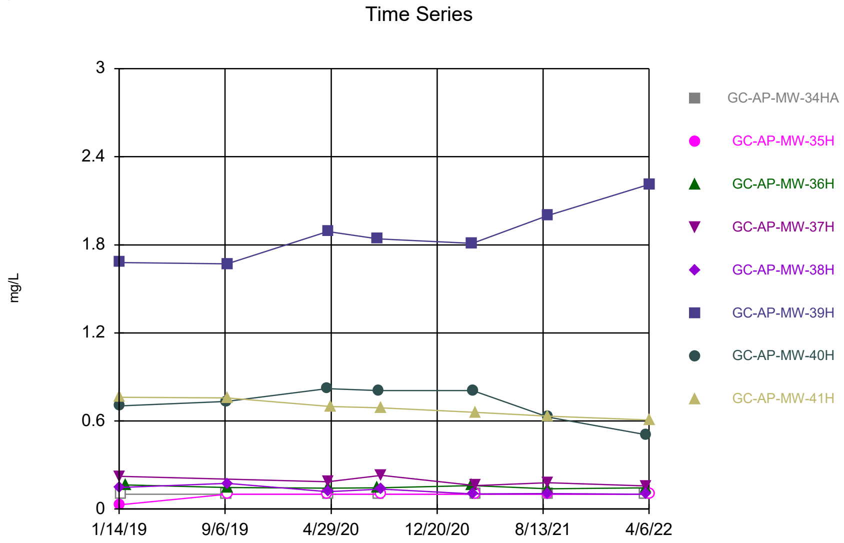
Constituent: Boron   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Boron   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

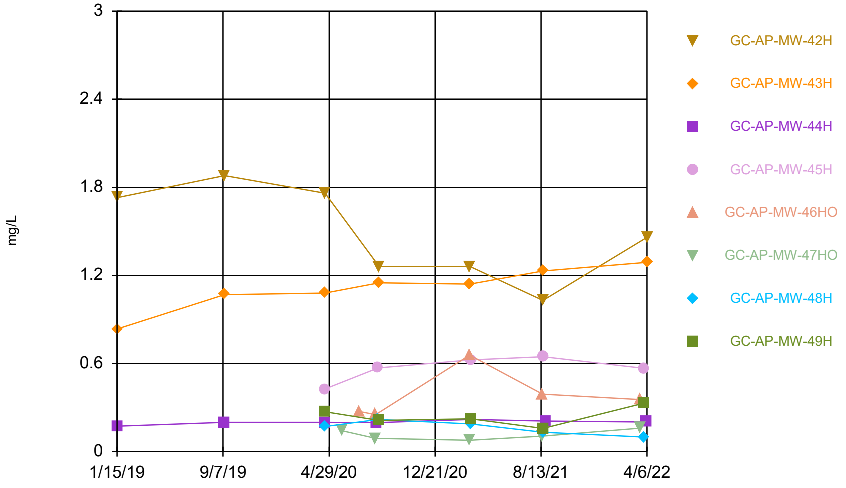
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Boron   Analysis Run 6/10/2022 12:54 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

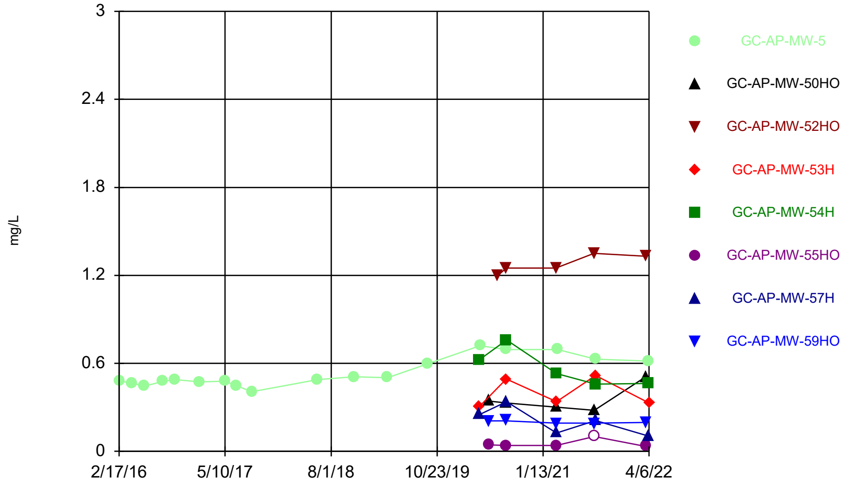
Time Series



Constituent: Boron Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

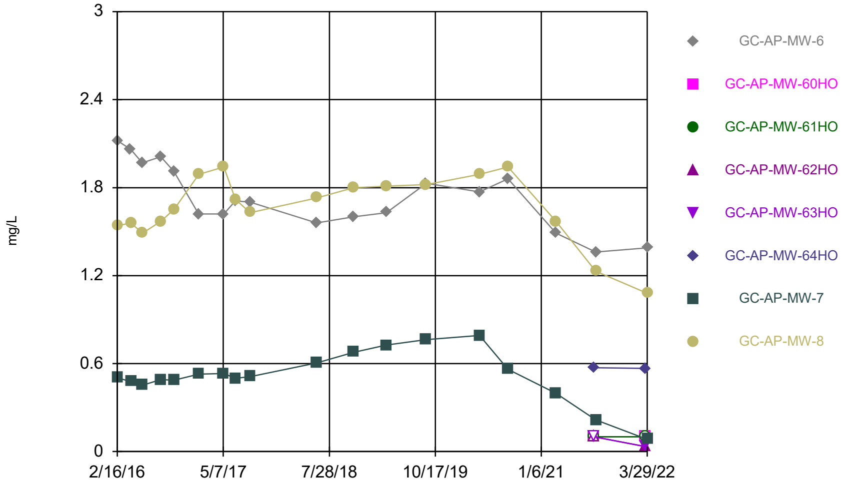
Time Series



Constituent: Boron Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

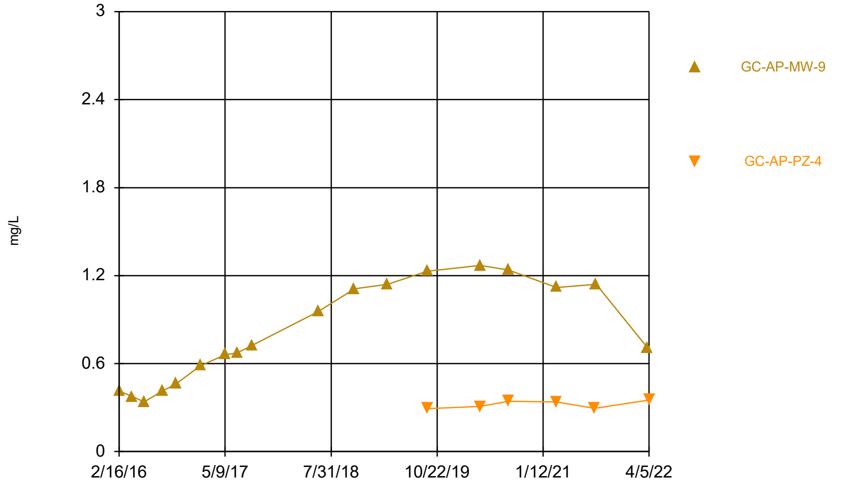
Time Series



Constituent: Boron Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

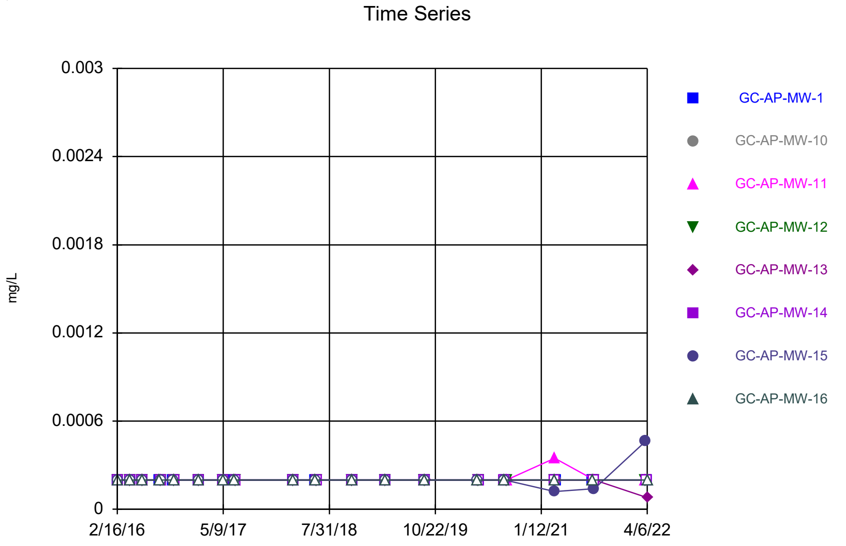
Sanitas™ v.9.6.34 . UG

Time Series



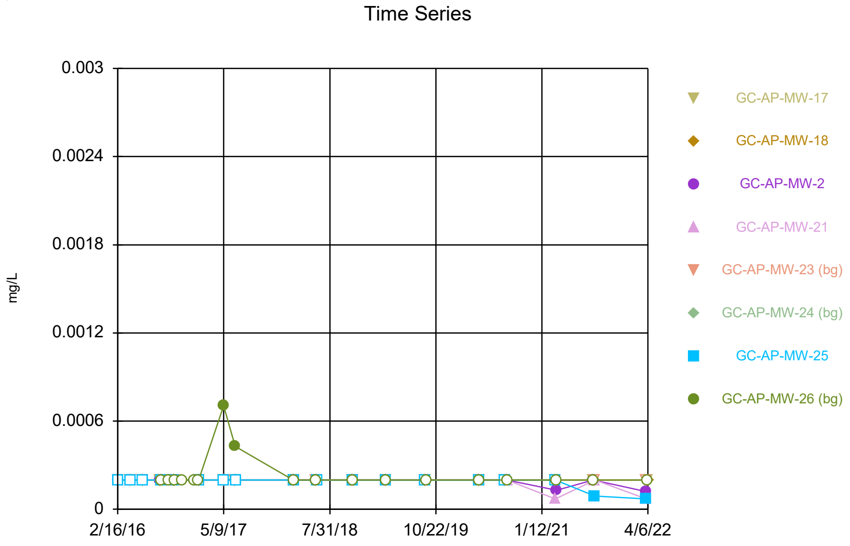
Constituent: Boron Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



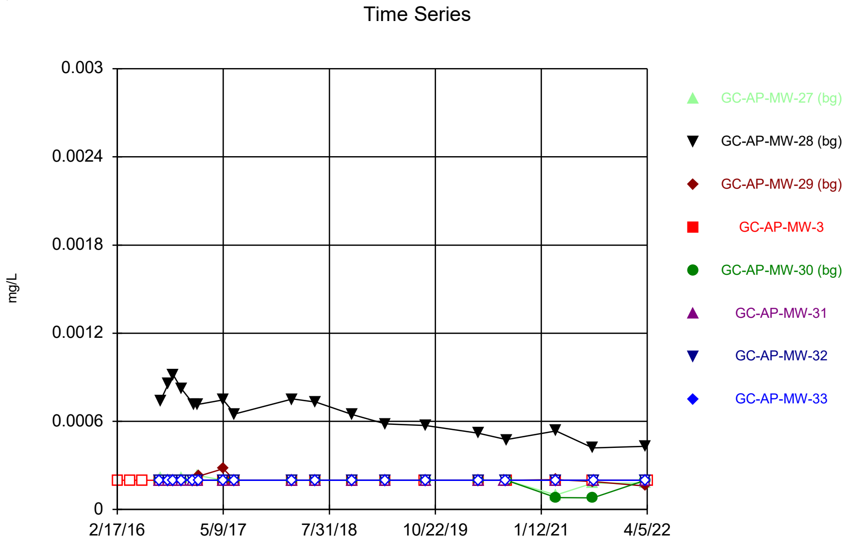
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



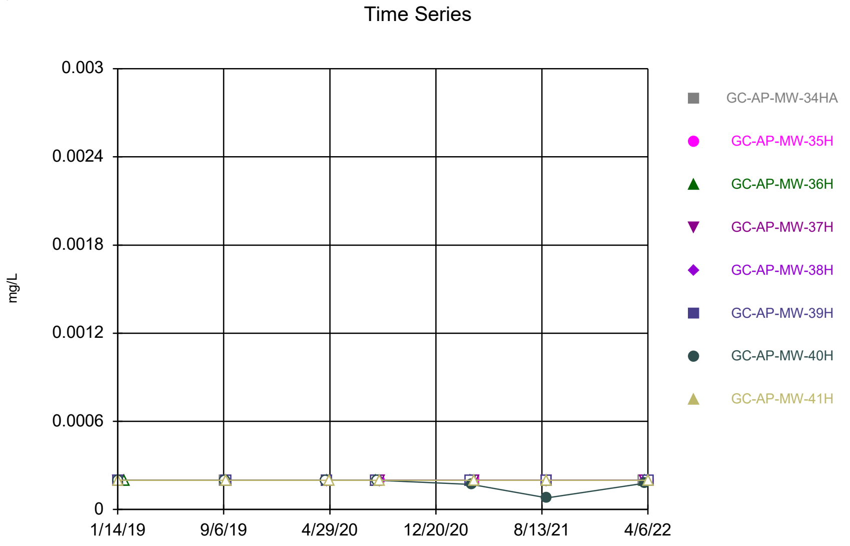
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



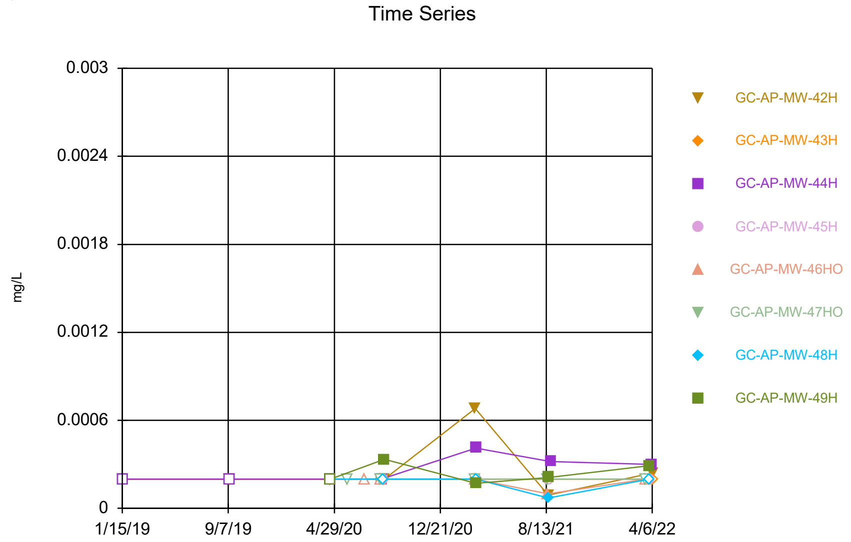
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



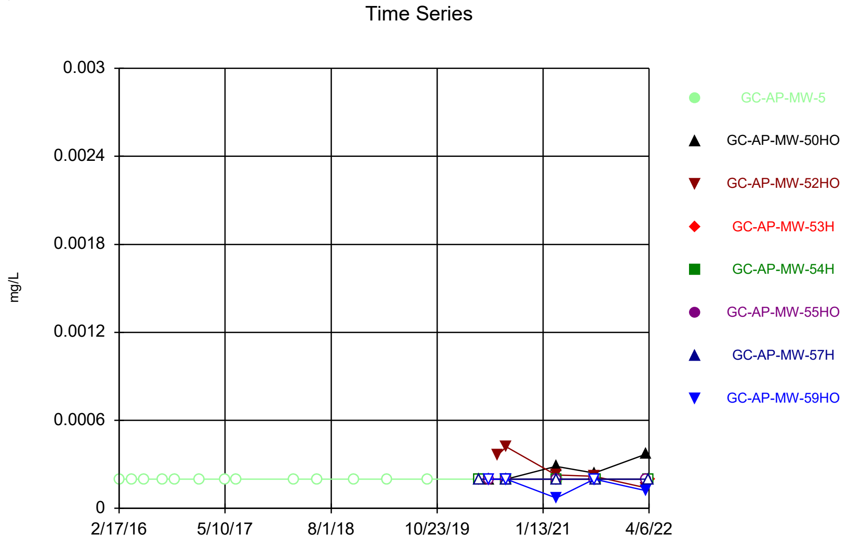
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



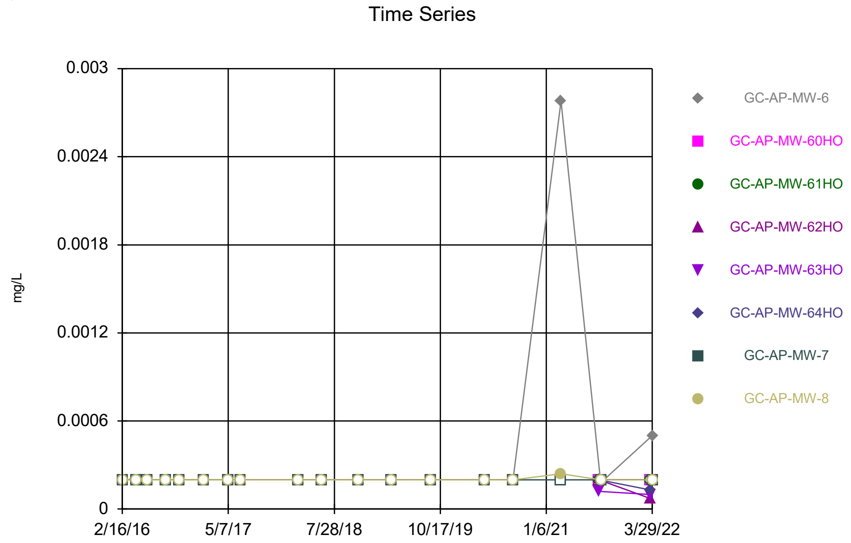
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



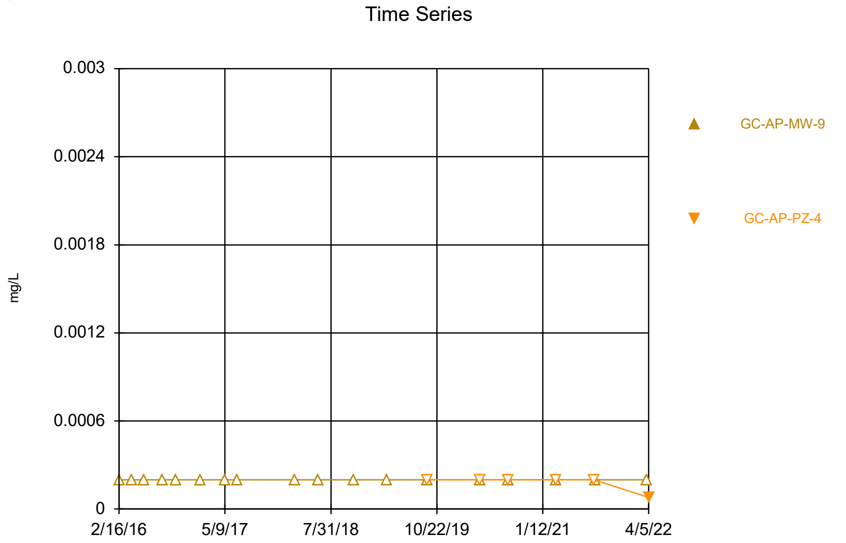
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



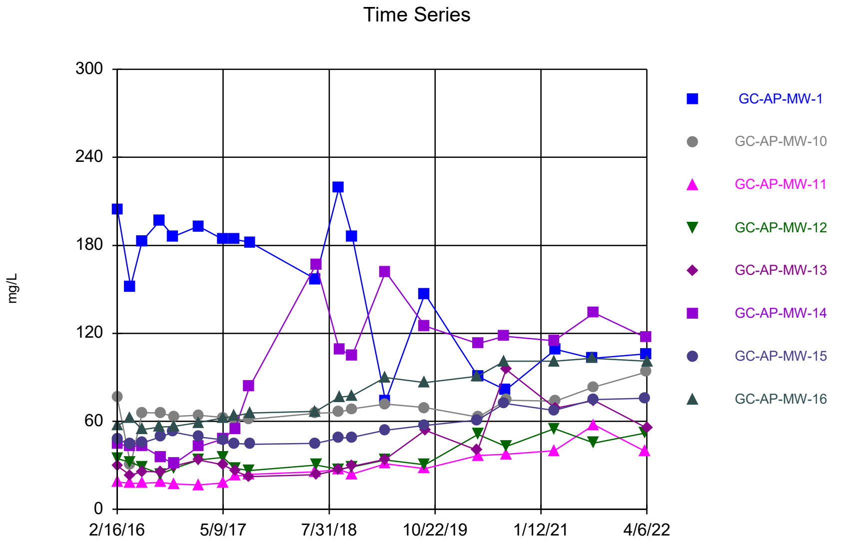
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



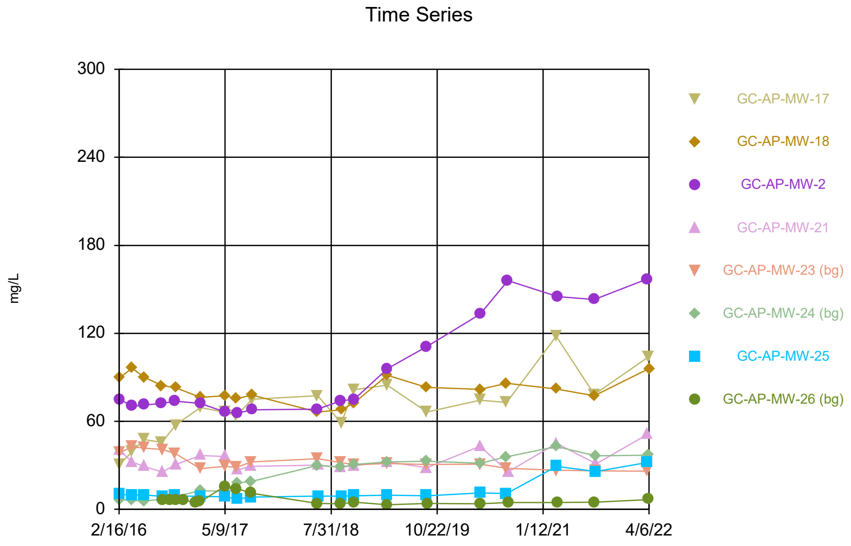
Constituent: Cadmium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



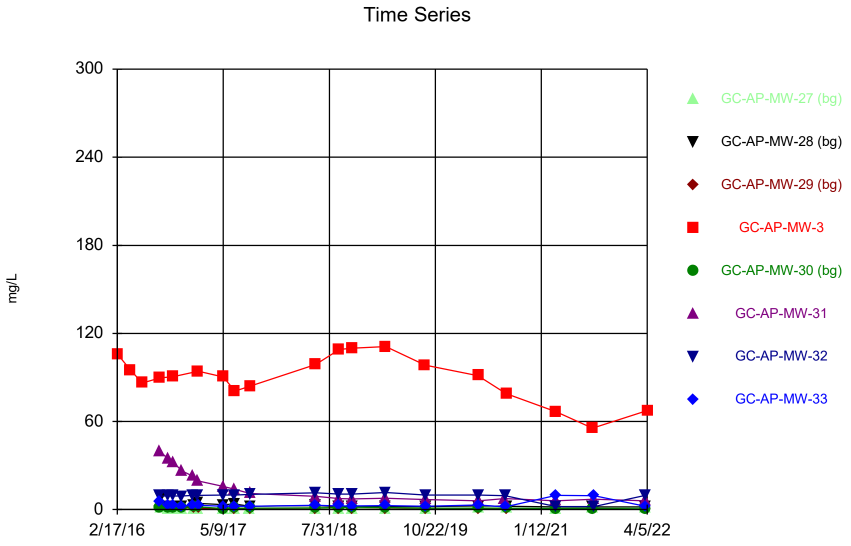
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



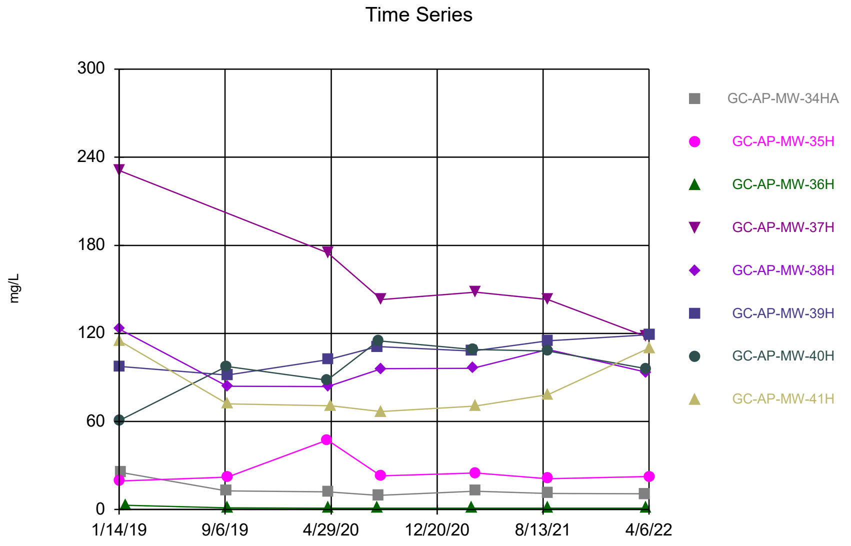
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



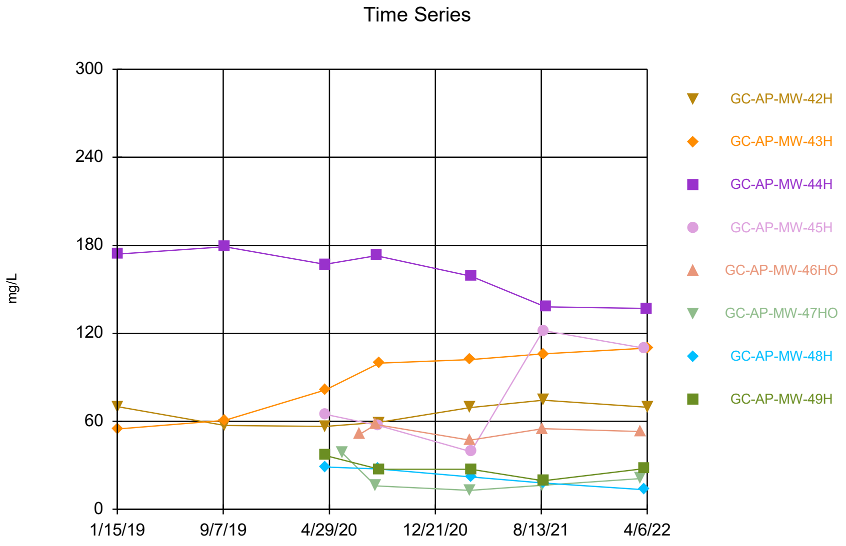
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



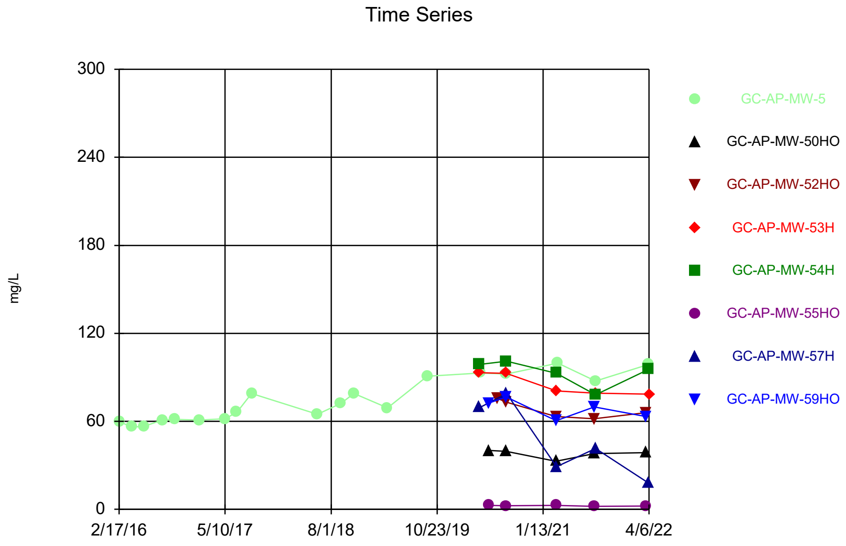
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



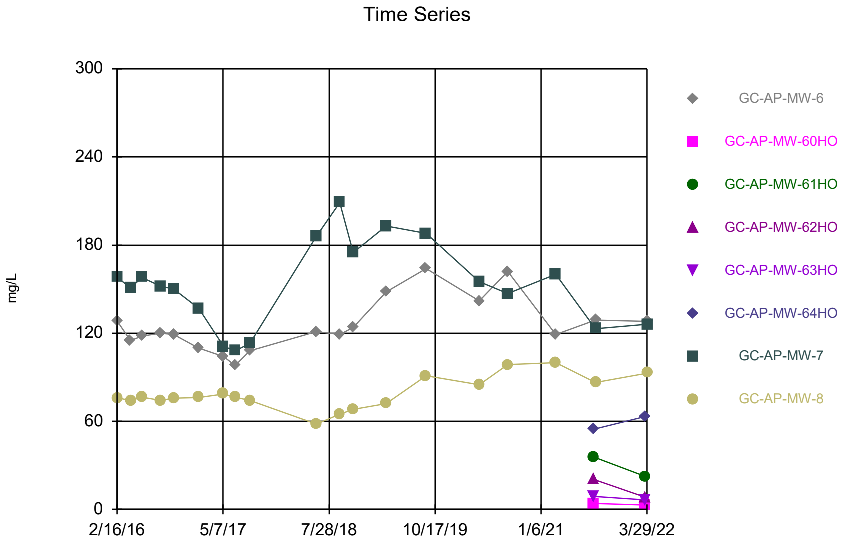
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



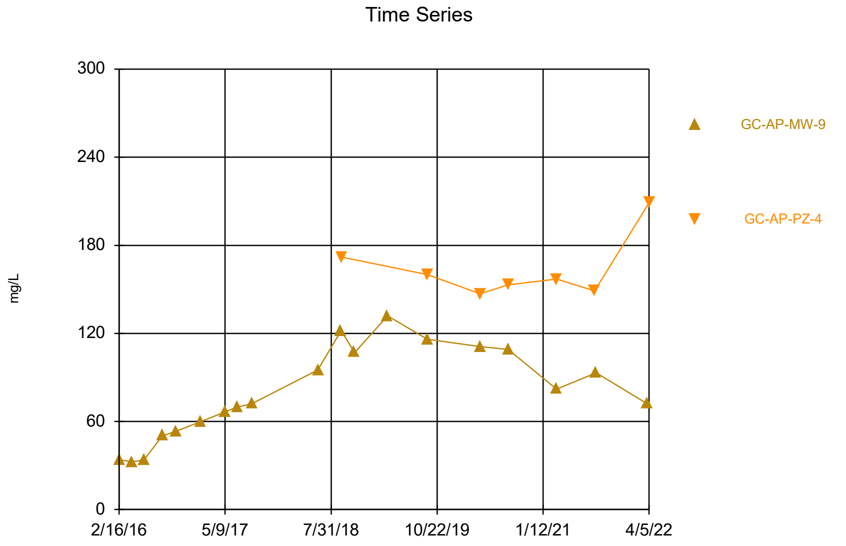
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



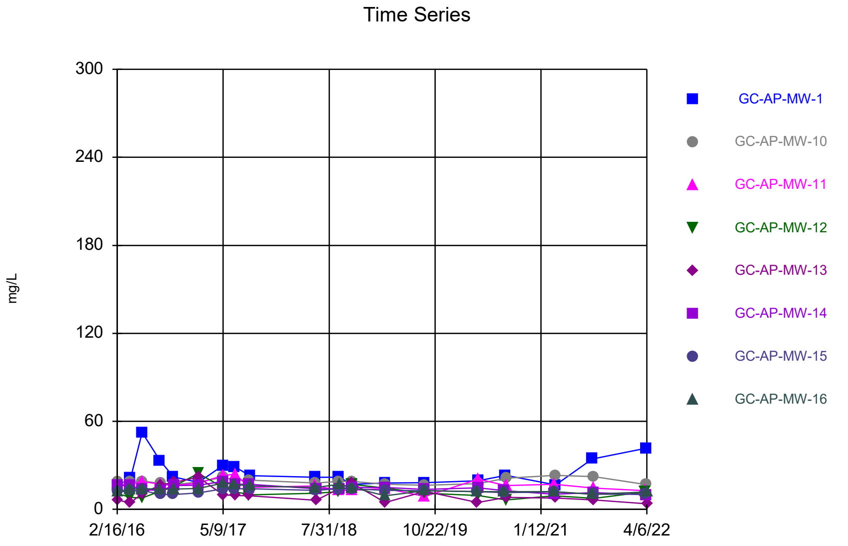
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



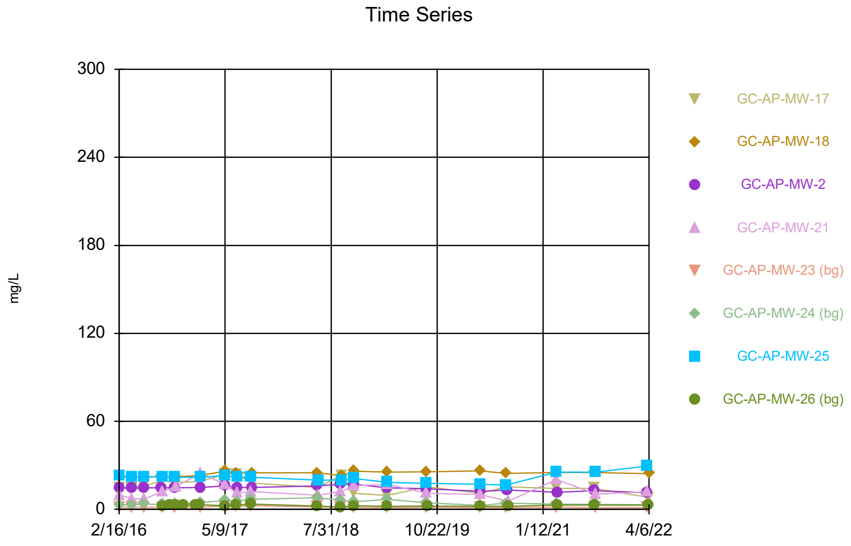
Constituent: Calcium Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



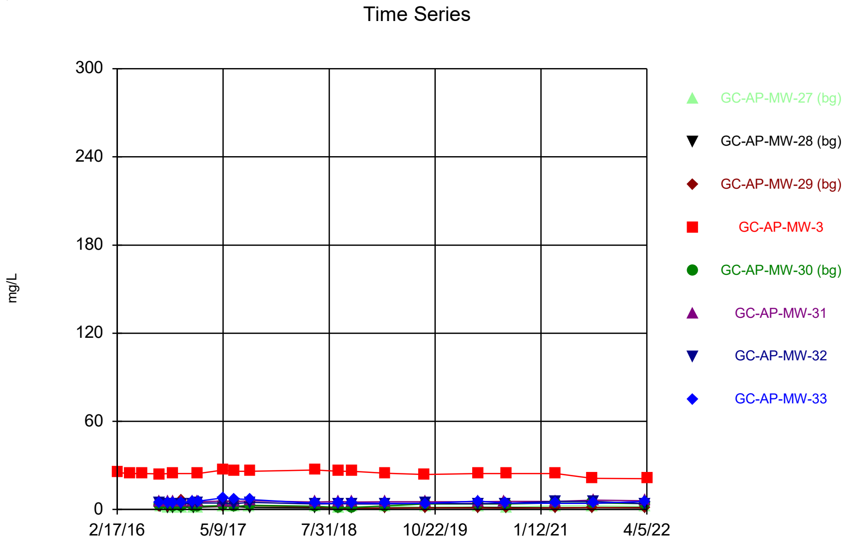
Constituent: Chloride Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



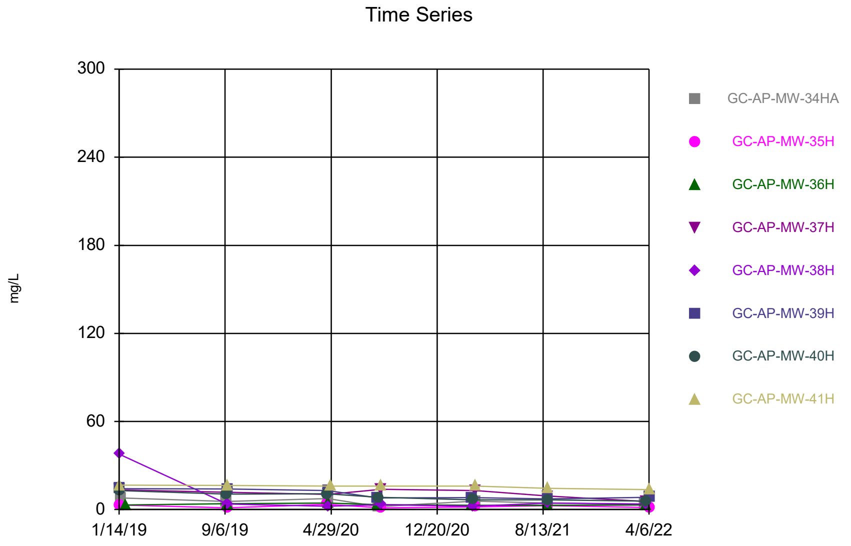
Constituent: Chloride Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Chloride Analysis Run 6/10/2022 12:54 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

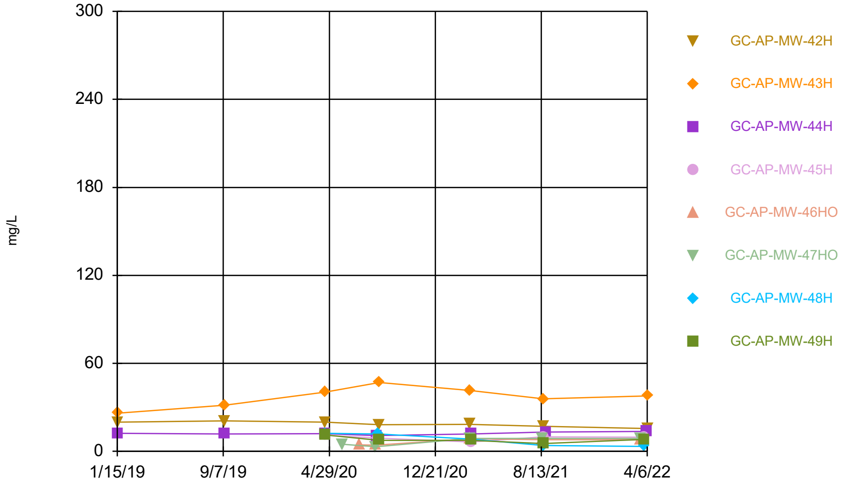
Sanitas™ v.9.6.34 . UG



Constituent: Chloride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

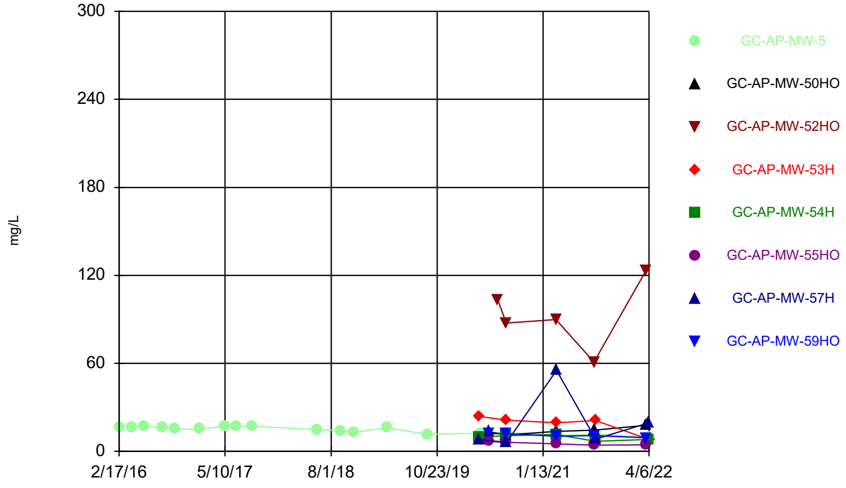
Time Series



Constituent: Chloride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

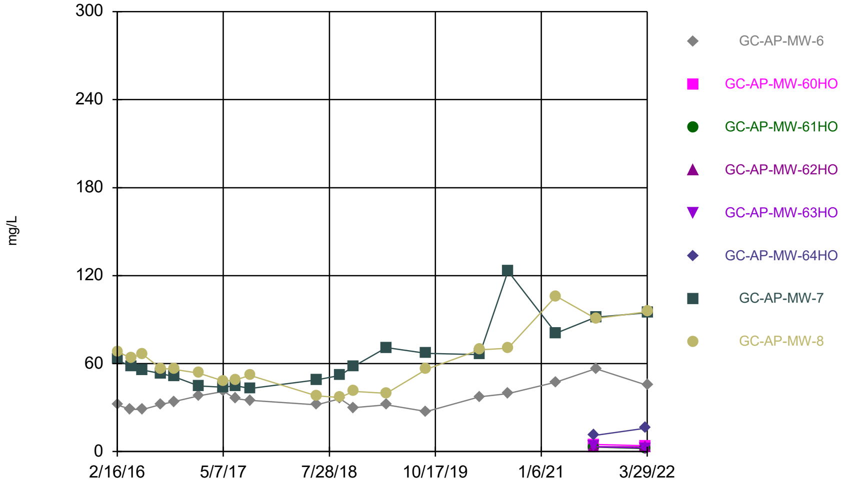
Time Series



Constituent: Chloride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

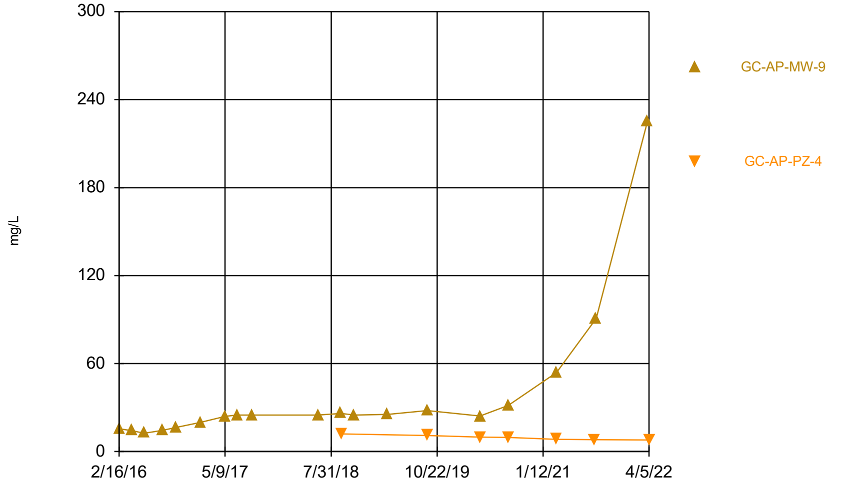
Time Series



Constituent: Chloride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

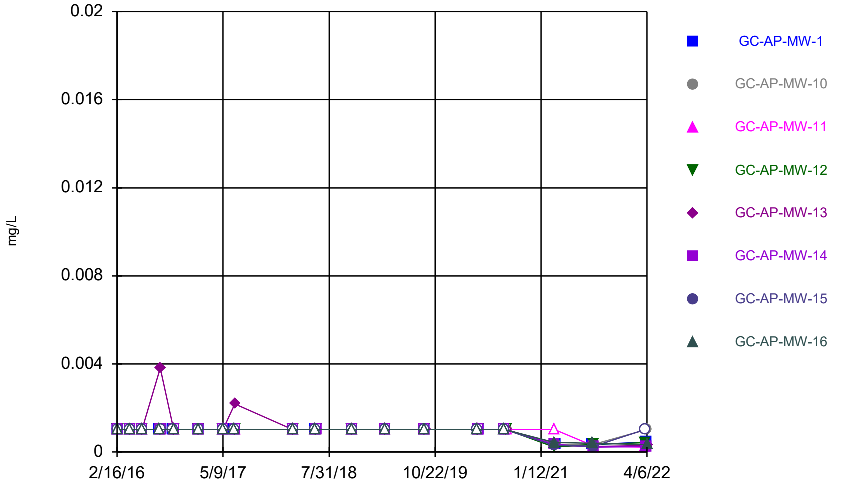
Time Series



Constituent: Chloride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

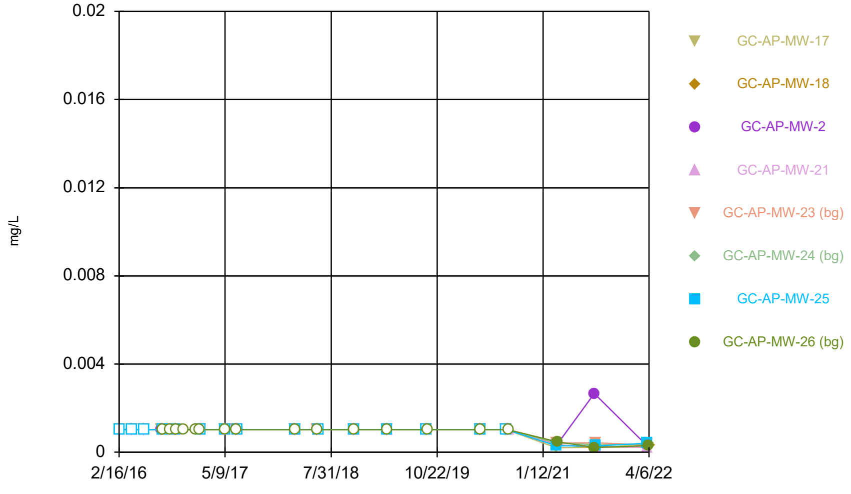
Time Series



Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

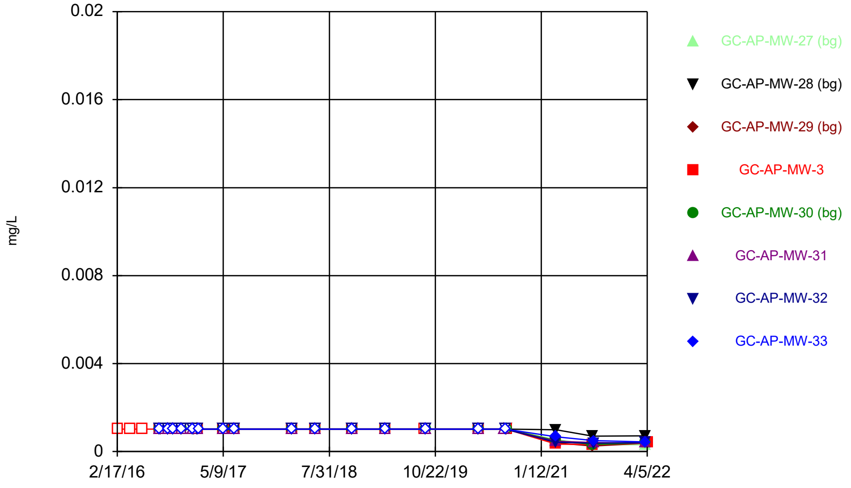
Time Series



Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

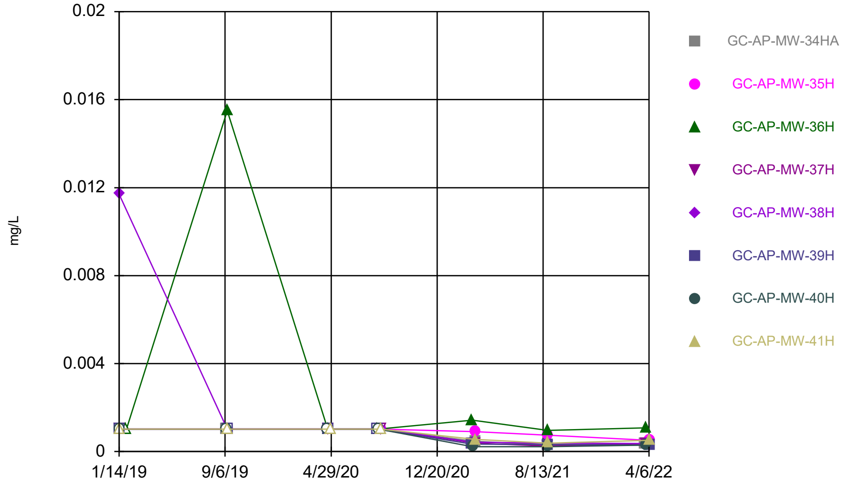
Time Series



Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

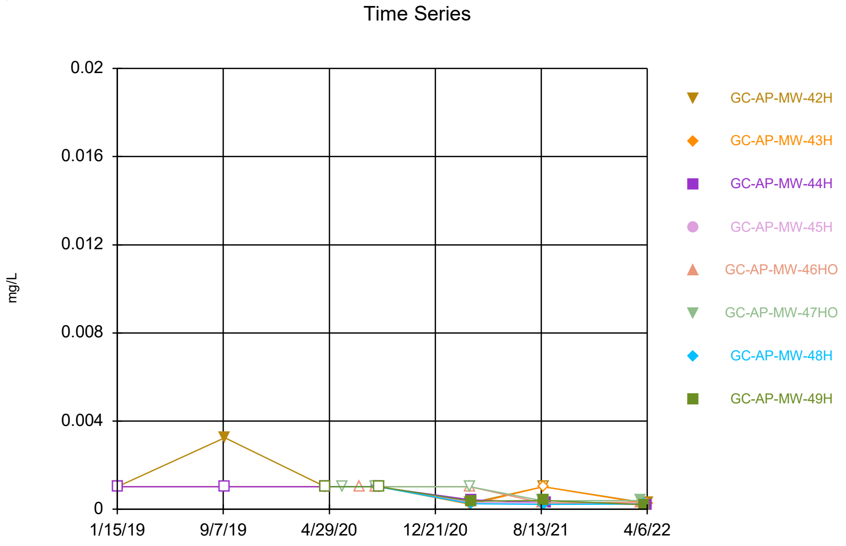
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Time Series



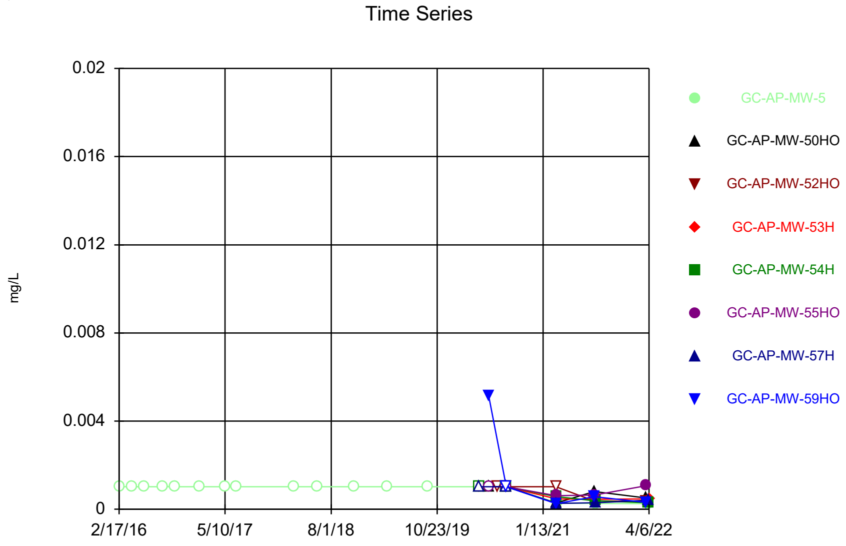
Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



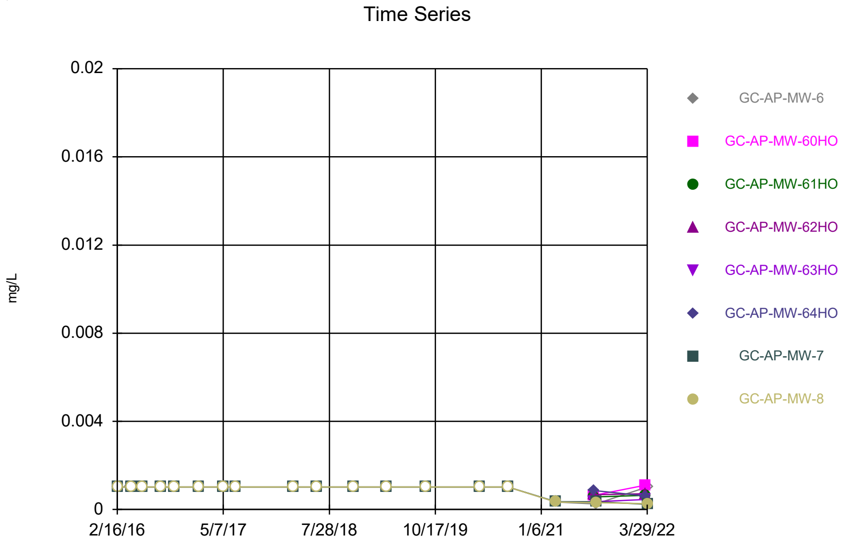
Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



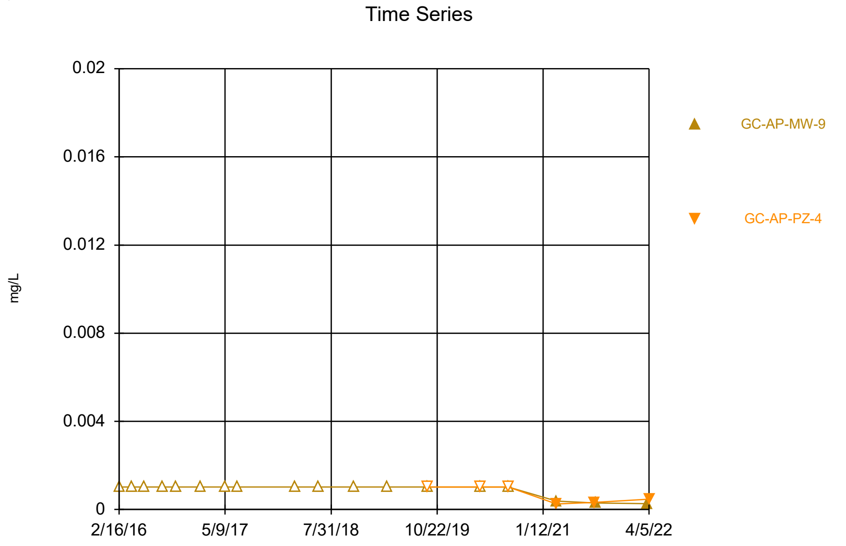
Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

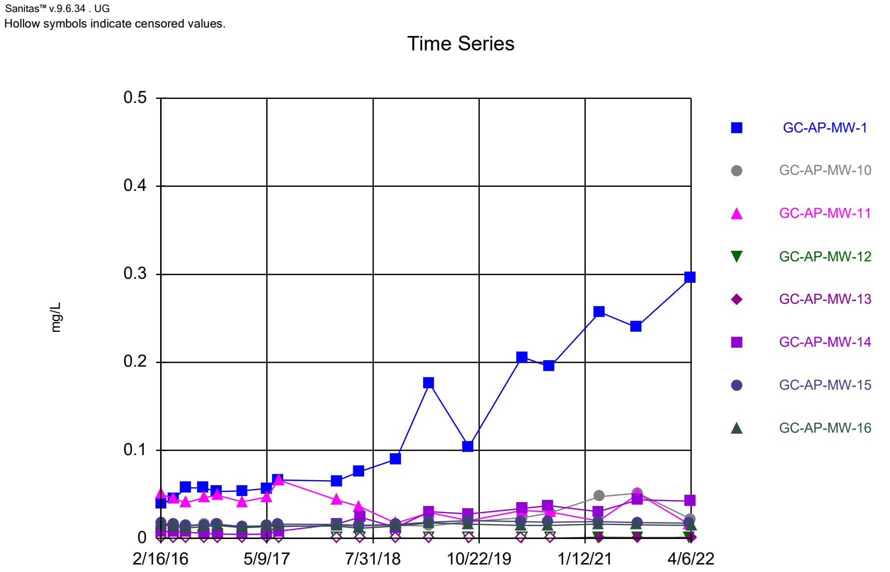


Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

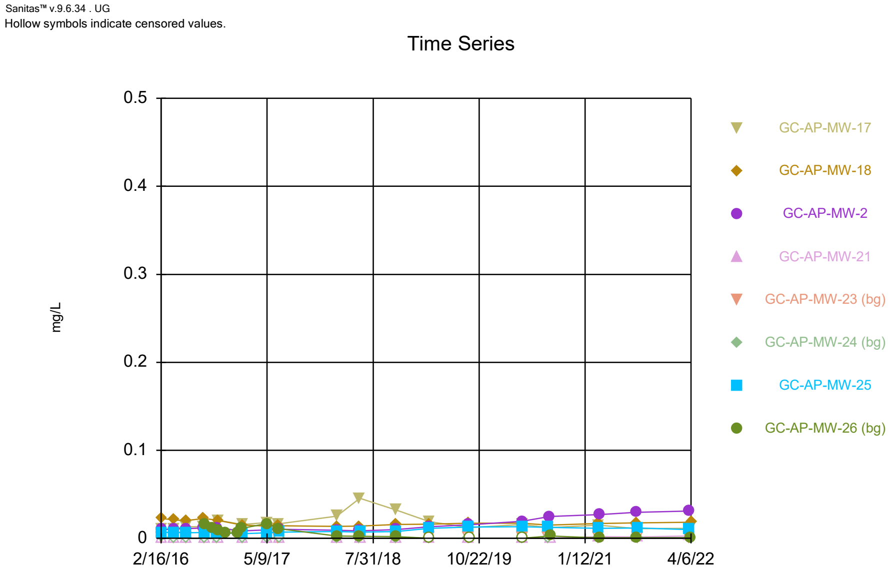
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



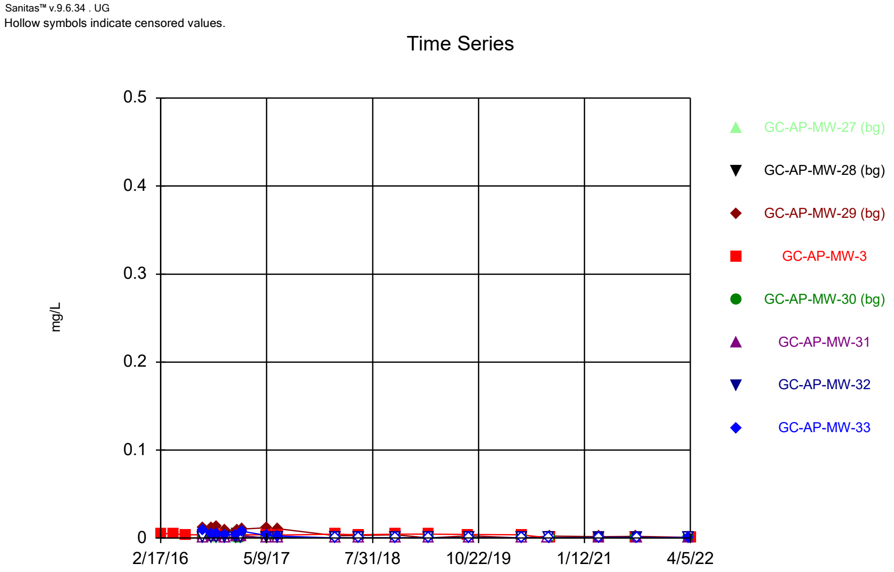
Constituent: Chromium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



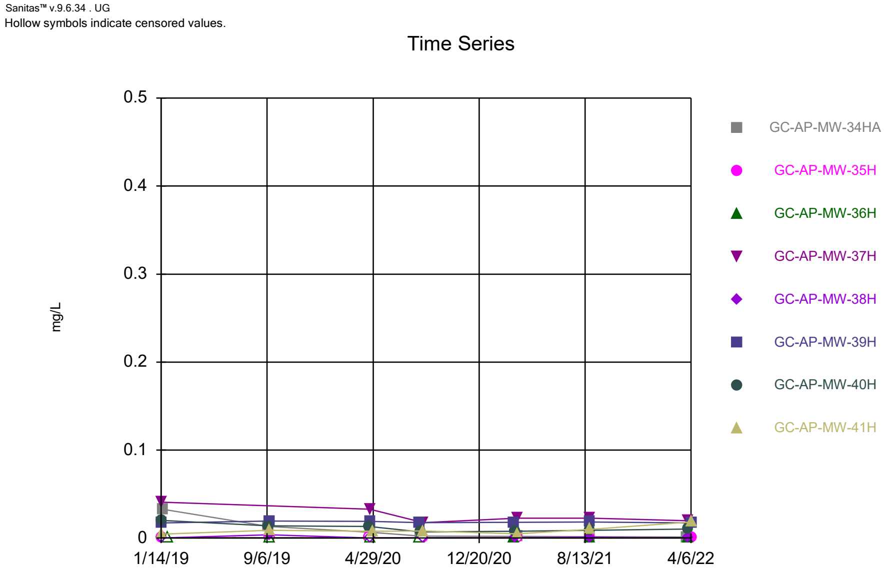
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



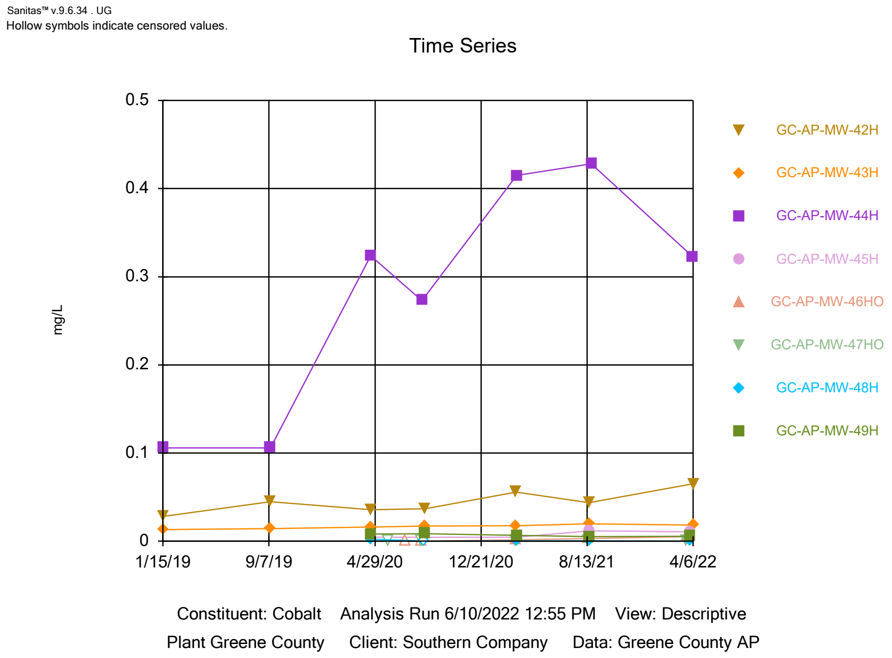
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

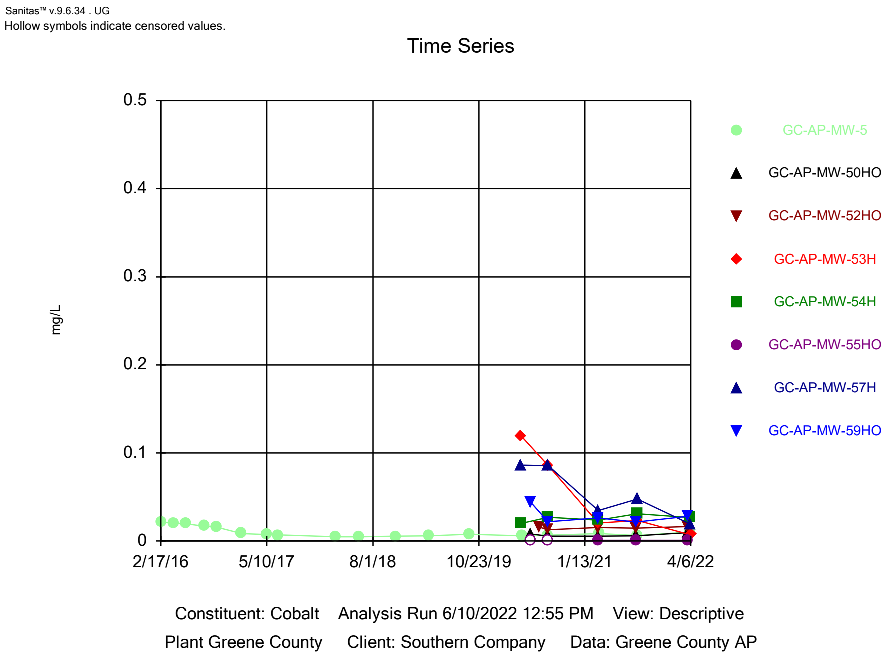


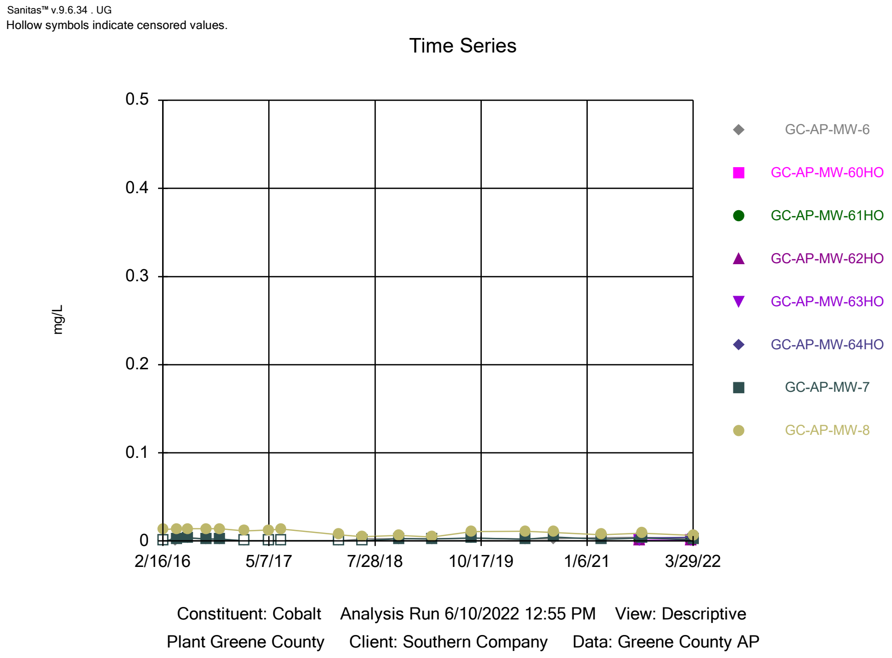
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

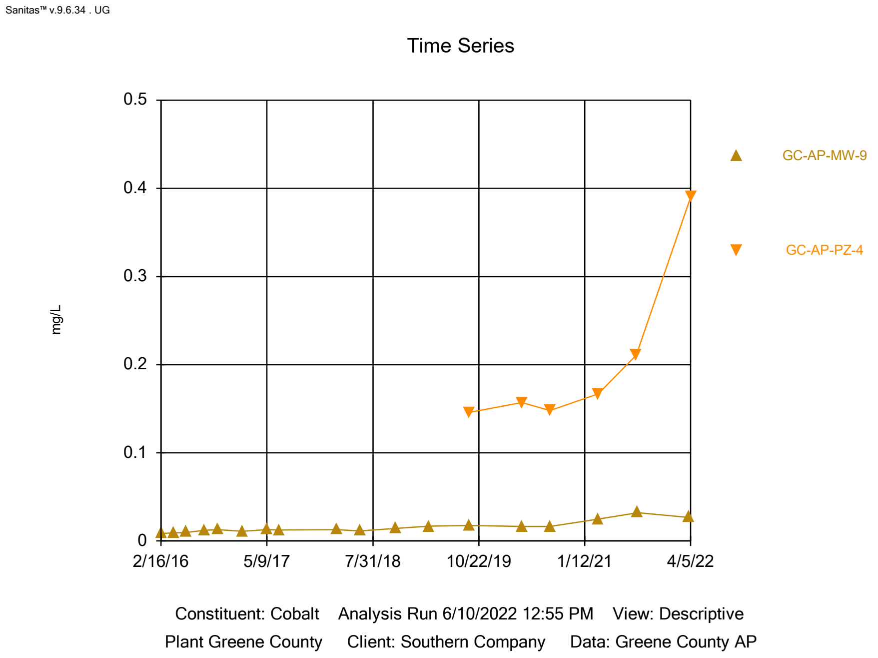


Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP


Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.
Time Series
mg/L
0.5
0.4
0.3
0.2
0.1
0
1/15/19
9/7/19
4/29/20
12/21/20
8/13/21
4/6/22
GC-AP-MW-42H
GC-AP-MW-43H
GC-AP-MW-44H
GC-AP-MW-45H
GC-AP-MW-46HO
GC-AP-MW-47HO
GC-AP-MW-48H
GC-AP-MW-49H
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

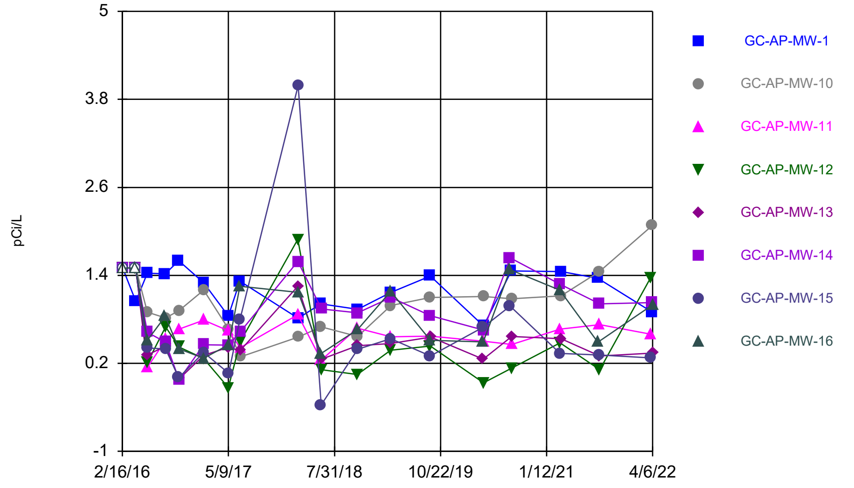

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.
Time Series
mg/L
0.5
0.4
0.3
0.2
0.1
0
2/17/16
5/10/17
8/1/18
10/23/19
1/13/21
4/6/22
GC-AP-MW-5
GC-AP-MW-50HO
GC-AP-MW-52HO
GC-AP-MW-53H
GC-AP-MW-54H
GC-AP-MW-55HO
GC-AP-MW-57H
GC-AP-MW-59HO
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP


Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.
Time Series
mg/L
0.5
0.4
0.3
0.2
0.1
0
2/16/16
5/7/17
7/28/18
10/17/19
1/6/21
3/29/22
GC-AP-MW-6
GC-AP-MW-60HO
GC-AP-MW-61HO
GC-AP-MW-62HO
GC-AP-MW-63HO
GC-AP-MW-64HO
GC-AP-MW-7
GC-AP-MW-8
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP


Sanitas™ v.9.6.34 . UG
Time Series
mg/L
0.5
0.4
0.3
0.2
0.1
0
2/16/16
5/9/17
7/31/18
10/22/19
1/12/21
4/5/22
GC-AP-MW-9
GC-AP-PZ-4
Constituent: Cobalt Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

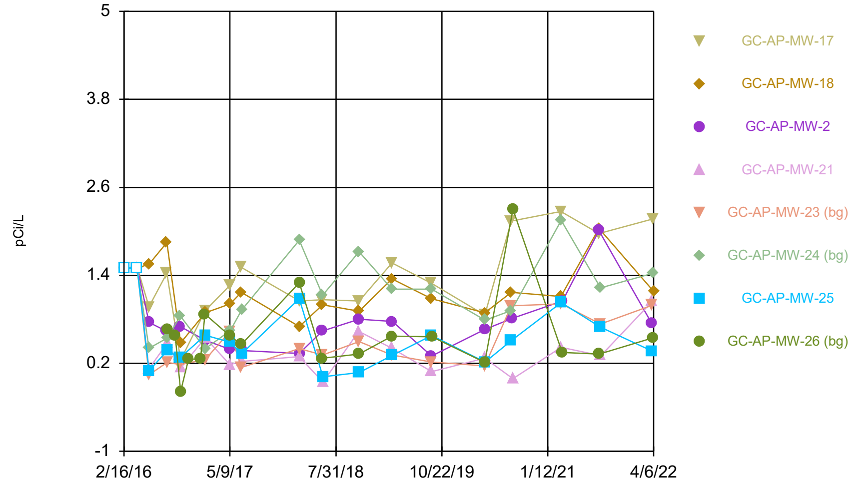
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

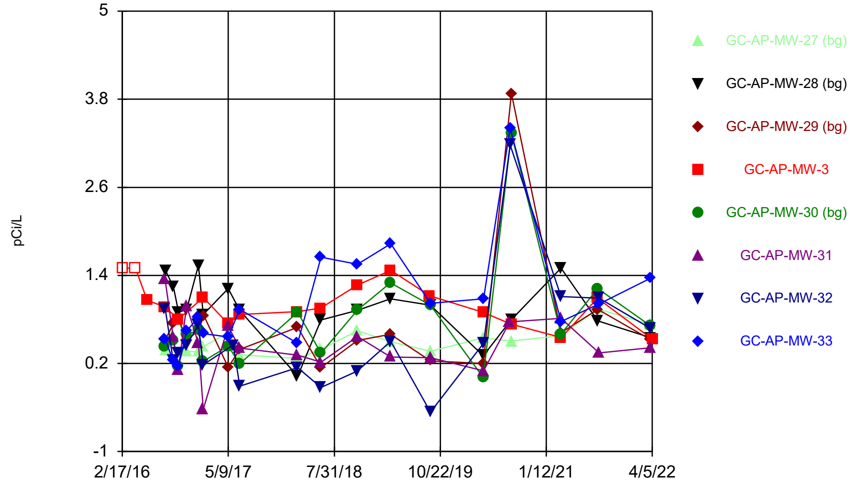
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

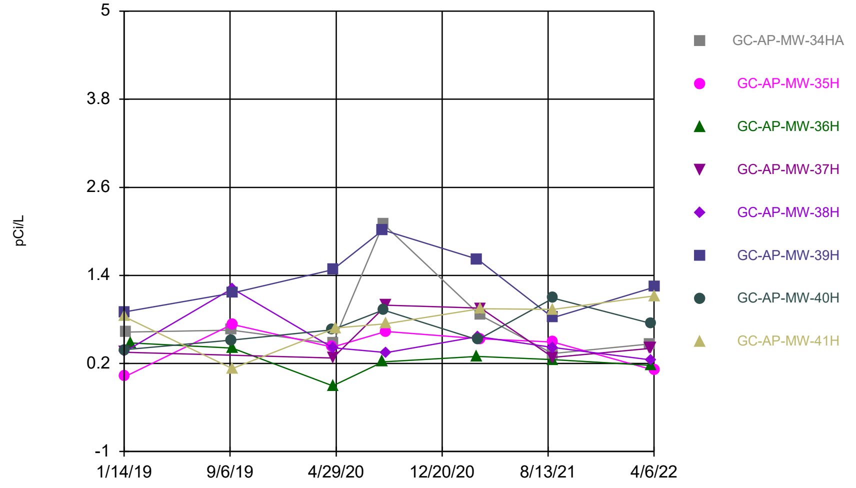
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

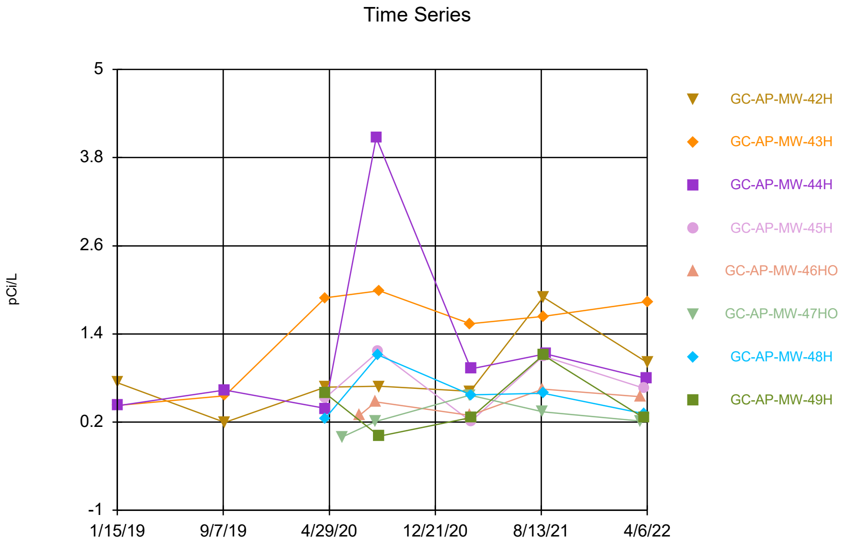
Sanitas™ v.9.6.34 . UG

Time Series



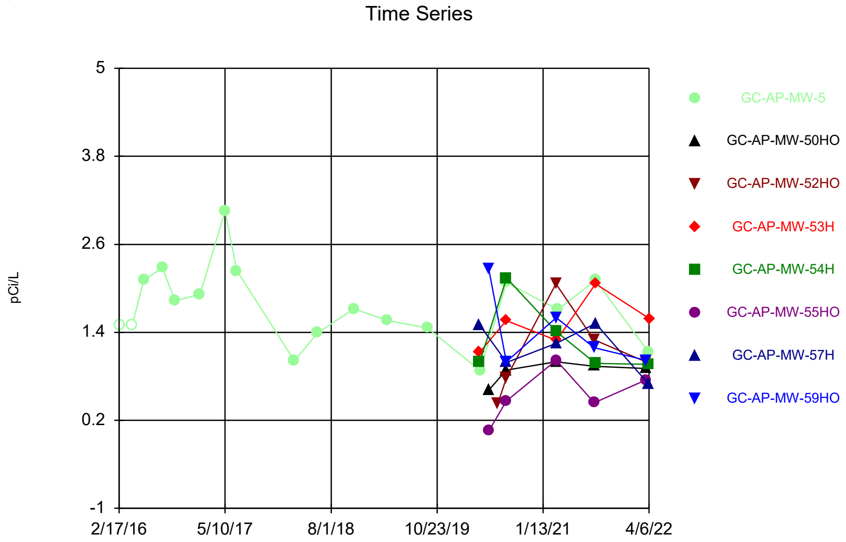
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



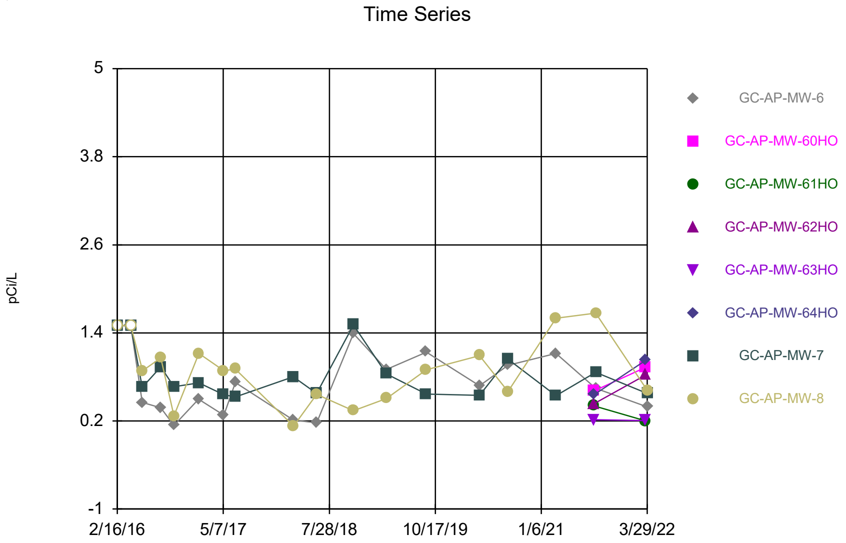
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



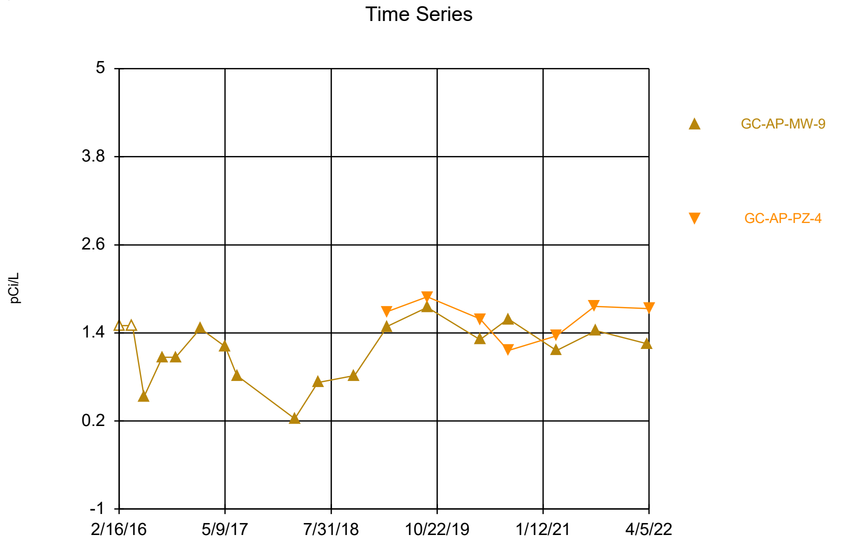
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

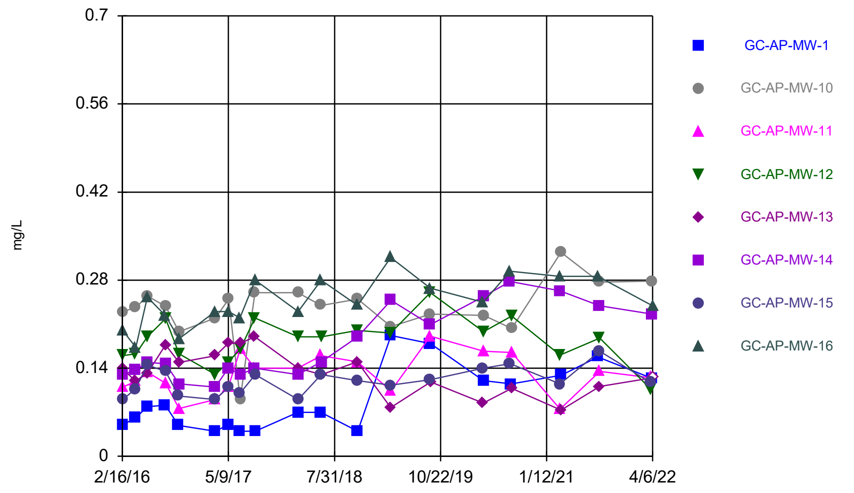
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

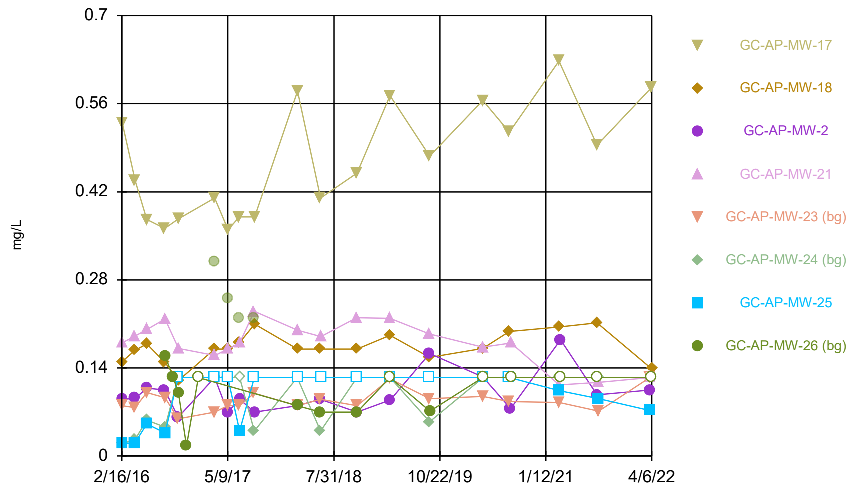
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

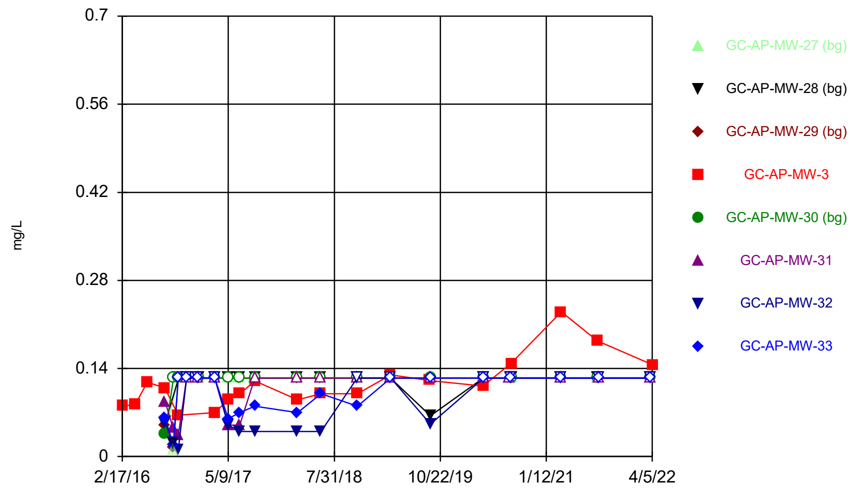
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

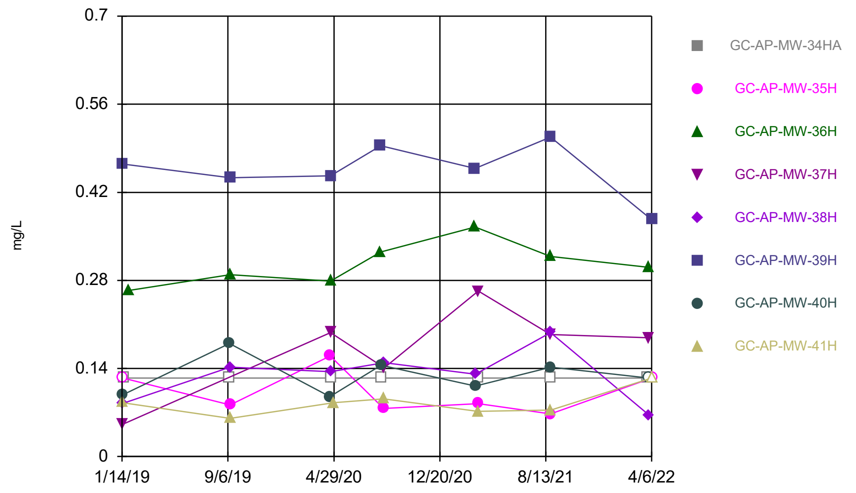
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

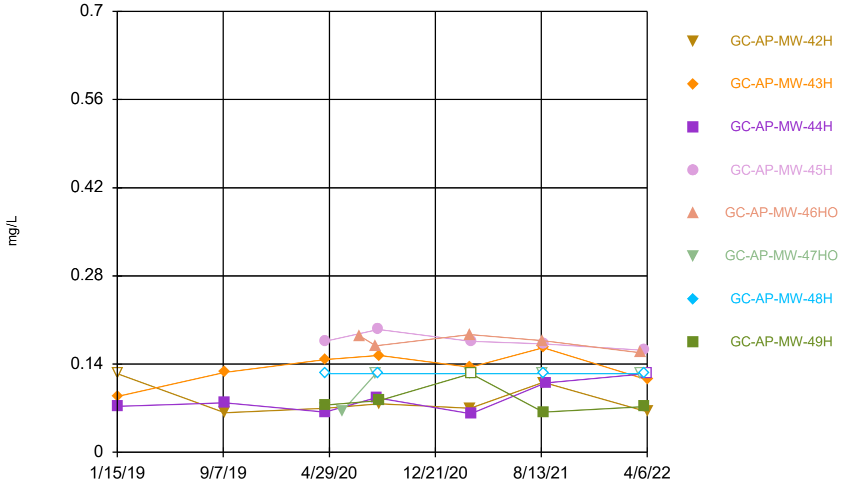
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

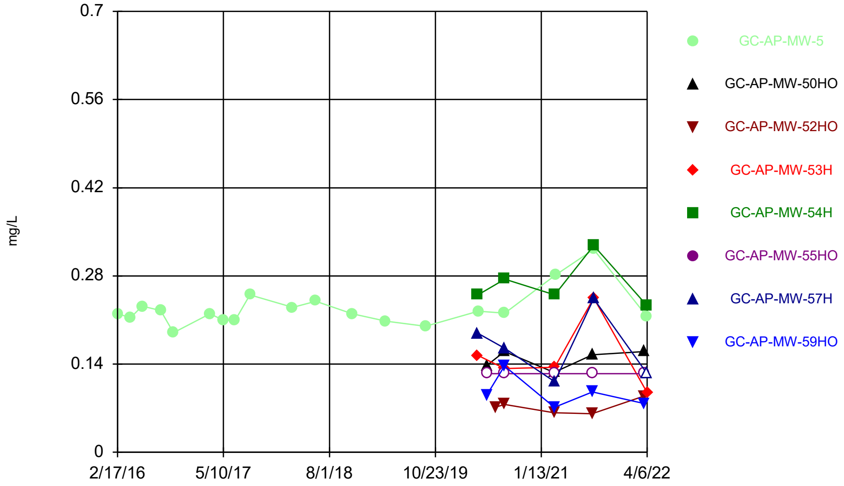
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

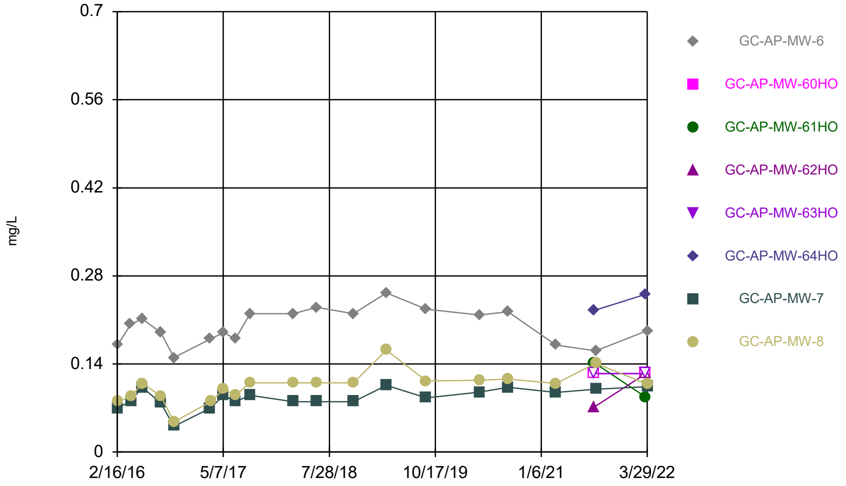
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

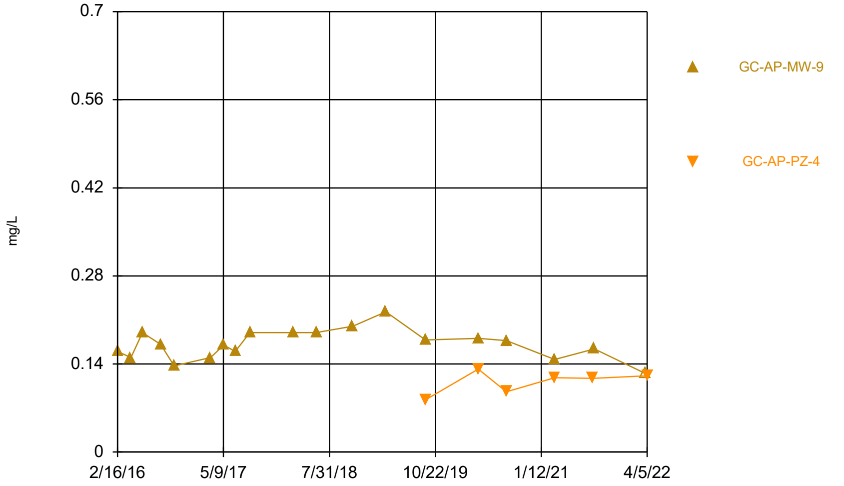
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

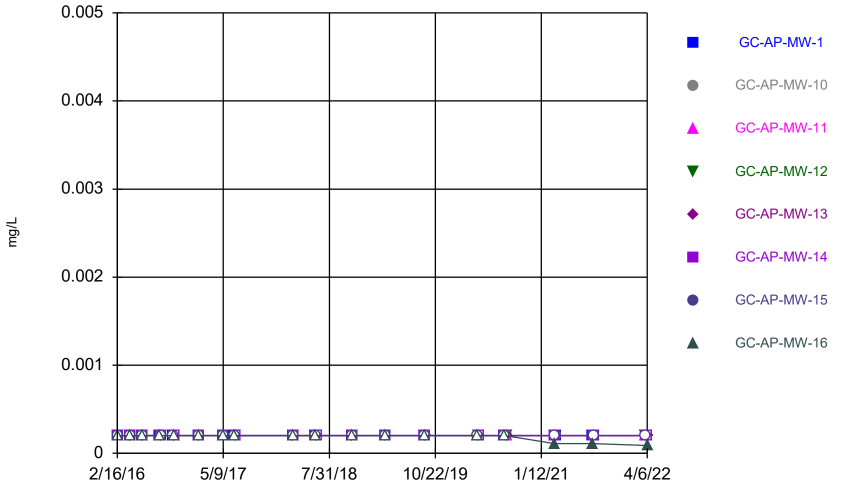
Time Series



Constituent: Fluoride Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

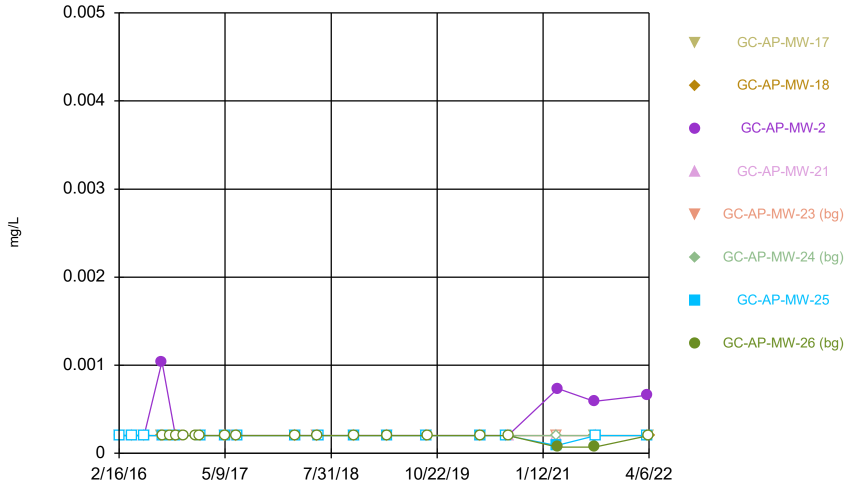
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

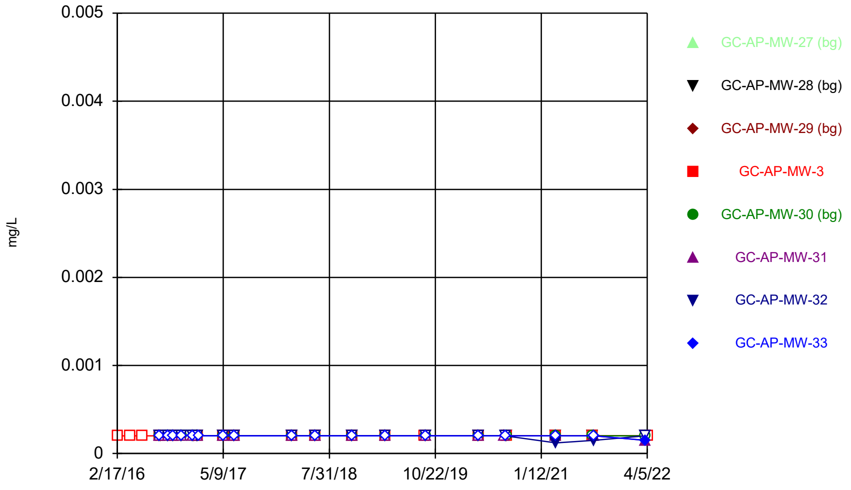
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

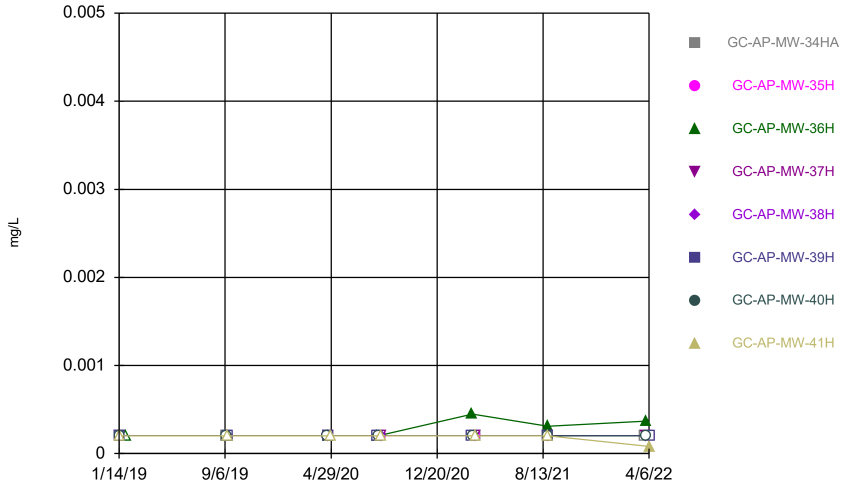
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

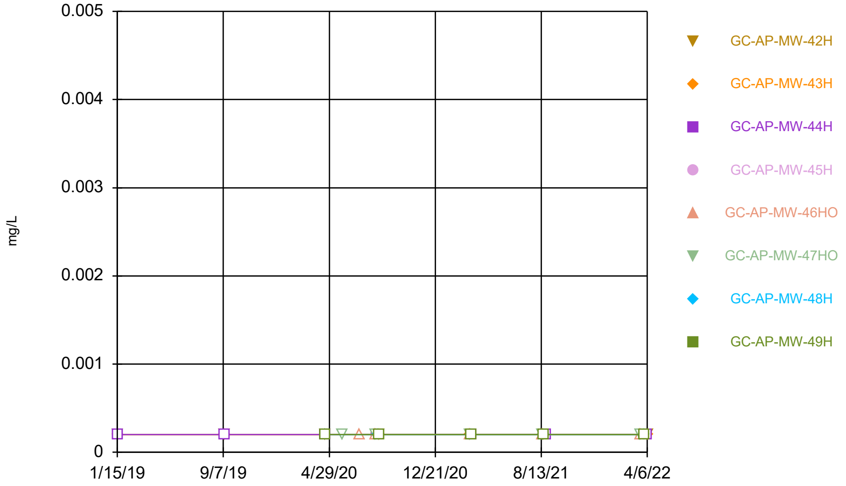
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

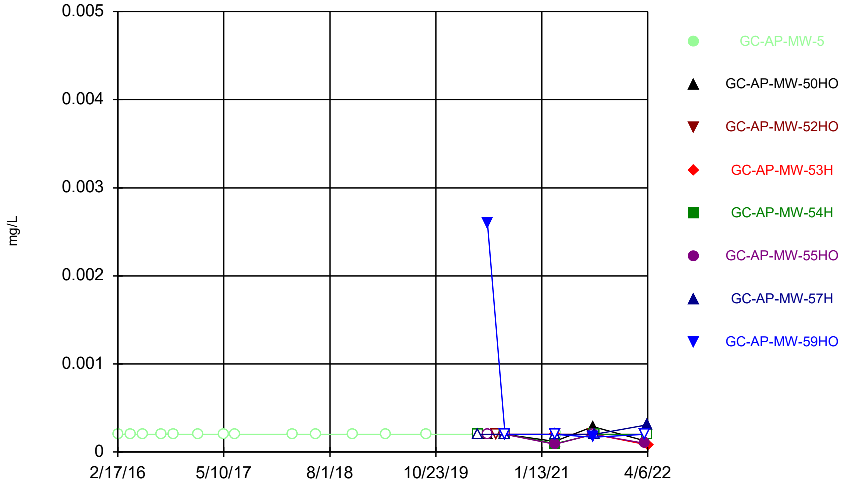
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

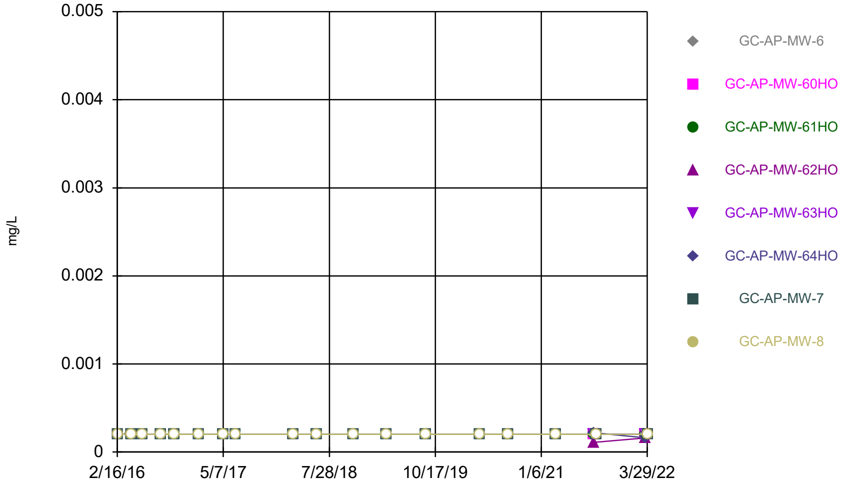
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

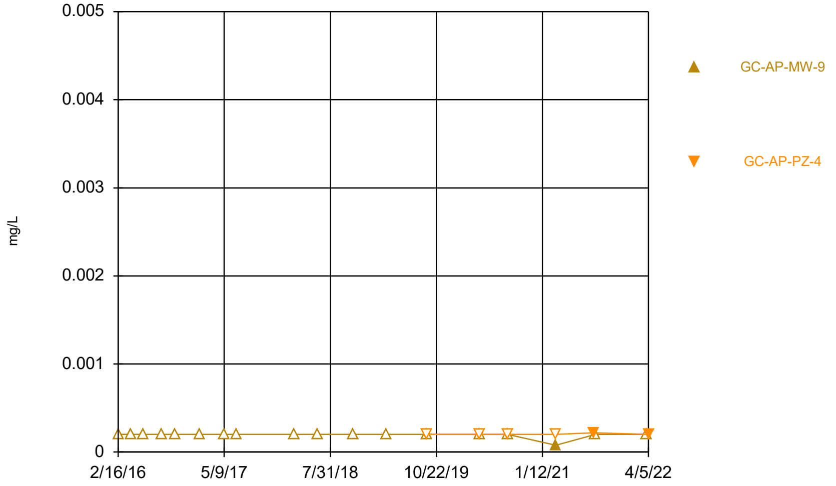
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

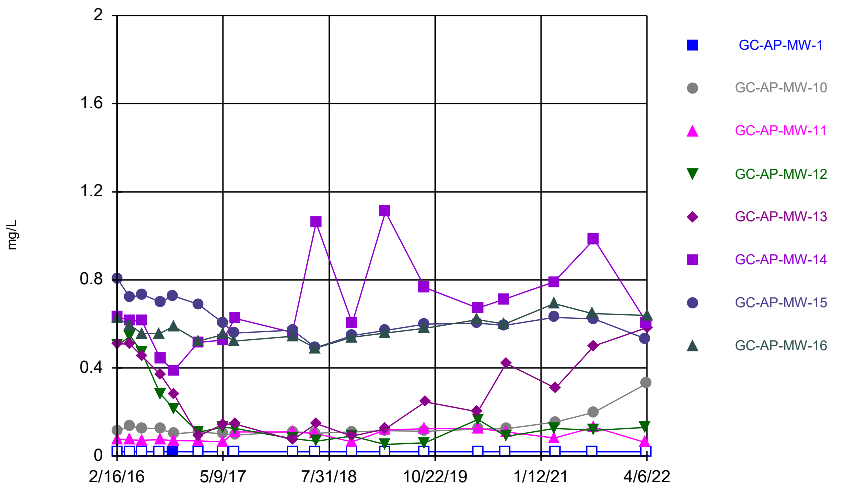
Time Series



Constituent: Lead Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

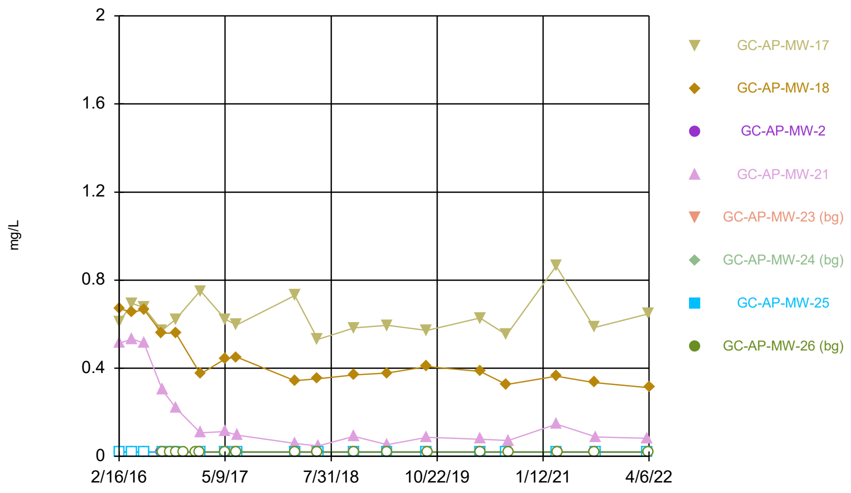
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

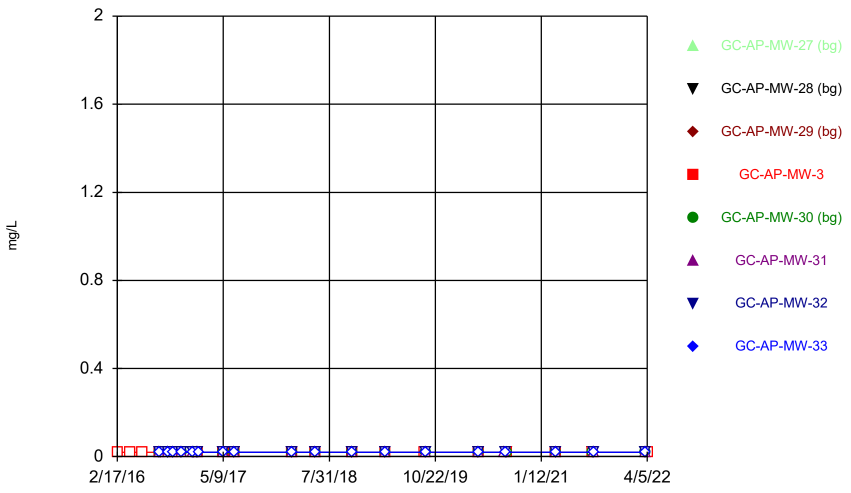
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

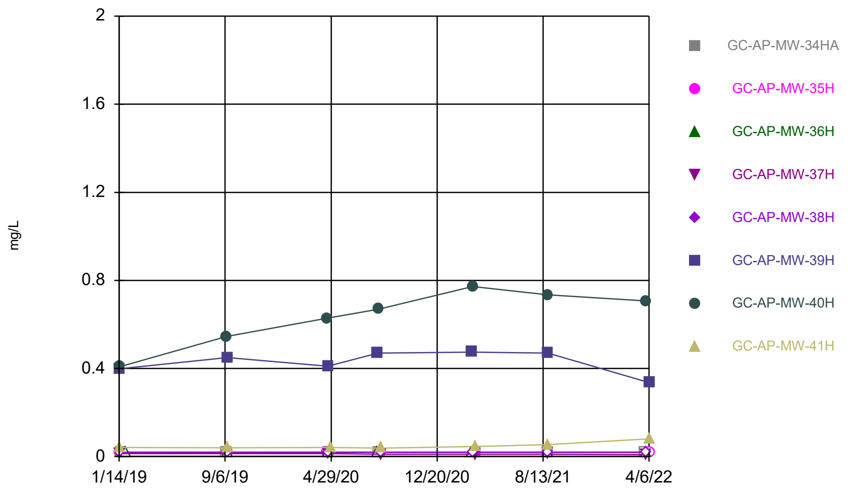
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

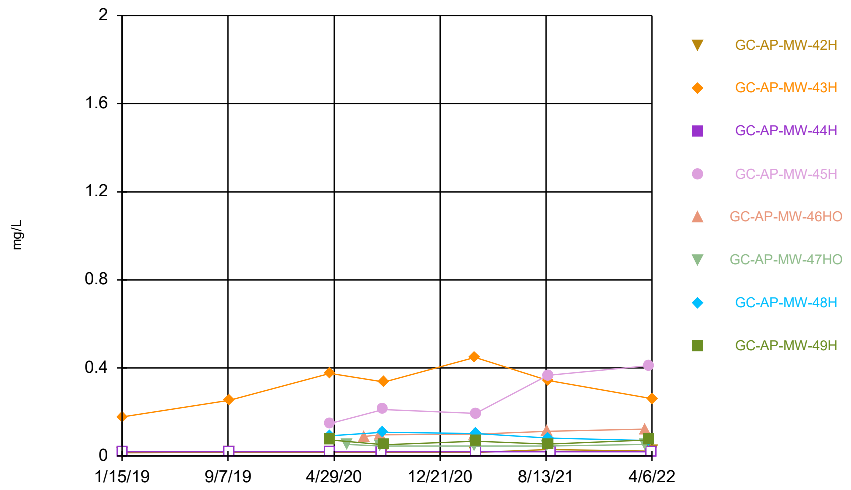
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

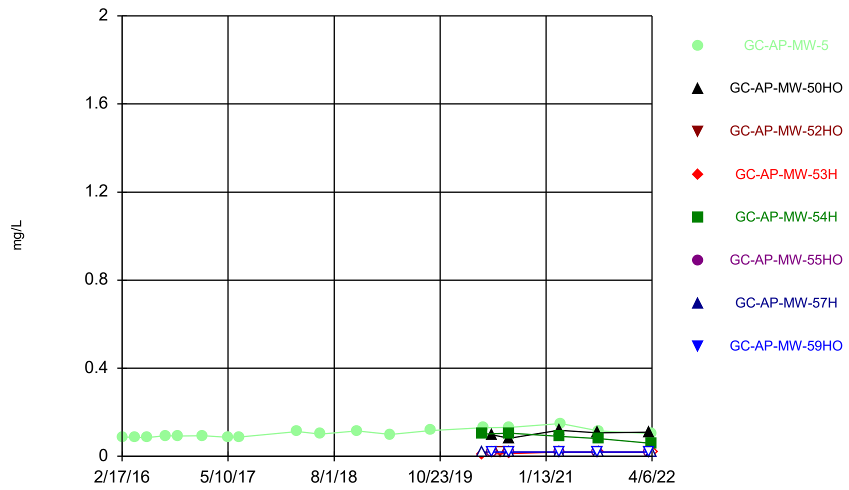
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

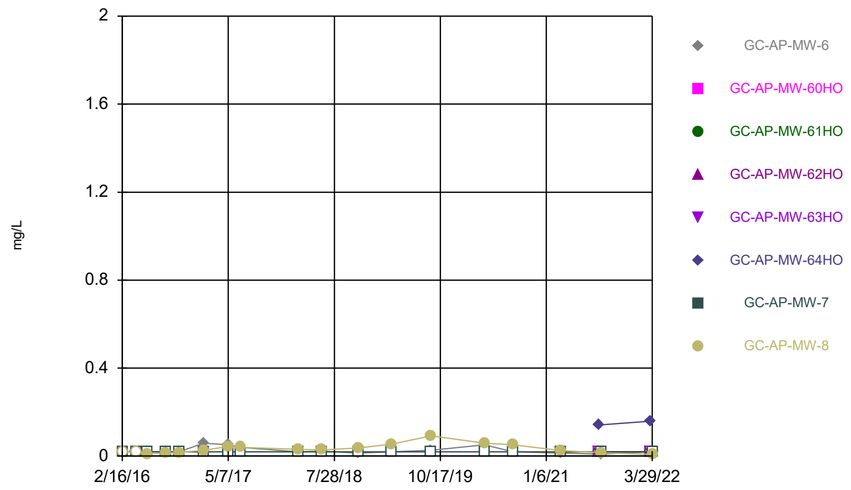
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

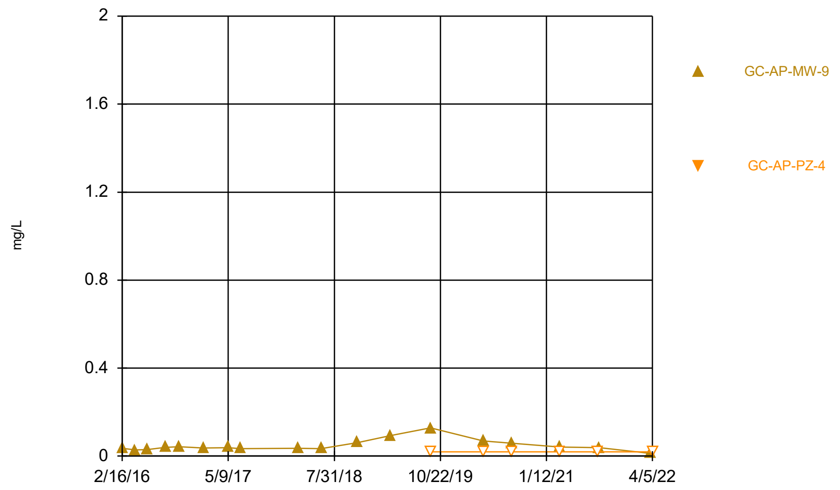
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

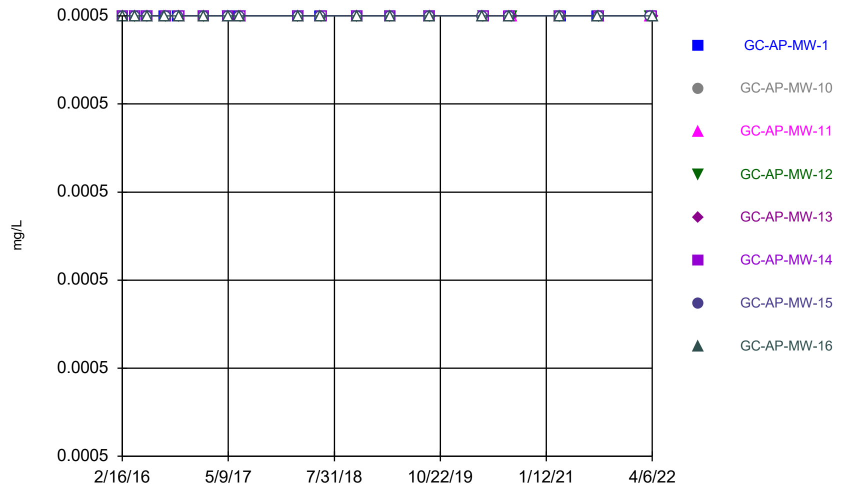
Time Series



Constituent: Lithium Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

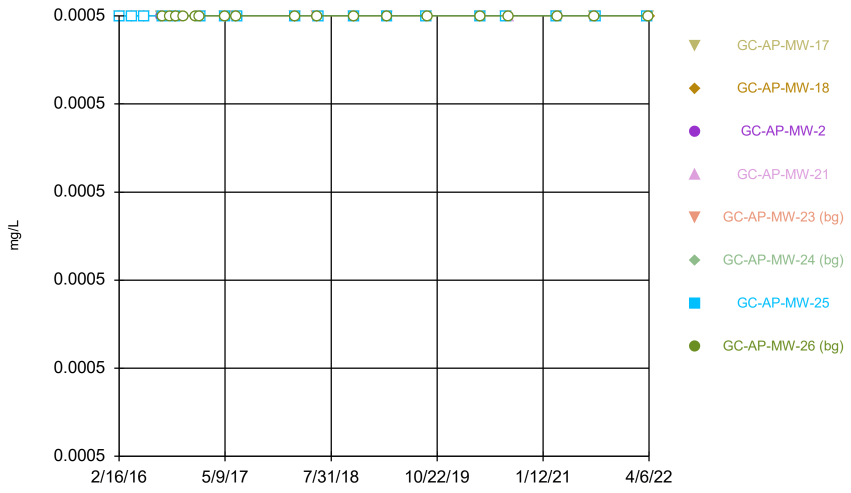
Time Series



Constituent: Mercury Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

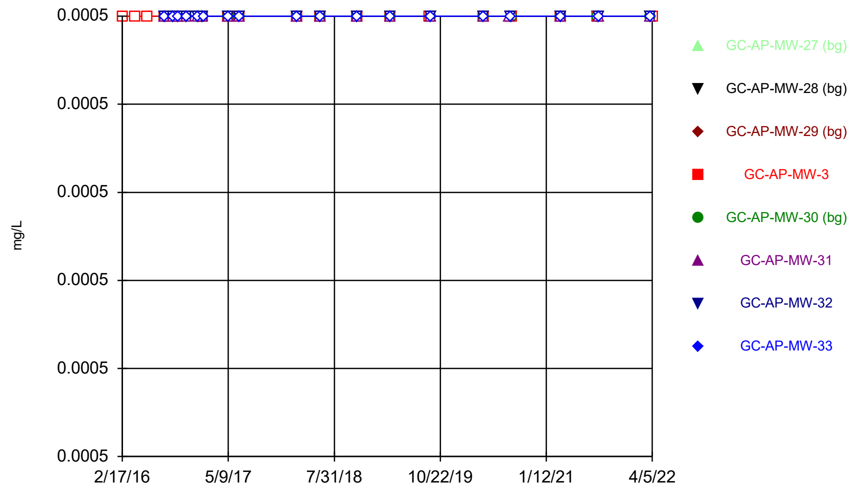
Time Series



Constituent: Mercury Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

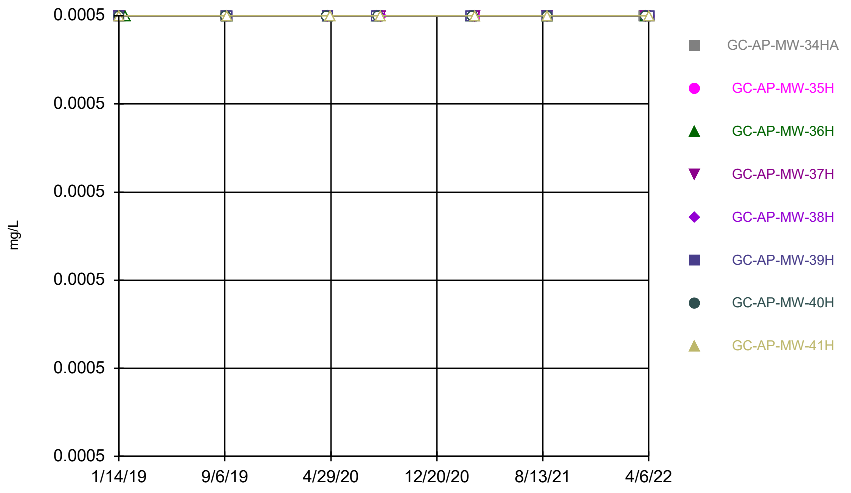
Time Series



Constituent: Mercury Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

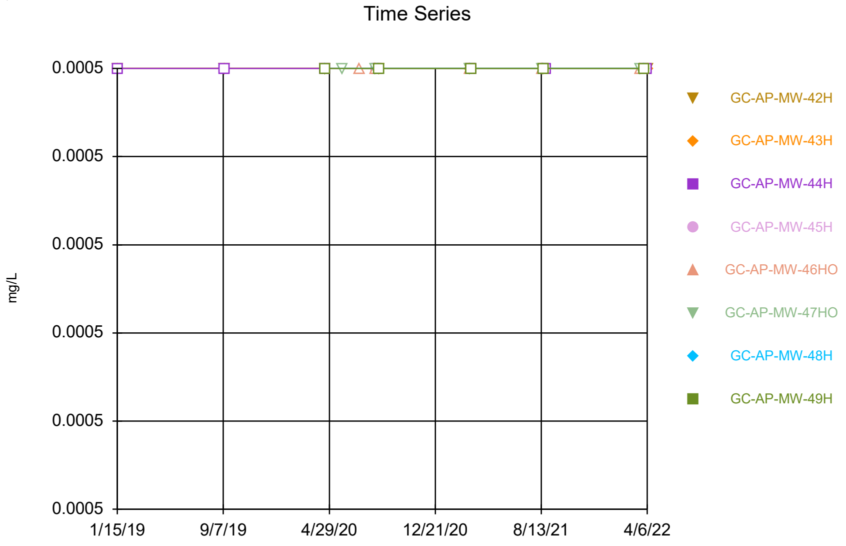
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Time Series



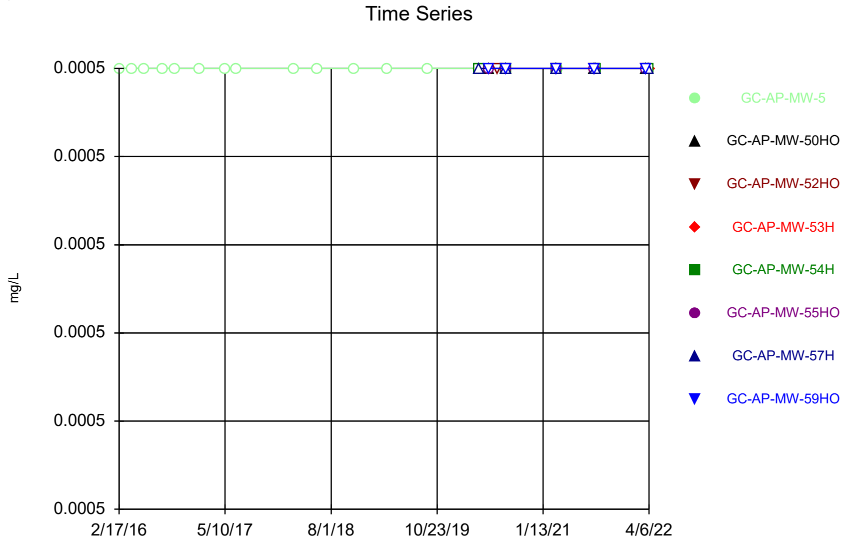
Constituent: Mercury Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



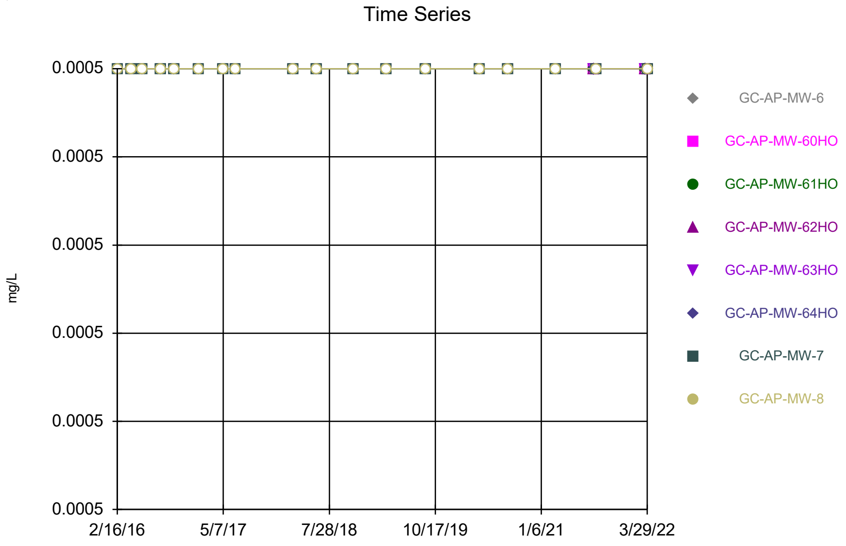
Constituent: Mercury Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



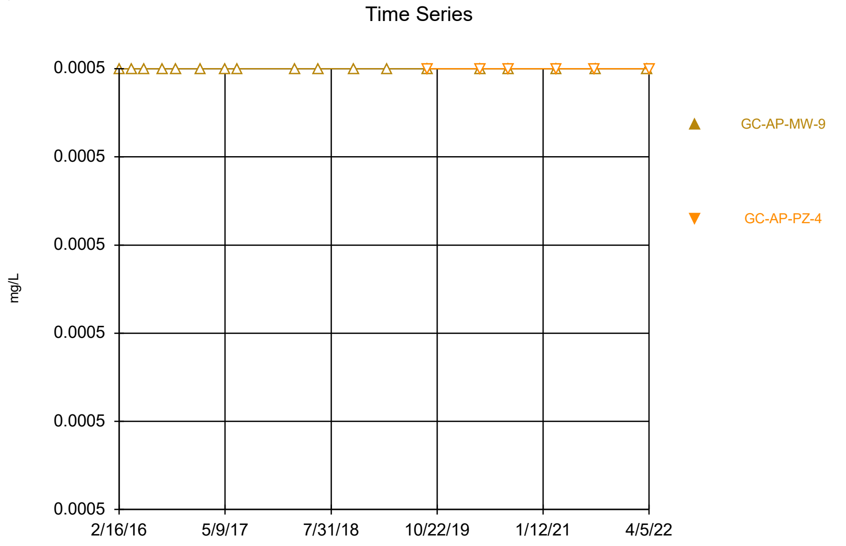
Constituent: Mercury Analysis Run 6/10/2022 12:55 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Mercury Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

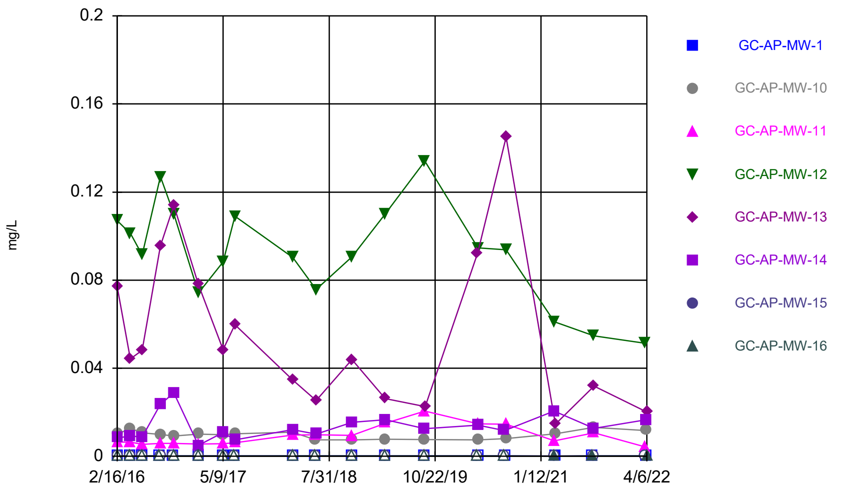
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Constituent: Mercury Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

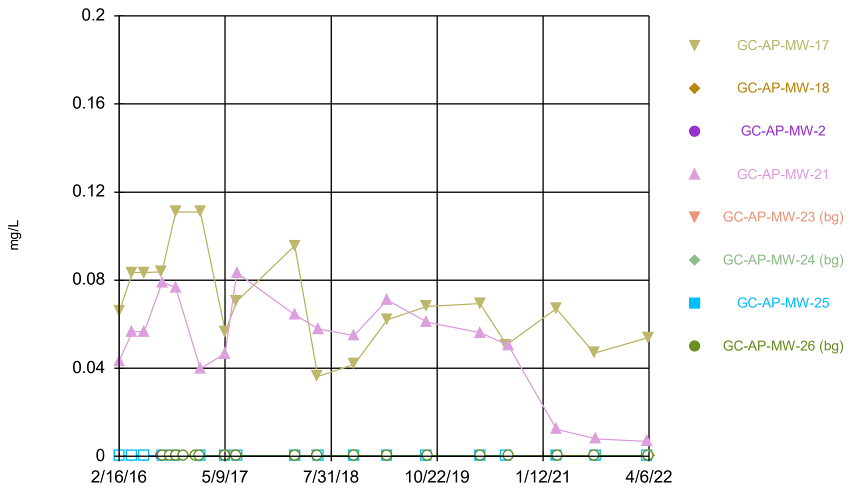
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

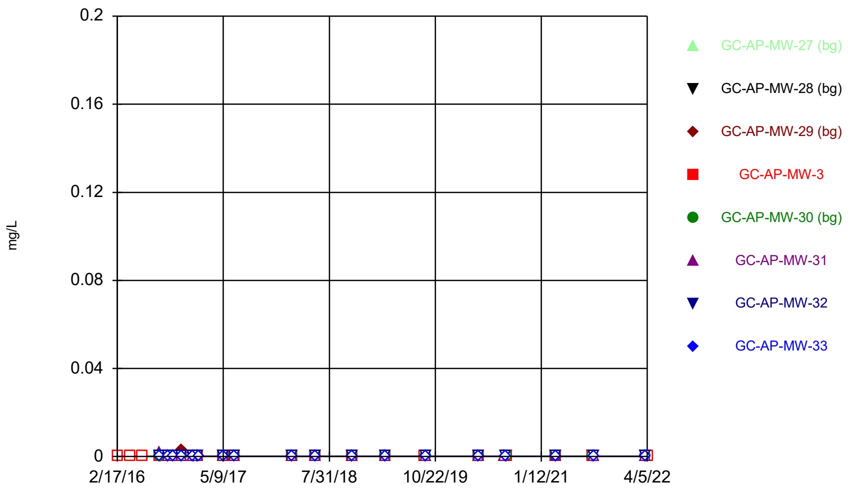
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

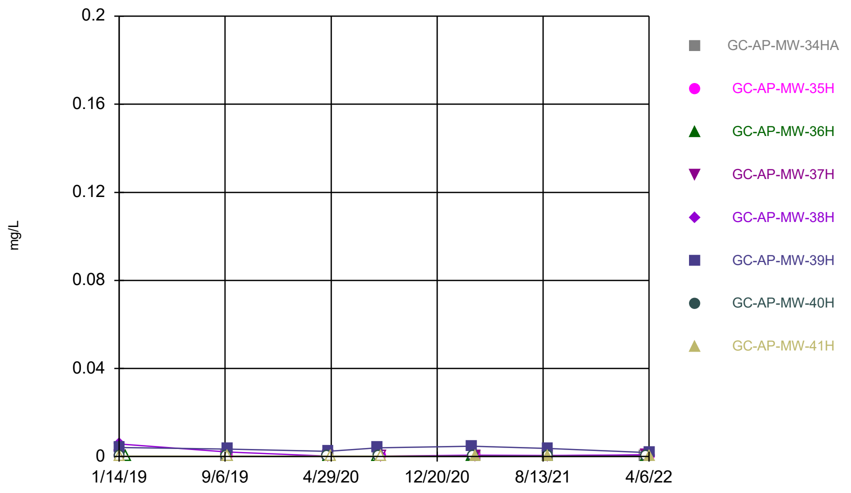
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

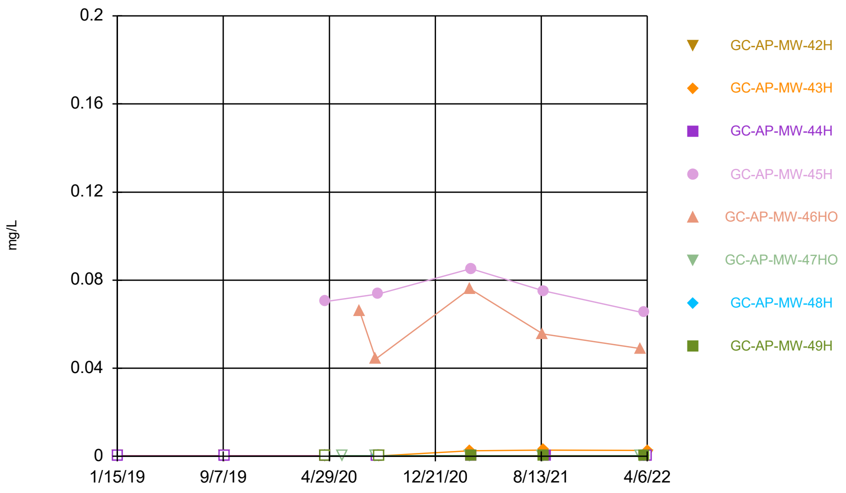
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

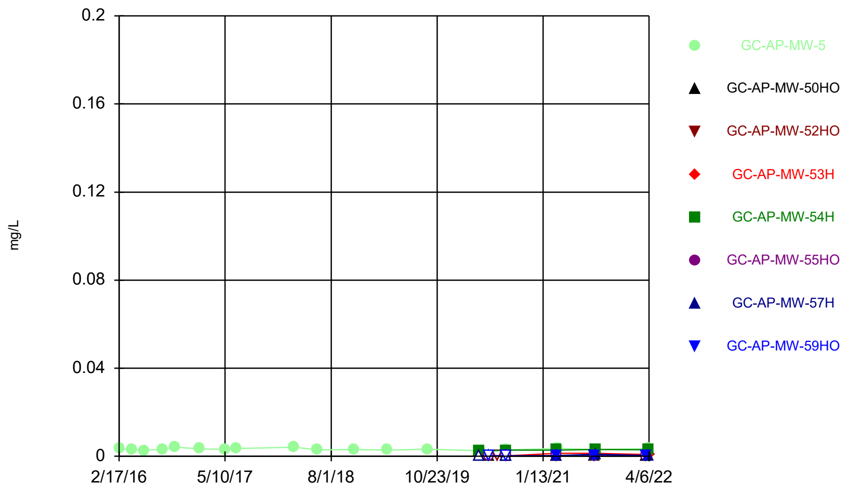
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

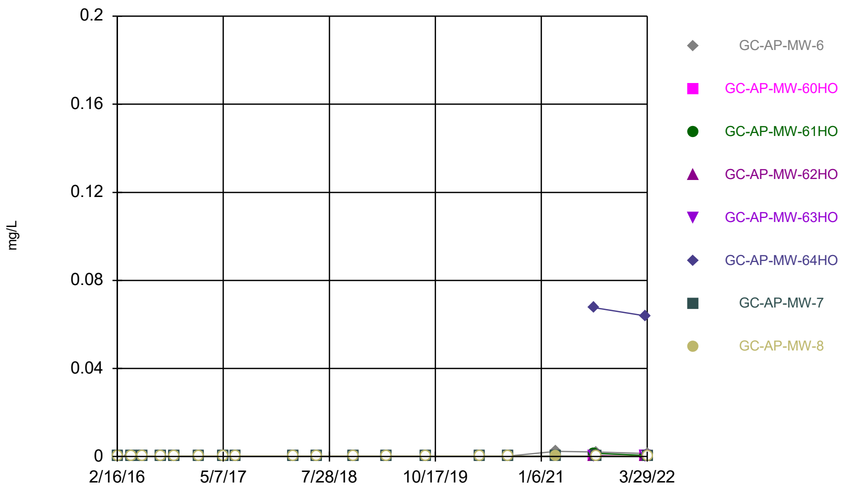
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

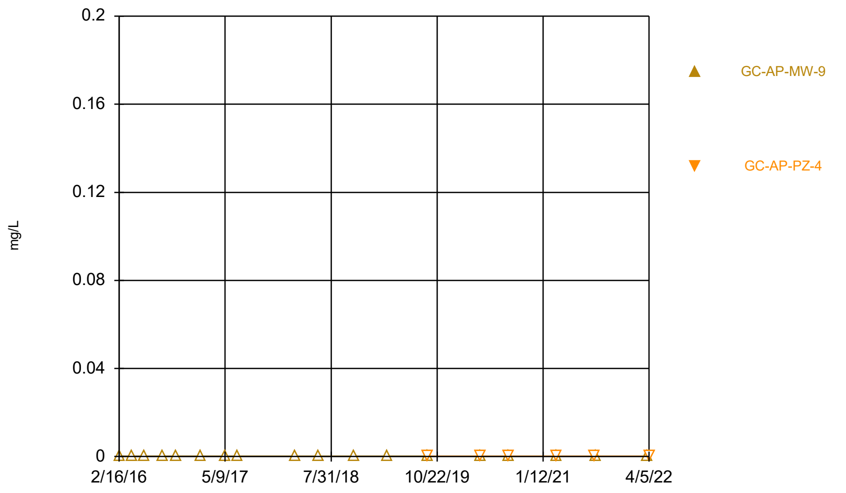
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

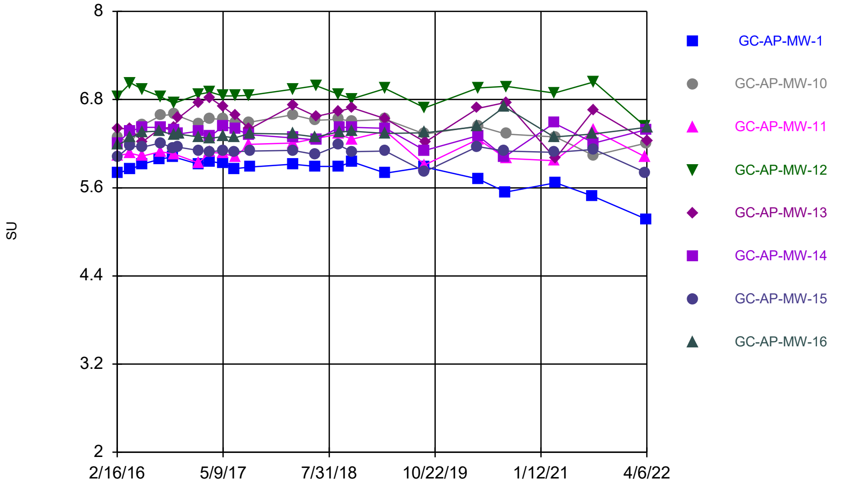
Time Series



Constituent: Molybdenum Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

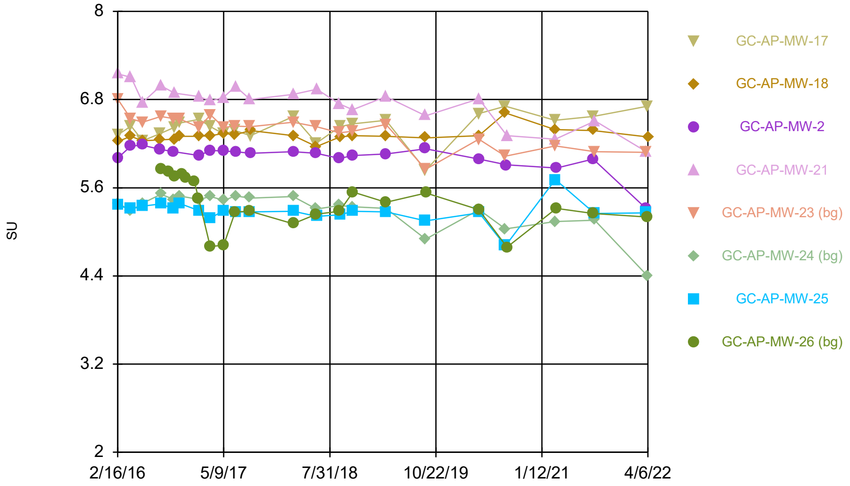
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

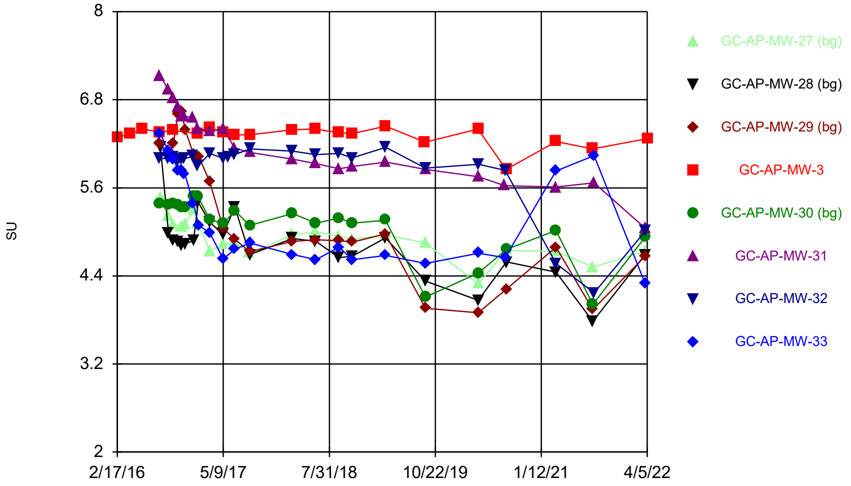
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

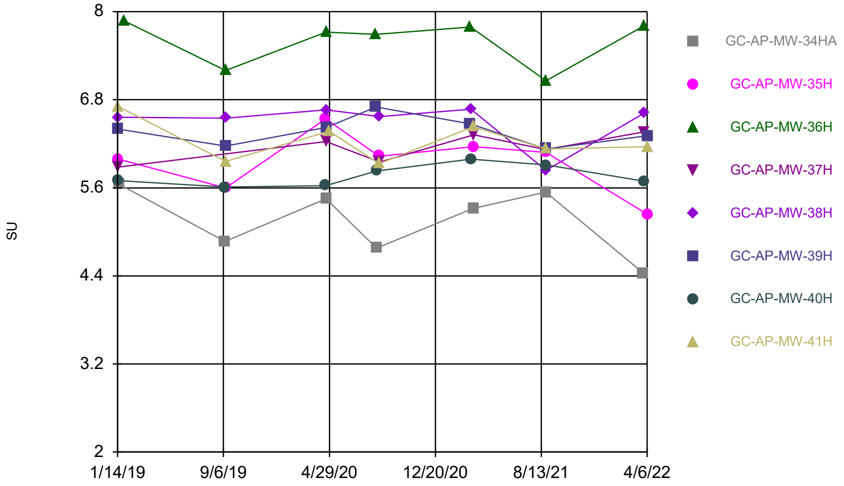
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

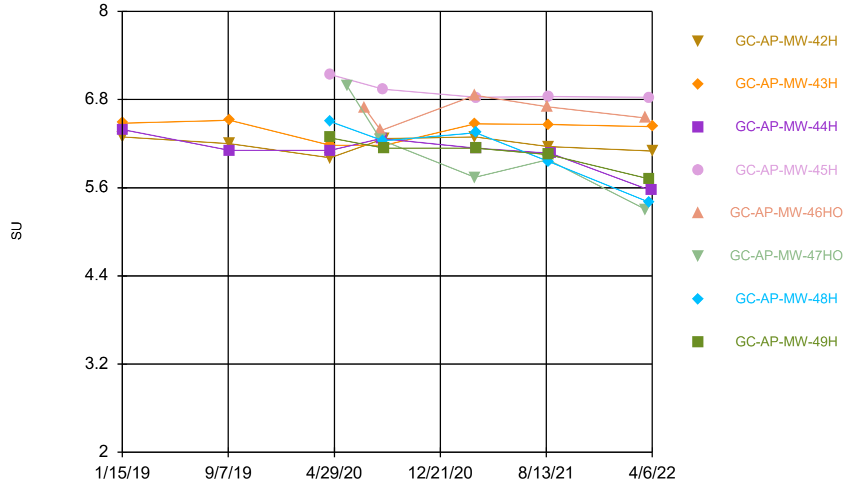
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

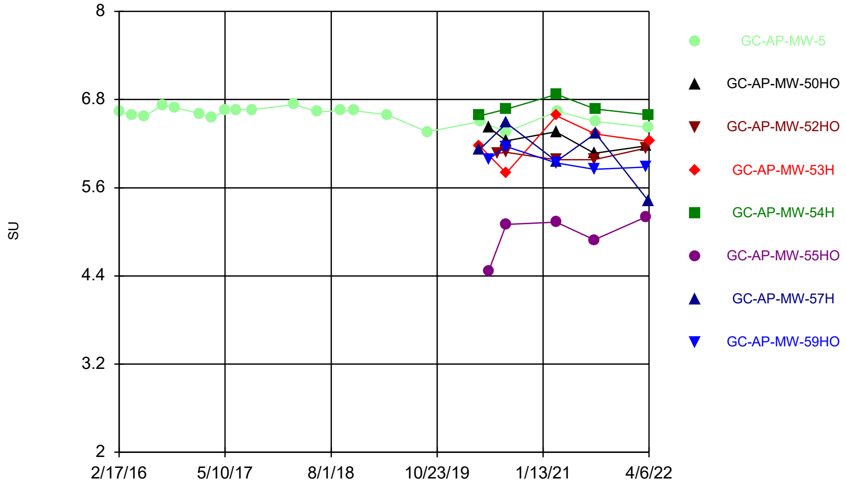
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

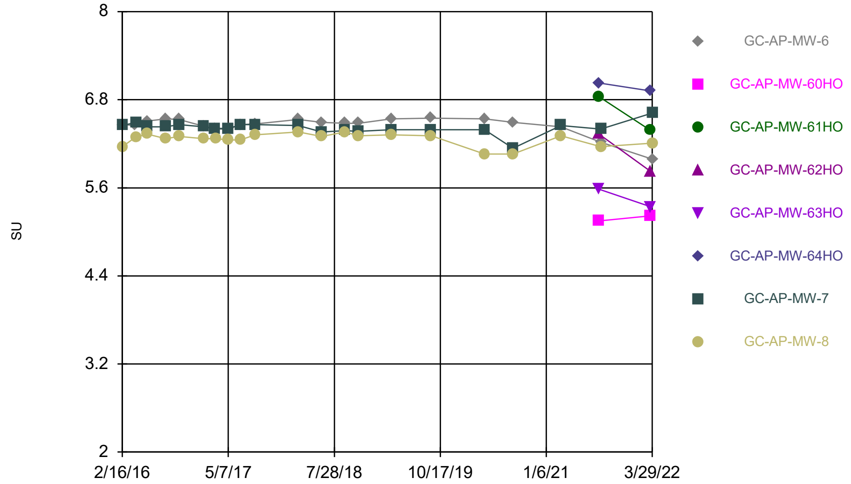
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

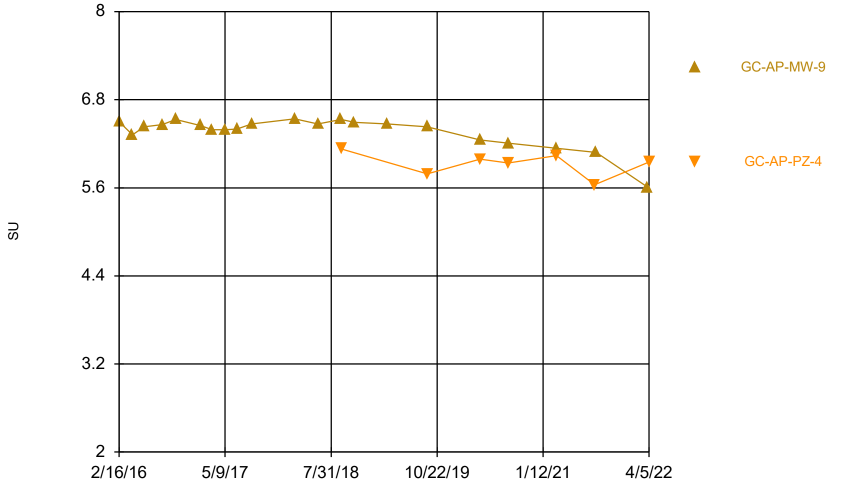
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

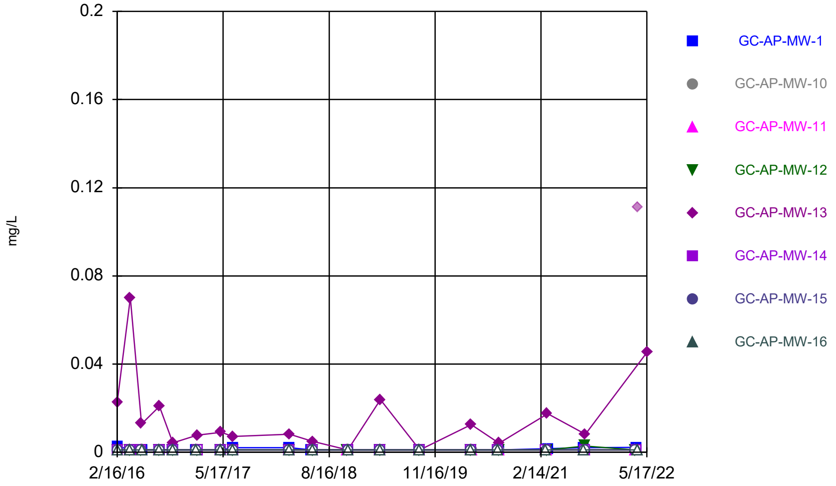
Time Series



Constituent: pH Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

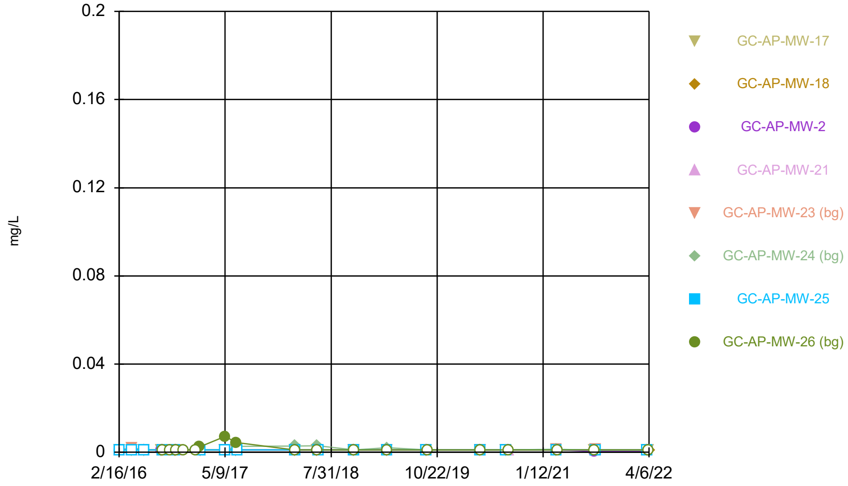
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

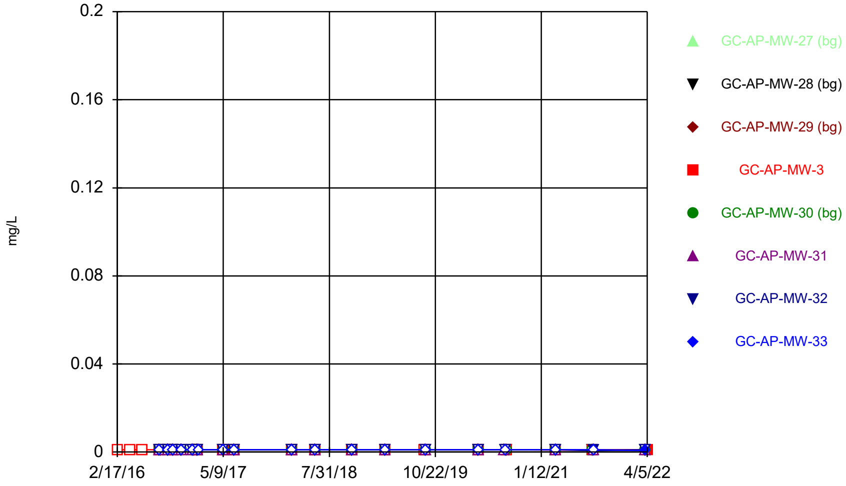
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

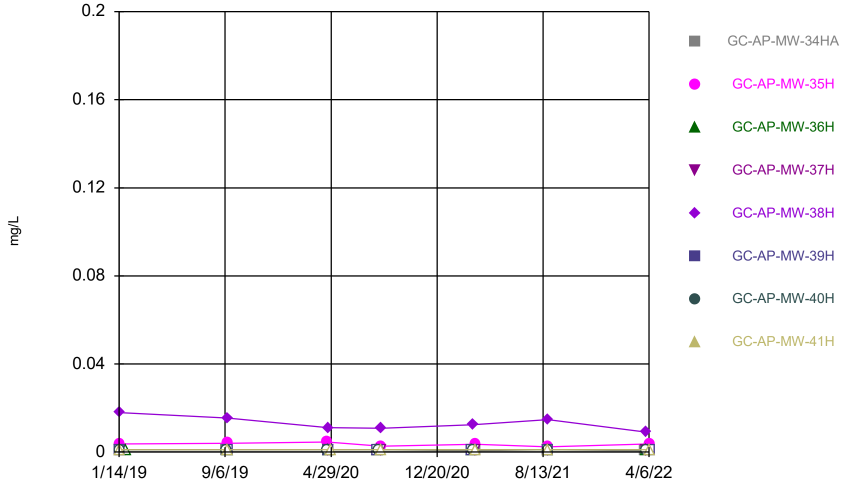
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

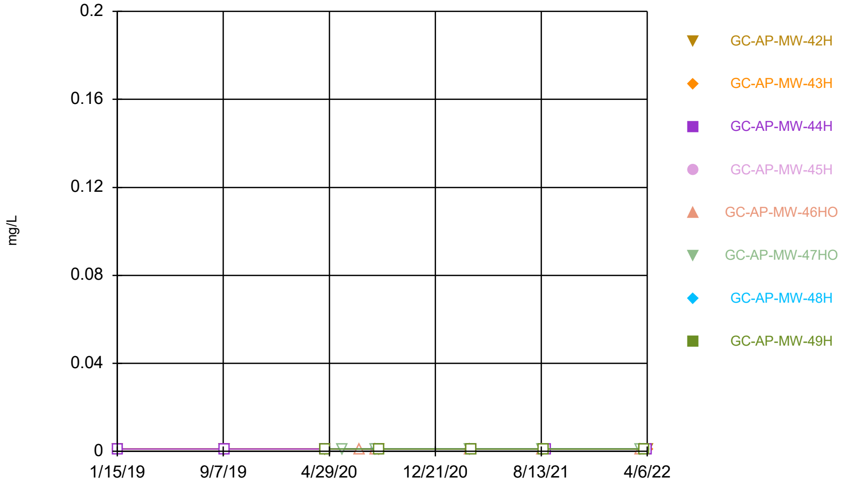
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

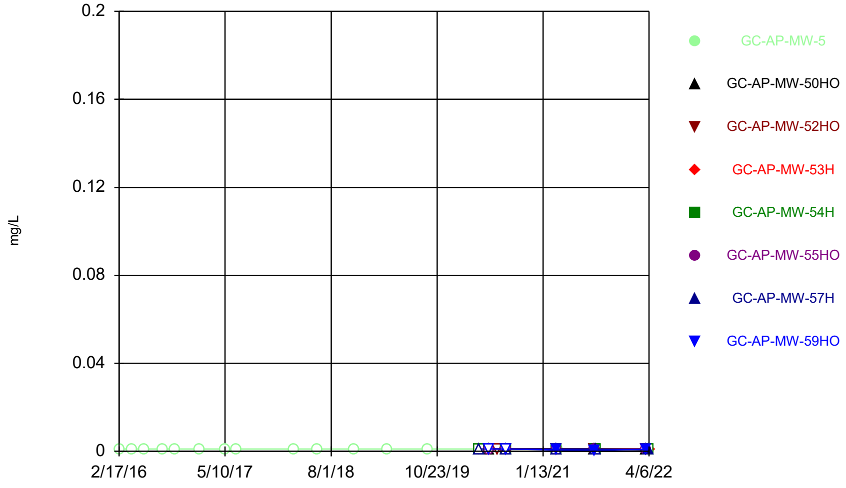
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

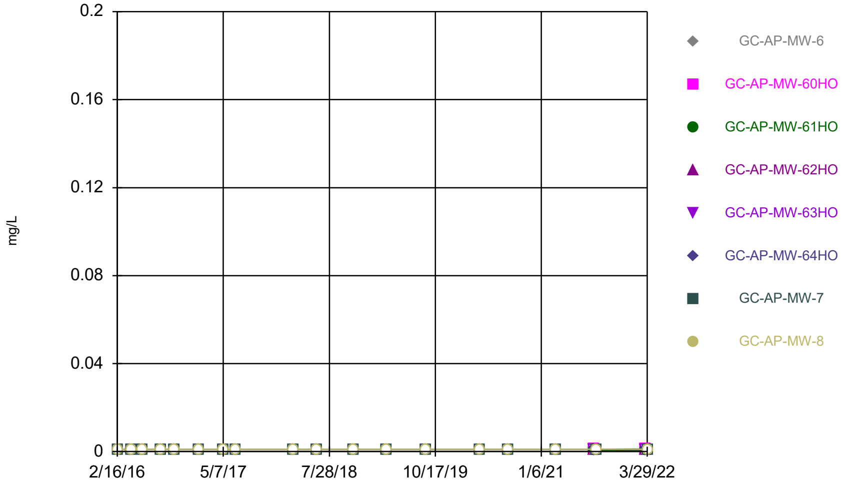
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

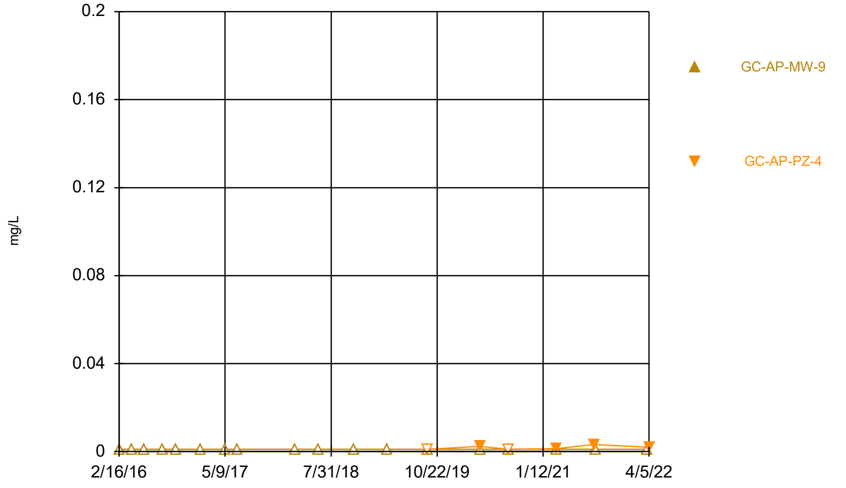
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

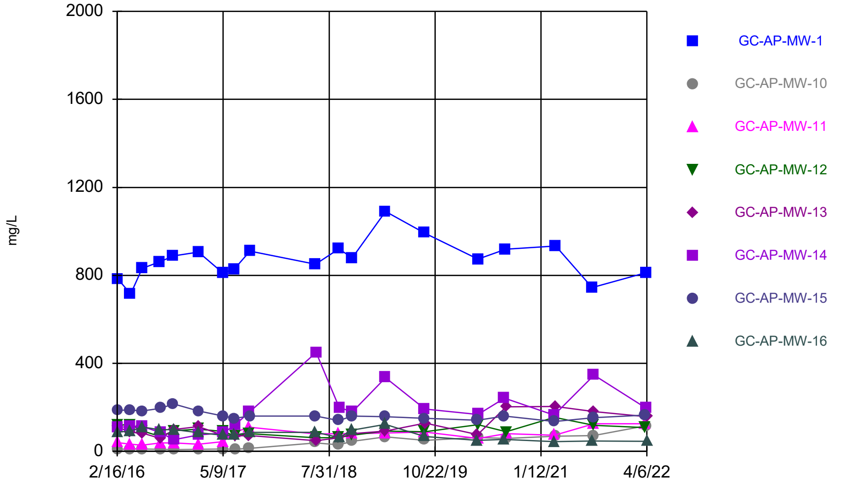
Time Series



Constituent: Selenium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

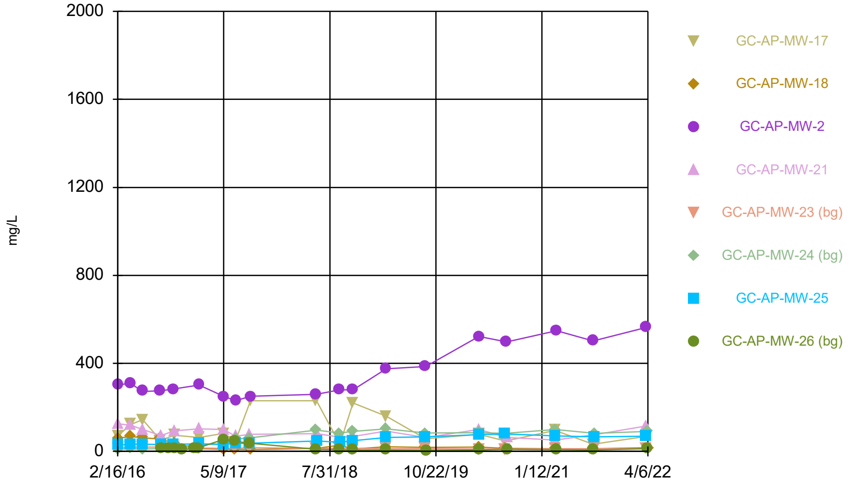
Time Series



Constituent: Sulfate Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

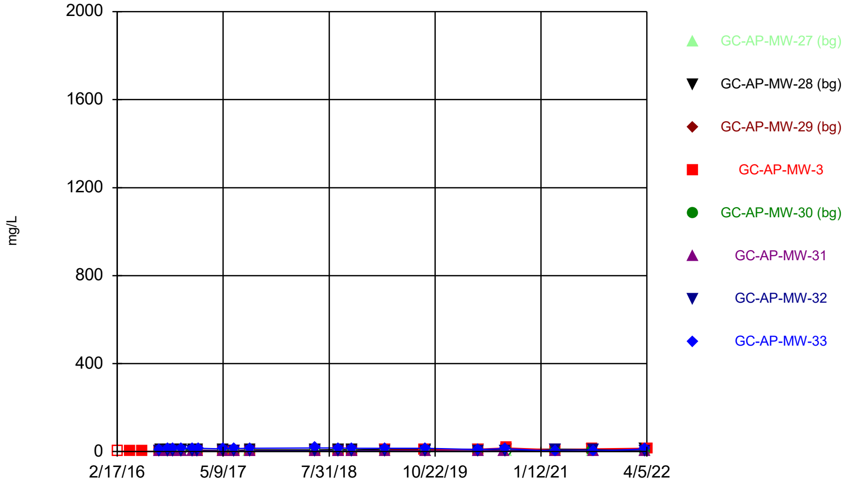
Time Series



Constituent: Sulfate Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

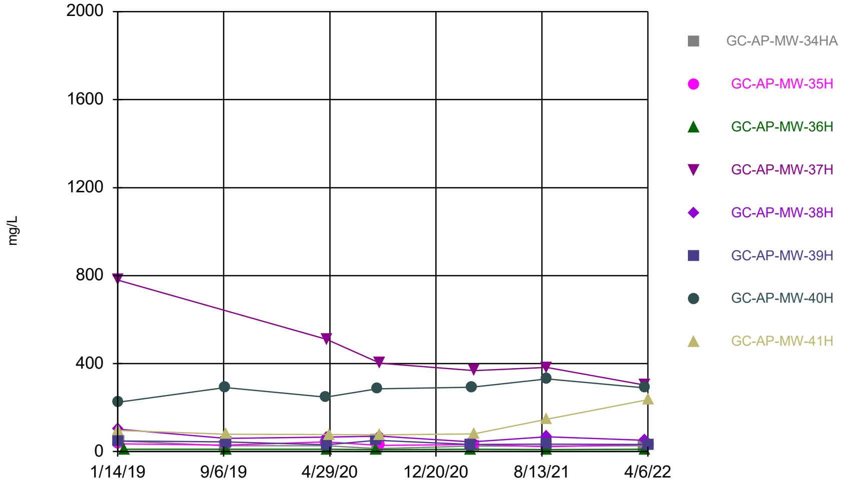
Time Series



Constituent: Sulfate Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

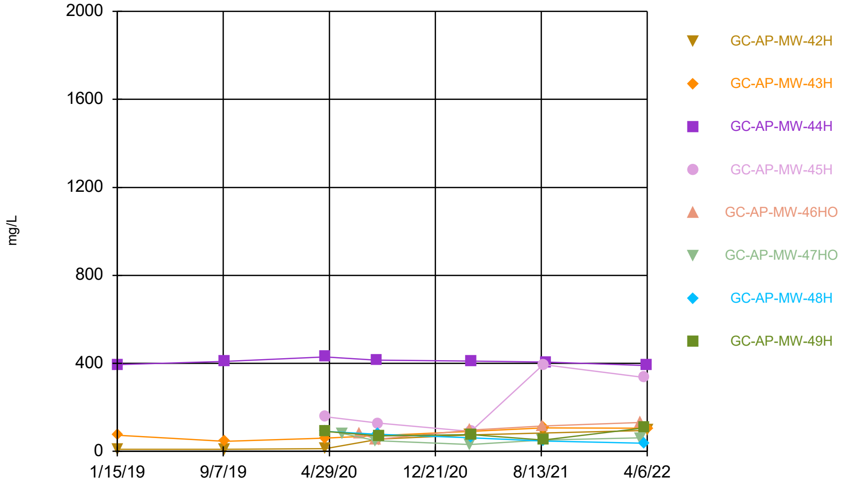
Time Series



Constituent: Sulfate Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

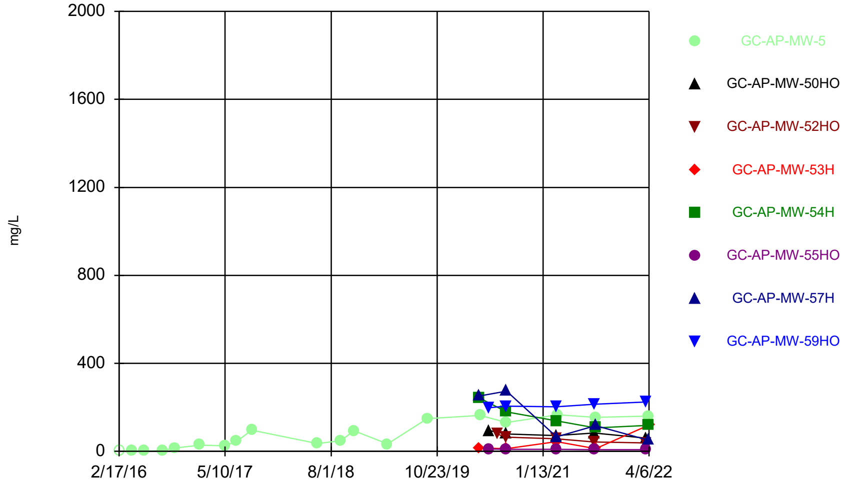
Time Series



Constituent: Sulfate   Analysis Run 6/10/2022 12:56 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

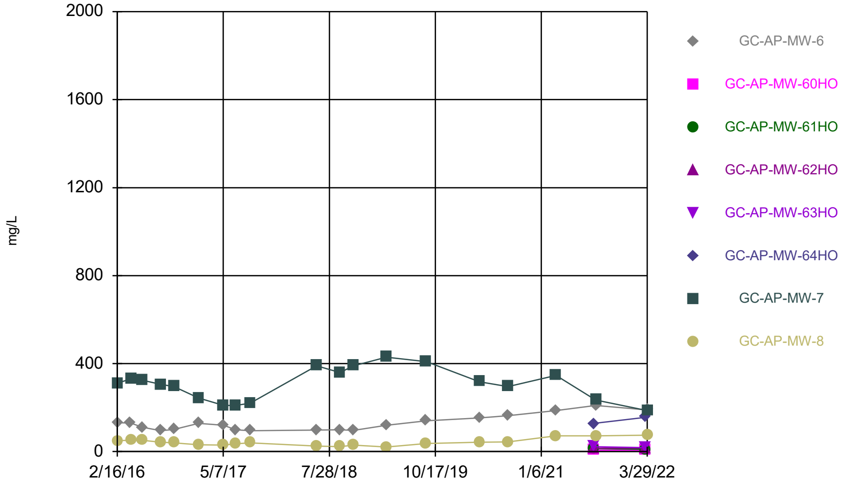
Time Series



Constituent: Sulfate   Analysis Run 6/10/2022 12:56 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

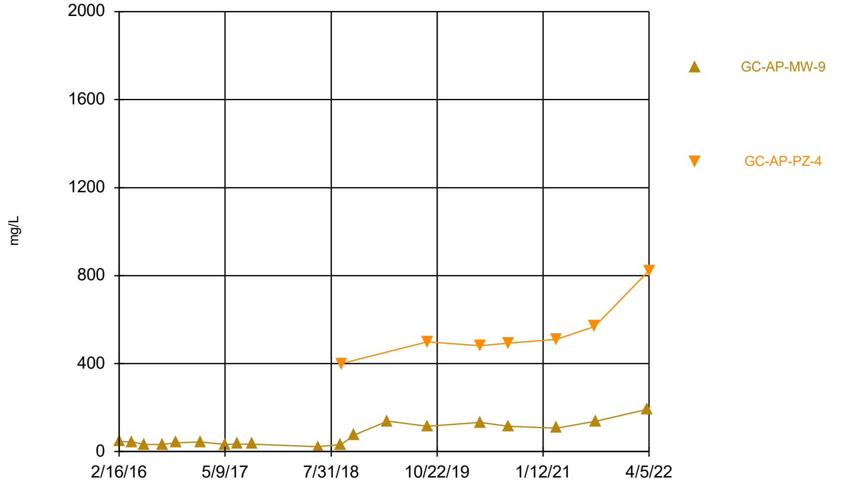
Time Series



Constituent: Sulfate   Analysis Run 6/10/2022 12:56 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

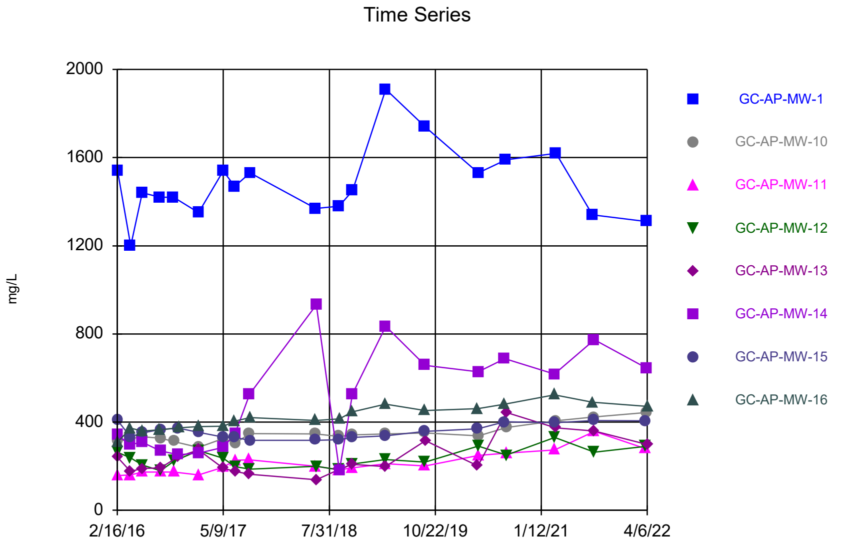
Sanitas™ v.9.6.34 . UG

Time Series



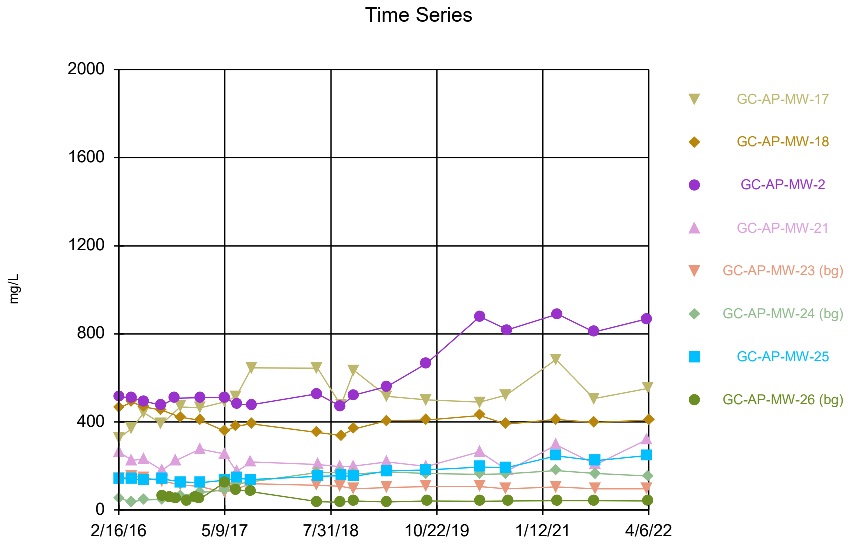
Constituent: Sulfate   Analysis Run 6/10/2022 12:56 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



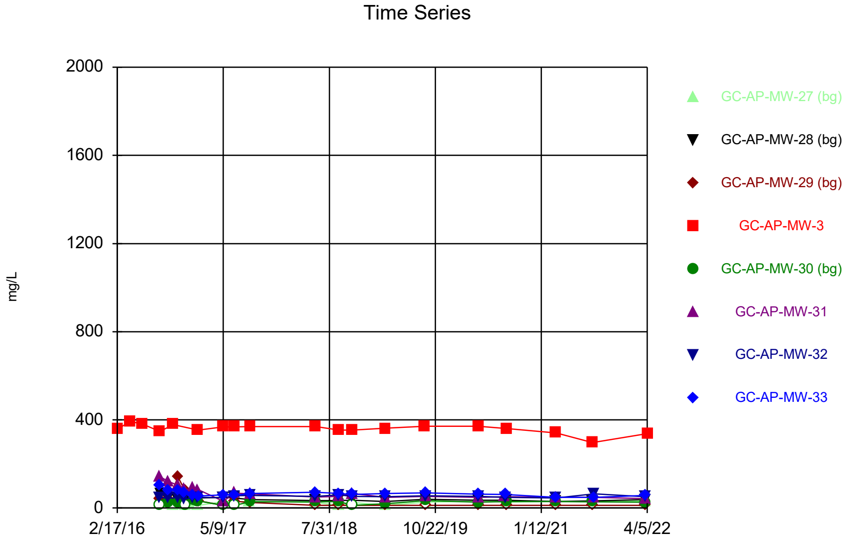
Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



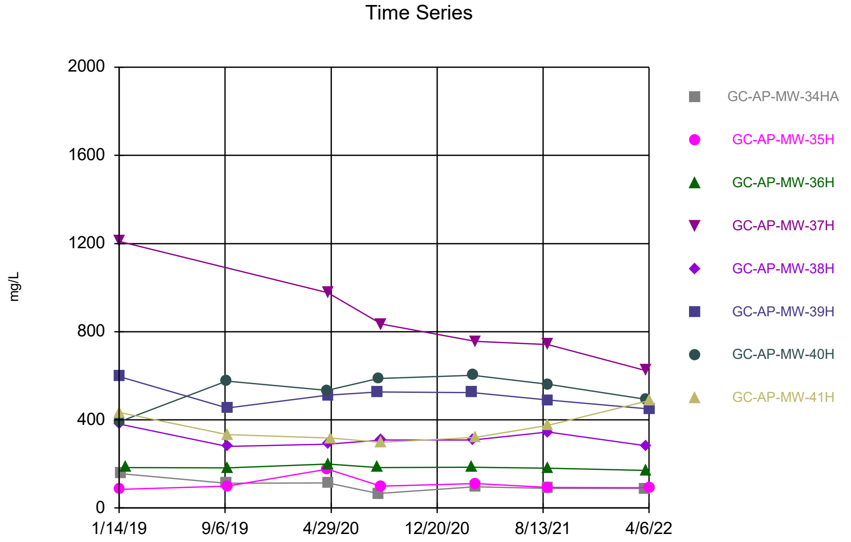
Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



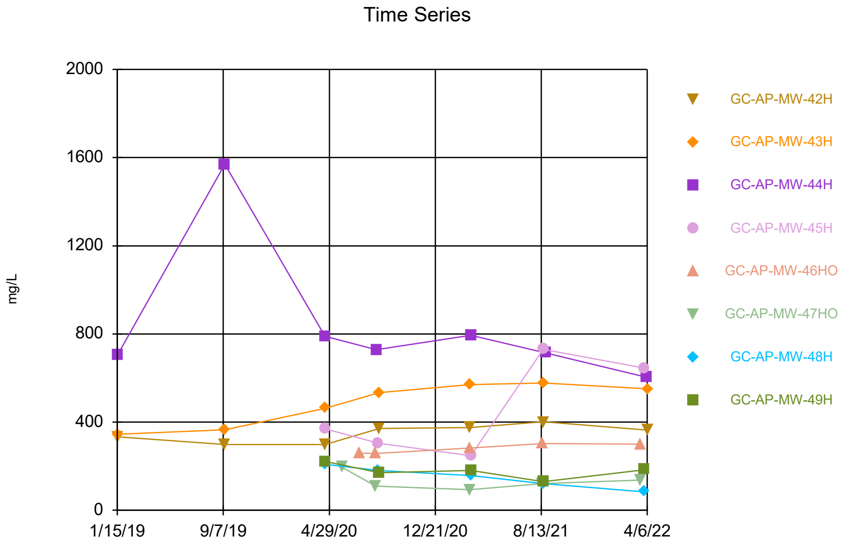
Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



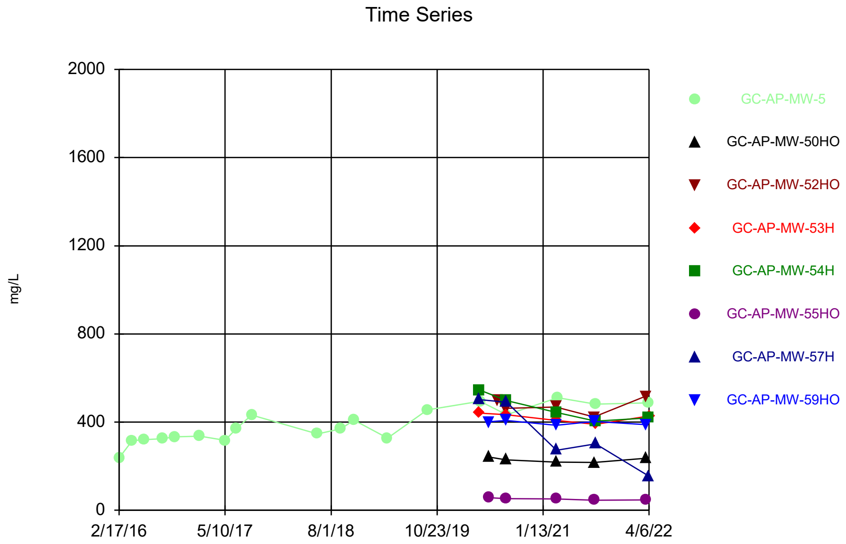
Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



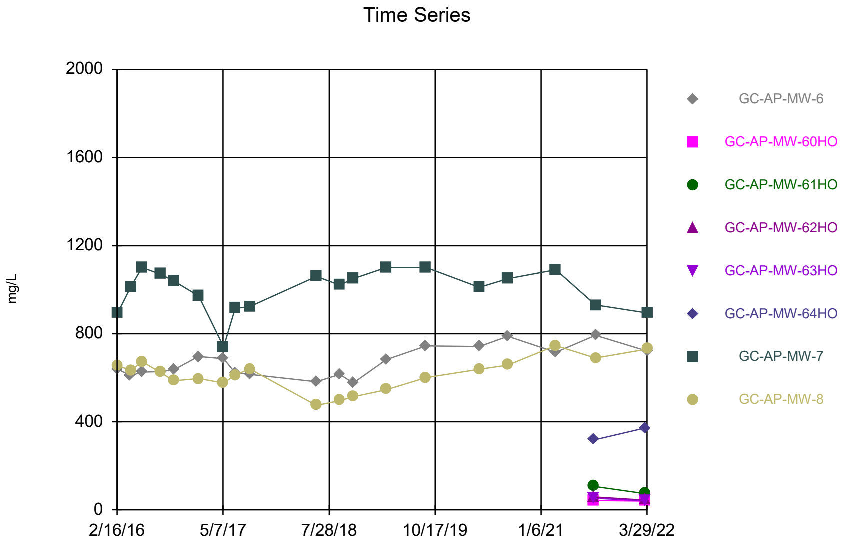
Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



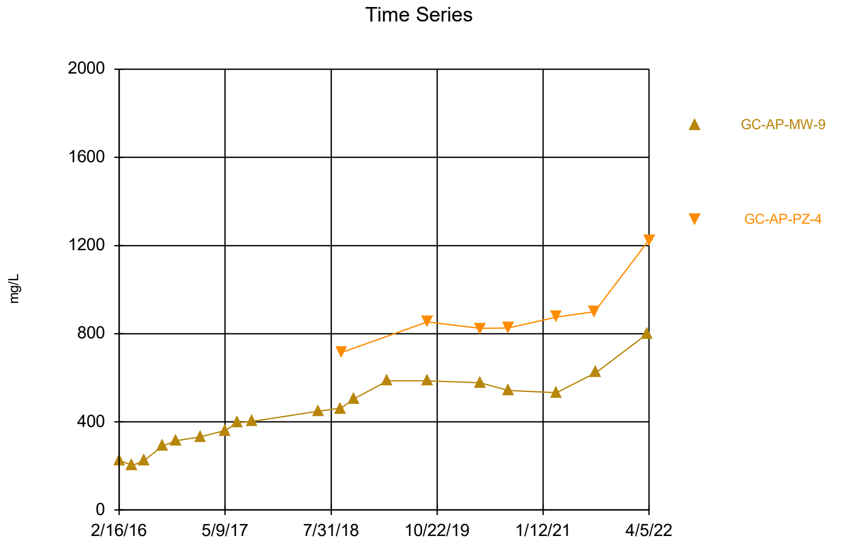
Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

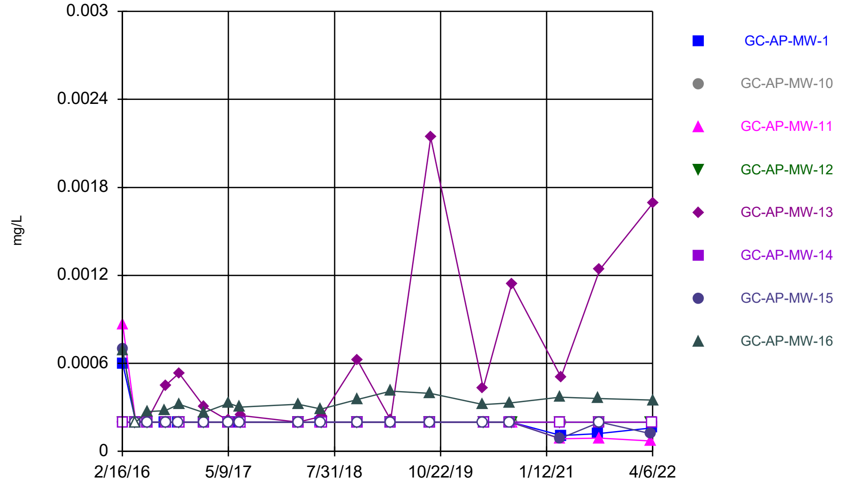
Sanitas™ v.9.6.34 . UG



Constituent: TDS Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

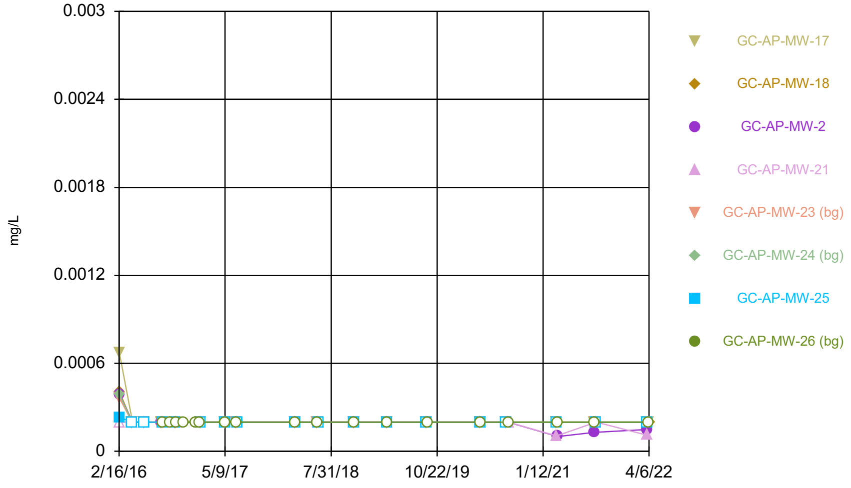
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

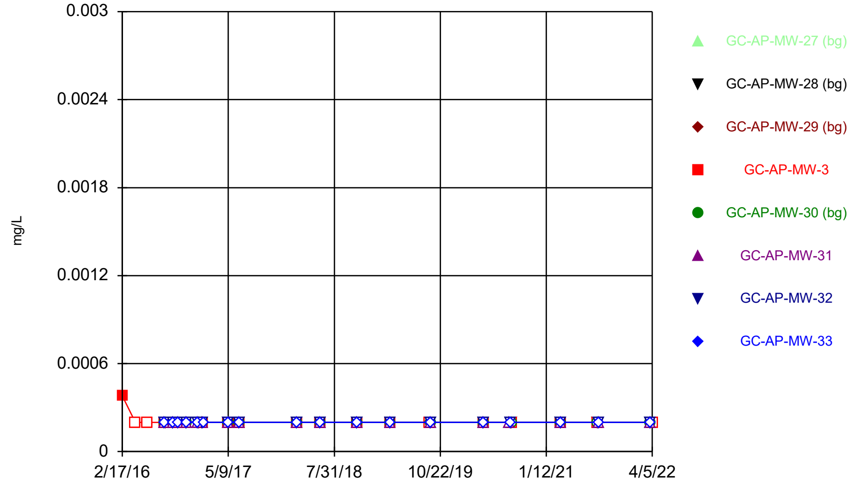
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

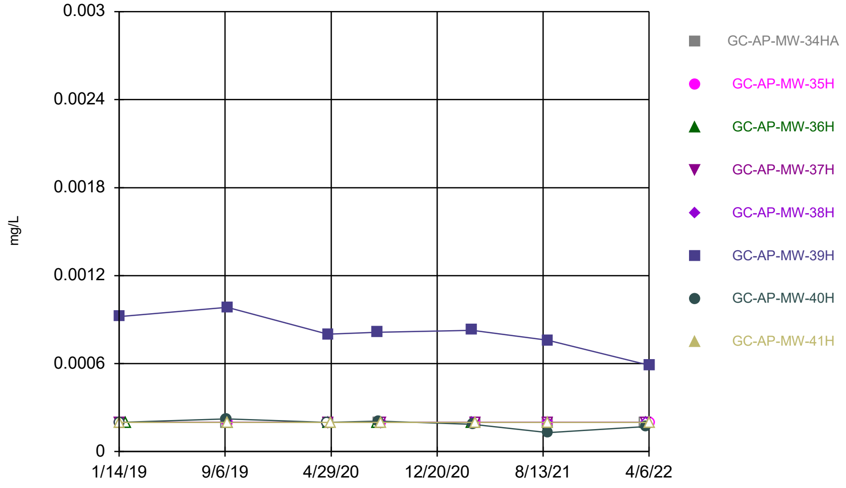
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

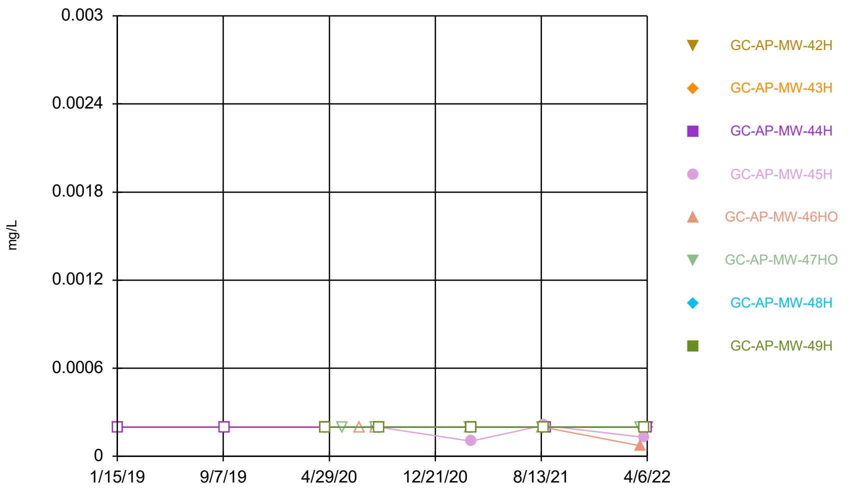
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

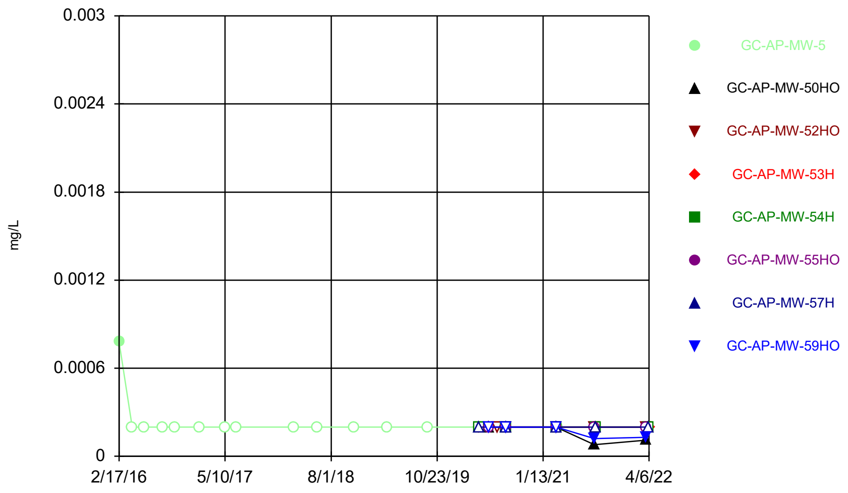
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

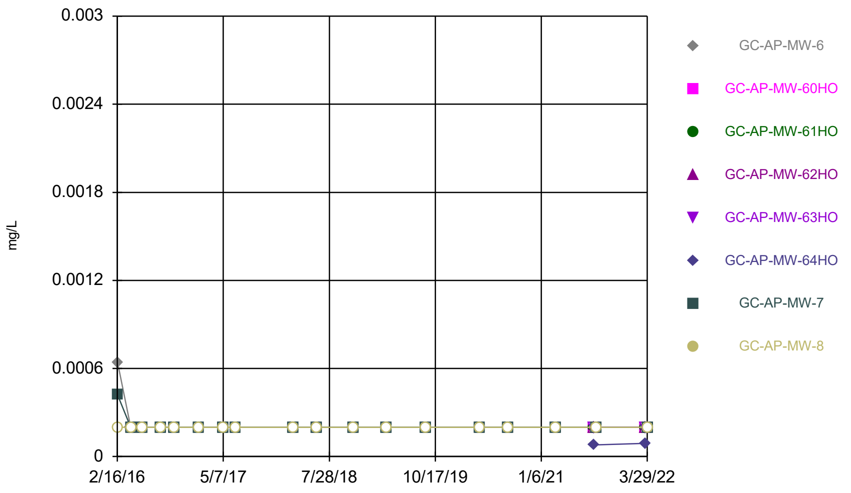
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

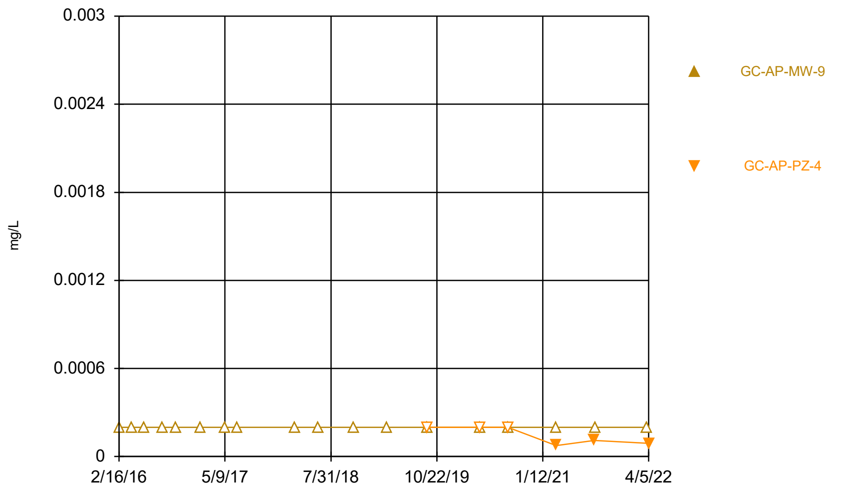
Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 6/10/2022 12:56 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.000786 (J)		0.000933 (J)	0.000972 (J)	<0.00102		
2/17/2016	<0.00102		<0.00102				<0.00102	<0.00102
4/12/2016					<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	0.000834 (J)	0.000869 (J)	0.00062 (J)	<0.00102	
6/1/2016	<0.00102							<0.00102
8/15/2016	<0.00102							<0.00102
8/16/2016		<0.00102	<0.00102	0.00118 (J)	0.00128 (J)		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.00102						<0.00102	
10/12/2016		<0.00102	<0.00102	0.000899 (J)	0.00114 (J)	<0.00102		<0.00102
1/24/2017	0.000799 (J)						0.00111 (J)	0.000935 (J)
1/25/2017		0.00128 (J)	0.000896 (J)	0.00136 (J)	0.00384	0.00106 (J)		
5/9/2017	<0.00102		<0.00102	<0.00102	0.00323	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	<0.00102						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	0.000683 (J)	0.00406	<0.00102		
2/27/2018	<0.00102	<0.00102	<0.00102			<0.00102		
2/28/2018				0.000656 (J)	0.00199 (J)		<0.00102	<0.00102
6/4/2018	<0.00102							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	0.00261 (J)	<0.00102		
11/5/2018			<0.00102	<0.00102	0.00275 (J)			
11/6/2018	<0.00102						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				0.00121 (J)	0.00219 (J)		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					0.00261 (J)			
4/20/2020					0.00338		<0.00102	<0.00102
4/21/2020	<0.00102			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.00102							
8/18/2020		<0.00102	<0.00102	<0.00102	0.00388			
3/9/2021						<0.00102		<0.00102
3/10/2021			<0.00102	<0.00102			<0.00102	
3/15/2021		<0.00102			0.0016			
3/16/2021	<0.00102							
8/17/2021	<0.00102							<0.00102
8/24/2021		<0.00102						
8/25/2021			<0.00102	<0.00102	0.00263	<0.00102	<0.00102	
3/29/2022				<0.00102			<0.00102	
3/30/2022			<0.00102					
4/4/2022	<0.00102	<0.00102				<0.00102		
4/6/2022					0.002			<0.00102

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
4/12/2016		<0.00102			<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.00102	<0.00102		
8/17/2016							<0.00102	<0.00102
9/20/2016								<0.00102
10/11/2016			<0.00102		<0.00102	<0.00102	<0.00102	
10/12/2016	<0.00102	<0.00102		<0.00102				<0.00102
11/15/2016								<0.00102
1/4/2017								<0.00102
1/23/2017								0.001 (J)
1/24/2017	0.000997 (J)	0.000984 (J)	0.00084 (J)		0.000886 (J)	0.000858 (J)	0.00111 (J)	
1/25/2017				0.00107 (J)				
5/9/2017			<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
5/10/2017	<0.00102	<0.00102				<0.00102		
6/27/2017	<0.00102	<0.00102			<0.00102			<0.00102
6/28/2017			<0.00102	<0.00102		<0.00102	<0.00102	
2/27/2018			<0.00102		<0.00102	<0.00102		<0.00102
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.00102	<0.00102		<0.00102
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102
11/7/2018					<0.00102	<0.00102		
3/26/2019	0.000897 (J)	<0.00102		0.000964 (J)	<0.00102	<0.00102		<0.00102
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.00102	<0.00102	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			<0.00102
4/22/2020						<0.00102	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.00102	<0.00102		
8/17/2020			<0.00102					
8/18/2020				<0.00102				<0.00102
3/9/2021	<0.00102	<0.00102						
3/10/2021				<0.00102	<0.00102	<0.00102	<0.00102	
3/15/2021								<0.00102
3/16/2021			<0.00102					
8/17/2021	<0.00102	<0.00102	<0.00102					
8/18/2021								<0.00102
8/24/2021					<0.00102	<0.00102	<0.00102	
8/25/2021				<0.00102				
3/28/2022			<0.00102		<0.00102			
3/29/2022							<0.00102	
3/30/2022				<0.00102				
4/4/2022	<0.00102					<0.00102		<0.00102
4/6/2022		<0.00102						

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.00102				
4/12/2016				<0.00102				
6/1/2016				<0.00102				
8/15/2016				<0.00102				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	0.00083 (J)				0.000701 (J)			
1/24/2017		0.00096 (J)		0.000906 (J)		0.000928 (J)	0.00091 (J)	
1/25/2017								0.00112 (J)
1/26/2017			0.00092 (J)					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.00102				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.00102				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/26/2019	0.00137 (J)	0.000975 (J)	<0.00102		0.000854 (J)			
3/27/2019				<0.00102		<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.00102				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.00102				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
3/16/2021				<0.00102				
8/17/2021				<0.00102				
8/18/2021	<0.00102	<0.00102	<0.00102		<0.00102			
8/23/2021						<0.00102	<0.00102	<0.00102
3/28/2022	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/5/2022				<0.00102				

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.00102			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		<0.00102						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		<0.00102	<0.00102		<0.00102	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		<0.00102						
4/22/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		<0.00102						<0.00102
8/19/2020				<0.00102	<0.00102			
3/9/2021			<0.00102			<0.00102		
3/10/2021					<0.00102		<0.00102	
3/15/2021	<0.00102							<0.00102
3/16/2021		<0.00102		<0.00102				
8/23/2021	<0.00102							
8/24/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/25/2021							<0.00102	<0.00102
3/28/2022	<0.00102							
3/29/2022				<0.00102				
3/30/2022			<0.00102		<0.00102		<0.00102	
4/6/2022		<0.00102				<0.00102		<0.00102

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	<0.00102	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	<0.00102	<0.00102						
3/10/2021			<0.00102	<0.00102			<0.00102	<0.00102
8/17/2021					<0.00102	<0.00102		
8/18/2021	<0.00102	<0.00102		<0.00102			<0.00102	<0.00102
8/23/2021			<0.00102					
3/23/2022					<0.00102	<0.00102		
3/29/2022				<0.00102				
3/30/2022							<0.00102	<0.00102
4/4/2022			<0.00102					
4/6/2022	<0.00102	<0.00102						

Time Series

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	0.000728 (J)							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		<0.00102
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		<0.00102	<0.00102					
3/9/2021						<0.00102		<0.00102
3/10/2021				<0.00102	<0.00102		<0.00102	
3/16/2021	<0.00102							
8/16/2021			<0.00102					
8/17/2021		<0.00102				<0.00102		<0.00102
8/23/2021	<0.00102			<0.00102	<0.00102		<0.00102	
3/23/2022		<0.00102	<0.00102			<0.00102		<0.00102
4/4/2022	<0.00102							
4/5/2022					<0.00102		<0.00102	
4/6/2022				<0.00102				

Time Series

Constituent: Antimony (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	0.000792 (J)							
1/25/2017							0.000839 (J)	0.000833 (J)
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	0.00141 (J)						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	<0.00102						<0.00102	<0.00102
8/17/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/24/2021	<0.00102						0.00075 (J)	<0.00102
3/23/2022		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
3/29/2022	<0.00102						0.00066 (J)	<0.00102

Time Series

Constituent: Antimony (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	0.000847 (J)	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.00102
4/20/2020		<0.00102
4/21/2020	<0.00102	
8/17/2020		<0.00102
8/18/2020	<0.00102	
3/9/2021	<0.00102	
3/10/2021		<0.00102
8/17/2021		<0.00102
8/24/2021	<0.00102	
3/29/2022	<0.00102	
4/5/2022		<0.00102

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.0123		<0.0002	0.0141	0.0202		
2/17/2016	0.0181		0.00437 (J)				<0.0002	0.0788
4/12/2016					0.0144	0.0214	<0.0002	
4/13/2016	0.0178	0.0143	0.00695	<0.0002				0.0759
5/31/2016		0.0125	0.0063	<0.0002	0.00984	0.0156	<0.0002	
6/1/2016	0.016							0.292
8/15/2016	0.0182							0.105
8/16/2016		0.0128	0.0068	<0.0002	0.0126		<0.0002	
8/17/2016						0.0153		
10/11/2016	0.0186						<0.0002	
10/12/2016		0.0145	0.00709	<0.0002	0.0117	0.0254		0.0831
1/24/2017	0.0173						<0.0002	0.0472
1/25/2017		0.0122	0.00718	<0.0002	0.00316 (J)	0.0194		
5/9/2017	0.0176		0.00819	<0.0002	0.00393 (J)	0.0361		
5/10/2017		0.0135					<0.0002	0.0814
6/27/2017	0.0165						<0.0002	0.0693
6/28/2017		0.0131	0.00664	<0.0002	0.00406 (J)	0.022		
2/27/2018	0.0201	0.0146	0.00733			0.0265		
2/28/2018				<0.0002	0.00278 (J)		<0.0002	0.0852
6/4/2018	0.0195							
6/5/2018		0.0233	0.00637				<0.0002	0.0648
6/6/2018				<0.0002	0.00352 (J)	0.0372		
11/5/2018			0.00195 (J)	<0.0002	0.00497 (J)			
11/6/2018	0.0189						<0.0002	0.0701
11/7/2018		0.0152				0.0289		
3/26/2019				<0.0002	0.00251 (J)		<0.0002	0.0952
3/27/2019	0.0267	0.014	0.00573			0.0264		
9/10/2019	0.0226	0.0132	0.00378 (J)	<0.0002		0.0263	<0.0002	0.0786
9/11/2019					0.00664			
4/20/2020					0.00181 (J)		<0.0002	0.105
4/21/2020	0.0219			<0.0002		0.0178		
4/22/2020		0.0121	0.00616					
8/11/2020						0.0207		0.0698
8/12/2020							<0.0002	
8/17/2020	0.0265							
8/18/2020		0.0121	0.00457 (J)	<0.0002	0.00176 (J)			
3/9/2021						0.0292		0.113
3/10/2021			0.00317	0.000251			0.000349	
3/15/2021		0.0125			0.00207			
3/16/2021	0.0238							
8/17/2021	0.0206							0.0765
8/24/2021		0.0129						
8/25/2021			0.00518	0.00023	0.00302	0.0224	0.00046	
3/29/2022				0.00023			0.00032	
3/30/2022			0.00097					
4/4/2022	0.0164	0.0117				0.0241		
4/6/2022					0.00261			0.078

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	0.177	0.133	0.0142		<0.0002	<0.0002	<0.0002	
4/12/2016		0.134			<0.0002	<0.0002	<0.0002	
4/13/2016	0.271		0.0145	<0.0002				
6/1/2016	0.251	0.11	0.0112	<0.0002	<0.0002	<0.0002	<0.0002	
8/15/2016	0.253	0.116	0.0154					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.0002	0.0017 (J)
9/20/2016								0.00283 (J)
10/11/2016			0.0113		<0.0002	<0.0002	<0.0002	
10/12/2016	0.243	0.109		<0.0002				0.00218 (J)
11/15/2016								0.00124 (J)
1/4/2017								0.0028 (J)
1/23/2017								0.00257 (J)
1/24/2017	0.363	0.0825	0.0115		<0.0002	<0.0002	<0.0002	
1/25/2017				<0.0002				
5/9/2017			0.00989	<0.0002	<0.0002		<0.0002	0.00138 (J)
5/10/2017	0.499	0.0776				<0.0002		
6/27/2017	0.489	0.0672			<0.0002			<0.0002
6/28/2017			0.00848	<0.0002		<0.0002	<0.0002	
2/27/2018			0.0106		<0.0002	<0.0002		<0.0002
2/28/2018	0.532	0.063		<0.0002			<0.0002	
6/4/2018			0.0124					
6/5/2018	0.382	0.0661			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.0002	
11/5/2018				<0.0002				
11/6/2018	0.299	0.0509	0.0085				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	0.32	0.0477		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			0.0101				<0.0002	
9/9/2019	0.356	0.0498	0.022					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	0.689	0.0478	0.013	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	0.581						<0.0002	
8/12/2020		0.0485			<0.0002	<0.0002		
8/17/2020			0.00768					
8/18/2020				<0.0002				<0.0002
3/9/2021	0.86	0.0505						
3/10/2021				0.000216	<0.0002	0.00045	0.00033	
3/15/2021								0.000125 (J)
3/16/2021			0.0045					
8/17/2021	0.937	0.0509	0.00514					
8/18/2021								0.00016 (J)
8/24/2021					7E-05 (J)	0.00024	0.00028	
8/25/2021				0.00014 (J)				
3/28/2022			0.00381		<0.0002			
3/29/2022							0.00026	
3/30/2022				0.00017 (J)				
4/4/2022	0.861					0.00033		0.00011 (J)
4/6/2022		0.049						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.00668				
4/12/2016				0.00827				
6/1/2016				0.00768				
8/15/2016				0.00798				
8/16/2016			0.00199 (J)		<0.0002	0.00185 (J)	<0.0002	0.00122 (J)
8/17/2016	<0.0002	<0.0002						
9/19/2016						0.00121 (J)	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	0.00155 (J)		<0.0002			
10/11/2016			0.00231 (J)	0.008	<0.0002	0.00111 (J)	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	0.0044 (J)		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	0.00123 (J)		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		0.00722		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			0.00169 (J)					
5/9/2017	<0.0002	<0.0002	<0.0002	0.00766	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				0.00745				
2/27/2018	<0.0002	<0.0002	<0.0002	0.00699	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				0.00731				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	0.00685	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				0.00596		<0.0002	<0.0002	<0.0002
9/9/2019				0.00806				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				0.00751				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				0.00909				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	0.000111 (J)	0.000142 (J)	<0.0002
3/16/2021				0.0112				
8/17/2021				0.0119				
8/18/2021	<0.0002	9E-05 (J)	9E-05 (J)		<0.0002			
8/23/2021						<0.0002	0.00019 (J)	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	0.00015 (J)
4/5/2022				0.01				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		0.0514	<0.0002	0.002 (J)
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			0.0034 (J)					
9/10/2019	<0.0002						<0.0002	
9/11/2019		<0.0002	0.00222 (J)		<0.0002	0.053		0.00208 (J)
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		0.00168 (J)	0.00768	<0.0002	0.0533		
4/29/2020								0.00182 (J)
8/11/2020			0.00223 (J)			0.0635		
8/12/2020	<0.0002						<0.0002	
8/18/2020		<0.0002						0.00171 (J)
8/19/2020				0.00618	<0.0002			
3/9/2021			0.00291			0.0697		
3/10/2021					<0.0002		0.000443	
3/15/2021	0.000158 (J)							0.00174
3/16/2021		0.0001 (J)		0.00685				
8/23/2021	0.00042							
8/24/2021		0.0001 (J)	0.00235	0.00811	0.00012 (J)	0.069		
8/25/2021							0.00043	0.00182
3/28/2022	0.00013 (J)							
3/29/2022				0.011				
3/30/2022			0.00263		9E-05 (J)		0.00027	
4/6/2022		0.00013 (J)				0.0524		0.00197

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.00372 (J)							
1/16/2019		0.00816	<0.0002					
9/11/2019	0.00583	0.0124	0.00269 (J)					
4/20/2020			0.00215 (J)	0.00153 (J)				
4/21/2020	0.00417 (J)	0.0101					0.0021 (J)	<0.0002
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			0.00197 (J)					
8/17/2020				<0.0002			<0.0002	
8/19/2020	0.00445 (J)	0.0103						<0.0002
3/8/2021					0.000339	0.000152 (J)		
3/9/2021	0.00343	0.0117						
3/10/2021			0.00172	0.00147			0.000557	0.000592
8/17/2021					0.00027	0.00014 (J)		
8/18/2021	0.00456	0.0116		0.00143			0.00025	0.00074
8/23/2021			0.00263					
3/23/2022					0.00017 (J)	<0.0002		
3/29/2022				0.00106				
3/30/2022							0.00014 (J)	0.00041
4/4/2022			0.00187					
4/6/2022	0.00515	0.011						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.353							
4/12/2016	0.402							
5/31/2016	0.33							
8/17/2016	0.369							
10/11/2016	0.378							
1/24/2017	0.386							
5/9/2017	0.406							
6/28/2017	0.353							
2/27/2018	0.425							
6/5/2018	0.454							
11/6/2018	0.432							
3/27/2019	0.455							
9/11/2019	0.406							
4/20/2020				0.0806	0.41		0.0375	
4/21/2020	0.42							
5/28/2020		<0.0002				<0.0002		0.00208 (J)
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	0.0869		<0.0002		<0.0002
8/12/2020	0.415				0.467		0.0467	
3/8/2021		0.000267	0.00027					
3/9/2021						0.00013 (J)		0.00103
3/10/2021				0.213	0.45		0.0196	
3/16/2021	0.473							
8/16/2021			0.00014 (J)					
8/17/2021		0.00032				9E-05 (J)		0.0007
8/23/2021	0.368			0.225	0.454		0.029	
3/23/2022		0.00014 (J)	0.00026			<0.0002		0.00082
4/4/2022	0.432							
4/5/2022					0.401		0.00687	
4/6/2022				0.229				

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	0.000303						0.00015 (J)	0.000248
8/17/2021		<0.0002	0.00039	0.00026	0.00012 (J)	0.00051		
8/24/2021	0.00028						0.0001 (J)	0.00027
3/23/2022		<0.0002	0.00025	0.00011 (J)	<0.0002	0.0003		
3/29/2022	0.00013 (J)						8E-05 (J)	0.00015 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.00507	
4/13/2016	0.00556	
6/1/2016	0.00625	
8/17/2016	0.00648	
10/12/2016	0.00772	
1/25/2017	0.00728	
5/10/2017	0.00818	
6/28/2017	0.00718	
2/27/2018	0.00946	
6/5/2018	0.00921	
11/7/2018	0.0098	
3/26/2019	0.00969	
9/10/2019	0.0108	0.00176 (J)
4/20/2020		0.0029 (J)
4/21/2020	0.0102	
8/17/2020		0.00191 (J)
8/18/2020	0.0108	
3/9/2021	0.0105	
3/10/2021		0.00597
8/17/2021		0.0021
8/24/2021	0.00695	
3/29/2022	0.00316	
4/5/2022		0.00404

Time Series

Constituent: Barium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.179		0.0231	0.113	0.0447		
2/17/2016	0.0364		0.105				0.022	0.0368
4/12/2016					0.0912	0.043	0.0242	
4/13/2016	0.0344	0.185	0.106	0.02				0.044
5/31/2016		0.158	0.0907	0.0175	0.0963	0.0383	0.0224	
6/1/2016	0.0353							0.0357
8/15/2016	0.0395							0.0377
8/16/2016		0.16	0.0989	0.0182	0.0878		0.0243	
8/17/2016						0.0332		
10/11/2016	0.0455						0.0291	
10/12/2016		0.17	0.113	0.0221	0.112	0.0454		0.0431
1/24/2017	0.0428						0.0223	0.0418
1/25/2017		0.156	0.103	0.0187	0.114	0.0567		
5/9/2017	0.0399		0.125	0.0232	0.1	0.069		
5/10/2017		0.169					0.0281	0.0449
6/27/2017	0.0348						0.0223	0.042
6/28/2017		0.144	0.103	0.0178	0.0874	0.0764		
2/27/2018	0.0398	0.172	0.0718			0.0908		
2/28/2018				0.0197	0.0984		0.0271	0.0595
6/4/2018	0.0314							
6/5/2018		0.173	0.0643				0.0269	0.0471
6/6/2018				0.0204	0.0951	0.064		
11/5/2018			0.0588	0.0255	0.113			
11/6/2018	0.0348						0.0271	0.0574
11/7/2018		0.171				0.0575		
3/26/2019				0.0218	0.109		0.0282	0.0626
3/27/2019	0.0286	0.167	0.0678			0.0768		
9/10/2019	0.0283	0.199	0.0651	0.0233		0.0685	0.0348	0.0754
9/11/2019					0.275			
4/20/2020					0.104		0.0338	0.0921
4/21/2020	0.0206			0.0325		0.102		
4/22/2020		0.186	0.0967					
8/11/2020						0.0806		0.0948
8/12/2020							0.0352	
8/17/2020	0.0218							
8/18/2020		0.223	0.0866	0.021	0.199			
3/9/2021						0.125		0.102
3/10/2021			0.0637	0.0373			0.0365	
3/15/2021		0.261			0.0699			
3/16/2021	0.024							
8/17/2021	0.0211							0.101
8/24/2021		0.287						
8/25/2021			0.104	0.0323	0.114	0.11	0.0402	
3/29/2022				0.0355			0.0381	
3/30/2022			0.0485					
4/4/2022	0.0235	0.26				0.103		
4/6/2022					0.0701			0.103

Time Series

Constituent: Barium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.0379				
2/17/2016	0.0402	0.12	0.0311		0.0285	0.0305	0.0895	
4/12/2016		0.131			0.035	0.0312	0.0966	
4/13/2016	0.0637		0.0334	0.0291				
6/1/2016	0.0786	0.114	0.029	0.0254	0.0328	0.0298	0.0872	
8/15/2016	0.0634	0.113	0.0317					
8/16/2016				0.0385	0.033	0.0308		
8/17/2016							0.0875	0.0476
9/20/2016								0.0436
10/11/2016			0.0339		0.0352	0.042	0.1	
10/12/2016	0.0995	0.126		0.0486				0.0397
11/15/2016								0.0369
1/4/2017								0.0518
1/23/2017								0.0662
1/24/2017	0.117	0.126	0.0276		0.0286	0.0446	0.0856	
1/25/2017				0.0371				
5/9/2017			0.0285	0.0454	0.0257		0.093	0.0691
5/10/2017	0.158	0.138				0.0568		
6/27/2017	0.139	0.12			0.0246			0.0603
6/28/2017			0.0273	0.0352		0.0663	0.0829	
2/27/2018			0.0292		0.0287	0.101		0.0386
2/28/2018	0.199	0.143		0.0376			0.0958	
6/4/2018			0.0298					
6/5/2018	0.149	0.128			0.0279	0.108		0.0356
6/6/2018				0.0355			0.0892	
11/5/2018				0.0509				
11/6/2018	0.202	0.109	0.0286				0.0807	0.0387
11/7/2018					0.0281	0.1		
3/26/2019	0.242	0.117		0.047	0.0295	0.0978		0.0419
3/27/2019			0.0311				0.0901	
9/9/2019	0.319	0.101	0.035					
9/10/2019				0.0568	0.0338	0.0967	0.101	
9/11/2019								0.0468
4/21/2020	0.306	0.0926	0.0335	0.0763	0.0296			0.0439
4/22/2020						0.0738	0.11	
8/11/2020	0.29						0.111	
8/12/2020		0.0815			0.0311	0.0788		
8/17/2020			0.0376					
8/18/2020				0.0517				0.0409
3/9/2021	0.352	0.0849						
3/10/2021				0.111	0.0305	0.0873	0.0797	
3/15/2021								0.0351
3/16/2021			0.033					
8/17/2021	0.254	0.0763	0.0347					
8/18/2021								0.0311
8/24/2021					0.0311	0.07	0.0988	
8/25/2021				0.0865				
3/28/2022			0.0301		0.0264			
3/29/2022							0.0717	
3/30/2022				0.112				
4/4/2022	0.27					0.0635		0.0335
4/6/2022		0.0769						

Time Series

Constituent: Barium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.0896				
4/12/2016				0.0994				
6/1/2016				0.104				
8/15/2016				0.102				
8/16/2016			0.0527		0.0376	0.0226	0.0134	0.0304
8/17/2016	0.0803	0.336						
9/19/2016						0.0202	0.0125	0.0215
9/20/2016	0.0679	0.341	0.0698		0.0348			
10/11/2016			0.0799	0.11	0.0396	0.0219	0.0128	0.0236
10/12/2016	0.0644	0.347						
11/14/2016						0.0215	0.0129	0.0206
11/15/2016	0.0628	0.332	0.0479		0.0359			
1/3/2017						0.019	0.0116	0.0409
1/4/2017	0.0477	0.299	0.0513		0.0238			
1/23/2017	0.0482				0.029			
1/24/2017		0.264		0.0942		0.0167	0.0118	
1/25/2017								0.0455
1/26/2017			0.0674					
5/9/2017	0.0611	0.322	0.0836	0.105	0.0409			
5/10/2017						0.0246	0.0142	0.0798
6/27/2017	0.0492	0.278	0.0661		0.0303	0.0238	0.0127	0.0679
6/28/2017				0.104				
2/27/2018	0.0463	0.312	0.05	0.0989	0.0383	0.0231	0.0135	0.0856
6/4/2018				0.0936				
6/5/2018	0.0298	0.243	0.0433		0.0633	0.0228	0.0126	0.0875
11/5/2018							0.0123	
11/6/2018	0.0582	0.249	0.0379	0.0936	0.0463	0.0211		0.0726
3/26/2019	0.0499	0.232	0.0348		0.101			
3/27/2019				0.0951		0.025	0.0134	0.0912
9/9/2019				0.111				
9/11/2019	0.0574	0.246	0.0404		0.0855	0.0267	0.0147	0.0824
4/20/2020				0.109				
4/21/2020	0.0827	0.219	0.0542		0.0485			
4/22/2020						0.0285	0.0133	0.102
8/11/2020						0.0264		
8/12/2020							0.0127	0.0601
8/17/2020				0.139				
8/18/2020	0.0734	0.211	0.0442		0.0529			
3/15/2021	0.069	0.222	0.0545		0.0462	0.0316	0.0692	0.0144
3/16/2021				0.159				
8/17/2021				0.15				
8/18/2021	0.0607	0.198	0.0554		0.0329			
8/23/2021						0.0317	0.0764	0.0141
3/28/2022	0.0625	0.186	0.0337		0.0286	0.0325	0.0132	0.0773
4/5/2022				0.145				

Time Series

Constituent: Barium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.0814			
1/15/2019				0.0454		0.185	0.0361	0.13
1/16/2019		0.0492						
1/17/2019	0.0714							
1/30/2019			0.00776 (J)					
9/10/2019	0.0554						0.0294	
9/11/2019		0.0369	0.00323 (J)		0.0581	0.173		0.1
4/20/2020							0.0282	
4/21/2020		0.0473						
4/22/2020	0.0578		0.0027 (J)	0.0248	0.0607	0.192		
4/29/2020								0.0998
8/11/2020			0.00393 (J)			0.177		
8/12/2020	0.0467						0.0295	
8/18/2020		0.033						0.0879
8/19/2020				0.0591	0.0678			
3/9/2021			0.00297			0.206		
3/10/2021					0.0719		0.0322	
3/15/2021	0.0532							0.116
3/16/2021		0.04		0.0347				
8/23/2021	0.0478							
8/24/2021		0.0336	0.00261	0.037	0.0872	0.213		
8/25/2021							0.0296	0.128
3/28/2022	0.0481							
3/29/2022				0.0235				
3/30/2022			0.00372		0.0702		0.0277	
4/6/2022		0.0385				0.178		0.145

Time Series

Constituent: Barium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.162							
1/16/2019		0.12	0.131					
9/11/2019	0.123	0.127	0.0797					
4/20/2020			0.0594	0.0898				
4/21/2020	0.108	0.156					0.028	0.0437
5/28/2020						0.0267		
7/6/2020					0.0613			
8/11/2020					0.0653	0.0204		
8/12/2020			0.0589					
8/17/2020				0.0632			0.027	
8/19/2020	0.119	0.168						0.0394
3/8/2021					0.0523	0.0229		
3/9/2021	0.135	0.211						
3/10/2021			0.064	0.0543			0.0281	0.0406
8/17/2021					0.0563	0.0297		
8/18/2021	0.145	0.187		0.0942			0.0239	0.0492
8/23/2021			0.0596					
3/23/2022					0.0595	0.0332		
3/29/2022				0.0534				
3/30/2022							0.0253	0.0642
4/4/2022			0.0482					
4/6/2022	0.147	0.168						

Time Series

Constituent: Barium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.397							
4/12/2016	0.434							
5/31/2016	0.354							
8/17/2016	0.397							
10/11/2016	0.485							
1/24/2017	0.472							
5/9/2017	0.512							
6/28/2017	0.48							
2/27/2018	0.269							
6/5/2018	0.27							
11/6/2018	0.306							
3/27/2019	0.251							
9/11/2019	0.323							
4/20/2020				0.278	0.259		0.0771	
4/21/2020	0.138							
5/28/2020		0.0701				0.0389		0.127
7/6/2020			0.129					
8/11/2020		0.064	0.116	0.246		0.0337		0.0909
8/12/2020	0.134				0.221		0.0796	
3/8/2021		0.0685	0.131					
3/9/2021						0.0404		0.0795
3/10/2021				0.393	0.19		0.103	
3/16/2021	0.143							
8/16/2021			0.129					
8/17/2021		0.0707				0.0317		0.0669
8/23/2021	0.139			0.377	0.2		0.084	
3/23/2022		0.0762	0.149			0.0352		0.0627
4/4/2022	0.131							
4/5/2022					0.18		0.088	
4/6/2022				0.382				

Time Series

Constituent: Barium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								0.117
2/17/2016	0.0455						0.0772	
4/12/2016	0.0455							
4/13/2016							0.0886	0.113
5/31/2016	0.0407						0.0823	
6/1/2016								0.105
8/17/2016	0.0434						0.0789	0.105
10/11/2016	0.0514							
10/12/2016							0.0883	0.111
1/24/2017	0.0476							
1/25/2017							0.067	0.0963
5/10/2017	0.0543						0.0644	0.103
6/28/2017	0.0402						0.0582	0.0935
2/27/2018	0.0463						0.0669	0.0808
6/5/2018	0.051						0.0672	0.0789
11/7/2018	0.0527						0.0739	0.0855
3/26/2019	0.0682						0.0796	0.0911
9/10/2019	0.0789						0.0887	0.11
4/21/2020	0.0728						0.0762	0.116
8/19/2020	0.0784						0.0816	0.119
3/9/2021	0.0664						0.083	0.15
8/17/2021		0.0379	0.0383	0.0727	0.0597	0.0762		
8/24/2021	0.0737						0.0782	0.122
3/23/2022		0.0338	0.0411	0.0807	0.0498	0.094		
3/29/2022	0.0614						0.0639	0.104

Time Series

Constituent: Barium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.0637	
4/13/2016	0.0552	
6/1/2016	0.0555	
8/17/2016	0.0745	
10/12/2016	0.0897	
1/25/2017	0.0864	
5/10/2017	0.105	
6/28/2017	0.0897	
2/27/2018	0.118	
6/5/2018	0.111	
11/7/2018	0.141	
3/26/2019	0.175	
9/10/2019	0.206	0.0787
4/20/2020		0.0801
4/21/2020	0.175	
8/17/2020		0.0718
8/18/2020	0.165	
3/9/2021	0.16	
3/10/2021		0.0759
8/17/2021		0.0781
8/24/2021	0.168	
3/29/2022	0.139	
4/5/2022		0.0665

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.00102		<0.00102	<0.00102	<0.00102		
2/17/2016	<0.00102		<0.00102				<0.00102	<0.00102
4/12/2016					<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
6/1/2016	<0.00102							<0.00102
8/15/2016	<0.00102							<0.00102
8/16/2016		<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.00102						<0.00102	
10/12/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
1/24/2017	<0.00102						<0.00102	<0.00102
1/25/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
5/9/2017	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	<0.00102						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
2/27/2018	<0.00102	<0.00102	<0.00102			<0.00102		
2/28/2018				<0.00102	<0.00102		<0.00102	<0.00102
6/4/2018	<0.00102							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	<0.00102	<0.00102		
11/5/2018			<0.00102	<0.00102	<0.00102			
11/6/2018	<0.00102						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				<0.00102	<0.00102		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					<0.00102			
4/20/2020					<0.00102		<0.00102	<0.00102
4/21/2020	<0.00102			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.00102							
8/18/2020		<0.00102	<0.00102	<0.00102	<0.00102			
3/9/2021						<0.00102		<0.00102
3/10/2021			<0.00102	<0.00102			<0.00102	
3/15/2021		<0.00102			<0.00102			
3/16/2021	<0.00102							
8/17/2021	<0.00102							<0.00102
8/24/2021		<0.00102						
8/25/2021			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
3/29/2022				<0.00102			<0.00102	
3/30/2022			<0.00102					
4/4/2022	<0.00102	<0.00102				<0.00102		
4/6/2022					<0.00102			<0.00102

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
4/12/2016		<0.00102			<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.00102	<0.00102		
8/17/2016							<0.00102	0.00161 (J)
9/20/2016								0.00155 (J)
10/11/2016			<0.00102		<0.00102	<0.00102	0.000715 (J)	
10/12/2016	<0.00102	<0.00102		<0.00102				0.00138 (J)
11/15/2016								0.00109 (J)
1/4/2017								0.00141 (J)
1/23/2017								0.00171 (J)
1/24/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
1/25/2017				<0.00102				
5/9/2017			<0.00102	<0.00102	<0.00102		<0.00102	0.00226 (J)
5/10/2017	<0.00102	<0.00102				<0.00102		
6/27/2017	<0.00102	<0.00102			<0.00102			0.0017 (J)
6/28/2017			<0.00102	<0.00102		<0.00102	<0.00102	
2/27/2018			<0.00102		<0.00102	<0.00102		0.00147 (J)
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.00102	<0.00102		0.000821 (J)
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	0.000757 (J)
11/7/2018					<0.00102	<0.00102		
3/26/2019	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102		0.00092 (J)
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.00102	<0.00102	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			0.000756 (J)
4/22/2020						<0.00102	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.00102	<0.00102		
8/17/2020			<0.00102					
8/18/2020				<0.00102				0.000828 (J)
3/9/2021	<0.00102	<0.00102						
3/10/2021				<0.00102	<0.00102	<0.00102	<0.00102	
3/15/2021								0.000453 (J)
3/16/2021			<0.00102					
8/17/2021	<0.00102	<0.00102	<0.00102					
8/18/2021								0.00041 (J)
8/24/2021					<0.00102	<0.00102	<0.00102	
8/25/2021				<0.00102				
3/28/2022			<0.00102		<0.00102			
3/29/2022							<0.00102	
3/30/2022				<0.00102				
4/4/2022	<0.00102					<0.00102		<0.00102
4/6/2022		<0.00102						

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.00102				
4/12/2016				<0.00102				
6/1/2016				<0.00102				
8/15/2016				<0.00102				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	<0.00102				<0.00102			
1/24/2017		<0.00102		<0.00102		<0.00102	<0.00102	
1/25/2017								<0.00102
1/26/2017			<0.00102					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.00102				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.00102				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/26/2019	<0.00102	<0.00102	<0.00102		<0.00102			
3/27/2019				<0.00102		<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.00102				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.00102				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
3/16/2021				<0.00102				
8/17/2021				<0.00102				
8/18/2021	<0.00102	<0.00102	<0.00102		<0.00102			
8/23/2021						<0.00102	<0.00102	<0.00102
3/28/2022	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/5/2022				<0.00102				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.00102			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		<0.00102						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		<0.00102	<0.00102		<0.00102	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		<0.00102						
4/22/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		<0.00102						<0.00102
8/19/2020				<0.00102	<0.00102			
3/9/2021			<0.00102			<0.00102		
3/10/2021					<0.00102		<0.00102	
3/15/2021	<0.00102							<0.00102
3/16/2021		<0.00102		<0.00102				
8/23/2021	<0.00102							
8/24/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/25/2021							<0.00102	<0.00102
3/28/2022	<0.00102							
3/29/2022				<0.00102				
3/30/2022			<0.00102		<0.00102		<0.00102	
4/6/2022		<0.00102				<0.00102		<0.00102

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	<0.00102	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	<0.00102	<0.00102						
3/10/2021			<0.00102	<0.00102			<0.00102	<0.00102
8/17/2021					<0.00102	<0.00102		
8/18/2021	<0.00102	<0.00102		<0.00102			<0.00102	<0.00102
8/23/2021			<0.00102					
3/23/2022					<0.00102	<0.00102		
3/29/2022				<0.00102				
3/30/2022							<0.00102	<0.00102
4/4/2022			<0.00102					
4/6/2022	<0.00102	<0.00102						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	<0.00102							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		0.000799 (J)
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		<0.00102	<0.00102					
3/9/2021						<0.00102		<0.00102
3/10/2021				<0.00102	<0.00102		<0.00102	
3/16/2021	<0.00102							
8/16/2021			<0.00102					
8/17/2021		<0.00102				<0.00102		<0.00102
8/23/2021	<0.00102			<0.00102	<0.00102		<0.00102	
3/23/2022		<0.00102	<0.00102			<0.00102		<0.00102
4/4/2022	<0.00102							
4/5/2022					<0.00102		<0.00102	
4/6/2022				<0.00102				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	<0.00102							
1/25/2017							<0.00102	<0.00102
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	<0.00102						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	<0.00102						<0.00102	<0.00102
8/17/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/24/2021	<0.00102						<0.00102	<0.00102
3/23/2022		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
3/29/2022	<0.00102						<0.00102	<0.00102

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	<0.00102	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.00102
4/20/2020		<0.00102
4/21/2020	<0.00102	
8/17/2020		<0.00102
8/18/2020	<0.00102	
3/9/2021	<0.00102	
3/10/2021		<0.00102
8/17/2021		<0.00102
8/24/2021	<0.00102	
3/29/2022	<0.00102	
4/5/2022		<0.00102

Time Series

Constituent: Boron (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		1.44		0.273	0.26	0.739		
2/17/2016	0.219		0.581				0.454	1.47
4/12/2016					0.26	0.733	0.444	
4/13/2016	0.211	0.373	0.61	0.276				1.48
5/31/2016		1.26	0.615	0.291	0.318	0.603	0.424	
6/1/2016	0.2							1.22
8/15/2016	0.211							1.31
8/16/2016		1.34	0.554	0.268	0.322		0.438	
8/17/2016						0.509		
10/11/2016	0.23						0.456	
10/12/2016		1.34	0.537	0.252	0.244	0.569		1.37
1/24/2017	0.218						0.458	1.38
1/25/2017		1.38	0.562	0.167	0.188	0.671		
5/9/2017	0.235		0.528	0.32	0.281	0.622		
5/10/2017		1.23					0.486	1.41
6/27/2017	0.206						0.454	1.43
6/28/2017		1.05	0.313	0.231	0.153	0.695		
8/29/2017		1.17	0.241	0.191	0.112	1		
8/30/2017	0.138						0.441	1.36
6/4/2018	0.242							
6/5/2018		1.31	0.311				0.543	1.36
6/6/2018				0.26	0.244	1.01		
11/5/2018			0.262	0.127	0.104			
11/6/2018	0.247						0.614	1.47
11/7/2018		1.26				0.908		
3/26/2019				0.111	0.213		0.697	1.38
3/27/2019	0.488	1.11	0.298			1.33		
9/10/2019	0.398	1.27	0.141	0.153		1.49	0.73	1.69
9/11/2019					0.535			
4/20/2020					0.642		0.791	1.83
4/21/2020	0.347			0.872		1.55		
4/22/2020		1.23	0.447					
8/11/2020						1.44		1.93
8/12/2020							0.813	
8/17/2020	0.496							
8/18/2020		1.37	0.358	0.748	0.501			
3/9/2021						1.81		1.94
3/10/2021			0.502	0.389			0.825	
3/15/2021		1.79			0.523			
3/16/2021	0.313							
8/17/2021	0.281							1.98
8/24/2021		1.93						
8/25/2021			0.601	0.393	0.438	1.33	0.83	
3/29/2022				0.416			0.848	
3/30/2022			0.472					
4/4/2022	0.269	1.92				1.89		
4/6/2022					0.26			2.17

Time Series

Constituent: Boron (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.286				
2/17/2016	1.66	1.94	0.146		0.0271 (J)	<0.1015	0.0922 (J)	
4/12/2016		2.03			<0.1015	<0.1015	0.0935 (J)	
4/13/2016	1.64		0.125	0.26				
6/1/2016	1.66	1.74	0.114	0.283	<0.1015	<0.1015	0.0826 (J)	
8/15/2016	1.83	1.66	0.128					
8/16/2016				0.292	<0.1015	<0.1015		
8/17/2016							0.092 (J)	<0.1015
9/20/2016								<0.1015
10/11/2016			0.129		0.024 (J)	<0.1015	0.0976 (J)	
10/12/2016	2.12	1.77		0.254				<0.1015
11/15/2016								<0.1015
1/4/2017								<0.1015
1/23/2017								0.0217 (J)
1/24/2017	1.94	1.49	0.124		0.0333 (J)	<0.1015	0.0877 (J)	
1/25/2017				0.133				
5/9/2017			0.121	0.304	<0.1015		0.0953 (J)	<0.1015
5/10/2017	1.99	1.65				<0.1015		
6/27/2017	2.18	1.66			<0.1015			<0.1015
6/28/2017			0.111	0.243		<0.1015	0.0835 (J)	
8/29/2017				0.249	<0.1015	<0.1015	0.0914 (J)	<0.1015
8/30/2017	1.71	1.53	0.0915 (J)					
6/4/2018			0.134					
6/5/2018	1.76	1.36			<0.1015	<0.1015		<0.1015
6/6/2018				0.245			0.102	
11/5/2018				0.151				
11/6/2018	1.74	1.48	0.131				0.0995 (J)	<0.1015
11/7/2018					<0.1015	<0.1015		
3/26/2019	1.74	1.63		0.0834 (J)	<0.1015	<0.1015		<0.1015
3/27/2019			0.138				0.113	
9/9/2019	2.33	1.73	0.157					
9/10/2019				0.16	<0.1015	<0.1015	0.105	
9/11/2019								<0.1015
4/21/2020	1.97	1.51	0.14	0.586	<0.1015			<0.1015
4/22/2020						<0.1015	0.104	
8/11/2020	2.03						0.11	
8/12/2020		1.53			<0.1015	<0.1015		
8/17/2020			0.152					
8/18/2020				0.211				<0.1015
3/9/2021	2.45	1.52						
3/10/2021				0.528	<0.1015	<0.1015	0.146	
3/15/2021								<0.1015
3/16/2021			0.134					
8/17/2021	2.18	1.45	0.131					
8/18/2021								<0.1015
8/24/2021					<0.1015	<0.1015	0.115	
8/25/2021				0.288				
3/28/2022			0.125		<0.1015			
3/29/2022							0.122	
3/30/2022				0.696				
4/4/2022	2.32					<0.1015		<0.1015
4/6/2022		1.6						

Time Series

Constituent: Boron (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.0288 (J)				
4/12/2016				0.0293 (J)				
6/1/2016				0.0279 (J)				
8/15/2016				0.0332 (J)				
8/16/2016			<0.1015		<0.1015	<0.1015	<0.1015	0.0268 (J)
8/17/2016	<0.1015	<0.1015						
9/19/2016						<0.1015	<0.1015	0.0225 (J)
9/20/2016	<0.1015	<0.1015	<0.1015		<0.1015			
10/11/2016			<0.1015	0.0328 (J)	<0.1015	<0.1015	<0.1015	0.0304 (J)
10/12/2016	0.02 (J)	<0.1015						
11/14/2016						<0.1015	<0.1015	0.0355 (J)
11/15/2016	<0.1015	<0.1015	0.0229 (J)		<0.1015			
1/3/2017						<0.1015	<0.1015	0.0304 (J)
1/4/2017	<0.1015	<0.1015	<0.1015		<0.1015			
1/23/2017	0.0287 (J)				<0.1015			
1/24/2017		0.0331 (J)		0.0262 (J)		0.0282 (J)	<0.1015	
1/25/2017								<0.1015
1/26/2017			<0.1015					
5/9/2017	<0.1015	<0.1015	<0.1015	0.0298 (J)	<0.1015			
5/10/2017						<0.1015	<0.1015	<0.1015
6/27/2017	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
6/28/2017				0.0226 (J)				
8/29/2017	<0.1015							
8/30/2017		<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
6/4/2018				0.0296 (J)				
6/5/2018	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
11/5/2018							<0.1015	
11/6/2018	<0.1015	<0.1015	<0.1015	0.0268 (J)	<0.1015	<0.1015		<0.1015
3/26/2019	<0.1015	<0.1015	<0.1015		<0.1015			
3/27/2019				0.0316 (J)		<0.1015	<0.1015	<0.1015
9/9/2019				0.035 (J)				
9/11/2019	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
4/20/2020				<0.1015				
4/21/2020	<0.1015	<0.1015	<0.1015		<0.1015			
4/22/2020						<0.1015	<0.1015	<0.1015
8/11/2020						<0.1015		
8/12/2020							<0.1015	<0.1015
8/17/2020				0.0636 (J)				
8/18/2020	<0.1015	<0.1015	<0.1015		<0.1015			
3/15/2021	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
3/16/2021				0.0445 (J)				
8/17/2021				0.0518 (J)				
8/18/2021	<0.1015	<0.1015	<0.1015		<0.1015			
8/23/2021						<0.1015	<0.1015	<0.1015
3/28/2022	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
4/5/2022				0.0453 (J)				

Time Series

Constituent: Boron (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.148			
1/15/2019				0.224		1.68	0.702	0.762
1/16/2019		0.0284 (J)						
1/17/2019	<0.1015							
1/30/2019			0.164					
9/10/2019	<0.1015						0.734	
9/11/2019		<0.1015	0.147		0.175	1.67		0.758
4/20/2020							0.821	
4/21/2020		<0.1015						
4/22/2020	<0.1015		0.143	0.186	0.118	1.89		
4/29/2020								0.699
8/11/2020			0.145			1.84		
8/12/2020	<0.1015						0.807	
8/18/2020		<0.1015						0.689
8/19/2020				0.229	0.135			
3/9/2021			0.159			1.81		
3/10/2021					0.104		0.807	
3/15/2021	<0.1015							0.659
3/16/2021		<0.1015		0.159				
8/23/2021	<0.1015							
8/24/2021		<0.1015	0.139	0.179	0.105	2		
8/25/2021							0.627	0.632
3/28/2022	<0.1015							
3/29/2022				0.157				
3/30/2022			0.145		0.102		0.506	
4/6/2022		<0.1015				2.21		0.607

Time Series

Constituent: Boron (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	1.73							
1/16/2019		0.835	0.173					
9/11/2019	1.88	1.07	0.199					
4/20/2020			0.2	0.426				
4/21/2020	1.76	1.08					0.172	0.272
5/28/2020						0.143		
7/6/2020					0.274			
8/11/2020					0.252	0.0903 (J)		
8/12/2020			0.197					
8/17/2020				0.57			0.218	
8/19/2020	1.26	1.15						0.213
3/8/2021					0.658	0.0769 (J)		
3/9/2021	1.26	1.14						
3/10/2021			0.218	0.625			0.188	0.224
8/17/2021					0.392	0.105		
8/18/2021	1.03	1.23		0.646			0.131	0.157
8/23/2021			0.208					
3/23/2022					0.355	0.159		
3/29/2022				0.567				
3/30/2022							0.0985 (J)	0.33
4/4/2022			0.202					
4/6/2022	1.46	1.29						

Time Series

Constituent: Boron (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.478							
4/12/2016	0.467							
5/31/2016	0.443							
8/17/2016	0.477							
10/11/2016	0.489							
1/24/2017	0.475							
5/9/2017	0.479							
6/28/2017	0.448							
8/30/2017	0.407							
6/5/2018	0.489							
11/6/2018	0.508							
3/27/2019	0.502							
9/11/2019	0.595							
4/20/2020				0.309	0.626		0.252	
4/21/2020	0.72							
5/28/2020		0.343				0.0435 (J)		0.208
7/6/2020			1.2					
8/11/2020		0.329	1.25	0.493		0.0406 (J)		0.209
8/12/2020	0.695				0.76		0.338	
3/8/2021		0.302	1.25					
3/9/2021						0.0397 (J)		0.192
3/10/2021				0.338	0.53		0.126	
3/16/2021	0.694							
8/16/2021			1.35					
8/17/2021		0.281				<0.1015		0.192
8/23/2021	0.628			0.517	0.458		0.211	
3/23/2022		0.508	1.33			0.0337 (J)		0.197
4/4/2022	0.615							
4/5/2022					0.462		0.104	
4/6/2022				0.329				

Time Series

Constituent: Boron (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								1.54
2/17/2016	2.12						0.503	
4/12/2016	2.06							
4/13/2016							0.478	1.56
5/31/2016	1.97						0.452	
6/1/2016								1.49
8/17/2016	2.01						0.492	1.57
10/11/2016	1.91							
10/12/2016							0.487	1.65
1/24/2017	1.62							
1/25/2017							0.529	1.89
5/10/2017	1.62						0.533	1.94
6/28/2017	1.71						0.501	1.72
8/29/2017	1.7						0.51	1.63
6/5/2018	1.56						0.605	1.73
11/7/2018	1.6						0.677	1.8
3/26/2019	1.63						0.727	1.81
9/10/2019	1.83						0.764	1.82
4/21/2020	1.77						0.793	1.89
8/19/2020	1.86						0.561	1.94
3/9/2021	1.49						0.397	1.57
8/17/2021		<0.1015	<0.1015	<0.1015	<0.1015	0.571		
8/24/2021	1.36						0.216	1.23
3/23/2022		<0.1015	<0.1015	0.0339 (J)	0.0339 (J)	0.567		
3/29/2022	1.39						0.0842 (J)	1.08

Time Series

Constituent: Boron (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.412	
4/13/2016	0.376	
6/1/2016	0.338	
8/17/2016	0.412	
10/12/2016	0.46	
1/25/2017	0.586	
5/10/2017	0.661	
6/28/2017	0.673	
8/29/2017	0.723	
6/5/2018	0.954	
11/7/2018	1.11	
3/26/2019	1.14	
9/10/2019	1.23	0.293
4/20/2020		0.308
4/21/2020	1.27	
8/17/2020		0.344
8/18/2020	1.24	
3/9/2021	1.12	
3/10/2021		0.338
8/17/2021		0.296
8/24/2021	1.14	
3/29/2022	0.71	
4/5/2022		0.351

Time Series

Constituent: Cadmium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0002		<0.0002	<0.0002	<0.0002		
2/17/2016	<0.0002		<0.0002				<0.0002	<0.0002
4/12/2016					<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002	<0.0002	<0.0002	<0.0002				<0.0002
5/31/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
6/1/2016	<0.0002							<0.0002
8/15/2016	<0.0002							<0.0002
8/16/2016		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	
8/17/2016						<0.0002		
10/11/2016	<0.0002						<0.0002	
10/12/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
1/24/2017	<0.0002						<0.0002	<0.0002
1/25/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
5/9/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
5/10/2017		<0.0002					<0.0002	<0.0002
6/27/2017	<0.0002						<0.0002	<0.0002
6/28/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/27/2018	<0.0002	<0.0002	<0.0002			<0.0002		
2/28/2018				<0.0002	<0.0002		<0.0002	<0.0002
6/4/2018	<0.0002							
6/5/2018		<0.0002	<0.0002				<0.0002	<0.0002
6/6/2018				<0.0002	<0.0002	<0.0002		
11/5/2018			<0.0002	<0.0002	<0.0002			
11/6/2018	<0.0002						<0.0002	<0.0002
11/7/2018		<0.0002				<0.0002		
3/26/2019				<0.0002	<0.0002		<0.0002	<0.0002
3/27/2019	<0.0002	<0.0002	<0.0002			<0.0002		
9/10/2019	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
9/11/2019					<0.0002			
4/20/2020					<0.0002		<0.0002	<0.0002
4/21/2020	<0.0002			<0.0002		<0.0002		
4/22/2020		<0.0002	<0.0002					
8/11/2020						<0.0002		<0.0002
8/12/2020							<0.0002	
8/17/2020	<0.0002							
8/18/2020		<0.0002	<0.0002	<0.0002	<0.0002			
3/9/2021						<0.0002		<0.0002
3/10/2021			0.000347	<0.0002			0.00012 (J)	
3/15/2021		<0.0002			<0.0002			
3/16/2021	<0.0002							
8/17/2021	<0.0002							<0.0002
8/24/2021		<0.0002						
8/25/2021			<0.0002	<0.0002	<0.0002	<0.0002	0.00014 (J)	
3/29/2022				<0.0002			0.00046	
3/30/2022			<0.0002					
4/4/2022	<0.0002	<0.0002				<0.0002		
4/6/2022					8E-05 (J)			<0.0002

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002		<0.0002	<0.0002				
6/1/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/15/2016	<0.0002	<0.0002	<0.0002					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.0002		<0.0002	<0.0002	<0.0002	
10/12/2016	<0.0002	<0.0002		<0.0002				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
1/25/2017				<0.0002				
5/9/2017			<0.0002	<0.0002	<0.0002		<0.0002	0.000706 (J)
5/10/2017	<0.0002	<0.0002				<0.0002		
6/27/2017	<0.0002	<0.0002			<0.0002			0.000429 (J)
6/28/2017			<0.0002	<0.0002		<0.0002	<0.0002	
2/27/2018			<0.0002		<0.0002	<0.0002		<0.0002
2/28/2018	<0.0002	<0.0002		<0.0002			<0.0002	
6/4/2018			<0.0002					
6/5/2018	<0.0002	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.0002	
11/5/2018				<0.0002				
11/6/2018	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			<0.0002				<0.0002	
9/9/2019	<0.0002	<0.0002	<0.0002					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	<0.0002						<0.0002	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.0002					
8/18/2020				<0.0002				<0.0002
3/9/2021	<0.0002	<0.0002						
3/10/2021				7.02E-05 (J)	<0.0002	<0.0002	<0.0002	
3/15/2021								<0.0002
3/16/2021			0.00013 (J)					
8/17/2021	<0.0002	<0.0002	<0.0002					
8/18/2021								<0.0002
8/24/2021					<0.0002	<0.0002	9E-05 (J)	
8/25/2021				<0.0002				
3/28/2022			0.00012 (J)		<0.0002			
3/29/2022							7E-05 (J)	
3/30/2022				7E-05 (J)				
4/4/2022	<0.0002					<0.0002		<0.0002
4/6/2022		<0.0002						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0002				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/17/2016	0.000211 (J)	0.000742 (J)						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	0.000857 (J)	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	0.000912 (J)						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	0.000216 (J)	0.000821 (J)	<0.0002		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	0.000718 (J)	<0.0002		<0.0002			
1/23/2017	0.000231 (J)				<0.0002			
1/24/2017		0.000716 (J)		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			0.000228 (J)					
5/9/2017	<0.0002	0.000746 (J)	0.000277 (J)	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	0.00065 (J)	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	0.000752 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	0.000731 (J)	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	0.000646 (J)	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	0.000582 (J)	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	0.000573 (J)	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	0.00052 (J)	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	0.000476 (J)	<0.0002		<0.0002			
3/15/2021	0.0001 (J)	0.000536	0.000204		8.19E-05 (J)	<0.0002	<0.0002	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	0.00018 (J)	0.00042	0.00019 (J)		8E-05 (J)			
8/23/2021						<0.0002	<0.0002	<0.0002
3/28/2022	0.00018 (J)	0.00043	0.00016 (J)		<0.0002	<0.0002	<0.0002	<0.0002
4/5/2022				<0.0002				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		<0.0002	<0.0002	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.0002					
9/10/2019	<0.0002						<0.0002	
9/11/2019		<0.0002	<0.0002		<0.0002	<0.0002		<0.0002
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
4/29/2020								<0.0002
8/11/2020			<0.0002			<0.0002		
8/12/2020	<0.0002						<0.0002	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			<0.0002			<0.0002		
3/10/2021					<0.0002		0.000171 (J)	
3/15/2021	<0.0002							<0.0002
3/16/2021		<0.0002		<0.0002				
8/23/2021	<0.0002							
8/24/2021		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
8/25/2021							8E-05 (J)	<0.0002
3/28/2022	<0.0002							
3/29/2022				<0.0002				
3/30/2022			<0.0002		<0.0002		0.00018 (J)	
4/6/2022		<0.0002				<0.0002		<0.0002

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0002							
1/16/2019		<0.0002	<0.0002					
9/11/2019	<0.0002	<0.0002	<0.0002					
4/20/2020			<0.0002	<0.0002				
4/21/2020	<0.0002	<0.0002					<0.0002	<0.0002
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			<0.0002					
8/17/2020				<0.0002			<0.0002	
8/19/2020	<0.0002	<0.0002						0.000334 (J)
3/8/2021					<0.0002	<0.0002		
3/9/2021	0.000682	<0.0002						
3/10/2021			0.000411	<0.0002			<0.0002	0.00017 (J)
8/17/2021					0.0001 (J)	<0.0002		
8/18/2021	9E-05 (J)	<0.0002		<0.0002			7E-05 (J)	0.00021
8/23/2021			0.00032					
3/23/2022					<0.0002	<0.0002		
3/29/2022				<0.0002				
3/30/2022							<0.0002	0.00029
4/4/2022			0.0003					
4/6/2022	0.00024	<0.0002						

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.0002							
4/12/2016	<0.0002							
5/31/2016	<0.0002							
8/17/2016	<0.0002							
10/11/2016	<0.0002							
1/24/2017	<0.0002							
5/9/2017	<0.0002							
6/28/2017	<0.0002							
2/27/2018	<0.0002							
6/5/2018	<0.0002							
11/6/2018	<0.0002							
3/27/2019	<0.0002							
9/11/2019	<0.0002							
4/20/2020				<0.0002	<0.0002		<0.0002	
4/21/2020	<0.0002							
5/28/2020		<0.0002				<0.0002		<0.0002
7/6/2020			0.000366 (J)					
8/11/2020		<0.0002	0.00042 (J)	<0.0002		<0.0002		<0.0002
8/12/2020	<0.0002				<0.0002		<0.0002	
3/8/2021		0.000287	0.000227					
3/9/2021						<0.0002		7.08E-05 (J)
3/10/2021				<0.0002	<0.0002		<0.0002	
3/16/2021	<0.0002							
8/16/2021			0.00022					
8/17/2021		0.00024				<0.0002		<0.0002
8/23/2021	<0.0002			<0.0002	<0.0002		<0.0002	
3/23/2022		0.00037	0.00014 (J)			<0.0002		0.00012 (J)
4/4/2022	<0.0002							
4/5/2022					<0.0002		<0.0002	
4/6/2022				<0.0002				

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	0.00278						<0.0002	0.000241
8/17/2021		<0.0002	<0.0002	<0.0002	0.00012 (J)	<0.0002		
8/24/2021	0.00018 (J)						<0.0002	<0.0002
3/23/2022		<0.0002	<0.0002	7E-05 (J)	0.0001 (J)	0.00013 (J)		
3/29/2022	0.0005						<0.0002	<0.0002

Time Series

Constituent: Cadmium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.0002
4/20/2020		<0.0002
4/21/2020	<0.0002	
8/17/2020		<0.0002
8/18/2020	<0.0002	
3/9/2021	<0.0002	
3/10/2021		<0.0002
8/17/2021		<0.0002
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		8E-05 (J)

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		76.3		34.6	29.8	44.4		
2/17/2016	204		18.6				47.7	57
4/12/2016					23.3	43.2	44.4	
4/13/2016	152	30.5	17.8	32.2				62.5
5/31/2016		65.9	17.7	28.8	25.9	43	45.3	
6/1/2016	183							54.4
8/15/2016	197							56.2
8/16/2016		65.6	18.4	24	25.5		49.4	
8/17/2016						35.9		
10/11/2016	186						52.7	
10/12/2016		63.4	17.3	27.8	29.5	31.1		56.6
1/24/2017	193						49.4	59.1
1/25/2017		64.2	16.6	33.7	33.6	42.7		
5/9/2017	184		18	35.5	30.4	48.1		
5/10/2017		62.6					47.4	62.5
6/27/2017	184						44.9	63.6
6/28/2017		60.8	22.6	28	26	55		
8/29/2017		61.4	23.9	26.4	22.3	83.6		
8/30/2017	182						44.4	65.7
6/4/2018	157							
6/5/2018		65.5	25.7				45.1	66.8
6/6/2018				30.1	23.7	167		
9/10/2018	219		27.2					
9/11/2018		66.1		27.4	26.8		48.5	
9/12/2018						109		76.3
11/5/2018			24.1	28.8	29.4			
11/6/2018	186						49.2	77.4
11/7/2018		68.5				105		
3/26/2019				33.7	34.1		54	90
3/27/2019	73.8	71.8	31			162		
9/10/2019	147	69.3	27.7	30.5		125	57.2	86.3
9/11/2019					53.9			
4/20/2020					40.3		61	90.8
4/21/2020	90.5			51		113		
4/22/2020		62.9	36.7					
8/11/2020						118		101
8/12/2020							72.2	
8/17/2020	81.5							
8/18/2020		74.4	37.6	42.9	95.3			
3/9/2021						115		101
3/10/2021			39.9	55.1			67.4	
3/15/2021		73.8			68.9			
3/16/2021	109							
8/17/2021	103							103
8/24/2021		83.4						
8/25/2021			57.6	45.2	74.2	134	74.8	
3/29/2022				52			75.7	
3/30/2022			39.6					
4/4/2022	106	93.7				117		
4/6/2022					55.5			101

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				40.4				
2/17/2016	30.7	89.6	75		38.7	6.54	10.2	
4/12/2016		96.2			42.7	6.15	10	
4/13/2016	39.5		70.2	32.2				
6/1/2016	47.7	90.2	71.2	29.3	41.8	5.7	9.87	
8/15/2016	45.6	84.4	72.2					
8/16/2016				25.4	40.9	6.77		
8/17/2016							8.88	5.88
9/20/2016								5.95
10/11/2016			73.8		38.1	8.84	9.22	
10/12/2016	57.6	82.9		30.7				6.1
11/15/2016								6.28
1/4/2017								4.97
1/23/2017								5.17
1/24/2017	69.4	76.4	72.2		27.7	12.8	8.72	
1/25/2017				36.8				
5/9/2017			66.4	36.1	29.3		8.56	15.7
5/10/2017	66.2	77.4				12.4		
6/27/2017	63.8	75.4			28.6			14.2
6/28/2017			65.4	26.9		17.9	7.16	
8/29/2017				29.4	32.3	19	8.32	11.1
8/30/2017	75.1	78	67.8					
6/4/2018			68.3					
6/5/2018	77.4	66.3			34.5	30		3.93
6/6/2018				30.2			9.05	
9/10/2018			73.9	28.8				
9/11/2018					32	28.7		3.76
9/12/2018	58.9	67.8					8.98	
11/5/2018				29.7				
11/6/2018	81.6	72.7	75.1				9.21	4.81
11/7/2018					30.3	30.7		
3/26/2019	84.7	91.5		32.4	31.3	32.3		3.18
3/27/2019			96.1				9.77	
9/9/2019	66.4	83.2	111					
9/10/2019				28.4	30.7	32.8	9.28	
9/11/2019								3.98
4/21/2020	74.4	81.8	133	43.1	30.8			3.83
4/22/2020						31.4	11.3	
8/11/2020	73						10.7	
8/12/2020		85.9			28	35.8		
8/17/2020			156					
8/18/2020				25.5				4.58
3/9/2021	118	82						
3/10/2021				44.9	26.6	42.8	29.3	
3/15/2021								4.67
3/16/2021			145					
8/17/2021	78.3	77.4	143					
8/18/2021								4.84
8/24/2021					26.3	36.5	25.9	
8/25/2021				31				
3/28/2022			157		26			
3/29/2022							31.9	

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/30/2022				51				
4/4/2022	104					37		6.7
4/6/2022		96.1						

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				106				
4/12/2016				95.2				
6/1/2016				86.1				
8/15/2016				89.7				
8/16/2016			2.02		1.24	39.5	9.33	5.54
8/17/2016	1.1	7.74						
9/19/2016						34.5	9.26	3.01
9/20/2016	0.771	2.43	1.22		1.11			
10/11/2016			1.48	90.6	1.22	32.4	9.31	2.74
10/12/2016	0.711	2.46						
11/14/2016						26.5	9.17	2.47
11/15/2016	0.641	2.28	1.36		1.34			
1/3/2017						22.6	9.66	2.94
1/4/2017	0.797	2.7	1.11		2.39			
1/23/2017	0.655				1.83			
1/24/2017		4.19		94.2		19.5	9.67	
1/25/2017								2.91
1/26/2017			1.03					
5/9/2017	0.538	3.28	0.289 (J)	90.3	0.823			
5/10/2017						15.7	9.81	2.27
6/27/2017	0.413 (J)	3.76	0.292 (J)		0.956	13.8	9.88	2.2
6/28/2017				80.7				
8/29/2017	0.504							
8/30/2017		2.31	0.336 (J)	84	1.04	11.1	10.3	2.26
6/4/2018				98.8				
6/5/2018	0.339 (J)	2.76	0.2 (J)		1.18	9.12	11.4	2.97
9/11/2018	0.776	2.04	0.171 (J)		1.5	7.5	10.5	2.6
9/12/2018				109				
11/5/2018							10.5	
11/6/2018	0.746	2	0.193 (J)	110	1.64	7.39		2.42
3/26/2019	0.526	2.13	0.223 (J)		1.33			
3/27/2019				111		7.65	11.6	2.75
9/9/2019				98.5				
9/11/2019	0.638	1.98	0.158 (J)		0.925	6.96	9.95	2.17
4/20/2020				91.2				
4/21/2020	1.15	2.41	0.287 (J)		0.864			
4/22/2020						5.92	9.87	3.15
8/11/2020						7.46		
8/12/2020							9.48	1.78
8/17/2020				78.9				
8/18/2020	0.884	2.23	0.231 (J)		0.926			
3/15/2021	0.745	1.73	0.239 (J)		0.646	5.9	2.02	9.77
3/16/2021				66.6				
8/17/2021				55.4				
8/18/2021	1.11	1.94	0.283 (J)		0.716			
8/23/2021						7.11	2.16	9.48
3/28/2022	1.37	1.94	0.172 (J)		0.542	5.95	9.61	2.21
4/5/2022				67.4				

Time Series

Constituent: Calcium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					123			
1/15/2019				231		97.6	60.7	115
1/16/2019		19.6						
1/17/2019	25.3							
1/30/2019			2.85					
9/10/2019	12.8						97.5	
9/11/2019		22.2	1.16		84	91.6		72.1
4/20/2020							88.2	
4/21/2020		47.3						
4/22/2020	12		0.941	175	83.9	102		
4/29/2020								70.8
8/11/2020			1.06			111		
8/12/2020	9.68						115	
8/18/2020		22.9						66.7
8/19/2020				143	96			
3/9/2021			0.99			108		
3/10/2021					96.2		109	
3/15/2021	12.6							70.4
3/16/2021		24.9		148				
8/23/2021	11.1							
8/24/2021		21	1.07	143	109	115		
8/25/2021							108	78.3
3/28/2022	10.8							
3/29/2022				118				
3/30/2022			1.01		93.5		96	
4/6/2022		22.5				119		110

Time Series

Constituent: Calcium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	70							
1/16/2019		54.9	174					
9/11/2019	57.2	60.7	179					
4/20/2020			167	64.9				
4/21/2020	56.5	81.4					28.9	36.8
5/28/2020						38.6		
7/6/2020					51.1			
8/11/2020					57.8	15.9		
8/12/2020			173					
8/17/2020				57.2			27.6	
8/19/2020	59.3	99.7						27.4
3/8/2021					47.1	12.9		
3/9/2021	69.5	102						
3/10/2021			159	39.3			22.1	27.3
8/17/2021					55	16.4		
8/18/2021	74.4	106		122			17.9	19.5
8/23/2021			138					
3/23/2022					53.1	21.1		
3/29/2022				110				
3/30/2022							13.4	27.8
4/4/2022			137					
4/6/2022	69.6	110						

Time Series

Constituent: Calcium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	59.8							
4/12/2016	56.1							
5/31/2016	56.6							
8/17/2016	61							
10/11/2016	61.3							
1/24/2017	61							
5/9/2017	61.7							
6/28/2017	66.1							
8/30/2017	78.9							
6/5/2018	64.8							
9/11/2018	72.2							
11/6/2018	78.9							
3/27/2019	69.1							
9/11/2019	90.8							
4/20/2020				93.1	98.8		69.5	
4/21/2020	93							
5/28/2020		40.1				2.61		72.4
7/6/2020			75.6					
8/11/2020		39.5	73.1	92.8		2.43		76.7
8/12/2020	92.2				101		79.1	
3/8/2021		32.7	63.3					
3/9/2021						2.62		60.5
3/10/2021				80.8	92.8		29	
3/16/2021	99.7							
8/16/2021			61.7					
8/17/2021		38.1				1.96		69.8
8/23/2021	87.6			79.2	78.2		41.4	
3/23/2022		38.7	66			2.26		63.2
4/4/2022	98.8							
4/5/2022					95.6		17.8	
4/6/2022				78.5				

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								75.9
2/17/2016	128						158	
4/12/2016	115							
4/13/2016							151	74.1
5/31/2016	118						158	
6/1/2016								76.4
8/17/2016	120						152	74.2
10/11/2016	119							
10/12/2016							150	75.7
1/24/2017	110							
1/25/2017							137	76.1
5/10/2017	104						111	78.6
6/28/2017	98						108	76.4
8/29/2017	108						113	74.1
6/5/2018	121						186	58
9/11/2018	119						209	64.9
11/7/2018	124						175	68.1
3/26/2019	148						193	72
9/10/2019	164						188	91
4/21/2020	142						155	84.8
8/19/2020	162						147	98.6
3/9/2021	119						160	100
8/17/2021		3.97	35.7	20.3	8.92	54.6		
8/24/2021	129						123	86.4
3/23/2022		2.95	22.4	8.23	6.43	63.2		
3/29/2022	128						126	92.8

Time Series

Constituent: Calcium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	33.9	
4/13/2016	32.5	
6/1/2016	33.9	
8/17/2016	50.3	
10/12/2016	53.3	
1/25/2017	59.9	
5/10/2017	66.5	
6/28/2017	69.8	
8/29/2017	72	
6/5/2018	95.1	
9/11/2018	122	
9/12/2018		172
11/7/2018	107	
3/26/2019	132	
9/10/2019	116	160
4/20/2020		147
4/21/2020	111	
8/17/2020		153
8/18/2020	109	
3/9/2021	82.1	
3/10/2021		157
8/17/2021		149
8/24/2021	93.1	
3/29/2022	72.1	
4/5/2022		209

Time Series

Constituent: Chloride (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		18.4		10.8	6.52	16.4		
2/17/2016	16		16.6				11.8	12.5
4/12/2016					4.47	15.9	12.6	
4/13/2016	21.5	19	17	8.2				13.6
5/31/2016		19.2	19	7.74	10.8	13.6	12.9	
6/1/2016	52.5							14.2
8/15/2016	33.3							13.6
8/16/2016		17.7	17	12.5	16.6		10.2	
8/17/2016						12.8		
10/11/2016	22.2						10.2	
10/12/2016		16.8	16.2	15.7	18.5	16.3		13.8
1/24/2017	18.4						11.2	14.2
1/25/2017		18.6	18	24.4	22	16.4		
5/9/2017	30		23	15	10	19		
5/10/2017		22					14	18
6/27/2017	29						14	17
6/28/2017		20	24	12	9.4	17		
8/29/2017		20	15	10	9.3	17		
8/30/2017	23						14	16
6/4/2018	22							
6/5/2018		18	16				13	15
6/6/2018				11	6.1	14		
9/10/2018	22		13					
9/11/2018		19		12	14		14	
9/12/2018						14		17
11/5/2018			13	17	18			
11/6/2018	17						14	15
11/7/2018		19				15		
3/26/2019				14.5	4.7		13	9.27
3/27/2019	18	17.1	14.2			14.9		
9/10/2019	18.1	16.5	8.88	10.9		13.5	12.8	12.7
9/11/2019					12.3			
4/20/2020					4.7		12	12.1
4/21/2020	19.5			9.49		14.8		
4/22/2020		17.6	20.5					
8/11/2020						12.7		12.1
8/12/2020							11.4	
8/17/2020	23.2							
8/18/2020		21.3	16.2	6.46	8.24			
3/9/2021						10.4		12
3/10/2021			17.1	9.3			11.9	
3/15/2021		23.2			7.68			
3/16/2021	16.6							
8/17/2021	34.4							10.4
8/24/2021		22.4						
8/25/2021			14.4	7.43	6.37	11.5	10.3	
3/29/2022				11.8			10.3	
3/30/2022			12.7					
4/4/2022	41.75 (D)	16.8 (D)				9.875 (D)		
4/6/2022					3.71			11.8 (D)

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				9.95				
2/17/2016	14.6	22.3	14.7		1.54	3.3	22.9	
4/12/2016		22.1			1.51	3.25	22.2	
4/13/2016	14.9		14.3	7.33				
6/1/2016	15.9	22	14.6	6.97	1.46	3.55	22.3	
8/15/2016	19.5	22.4	14.7					
8/16/2016				12	1.5	3.45		
8/17/2016							22.1	2.44
9/20/2016								2.54
10/11/2016			14.8		1.52	3.78	21.8	
10/12/2016	18.5	22.1		15.4				2.67
11/15/2016								2.94
1/4/2017								2.92
1/23/2017								3.21
1/24/2017	19	23.2	15		1.38	4.61	21.8	
1/25/2017				24.7				
5/9/2017			16	17	2.4		23	2.5
5/10/2017	24	26				5.9		
6/27/2017	24	25			2.1			3
6/28/2017			15	11		5.7	22	
8/29/2017				12	2.4	6.8	22	3.6
8/30/2017	18	25	15					
6/4/2018			16					
6/5/2018	15	25			1.7 (J)	7.9		2.2
6/6/2018				9.7			20	
9/10/2018			17	12				
9/11/2018					1.5 (J)	6.1		1.5 (J)
9/12/2018	23	23					20	
11/5/2018				16				
11/6/2018	11	26	17				21	2.5
11/7/2018					1.4 (J)	5.2		
3/26/2019	9.52	25.4		17.2	1.23	6.92		2
3/27/2019			14.8				18.4	
9/9/2019	15.4	25.6	14					
9/10/2019				11	1.38	4.39	17.7	
9/11/2019								2.34
4/21/2020	11.1	26.3	12.3	10.1	1.08			2.04
4/22/2020						2.75	17.1	
8/11/2020	15.4						16.7	
8/12/2020		24.5			1.28	4.14		
8/17/2020			13.1					
8/18/2020				5.54				2.16
3/9/2021	14.3	25.2						
3/10/2021				20.4	1.3	3.51	25.3	
3/15/2021								2.83
3/16/2021			11.6					
8/17/2021	14.3	25.1	12.7					
8/18/2021								2.97
8/24/2021					1.19	3.42	25.3	
8/25/2021				10.4				
3/28/2022			11.5		1.09			
3/29/2022							29.6	

Time Series

Constituent: Chloride (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/30/2022				12.1				
4/4/2022	8.06 (D)					3.09		2.93
4/6/2022		24.35 (D)						

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				25.2				
4/12/2016				24.6				
6/1/2016				24.5				
8/15/2016				24.2				
8/16/2016			2.21		2.54	5.32	4.24	4.88
8/17/2016	1.78	1.77						
9/19/2016						5.29	4.13	4.45
9/20/2016	1.61	1.56	2.12		2.51			
10/11/2016			2.24	24.4	2.34	5.26	4.07	4.36
10/12/2016	1.51	1.54						
11/14/2016						5.28	4.08	4.42
11/15/2016	1.5	1.53	6.65		2.1			
1/3/2017						5.18	4.06	5.18
1/4/2017	1.53	1.58	2.15		2.44			
1/23/2017	1.62				2.37			
1/24/2017		1.71		24.6		5.41	4.4	
1/25/2017								5.66
1/26/2017			2.31					
5/9/2017	2.2	2.1	2.3	27	2.8			
5/10/2017						5.8	4.4	8
6/27/2017	1.9 (J)	2	2.1		2.1	5.4	4	7.2
6/28/2017				26				
8/29/2017	2							
8/30/2017		1.5 (J)	2.8	26	3	6	4.8	6.9
6/4/2018				27				
6/5/2018	1.9 (J)	1.2 (J)	1.8 (J)		2.3	5.2	3.8	4.2
9/11/2018	<2	<2	<2		1.5 (J)	5.5	4.1	4.2
9/12/2018				26				
11/5/2018							3.9	
11/6/2018	1.9 (J)	<2	<2	26	1.4 (J)	5.1		4.5
3/26/2019	2.18	1.2	1.07		2.42			
3/27/2019				24.8		5.26	3.9	4.33
9/9/2019				23.8				
9/11/2019	1.7	1.26	1.19		3.72	5.31	4.21	4.16
4/20/2020				24.5				
4/21/2020	1.9	1.32	1.09		3.89			
4/22/2020						5.37	4	5.66
8/11/2020						5.45		
8/12/2020							4.17	4.46
8/17/2020				24.6				
8/18/2020	1.63	1.38	1.05		3.8			
3/15/2021	2.46	1.27	1.25		4.38	5.47	5.57	4.18
3/16/2021				24.4				
8/17/2021				21.3				
8/18/2021	2.45	1.42	1.42		4.46			
8/23/2021						6.37	5.61	4.33
3/28/2022	1.96	1.35	1.24		4.12	6	3.98	5.47
4/5/2022				21.1 (D)				

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					37.9			
1/15/2019				13.4		14.3	13	16.6
1/16/2019		3.1						
1/17/2019	7.87							
1/30/2019			3.04					
9/10/2019	5.54						10.5	
9/11/2019		1.15	3.95		3.82	14.1		16.5
4/20/2020							10.8	
4/21/2020		3.62						
4/22/2020	7.6		4.4	10.3	2.25	12.9		
4/29/2020								16.1
8/11/2020			3.28			7.85		
8/12/2020	2.07						8.34	
8/18/2020		1.12						15.9
8/19/2020				13.9	3.4			
3/9/2021			2.9			8.06		
3/10/2021					2.3		6.74	
3/15/2021	5.81							15.9
3/16/2021		1.91		13				
8/23/2021	4.36							
8/24/2021		2.79	2.91	9.19	4.46	7.38		
8/25/2021							6.66	14.4
3/28/2022	3.52							
3/29/2022				5.57				
3/30/2022			3.04		3.8		5.72	
4/6/2022		1.48				8.39 (D)		13.6

Time Series

Constituent: Chloride (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	19.9							
1/16/2019		26.1	12.3					
9/11/2019	20.7	31.4	11.8					
4/20/2020			12	10.9				
4/21/2020	19.9	40.4					12.3	11.3
5/28/2020						4.92		
7/6/2020					4.5			
8/11/2020					4.27	3.18		
8/12/2020			10.8					
8/17/2020				8.99			11.9	
8/19/2020	18.2	46.9						7.53
3/8/2021					8.51	8.78		
3/9/2021	18.4	41.6						
3/10/2021			11.9	6.5			8.31	7.57
8/17/2021					7.84	8.79		
8/18/2021	17	35.8		9.94			4.07	5.3
8/23/2021			13.1					
3/23/2022					7.84	8.8		
3/29/2022				9.58				
3/30/2022							3.44	8.12
4/4/2022			13.7					
4/6/2022	15.65 (D)	37.7 (D)						

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	16.4							
4/12/2016	16.6							
5/31/2016	16.8							
8/17/2016	16.4							
10/11/2016	15.2							
1/24/2017	15.1							
5/9/2017	17							
6/28/2017	17							
8/30/2017	17							
6/5/2018	15							
9/11/2018	14							
11/6/2018	13							
3/27/2019	16.1							
9/11/2019	11.6							
4/20/2020				23.9	9.74		7.88	
4/21/2020	12.3							
5/28/2020		13.4				6.88		12.1
7/6/2020			103					
8/11/2020		11.2	87.4	21.2		6.21		12.1
8/12/2020	13				10.8		6.3	
3/8/2021		13.7	90					
3/9/2021						5.06		10.4
3/10/2021				19.4	11.5		55.3	
3/16/2021	10.9							
8/16/2021			60.9					
8/17/2021		14.5				4.25		10.8
8/23/2021	11.6			21.1	6.89		8.41	
3/23/2022		17.7	123			4.56		9.19
4/4/2022	9.63							
4/5/2022					8.175 (D)		19.55 (D)	
4/6/2022				8.09 (D)				

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								67.9
2/17/2016	31.8						62.7	
4/12/2016	28.9							
4/13/2016							57.8	64.1
5/31/2016	28.7						55.6	
6/1/2016								66.3
8/17/2016	32.2						53.3	56.7
10/11/2016	34.2							
10/12/2016							51.2	56.1
1/24/2017	38.1							
1/25/2017							44.8	53.6
5/10/2017	41						44	48
6/28/2017	36						45	49
8/29/2017	35						43	52
6/5/2018	32						49	38
9/11/2018	36						52	37
11/7/2018	30						58	41
3/26/2019	31.9						71	39.7
9/10/2019	27.3						67	56.1
4/21/2020	37.4						66.2	69.5
8/19/2020	39.6						123	70.5
3/9/2021	47.5						80.7	106
8/17/2021		4.94	3.13	3.28	3.37	10.9		
8/24/2021	56.6						91.7	90.8
3/23/2022		4.08	2.07	3.19	2.42	16.1		
3/29/2022	45.3						94.7	95.4

Time Series

Constituent: Chloride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	15.6	
4/13/2016	14.3	
6/1/2016	12.6	
8/17/2016	14.4	
10/12/2016	16.4	
1/25/2017	20	
5/10/2017	24	
6/28/2017	25	
8/29/2017	25	
6/5/2018	25	
9/11/2018	26	
9/12/2018		12
11/7/2018	25	
3/26/2019	25.3	
9/10/2019	28	10.9
4/20/2020		9.87
4/21/2020	24.2	
8/17/2020		9.78
8/18/2020	31.4	
3/9/2021	53.9	
3/10/2021		8.48
8/17/2021		8.13
8/24/2021	90.7	
3/29/2022	225	
4/5/2022		7.86 (D)

Time Series

Constituent: Chromium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.00102		<0.00102	<0.00102	<0.00102		
2/17/2016	<0.00102		<0.00102				<0.00102	<0.00102
4/12/2016					<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
6/1/2016	<0.00102							<0.00102
8/15/2016	<0.00102							<0.00102
8/16/2016		<0.00102	<0.00102	<0.00102	0.00381 (J)		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.00102						<0.00102	
10/12/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
1/24/2017	<0.00102						<0.00102	<0.00102
1/25/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
5/9/2017	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	<0.00102						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	<0.00102	0.00219 (J)	<0.00102		
2/27/2018	<0.00102	<0.00102	<0.00102			<0.00102		
2/28/2018				<0.00102	<0.00102		<0.00102	<0.00102
6/4/2018	<0.00102							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	<0.00102	<0.00102		
11/5/2018			<0.00102	<0.00102	<0.00102			
11/6/2018	<0.00102						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				<0.00102	<0.00102		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					<0.00102			
4/20/2020					<0.00102		<0.00102	<0.00102
4/21/2020	<0.00102			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.00102							
8/18/2020		<0.00102	<0.00102	<0.00102	<0.00102			
3/9/2021						0.000357 (J)		0.000444 (J)
3/10/2021			<0.00102	0.000224 (J)			0.000301 (J)	
3/15/2021		0.000357 (J)			0.000311 (J)			
3/16/2021	0.000341 (J)							
8/17/2021	0.00034 (J)							0.0004 (J)
8/24/2021		0.00036 (J)						
8/25/2021			0.00027 (J)	0.00035 (J)	0.00026 (J)	0.00023 (J)	0.00027 (J)	
3/29/2022				0.00043 (J)			<0.00102	
3/30/2022			0.00023 (J)					
4/4/2022	0.00045 (J)	<0.00102				0.00025 (J)		
4/6/2022					0.0003 (J)			0.00034 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
4/12/2016		<0.00102			<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.00102	<0.00102		
8/17/2016							<0.00102	<0.00102
9/20/2016								<0.00102
10/11/2016			<0.00102		<0.00102	<0.00102	<0.00102	
10/12/2016	<0.00102	<0.00102		<0.00102				<0.00102
11/15/2016								<0.00102
1/4/2017								<0.00102
1/23/2017								<0.00102
1/24/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
1/25/2017				<0.00102				
5/9/2017			<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
5/10/2017	<0.00102	<0.00102				<0.00102		
6/27/2017	<0.00102	<0.00102			<0.00102			<0.00102
6/28/2017			<0.00102	<0.00102		<0.00102	<0.00102	
2/27/2018			<0.00102		<0.00102	<0.00102		<0.00102
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.00102	<0.00102		<0.00102
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102
11/7/2018					<0.00102	<0.00102		
3/26/2019	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102		<0.00102
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.00102	<0.00102	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			<0.00102
4/22/2020						<0.00102	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.00102	<0.00102		
8/17/2020			<0.00102					
8/18/2020				<0.00102				<0.00102
3/9/2021	0.000216 (J)	0.000346 (J)						
3/10/2021				0.000333 (J)	0.000432 (J)	0.000433 (J)	0.0003 (J)	
3/15/2021								0.000474 (J)
3/16/2021			0.0004 (J)					
8/17/2021	0.00022 (J)	0.00023 (J)	0.00267					
8/18/2021								0.00022 (J)
8/24/2021					0.00043 (J)	0.00034 (J)	0.00028 (J)	
8/25/2021				0.00027 (J)				
3/28/2022			0.0003 (J)		0.00034 (J)			
3/29/2022							0.00041 (J)	
3/30/2022				0.00022 (J)				
4/4/2022	0.00022 (J)					0.00037 (J)		0.0003 (J)
4/6/2022		0.00031 (J)						

Time Series

Constituent: Chromium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.00102				
4/12/2016				<0.00102				
6/1/2016				<0.00102				
8/15/2016				<0.00102				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	<0.00102				<0.00102			
1/24/2017		<0.00102		<0.00102		<0.00102	<0.00102	
1/25/2017								<0.00102
1/26/2017			<0.00102					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.00102				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.00102				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/26/2019	<0.00102	<0.00102	<0.00102		<0.00102			
3/27/2019				<0.00102		<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.00102				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.00102				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	0.000541 (J)	0.000995 (J)	0.000393 (J)		0.000502 (J)	0.000468 (J)	0.000431 (J)	0.000679 (J)
3/16/2021				0.000347 (J)				
8/17/2021				0.00032 (J)				
8/18/2021	0.00032 (J)	0.00071 (J)	0.00026 (J)		0.00033 (J)			
8/23/2021						0.00042 (J)	0.00038 (J)	0.0005 (J)
3/28/2022	0.00031 (J)	0.00072 (J)	0.00039 (J)		0.0004 (J)	0.00039 (J)	0.00042 (J)	0.00044 (J)
4/5/2022				0.00039 (J)				

Time Series

Constituent: Chromium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.0117			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		<0.00102						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		<0.00102	0.0155		<0.00102	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		<0.00102						
4/22/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		<0.00102						<0.00102
8/19/2020				<0.00102	<0.00102			
3/9/2021			0.00143			0.000342 (J)		
3/10/2021					0.000421 (J)		0.000226 (J)	
3/15/2021	0.000473 (J)							0.000553 (J)
3/16/2021		0.000912 (J)		0.000381 (J)				
8/23/2021	0.0003 (J)							
8/24/2021		0.00075 (J)	0.00096 (J)	0.00026 (J)	0.00038 (J)	0.00033 (J)		
8/25/2021							0.00023 (J)	0.00039 (J)
3/28/2022	0.00035 (J)							
3/29/2022				0.00037 (J)				
3/30/2022			0.00108		0.00037 (J)		0.0003 (J)	
4/6/2022		0.00051 (J)				0.00029 (J)		0.00052 (J)

Time Series

Constituent: Chromium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	0.00325 (J)	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	0.000286 (J)	0.000227 (J)						
3/10/2021			0.000428 (J)	0.000314 (J)			0.00026 (J)	0.000366 (J)
8/17/2021					0.00028 (J)	0.00039 (J)		
8/18/2021	<0.00102	<0.00102		0.0003 (J)			0.00022 (J)	0.0004 (J)
8/23/2021			0.0003 (J)					
3/23/2022					0.00032 (J)	0.0004 (J)		
3/29/2022				0.00026 (J)				
3/30/2022							0.00024 (J)	0.00021 (J)
4/4/2022			0.00022 (J)					
4/6/2022	0.00028 (J)	0.00026 (J)						

Time Series

Constituent: Chromium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	<0.00102							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		0.00515 (J)
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		0.00028 (J)	<0.00102					
3/9/2021						0.000619 (J)		0.000256 (J)
3/10/2021				0.000474 (J)	0.000574 (J)		0.000271 (J)	
3/16/2021	0.000285 (J)							
8/16/2021			0.00038 (J)					
8/17/2021		0.00081 (J)				0.00064 (J)		0.00057 (J)
8/23/2021	0.00027 (J)			0.00046 (J)	0.00039 (J)		0.00029 (J)	
3/23/2022		0.00051 (J)	0.00035 (J)			0.00107		0.00031 (J)
4/4/2022	0.00025 (J)							
4/5/2022					0.0003 (J)		0.00042 (J)	
4/6/2022				0.00047 (J)				

Time Series

Constituent: Chromium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	<0.00102							
1/25/2017							<0.00102	<0.00102
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	<0.00102						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	0.000347 (J)						0.000351 (J)	0.000346 (J)
8/17/2021		0.00065 (J)	0.00057 (J)	0.00067 (J)	0.00035 (J)	0.00086 (J)		
8/24/2021	0.00026 (J)						0.00036 (J)	0.00031 (J)
3/23/2022		0.00111	0.00065 (J)	0.00072 (J)	0.00045 (J)	0.00061 (J)		
3/29/2022	<0.00102						0.00024 (J)	0.00027 (J)

Time Series

Constituent: Chromium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	<0.00102	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.00102
4/20/2020		<0.00102
4/21/2020	<0.00102	
8/17/2020		<0.00102
8/18/2020	<0.00102	
3/9/2021	0.000381 (J)	
3/10/2021		0.000247 (J)
8/17/2021		0.00033 (J)
8/24/2021	0.0003 (J)	
3/29/2022	0.00027 (J)	
4/5/2022		0.00047 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.0135		<0.0002	<0.0002	0.00732 (J)		
2/17/2016	0.0395		0.0504				0.0169	0.016
4/12/2016					<0.0002	0.00785 (J)	0.0158	
4/13/2016	0.0452	0.0155	0.0448	<0.0002				0.0139
5/31/2016		0.0146	0.0405	<0.0002	<0.0002	0.00712 (J)	0.014	
6/1/2016	0.0576							0.0117
8/15/2016	0.0573							0.0133
8/16/2016		0.016	0.0464	<0.0002	<0.0002		0.0153	
8/17/2016						0.00545 (J)		
10/11/2016	0.0531						0.0162	
10/12/2016		0.0154	0.0489	<0.0002	<0.0002	0.00497 (J)		0.0147
1/24/2017	0.0539						0.0132	0.0122
1/25/2017		0.0139	0.0417	<0.0002	<0.0002	0.00454 (J)		
5/9/2017	0.057		0.0471	<0.0002	<0.0002	0.00488 (J)		
5/10/2017		0.0144					0.014	0.0133
6/27/2017	0.0664						0.0163	0.0141
6/28/2017		0.0134	0.0664	<0.0002	<0.0002	0.00805 (J)		
2/27/2018	0.0652	0.0148	0.0438			0.016		
2/28/2018				<0.0002	<0.0002		0.0157	0.014
6/4/2018	0.0758							
6/5/2018		0.0139	0.036				0.0148	0.0114
6/6/2018				<0.0002	<0.0002	0.024		
11/5/2018			0.0171	<0.0002	<0.0002			
11/6/2018	0.0898						0.0158	0.0141
11/7/2018		0.015				0.0124		
3/26/2019				<0.0002	<0.0002		0.0184	0.0177
3/27/2019	0.176	0.014	0.0292			0.0303		
9/10/2019	0.104	0.0191	0.02	<0.0002		0.0278	0.0201	0.0162
9/11/2019					<0.0002			
4/20/2020					<0.0002		0.0189	0.0146
4/21/2020	0.206			<0.0002		0.0339		
4/22/2020		0.0233	0.0319					
8/11/2020						0.0373		0.0148
8/12/2020							0.0184	
8/17/2020	0.195							
8/18/2020		0.0287	0.0298	<0.0002	<0.0002			
3/9/2021						0.0302		0.0162
3/10/2021			0.0197	0.00118			0.0189	
3/15/2021		0.0475			0.000312			
3/16/2021	0.257							
8/17/2021	0.24							0.0155
8/24/2021		0.0514						
8/25/2021			0.0507	0.00094	7E-05 (J)	0.0436	0.0181	
3/29/2022				0.00088			0.0172	
3/30/2022			0.0157					
4/4/2022	0.296	0.0218				0.0423		
4/6/2022					0.00126			0.0147

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	0.0101	0.0227	0.00989 (J)		<0.0002	0.00219 (J)	0.00683 (J)	
4/12/2016		0.0209			<0.0002	<0.0002	0.00656 (J)	
4/13/2016	0.0109		0.0106	<0.0002				
6/1/2016	0.0134	0.02	0.011	<0.0002	<0.0002	<0.0002	0.00637 (J)	
8/15/2016	0.0134	0.0225	0.0117					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							0.00659 (J)	0.0167
9/20/2016								0.0122
10/11/2016			0.0117		<0.0002	<0.0002	0.00687 (J)	
10/12/2016	0.0204	0.0206		<0.0002				0.00839 (J)
11/15/2016								0.00562 (J)
1/4/2017								0.00655 (J)
1/23/2017								0.0116
1/24/2017	0.0157	0.015	0.00863 (J)		<0.0002	<0.0002	0.00522 (J)	
1/25/2017				<0.0002				
5/9/2017			0.00975 (J)	<0.0002	<0.0002		0.00646 (J)	0.0167
5/10/2017	0.0179	0.0141				<0.0002		
6/27/2017	0.0166	0.0144			<0.0002			0.0109
6/28/2017			0.0102	<0.0002		<0.0002	0.00721 (J)	
2/27/2018			0.00924 (J)		<0.0002	<0.0002		0.00278 (J)
2/28/2018	0.0251	0.0136		<0.0002			0.00771 (J)	
6/4/2018			0.00866 (J)					
6/5/2018	0.0456	0.0138			<0.0002	<0.0002		0.00223 (J)
6/6/2018				<0.0002			0.00712 (J)	
11/5/2018				<0.0002				
11/6/2018	0.0321	0.0158	0.0101				0.00791	0.00202 (J)
11/7/2018					<0.0002	<0.0002		
3/26/2019	0.0192	0.0161		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			0.0131				0.0114	
9/9/2019	0.0121	0.0174	0.0154					
9/10/2019				<0.0002	<0.0002	<0.0002	0.0127	
9/11/2019								<0.0002
4/21/2020	0.0158	0.0173	0.0194	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	0.0133	
8/11/2020	0.0122						0.0126	
8/12/2020		0.0152			<0.0002	<0.0002		
8/17/2020			0.0249					
8/18/2020				<0.0002				0.00279 (J)
3/9/2021	0.0151	0.017						
3/10/2021				0.00204	<0.0002	0.000676	0.0115	
3/15/2021								0.000606
3/16/2021			0.0272					
8/17/2021	0.0109	0.0175	0.0296					
8/18/2021								0.00067
8/24/2021					<0.0002	0.00073	0.0117	
8/25/2021				0.00147				
3/28/2022			0.0309		<0.0002			
3/29/2022							0.0101	
3/30/2022				0.00284				
4/4/2022	0.0115					0.00073		0.00045
4/6/2022		0.0183						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.00507 (J)				
4/12/2016				0.0047 (J)				
6/1/2016				0.00372 (J)				
8/15/2016				0.0039 (J)				
8/16/2016			0.0122		0.00548 (J)	<0.0002	<0.0002	0.00923 (J)
8/17/2016	0.00692 (J)	0.00599 (J)						
9/19/2016						0.00242 (J)	<0.0002	0.00539 (J)
9/20/2016	0.00232 (J)	0.00466 (J)	0.012		0.0026 (J)			
10/11/2016			0.0135	0.00415 (J)	0.00214 (J)	0.0024 (J)	<0.0002	0.00506 (J)
10/12/2016	<0.0002	0.00394 (J)						
11/14/2016						<0.0002	<0.0002	0.00399 (J)
11/15/2016	<0.0002	0.00296 (J)	0.00938 (J)		<0.0002			
1/3/2017						0.00217 (J)	<0.0002	0.0037 (J)
1/4/2017	<0.0002	0.00448 (J)	0.00859 (J)		<0.0002			
1/23/2017	0.00203 (J)				<0.0002			
1/24/2017		0.00259 (J)		0.00383 (J)		0.00239 (J)	<0.0002	
1/25/2017								0.0077 (J)
1/26/2017			0.0104					
5/9/2017	<0.0002	<0.0002	0.0119	0.00396 (J)	<0.0002			
5/10/2017						<0.0002	<0.0002	0.00291 (J)
6/27/2017	<0.0002	<0.0002	0.0106		<0.0002	<0.0002	<0.0002	0.00247 (J)
6/28/2017				0.00336 (J)				
2/27/2018	<0.0002	<0.0002	0.0027 (J)	0.00442 (J)	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				0.0038 (J)				
6/5/2018	<0.0002	<0.0002	0.00317 (J)		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	0.00367 (J)	0.00439 (J)	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				0.00463 (J)		<0.0002	<0.0002	<0.0002
9/9/2019				0.00413 (J)				
9/11/2019	<0.0002	<0.0002	0.00265 (J)		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				0.00396 (J)				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	0.00224 (J)		<0.0002			
3/15/2021	0.000139 (J)	0.000452	0.00145		0.000137 (J)	0.000624	0.000908	<0.0002
3/16/2021				0.00076				
8/17/2021				0.00039				
8/18/2021	0.00016 (J)	0.00036	0.0019		0.00011 (J)			
8/23/2021						0.0006	0.00105	<0.0002
3/28/2022	0.00014 (J)	0.00052	0.00079		7E-05 (J)	0.00061	<0.0002	0.00099
4/5/2022				0.00083				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				0.0407		0.0173	0.0203	0.0044 (J)
1/16/2019		<0.0002						
1/17/2019	0.033							
1/30/2019			<0.0002					
9/10/2019	0.0131						0.0139	
9/11/2019		<0.0002	<0.0002		0.00363 (J)	0.0194		0.00897
4/20/2020							0.0132	
4/21/2020		<0.0002						
4/22/2020	0.00675		<0.0002	0.0327	<0.0002	0.0192		
4/29/2020								0.00777
8/11/2020			<0.0002			0.0176		
8/12/2020	0.00222 (J)						0.00717	
8/18/2020		<0.0002						0.00814
8/19/2020				0.0176	<0.0002			
3/9/2021			0.000522			0.0178		
3/10/2021					0.000455		0.00791	
3/15/2021	0.00198							0.00472
3/16/2021		<0.0002		0.0225				
8/23/2021	0.00159							
8/24/2021		<0.0002	0.00032	0.0228	0.00071	0.0183		
8/25/2021							0.00901	0.0101
3/28/2022	0.00117							
3/29/2022				0.0198				
3/30/2022			0.0007		0.00034		0.0103	
4/6/2022		8E-05 (J)				0.0173		0.0185

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.0281							
1/16/2019		0.0131	0.106					
9/11/2019	0.0449	0.0143	0.106					
4/20/2020			0.324	0.00451 (J)				
4/21/2020	0.0359	0.0162					0.00236 (J)	0.00799
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			0.273					
8/17/2020				0.00458 (J)			<0.0002	
8/19/2020	0.037	0.0173						0.00853
3/8/2021					0.00155	<0.0002		
3/9/2021	0.0559	0.0175						
3/10/2021			0.415	0.00442			0.000388	0.00662
8/17/2021					0.00295	0.00025		
8/18/2021	0.0436	0.0196		0.0119			0.0004	0.00507
8/23/2021			0.428					
3/23/2022					0.0053	0.00025		
3/29/2022				0.0108				
3/30/2022							0.00018 (J)	0.00562
4/4/2022			0.323					
4/6/2022	0.0651	0.0184						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.0216							
4/12/2016	0.0205							
5/31/2016	0.0196							
8/17/2016	0.0169							
10/11/2016	0.0157							
1/24/2017	0.00858 (J)							
5/9/2017	0.00755 (J)							
6/28/2017	0.0069 (J)							
2/27/2018	0.00471 (J)							
6/5/2018	0.00481 (J)							
11/6/2018	0.00545							
3/27/2019	0.00614							
9/11/2019	0.00767							
4/20/2020				0.119	0.0203		0.0862	
4/21/2020	0.00601							
5/28/2020		0.00801				<0.0002		0.0445
7/6/2020			0.0158					
8/11/2020		0.0056	0.0129	0.0859		<0.0002		0.022
8/12/2020	0.00678				0.0272		0.0857	
3/8/2021		0.00553	0.0153					
3/9/2021						0.000738		0.0263
3/10/2021				0.0204	0.0239		0.0345	
3/16/2021	0.00857							
8/16/2021			0.0146					
8/17/2021		0.00608				0.00095		0.0216
8/23/2021	0.00645			0.0233	0.031		0.0477	
3/23/2022		0.0096	0.0164			0.00102		0.0281
4/4/2022	0.0104							
4/5/2022					0.0265		0.0191	
4/6/2022				0.00706				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								0.0129
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							0.00218 (J)	0.0139
5/31/2016	0.00389 (J)						0.00328 (J)	
6/1/2016								0.0139
8/17/2016	0.00234 (J)						0.00217 (J)	0.0138
10/11/2016	0.00202 (J)							
10/12/2016							0.00225 (J)	0.0138
1/24/2017	<0.0002							
1/25/2017							<0.0002	0.0115
5/10/2017	<0.0002						<0.0002	0.0125
6/28/2017	<0.0002						<0.0002	0.0137
2/27/2018	<0.0002						<0.0002	0.00698 (J)
6/5/2018	0.00237 (J)						<0.0002	0.00478 (J)
11/7/2018	0.00258 (J)						0.00277 (J)	0.00651
3/26/2019	0.00223 (J)						0.0024 (J)	0.00445 (J)
9/10/2019	0.00306 (J)						0.0034 (J)	0.0108
4/21/2020	0.00228 (J)						0.00206 (J)	0.0111
8/19/2020	0.00278 (J)						0.0046 (J)	0.00975
3/9/2021	0.00367						0.00181	0.00707
8/17/2021		0.00077	0.00049	0.00033	0.00081	0.00348		
8/24/2021	0.00419						0.00333	0.00898
3/23/2022		0.0007	0.00037	0.00038	0.00031	0.00419		
3/29/2022	0.00223						0.0014	0.00619

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.00869 (J)	
4/13/2016	0.00936 (J)	
6/1/2016	0.00976 (J)	
8/17/2016	0.012	
10/12/2016	0.0127	
1/25/2017	0.0109	
5/10/2017	0.0129	
6/28/2017	0.0125	
2/27/2018	0.013	
6/5/2018	0.0113	
11/7/2018	0.0145	
3/26/2019	0.0167	
9/10/2019	0.0177	0.146
4/20/2020		0.157
4/21/2020	0.0166	
8/17/2020		0.148
8/18/2020	0.0164	
3/9/2021	0.0247	
3/10/2021		0.167
8/17/2021		0.211
8/24/2021	0.0323	
3/29/2022	0.0267	
4/5/2022		0.39

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<3		<3	<3	<3		
2/17/2016	<3		<3				<3	<3
4/12/2016					<3	<3	<3	
4/13/2016	1.0468 (U)	<3	<3	<3				<3
5/31/2016		0.899	0.145 (U)	0.21 (U)	0.313 (U)	0.624	0.41 (U)	
6/1/2016	1.43							0.515
8/15/2016	1.42							0.843
8/16/2016		0.82	0.521 (U)	0.697	0.435 (U)		0.399 (U)	
8/17/2016						0.49 (U)		
10/11/2016	1.6						0.00389 (U)	
10/12/2016		0.92	0.669 (U)	0.421 (U)	-0.0137 (U)	-0.0237 (U)		0.397 (U)
1/24/2017	1.3						0.35 (U)	0.269 (U)
1/25/2017		1.2	0.789	0.265 (U)	0.309 (U)	0.455 (U)		
5/9/2017	0.844		0.647	-0.132 (U)	0.42	0.451		
5/10/2017		0.665					0.0662 (U)	0.454
6/27/2017	1.32						0.793	1.25
6/28/2017		0.29 (U)	0.415	0.493	0.373	0.63		
2/27/2018			0.864	1.89	1.25	1.59		
2/28/2018	0.815	0.558					3.99	1.17
6/4/2018	1.01							
6/5/2018		0.698	0.244 (U)				-0.365 (U)	0.337 (U)
6/6/2018				0.114 (U)	0.258 (U)	0.943		
11/5/2018			0.682	0.048 (U)	0.441 (U)			
11/6/2018	0.938						0.391 (U)	0.661
11/7/2018		0.568				0.888		
3/26/2019				0.381	0.471		0.535	1.18
3/27/2019	1.17	0.988	0.564			1.1		
9/10/2019	1.39	1.1	0.57	0.434 (U)		0.852	0.3 (U)	0.516 (U)
9/11/2019					0.557 (U)			
4/20/2020					0.256 (U)		0.693	0.493 (U)
4/21/2020	0.712			-0.0655 (U)		0.653		
4/22/2020		1.11	0.502 (U)					
8/11/2020						1.64		1.48
8/12/2020							0.983	
8/17/2020	1.46							
8/18/2020		1.08	0.457 (U)	0.135 (U)	0.568 (U)			
3/9/2021						1.28 (U)		1.2 (U)
3/10/2021			0.666 (U)	0.481 (U)			0.335 (U)	
3/15/2021		1.12 (U)			0.537 (U)			
3/16/2021	1.45							
8/17/2021	1.36							0.49 (U)
8/24/2021		1.45						
8/25/2021			0.729 (U)	0.113 (U)	0.3 (U)	1.01	0.314 (U)	
3/29/2022				1.37			0.273 (U)	
3/30/2022			0.597 (U)					
4/4/2022	0.899	2.08				1.03		
4/6/2022					0.338 (U)			1 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<3				
2/17/2016	<3	<3	<3		<3	<3	<3	
4/12/2016		<3			<3	<3	<3	
4/13/2016	<3		<3	<3				
6/1/2016	0.972	1.55	0.758	0.126 (U)	0.044 (U)	0.407	0.1 (U)	
8/15/2016	1.43	1.85	0.638					
8/16/2016				0.477	0.213 (U)	0.547 (U)		
8/17/2016							0.372 (U)	0.66
9/20/2016								0.582
10/11/2016			0.701		0.184 (U)	0.845	0.277 (U)	
10/12/2016	0.246 (U)	0.481		0.137 (U)				-0.183 (U)
11/15/2016								0.262 (U)
1/4/2017								0.255 (U)
1/23/2017								0.871
1/24/2017	0.918	0.889	0.515 (U)		0.251 (U)	0.403 (U)	0.585	
1/25/2017				0.55				
5/9/2017			0.393 (U)	0.182 (U)	0.631		0.489	0.575
5/10/2017	1.27	1.01				0.645		
6/27/2017	1.51	1.17			0.145 (U)			0.459
6/28/2017			0.374	0.228 (U)		0.93	0.333	
2/27/2018		0.702	0.334 (U)	0.293 (U)	0.402 (U)	1.88	1.08	1.3
2/28/2018	1.05							
6/4/2018			0.64					
6/5/2018	1.07	0.999			0.313 (U)	1.13		0.269 (U)
6/6/2018				-0.056 (U)			0.016 (U)	
11/5/2018				0.637				
11/6/2018	1.05	0.913	0.803				0.0751 (U)	0.328 (U)
11/7/2018					0.496 (U)	1.72		
3/26/2019	1.57	1.35		0.405	0.315 (U)	1.21		0.571
3/27/2019			0.77				0.309 (U)	
9/9/2019	1.29	1.08	0.3 (U)					
9/10/2019				0.0889 (U)	0.219 (U)	1.21	0.578	
9/11/2019								0.561
4/21/2020	0.859	0.888	0.663 (U)	0.271 (U)	0.166 (U)			0.215 (U)
4/22/2020						0.791	0.218 (U)	
8/11/2020	2.14						0.511 (U)	
8/12/2020		1.17			0.986	0.919		
8/17/2020			0.817					
8/18/2020				-0.0105 (U)				2.3
3/9/2021	2.27	1.11 (U)						
3/10/2021				0.418 (U)	1.01 (U)	2.15	1.03 (U)	
3/15/2021								0.347 (U)
3/16/2021			1.05 (U)					
8/17/2021	1.97	2.04	2.01					
8/18/2021								0.327 (U)
8/24/2021					0.735 (U)	1.23	0.693 (U)	
8/25/2021				0.305 (U)				
3/28/2022			0.745 (U)		0.99 (U)			
3/29/2022							0.37 (U)	
3/30/2022				1.04				
4/4/2022	2.17					1.43		0.55 (U)
4/6/2022		1.18 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<3				
4/12/2016				<3				
6/1/2016				1.06				
8/15/2016				0.972				
8/16/2016			0.522		0.434 (U)	1.34	0.951	0.534 (U)
8/17/2016	0.386 (U)	1.47						
9/19/2016						0.561 (U)	0.242 (U)	0.238 (U)
9/20/2016	0.794	1.24	0.746		0.51			
10/11/2016			0.819	0.802	0.166 (U)	0.118 (U)	0.34 (U)	0.158 (U)
10/12/2016	0.81	0.899						
11/14/2016						0.984	0.447 (U)	0.641
11/15/2016	0.366 (U)	0.933	0.516		0.589			
1/3/2017						0.473 (U)	0.729	0.834
1/4/2017	0.356 (U)	1.54	0.648 (U)		0.659			
1/23/2017	0.429 (U)				0.227 (U)			
1/24/2017		0.868		1.1		-0.422 (U)	0.184 (U)	
1/25/2017								0.605
1/26/2017			0.852					
5/9/2017	0.62	1.22	0.148 (U)	0.74	0.436 (U)			
5/10/2017						0.706		0.563
5/31/2017							0.454	
6/27/2017	0.319 (U)	0.925	0.393		0.197 (U)	0.412	-0.111 (U)	0.937
6/28/2017				0.867				
2/27/2018	0.271 (U)	0.0271 (U)	0.695	0.905	0.896	0.314 (U)	0.146 (U)	0.475
6/4/2018				0.954				
6/5/2018	0.391	0.792	0.145 (U)		0.342 (U)	0.218 (U)	-0.128 (U)	1.65
11/5/2018							0.0946 (U)	
11/6/2018	0.646	0.926	0.513 (U)	1.27	0.928	0.566 (U)		1.55
3/26/2019	0.498	1.08	0.598		1.3			
3/27/2019				1.47		0.29 (U)	0.5	1.83
9/9/2019				1.12				
9/11/2019	0.368 (U)	0.995	0.237 (U)		0.995	0.28 (U)	-0.464 (U)	1.02
4/20/2020				0.899				
4/21/2020	0.55	0.307 (U)	0.201 (U)		0.00976 (U)			
4/22/2020						0.0983 (U)	0.474 (U)	1.08
8/11/2020						0.767		
8/12/2020							3.18	3.41
8/17/2020				0.738				
8/18/2020	0.504 (U)	0.797	3.88		3.33			
3/15/2021	0.578 (U)	1.5	0.618 (U)		0.601 (U)	0.817 (U)	1.11 (U)	0.771 (U)
3/16/2021				0.553 (U)				
8/17/2021				1.09				
8/18/2021	0.941 (U)	0.779 (U)	0.937 (U)		1.22 (U)			
8/23/2021						0.345 (U)	1.09	1.01 (U)
3/28/2022	0.733 (U)	0.554 (U)	0.529 (U)		0.714 (U)	0.413 (U)	0.682 (U)	1.36
4/5/2022				0.532 (U)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.359 (U)			
1/15/2019				0.354 (U)		0.901	0.387 (U)	0.839
1/16/2019		0.0207 (U)						
1/17/2019	0.628							
1/30/2019			0.479 (U)					
9/10/2019	0.656						0.519 (U)	
9/11/2019		0.734	0.412 (U)		1.22	1.16		0.13 (U)
4/20/2020							0.66	
4/21/2020		0.423 (U)						
4/22/2020	0.473 (U)		-0.103 (U)	0.273 (U)	0.413 (U)	1.48		
4/29/2020								0.684
8/11/2020			0.223 (U)			2.02		
8/12/2020	2.1						0.928	
8/18/2020		0.636 (U)						0.742
8/19/2020				0.994	0.347 (U)			
3/9/2021			0.296 (U)			1.62		
3/10/2021					0.566 (U)		0.522 (U)	
3/15/2021	0.858 (U)							0.946 (U)
3/16/2021		0.536 (U)		0.954 (U)				
8/23/2021	0.336 (U)							
8/24/2021		0.492 (U)	0.253 (U)	0.282 (U)	0.417 (U)	0.823 (U)		
8/25/2021							1.09 (U)	0.938 (U)
3/28/2022	0.466 (U)			0.405 (U)				
3/29/2022				0.405 (U)				
3/30/2022			0.174 (U)		0.248 (U)		0.745 (U)	
4/6/2022		0.108 (U)				1.24		1.12

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.739							
1/16/2019		0.426 (U)	0.422 (U)					
9/11/2019	0.195 (U)	0.558 (U)	0.637 (U)					
4/20/2020			0.386 (U)	0.529				
4/21/2020	0.678	1.89					0.251 (U)	0.594
5/28/2020						-0.0036 (U)		
7/6/2020					0.292 (U)			
8/11/2020					0.477 (U)	0.208 (U)		
8/12/2020			4.07					
8/17/2020				1.16			1.11	
8/19/2020	0.687	1.99						0.0107 (U)
3/8/2021					0.291 (U)	0.568 (U)		
3/9/2021	0.618 (U)	1.54						
3/10/2021			0.923 (U)	0.21 (U)			0.57 (U)	0.261 (U)
8/17/2021					0.651 (U)	0.339 (U)		
8/18/2021	1.9	1.64		1.1			0.595 (U)	1.11 (U)
8/23/2021			1.13					
3/23/2022					0.547 (U)	0.214 (U)		
3/29/2022				0.661 (U)				
3/30/2022							0.315 (U)	0.254 (U)
4/4/2022			0.795 (U)					
4/6/2022	1.01	1.84						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<3							
4/12/2016	<3							
5/31/2016	2.11							
8/17/2016	2.28							
10/11/2016	1.83							
1/24/2017	1.92							
5/9/2017	3.05							
6/28/2017	2.24							
2/27/2018	1.01							
6/5/2018	1.39							
11/6/2018	1.72							
3/27/2019	1.56							
9/11/2019	1.46							
4/20/2020				1.13	1		1.5	
4/21/2020	0.882							
5/28/2020		0.612				0.0544 (U)		2.27
7/6/2020			0.432 (U)					
8/11/2020		0.883	0.777	1.56		0.462 (U)		0.997
8/12/2020	2.08				2.14		0.991	
3/8/2021		1 (U)	2.06					
3/9/2021						1.02 (U)		1.6
3/10/2021				1.29 (U)	1.41		1.25 (U)	
3/16/2021	1.71							
8/16/2021			1.3					
8/17/2021		0.939 (U)				0.442 (U)		1.19 (U)
8/23/2021	2.11			2.06	0.978 (U)		1.52	
3/23/2022		0.908 (U)	0.999			0.748 (U)		1.02 (U)
4/4/2022	1.13							
4/5/2022					0.963 (U)		0.689 (U)	
4/6/2022				1.59				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<3
2/17/2016	<3						<3	
4/12/2016	<3							
4/13/2016							<3	<3
5/31/2016	0.453 (U)						0.658	
6/1/2016								0.884
8/17/2016	0.381 (U)						0.936	1.06
10/11/2016	0.139 (U)							
10/12/2016							0.668	0.269 (U)
1/24/2017	0.496							
1/25/2017							0.718	1.12
5/10/2017	0.278 (U)						0.56	0.887
6/28/2017	0.724						0.526	0.908
2/27/2018	0.214 (U)						0.803	
2/28/2018								0.131 (U)
6/5/2018	0.176 (U)						0.577	0.564
11/7/2018	1.39						1.51	0.34 (U)
3/26/2019	0.904						0.841	0.507
9/10/2019	1.14						0.569 (U)	0.898
4/21/2020	0.679 (U)						0.549 (U)	1.09
8/19/2020	0.96						1.04	0.6 (U)
3/9/2021	1.12 (U)						0.545 (U)	1.6
8/17/2021		0.612 (U)	0.404 (U)	0.437 (U)	0.219 (U)	0.56 (U)		
8/24/2021	0.645 (U)						0.865 (U)	1.67
3/23/2022		0.932 (U)	0.201 (U)	0.829 (U)	0.207 (U)	1.03		
3/29/2022	0.394 (U)						0.575 (U)	0.621 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<3	
4/13/2016	<3	
6/1/2016	0.532	
8/17/2016	1.07	
10/12/2016	1.07	
1/25/2017	1.46	
5/10/2017	1.21	
6/28/2017	0.821	
2/28/2018	0.232 (U)	
6/5/2018	0.722	
11/7/2018	0.82	
3/26/2019	1.49	
3/27/2019		1.69
9/10/2019	1.75	1.89
4/20/2020		1.59
4/21/2020	1.31	
8/17/2020		1.16
8/18/2020	1.59	
3/9/2021	1.16 (U)	
3/10/2021		1.36 (U)
8/17/2021		1.76
8/24/2021	1.43	
3/29/2022	1.25	
4/5/2022		1.73

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.23 (J)		0.16 (J)	0.14 (J)	0.13 (J)		
2/17/2016	0.05 (J)		0.11 (J)				0.09 (J)	0.2 (J)
4/12/2016					0.119 (J)	0.137 (J)	0.107 (J)	
4/13/2016	0.061 (J)	0.236 (J)	0.119 (J)	0.163 (J)				0.173 (J)
5/31/2016		0.255 (J)	0.134 (J)	0.19 (J)	0.132 (J)	0.149 (J)	0.145 (J)	
6/1/2016	0.079 (J)							0.253 (J)
8/15/2016	0.081 (J)							0.224 (J)
8/16/2016		0.238 (J)	0.116 (J)	0.219 (J)	0.177 (J)		0.135 (J)	
8/17/2016						0.147 (J)		
10/11/2016	0.049 (J)						0.096 (J)	
10/12/2016		0.198 (J)	0.076 (J)	0.163 (J)	0.149 (J)	0.115 (J)		0.187 (J)
3/14/2017	0.04 (J)		0.09 (J)			0.11	0.09 (J)	0.23
3/15/2017		0.22		0.13	0.16			
5/9/2017	0.05 (J)		0.11	0.15	0.18	0.14		
5/10/2017		0.25					0.11	0.23
6/27/2017	0.04 (J)						0.1	0.22
6/28/2017		0.09 (J)	0.17	0.17	0.18	0.13		
8/29/2017		0.26	0.14	0.22	0.19	0.14		
8/30/2017	0.04 (J)						0.13	0.28
2/27/2018	0.07 (J)	0.26	0.14			0.13		
2/28/2018				0.19	0.14		0.09 (J)	0.23
6/4/2018	0.07 (J)							
6/5/2018		0.24	0.16				0.13	0.28
6/6/2018				0.19	0.13	0.15		
11/5/2018			0.15	0.2	0.15			
11/6/2018	0.04 (J)						0.12	0.24
11/7/2018		0.25				0.19		
3/26/2019				0.196	0.0775 (J)		0.113	0.316
3/27/2019	0.192	0.206	0.104			0.248		
9/10/2019	0.179	0.226	0.191	0.26		0.209	0.122	0.267
9/11/2019					0.118			
4/20/2020					0.0844 (J)		0.14	0.245
4/21/2020	0.12			0.198		0.254		
4/22/2020		0.224	0.167					
8/11/2020						0.278		0.294
8/12/2020							0.147	
8/17/2020	0.115							
8/18/2020		0.203	0.165	0.223	0.108			
3/9/2021						0.263		0.286
3/10/2021			0.0749 (J)	0.161			0.115	
3/15/2021		0.324			0.0737 (J)			
3/16/2021	0.129							
8/17/2021	0.158							0.286
8/24/2021		0.277						
8/25/2021			0.135	0.188	0.111	0.239	0.167	
3/29/2022				0.107 (J)			0.117 (J)	
3/30/2022			<0.125					
4/4/2022	0.124 (D)	0.2785 (D)				0.226 (D)		
4/6/2022					<0.125			0.2395 (D)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.18 (J)				
2/17/2016	0.53	0.15 (J)	0.09 (J)		0.08 (J)	0.02 (J)	0.02 (J)	
4/12/2016		0.168 (J)			0.077 (J)	0.026 (J)	0.021 (J)	
4/13/2016	0.437		0.092 (J)	0.191 (J)				
6/1/2016	0.376	0.178 (J)	0.108 (J)	0.201 (J)	0.101 (J)	0.057 (J)	0.051 (J)	
8/15/2016	0.362	0.149 (J)	0.105 (J)					
8/16/2016				0.218 (J)	0.093 (J)	0.046 (J)		
8/17/2016							0.037 (J)	0.159 (J)
9/20/2016								0.126 (J)
10/11/2016			0.062 (J)		0.059 (J)	<0.125	<0.125	
10/12/2016	0.377	0.12 (J)		0.171 (J)				0.1 (J)
11/15/2016								0.016 (J)
1/4/2017								<0.125
3/13/2017								0.31 (o)
3/14/2017	0.41	0.17	<0.125		0.07 (J)	<0.125	<0.125	
3/15/2017				0.16				
5/9/2017			0.07 (J)	0.17	0.08 (J)		<0.125	0.25 (o)
5/10/2017	0.36	0.17				<0.125		
6/27/2017	0.38	0.18			0.08 (J)			0.22 (o)
6/28/2017			0.09 (J)	0.18		<0.125	0.04 (J)	
8/29/2017				0.23	0.1	0.04 (J)	<0.125	0.22 (o)
8/30/2017	0.38	0.21	0.07 (J)					
2/27/2018			0.08 (J)		0.08 (J)	<0.125		0.08 (J)
2/28/2018	0.58	0.17		0.2			<0.125	
6/4/2018			0.09 (J)					
6/5/2018	0.41	0.17			0.09 (J)	0.04 (J)		0.07 (J)
6/6/2018				0.19			<0.125	
11/5/2018				0.22				
11/6/2018	0.45	0.17	0.07 (J)				<0.125	0.07 (J)
11/7/2018					0.08 (J)	<0.125		
3/26/2019	0.573	0.192		0.219	0.123	<0.125		<0.125
3/27/2019			0.089 (J)				<0.125	
9/9/2019	0.477	0.157	0.163					
9/10/2019				0.194	0.0914 (J)	0.0545 (J)	<0.125	
9/11/2019								0.0716 (J)
4/21/2020	0.565	0.171	0.126	0.173	0.095 (J)			<0.125
4/22/2020						<0.125	<0.125	
8/11/2020	0.515						<0.125	
8/12/2020		0.198			0.0867 (J)	<0.125		
8/17/2020			0.0753 (J)					
8/18/2020				0.18				<0.125
3/9/2021	0.628	0.205						
3/10/2021				0.113	0.085 (J)	<0.125	0.104	
3/15/2021								<0.125
3/16/2021			0.185					
8/17/2021	0.494	0.212	0.0974 (J)					
8/18/2021								<0.125
8/24/2021					0.0713 (J)	<0.125	0.0914 (J)	
8/25/2021				0.117				
3/28/2022			0.105 (J)		<0.125			
3/29/2022							0.0724 (J)	
3/30/2022				<0.125				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
4/4/2022	0.5855 (D)					<0.125		<0.125
4/6/2022		0.1385 (D)						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.08 (J)				
4/12/2016				0.083 (J)				
6/1/2016				0.118 (J)				
8/15/2016				0.109 (J)				
8/16/2016			0.05 (J)		0.036 (J)	0.087 (J)	0.054 (J)	0.061 (J)
8/17/2016	0.039 (J)	0.055 (J)						
9/19/2016						0.045 (J)	0.023 (J)	0.018 (J)
9/20/2016	0.01 (o)	0.021 (o)	0.015 (J)		<0.125			
10/11/2016			<0.125	0.066 (J)	<0.125	0.034 (J)	0.011 (J)	<0.125
10/12/2016	<0.125	<0.125						
11/14/2016						<0.125	<0.125	<0.125
11/15/2016	<0.125	<0.125	<0.125		<0.125			
1/3/2017						<0.125	<0.125	<0.125
1/4/2017	<0.125	<0.125	<0.125		<0.125			
3/13/2017			<0.125					
3/14/2017	<0.125	<0.125		0.07 (J)	<0.125	<0.125	<0.125	<0.125
5/9/2017	<0.125	<0.125	<0.125	0.09 (J)	<0.125			
5/10/2017						0.05 (J)	0.05 (J)	0.06 (J)
6/27/2017	<0.125	<0.125	<0.125		<0.125	0.05 (J)	0.04 (J)	0.07 (J)
6/28/2017				0.1				
8/29/2017	<0.125							
8/30/2017		<0.125	<0.125	0.12	<0.125	<0.125	0.04 (J)	0.08 (J)
2/27/2018	<0.125	<0.125	<0.125	0.09 (J)	<0.125	<0.125	0.04 (J)	0.07 (J)
6/4/2018				0.1				
6/5/2018	<0.125	<0.125	<0.125		<0.125	<0.125	0.04 (J)	0.1
11/5/2018							<0.125	
11/6/2018	<0.125	<0.125	<0.125	0.1	<0.125	<0.125		0.08 (J)
3/26/2019	<0.125	<0.125	<0.125		<0.125			
3/27/2019				0.13		<0.125	<0.125	<0.125
9/9/2019				0.121				
9/11/2019	<0.125	0.0649 (J)	<0.125		<0.125	<0.125	0.0518 (J)	<0.125
4/20/2020				0.112				
4/21/2020	<0.125	<0.125	<0.125		<0.125			
4/22/2020						<0.125	<0.125	<0.125
8/11/2020						<0.125		
8/12/2020							<0.125	<0.125
8/17/2020				0.148				
8/18/2020	<0.125	<0.125	<0.125		<0.125			
3/15/2021	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125	<0.125
3/16/2021				0.23				
8/17/2021				0.184				
8/18/2021	<0.125	<0.125	<0.125		<0.125			
8/23/2021						<0.125	<0.125	<0.125
3/28/2022	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125	<0.125
4/5/2022				0.146 (D)				

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.0841 (J)			
1/15/2019				0.0512 (J)		0.465	0.0981 (J)	0.0859 (J)
1/16/2019		<0.125						
1/17/2019	<0.125							
1/30/2019			0.264					
9/10/2019	<0.125						0.18	
9/11/2019		0.082 (J)	0.289		0.142	0.443		0.0609 (J)
4/20/2020							0.0952 (J)	
4/21/2020		0.16						
4/22/2020	<0.125		0.279	0.197	0.135	0.446		
4/29/2020								0.0857 (J)
8/11/2020			0.325			0.494		
8/12/2020	<0.125						0.145	
8/18/2020		0.0766 (J)						0.092 (J)
8/19/2020				0.141	0.149			
3/9/2021			0.365			0.458		
3/10/2021					0.131		0.112	
3/15/2021	<0.125							0.0721 (J)
3/16/2021		0.0841 (J)		0.263				
8/23/2021	<0.125							
8/24/2021		0.0681 (J)	0.318	0.194	0.197	0.508		
8/25/2021							0.142	0.074 (J)
3/28/2022	<0.125							
3/29/2022				0.189				
3/30/2022			0.301		0.0661 (J)		<0.125	
4/6/2022		<0.125				0.3765 (D)		<0.125

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.125							
1/16/2019		0.0888 (J)	0.0727 (J)					
9/11/2019	0.063 (J)	0.127	0.0783 (J)					
4/20/2020			0.0638 (J)	0.176				
4/21/2020	0.0701 (J)	0.147					<0.125	0.075 (J)
5/28/2020						0.0647 (J)		
7/6/2020					0.185			
8/11/2020					0.169	<0.125		
8/12/2020			0.0867 (J)					
8/17/2020				0.195			<0.125	
8/19/2020	0.077 (J)	0.154						0.0823 (J)
3/8/2021					0.187	<0.125		
3/9/2021	0.0697 (J)	0.135						
3/10/2021			0.0611 (J)	0.176			<0.125	<0.125
8/17/2021					0.177	<0.125		
8/18/2021	0.111	0.166		0.172			<0.125	0.0638 (J)
8/23/2021			0.11					
3/23/2022					0.158	<0.125		
3/29/2022				0.162				
3/30/2022							<0.125	0.0724 (J)
4/4/2022			<0.125					
4/6/2022	0.06445 (D)	0.11535 (D)						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.22 (J)							
4/12/2016	0.214 (J)							
5/31/2016	0.232 (J)							
8/17/2016	0.225 (J)							
10/11/2016	0.19 (J)							
3/14/2017	0.22							
5/9/2017	0.21							
6/28/2017	0.21							
8/30/2017	0.25							
2/27/2018	0.23							
6/5/2018	0.24							
11/6/2018	0.22							
3/27/2019	0.208							
9/11/2019	0.2							
4/20/2020				0.154	0.25		0.189	
4/21/2020	0.224							
5/28/2020		0.138				<0.125		0.0914 (J)
7/6/2020			0.0721 (J)					
8/11/2020		0.16	0.0762 (J)	0.133		<0.125		0.137
8/12/2020	0.221				0.275		0.165	
3/8/2021		0.127	0.0628 (J)					
3/9/2021						<0.125		0.0715 (J)
3/10/2021				0.135	0.25		0.112	
3/16/2021	0.282							
8/16/2021			0.0613 (J)					
8/17/2021		0.155				<0.125		0.096 (J)
8/23/2021	0.322			0.245	0.328		0.244	
3/23/2022		0.16	0.0894 (J)			<0.125		0.0775 (J)
4/4/2022	0.216							
4/5/2022					0.2325 (D)		<0.125 (D)	
4/6/2022				0.0946 (JD)				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								0.08 (J)
2/17/2016	0.17 (J)						0.07 (J)	
4/12/2016	0.203 (J)							
4/13/2016							0.081 (J)	0.088 (J)
5/31/2016	0.212 (J)						0.103 (J)	
6/1/2016								0.109 (J)
8/17/2016	0.19 (J)						0.078 (J)	0.089 (J)
10/11/2016	0.15 (J)							
10/12/2016							0.041 (J)	0.048 (J)
3/14/2017	0.18						0.07 (J)	
3/15/2017								0.08 (J)
5/10/2017	0.19						0.09 (J)	0.1
6/28/2017	0.18						0.08 (J)	0.09 (J)
8/29/2017	0.22						0.09 (J)	0.11
2/27/2018	0.22						0.08 (J)	0.11
6/5/2018	0.23						0.08 (J)	0.11
11/7/2018	0.22						0.08 (J)	0.11
3/26/2019	0.253						0.106	0.162
9/10/2019	0.227						0.086 (J)	0.113
4/21/2020	0.218						0.0951 (J)	0.114
8/19/2020	0.223						0.103	0.116
3/9/2021	0.17						0.0949 (J)	0.109
8/17/2021		<0.125	0.142	0.0716 (J)	<0.125	0.225		
8/24/2021	0.161						0.1	0.141
3/23/2022		<0.125	0.0871 (J)	<0.125	<0.125	0.251		
3/29/2022	0.193						0.104 (J)	0.108 (J)

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.16 (J)	
4/13/2016	0.15 (J)	
6/1/2016	0.19 (J)	
8/17/2016	0.171 (J)	
10/12/2016	0.137 (J)	
3/15/2017	0.15	
5/10/2017	0.17	
6/28/2017	0.16	
8/29/2017	0.19	
2/27/2018	0.19	
6/5/2018	0.19	
11/7/2018	0.2	
3/26/2019	0.223	
9/10/2019	0.178	0.0831 (J)
4/20/2020		0.132
4/21/2020	0.181	
8/17/2020		0.0959 (J)
8/18/2020	0.177	
3/9/2021	0.147	
3/10/2021		0.118
8/17/2021		0.117
8/24/2021	0.164	
3/29/2022	<0.125	
4/5/2022		0.12105 (D)

Time Series

Constituent: Lead (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0002		<0.0002	<0.0002	<0.0002		
2/17/2016	<0.0002		<0.0002				<0.0002	<0.0002
4/12/2016					<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002	<0.0002	<0.0002	<0.0002				<0.0002
5/31/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
6/1/2016	<0.0002							<0.0002
8/15/2016	<0.0002							<0.0002
8/16/2016		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	
8/17/2016						<0.0002		
10/11/2016	<0.0002						<0.0002	
10/12/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
1/24/2017	<0.0002						<0.0002	<0.0002
1/25/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
5/9/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
5/10/2017		<0.0002					<0.0002	<0.0002
6/27/2017	<0.0002						<0.0002	<0.0002
6/28/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/27/2018	<0.0002	<0.0002	<0.0002			<0.0002		
2/28/2018				<0.0002	<0.0002		<0.0002	<0.0002
6/4/2018	<0.0002							
6/5/2018		<0.0002	<0.0002				<0.0002	<0.0002
6/6/2018				<0.0002	<0.0002	<0.0002		
11/5/2018			<0.0002	<0.0002	<0.0002			
11/6/2018	<0.0002						<0.0002	<0.0002
11/7/2018		<0.0002				<0.0002		
3/26/2019				<0.0002	<0.0002		<0.0002	<0.0002
3/27/2019	<0.0002	<0.0002	<0.0002			<0.0002		
9/10/2019	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
9/11/2019					<0.0002			
4/20/2020					<0.0002		<0.0002	<0.0002
4/21/2020	<0.0002			<0.0002		<0.0002		
4/22/2020		<0.0002	<0.0002					
8/11/2020						<0.0002		<0.0002
8/12/2020							<0.0002	
8/17/2020	<0.0002							
8/18/2020		<0.0002	<0.0002	<0.0002	<0.0002			
3/9/2021						<0.0002		0.000109 (J)
3/10/2021			<0.0002	<0.0002			<0.0002	
3/15/2021		<0.0002			<0.0002			
3/16/2021	<0.0002							
8/17/2021	<0.0002							0.00011 (J)
8/24/2021		<0.0002						
8/25/2021			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
3/29/2022				<0.0002			<0.0002	
3/30/2022			<0.0002					
4/4/2022	<0.0002	<0.0002				<0.0002		
4/6/2022					<0.0002			9E-05 (J)

Time Series

Constituent: Lead (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002		<0.0002	<0.0002				
6/1/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/15/2016	<0.0002	<0.0002	0.00104 (J)					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.0002		<0.0002	<0.0002	<0.0002	
10/12/2016	<0.0002	<0.0002		<0.0002				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
1/25/2017				<0.0002				
5/9/2017			<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
5/10/2017	<0.0002	<0.0002				<0.0002		
6/27/2017	<0.0002	<0.0002			<0.0002			<0.0002
6/28/2017			<0.0002	<0.0002		<0.0002	<0.0002	
2/27/2018			<0.0002		<0.0002	<0.0002		<0.0002
2/28/2018	<0.0002	<0.0002		<0.0002			<0.0002	
6/4/2018			<0.0002					
6/5/2018	<0.0002	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.0002	
11/5/2018				<0.0002				
11/6/2018	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			<0.0002				<0.0002	
9/9/2019	<0.0002	<0.0002	<0.0002					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	<0.0002						<0.0002	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.0002					
8/18/2020				<0.0002				<0.0002
3/9/2021	<0.0002	<0.0002						
3/10/2021				<0.0002	<0.0002	<0.0002	8.84E-05 (J)	
3/15/2021								6.99E-05 (J)
3/16/2021			0.000736					
8/17/2021	<0.0002	<0.0002	0.00059					
8/18/2021								7E-05 (J)
8/24/2021					<0.0002	<0.0002	<0.0002	
8/25/2021				<0.0002				
3/28/2022			0.00066		<0.0002			
3/29/2022							<0.0002	
3/30/2022				<0.0002				
4/4/2022	<0.0002					<0.0002		<0.0002
4/6/2022		<0.0002						

Time Series

Constituent: Lead (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0002				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/17/2016	<0.0002	<0.0002						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	<0.0002		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			<0.0002					
5/9/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.000121 (J)	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	<0.0002	<0.0002	<0.0002		<0.0002			
8/23/2021						<0.0002	0.00015 (J)	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	0.00015 (J)	<0.0002	0.00015 (J)
4/5/2022				<0.0002				

Time Series

Constituent: Lead (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		<0.0002	<0.0002	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.0002					
9/10/2019	<0.0002						<0.0002	
9/11/2019		<0.0002	<0.0002		<0.0002	<0.0002		<0.0002
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
4/29/2020								<0.0002
8/11/2020			<0.0002			<0.0002		
8/12/2020	<0.0002						<0.0002	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			0.000447			<0.0002		
3/10/2021					<0.0002		<0.0002	
3/15/2021	<0.0002							<0.0002
3/16/2021		<0.0002		<0.0002				
8/23/2021	<0.0002							
8/24/2021		<0.0002	0.00031	<0.0002	<0.0002	<0.0002		
8/25/2021							<0.0002	<0.0002
3/28/2022	<0.0002							
3/29/2022				<0.0002				
3/30/2022			0.00037		<0.0002		<0.0002	
4/6/2022		<0.0002				<0.0002		8E-05 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0002							
1/16/2019		<0.0002	<0.0002					
9/11/2019	<0.0002	<0.0002	<0.0002					
4/20/2020			<0.0002	<0.0002				
4/21/2020	<0.0002	<0.0002					<0.0002	<0.0002
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			<0.0002					
8/17/2020				<0.0002			<0.0002	
8/19/2020	<0.0002	<0.0002						<0.0002
3/8/2021					<0.0002	<0.0002		
3/9/2021	<0.0002	<0.0002						
3/10/2021			<0.0002	<0.0002			<0.0002	<0.0002
8/17/2021					<0.0002	<0.0002		
8/18/2021	<0.0002	<0.0002		<0.0002			<0.0002	<0.0002
8/23/2021			<0.0002					
3/23/2022					<0.0002	<0.0002		
3/29/2022				<0.0002				
3/30/2022							<0.0002	<0.0002
4/4/2022			<0.0002					
4/6/2022	<0.0002	<0.0002						

Time Series

Constituent: Lead (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.0002							
4/12/2016	<0.0002							
5/31/2016	<0.0002							
8/17/2016	<0.0002							
10/11/2016	<0.0002							
1/24/2017	<0.0002							
5/9/2017	<0.0002							
6/28/2017	<0.0002							
2/27/2018	<0.0002							
6/5/2018	<0.0002							
11/6/2018	<0.0002							
3/27/2019	<0.0002							
9/11/2019	<0.0002							
4/20/2020				<0.0002	<0.0002		<0.0002	
4/21/2020	<0.0002							
5/28/2020		<0.0002				<0.0002		0.0026 (J)
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002
8/12/2020	<0.0002				<0.0002		<0.0002	
3/8/2021		0.000122 (J)	<0.0002					
3/9/2021						8.75E-05 (J)		<0.0002
3/10/2021				<0.0002	9.49E-05 (J)		<0.0002	
3/16/2021	<0.0002							
8/16/2021			<0.0002					
8/17/2021		0.00029				<0.0002		0.00017 (J)
8/23/2021	<0.0002			<0.0002	<0.0002		<0.0002	
3/23/2022		0.00013 (J)	<0.0002			0.0001 (J)		<0.0002
4/4/2022	<0.0002							
4/5/2022					<0.0002		0.00031	
4/6/2022				8E-05 (J)				

Time Series

Constituent: Lead (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	<0.0002						<0.0002	<0.0002
8/17/2021		<0.0002	<0.0002	0.00011 (J)	<0.0002	0.00022		
8/24/2021	<0.0002						<0.0002	<0.0002
3/23/2022		<0.0002	<0.0002	0.00016 (J)	<0.0002	0.00016 (J)		
3/29/2022	<0.0002						<0.0002	<0.0002

Time Series

Constituent: Lead (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.0002
4/20/2020		<0.0002
4/21/2020	<0.0002	
8/17/2020		<0.0002
8/18/2020	<0.0002	
3/9/2021	7.84E-05 (J)	
3/10/2021		<0.0002
8/17/2021		0.00022
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		0.0002 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.115		0.502	0.51	0.632		
2/17/2016	<0.02		0.0777				0.806	0.626
4/12/2016					0.508	0.615	0.719	
4/13/2016	<0.02	0.135	0.073	0.544				0.594
5/31/2016		0.127	0.0721	0.47	0.454	0.613	0.735	
6/1/2016	<0.02							0.556
8/15/2016	<0.02							0.557
8/16/2016		0.124	0.075	0.282	0.371		0.699	
8/17/2016						0.444		
10/11/2016	0.0194 (J)						0.727	
10/12/2016		0.101	0.0703	0.217	0.282	0.387		0.589
1/24/2017	<0.02						0.689	0.522
1/25/2017		0.109	0.0683	0.108	0.0904	0.516		
5/9/2017	<0.02		0.0646	0.132	0.144	0.526		
5/10/2017		0.101					0.603	0.552
6/27/2017	<0.02						0.558	0.523
6/28/2017		0.0954	0.109	0.126	0.146	0.626		
2/27/2018	<0.02	0.111	0.11			0.562		
2/28/2018				0.0786	0.0738		0.571	0.544
6/4/2018	<0.02							
6/5/2018		0.104	0.102				0.492	0.49
6/6/2018				0.067	0.148	1.06		
11/5/2018			0.0641	0.0912	0.0914			
11/6/2018	<0.02						0.547	0.54
11/7/2018		0.11				0.604		
3/26/2019				0.0532	0.123		0.57	0.558
3/27/2019	<0.02	0.115	0.119			1.11		
9/10/2019	<0.02	0.112	0.124	0.0598		0.765	0.6	0.581
9/11/2019					0.246			
4/20/2020					0.201		0.604	0.62
4/21/2020	<0.02			0.166		0.672		
4/22/2020		0.123	0.126					
8/11/2020						0.712		0.599
8/12/2020							0.594	
8/17/2020	<0.02							
8/18/2020		0.124	0.109	0.0892	0.42			
3/9/2021						0.791		0.692
3/10/2021			0.0826	0.125			0.63	
3/15/2021		0.155			0.308			
3/16/2021	<0.02							
8/17/2021	<0.02							0.647
8/24/2021		0.198						
8/25/2021			0.132	0.117	0.5	0.985	0.622	
3/29/2022				0.13			0.534	
3/30/2022			0.0615					
4/4/2022	<0.02	0.329				0.607		
4/6/2022					0.584			0.638

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.513				
2/17/2016	0.612	0.67	<0.02		<0.02	<0.02	<0.02	
4/12/2016		0.655			<0.02	<0.02	<0.02	
4/13/2016	0.694		<0.02	0.532				
6/1/2016	0.675	0.666	<0.02	0.513	<0.02	<0.02	<0.02	
8/15/2016	0.571	0.558	<0.02					
8/16/2016				0.301	<0.02	<0.02		
8/17/2016							<0.02	<0.02
9/20/2016								<0.02
10/11/2016			<0.02		<0.02	<0.02	<0.02	
10/12/2016	0.622	0.56		0.22				<0.02
11/15/2016								<0.02
1/4/2017								<0.02
1/23/2017								<0.02
1/24/2017	0.752	0.374	<0.02		<0.02	<0.02	<0.02	
1/25/2017				0.107				
5/9/2017			<0.02	0.113	<0.02		<0.02	<0.02
5/10/2017	0.622	0.443				<0.02		
6/27/2017	0.597	0.451			<0.02			<0.02
6/28/2017			<0.02	0.0962		<0.02	<0.02	
2/27/2018			<0.02		<0.02	<0.02		<0.02
2/28/2018	0.73	0.343		0.0594			<0.02	
6/4/2018			<0.02					
6/5/2018	0.531	0.353			<0.02	<0.02		<0.02
6/6/2018				0.0469 (J)			<0.02	
11/5/2018				0.0902				
11/6/2018	0.583	0.369	<0.02				<0.02	<0.02
11/7/2018					<0.02	<0.02		
3/26/2019	0.595	0.378		0.0531	<0.02	<0.02		<0.02
3/27/2019			<0.02				<0.02	
9/9/2019	0.571	0.408	<0.02					
9/10/2019				0.0862	<0.02	<0.02	<0.02	
9/11/2019								<0.02
4/21/2020	0.629	0.386	<0.02	0.0782	<0.02			<0.02
4/22/2020						<0.02	<0.02	
8/11/2020	0.552						<0.02	
8/12/2020		0.326			<0.02	<0.02		
8/17/2020			<0.02					
8/18/2020				0.0718				<0.02
3/9/2021	0.864	0.364						
3/10/2021				0.146	<0.02	<0.02	<0.02	
3/15/2021								<0.02
3/16/2021			<0.02					
8/17/2021	0.585	0.335	<0.02					
8/18/2021								<0.02
8/24/2021					<0.02	<0.02	<0.02	
8/25/2021				0.0872				
3/28/2022			<0.02		<0.02			
3/29/2022							<0.02	
3/30/2022				0.082				
4/4/2022	0.647					<0.02		<0.02
4/6/2022		0.312						

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.02				
4/12/2016				<0.02				
6/1/2016				<0.02				
8/15/2016				<0.02				
8/16/2016			<0.02		<0.02	<0.02	<0.02	<0.02
8/17/2016	<0.02	<0.02						
9/19/2016						<0.02	<0.02	<0.02
9/20/2016	<0.02	<0.02	<0.02		<0.02			
10/11/2016			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/12/2016	<0.02	<0.02						
11/14/2016						<0.02	<0.02	<0.02
11/15/2016	<0.02	<0.02	<0.02		<0.02			
1/3/2017						<0.02	<0.02	<0.02
1/4/2017	<0.02	<0.02	<0.02		<0.02			
1/23/2017	<0.02				<0.02			
1/24/2017		<0.02		<0.02		<0.02	<0.02	
1/25/2017								<0.02
1/26/2017			<0.02					
5/9/2017	<0.02	<0.02	<0.02	<0.02	<0.02			
5/10/2017						<0.02	<0.02	<0.02
6/27/2017	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
6/28/2017				<0.02				
2/27/2018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
6/4/2018				<0.02				
6/5/2018	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
11/5/2018							<0.02	
11/6/2018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02
3/26/2019	<0.02	<0.02	<0.02		<0.02			
3/27/2019				<0.02		<0.02	<0.02	<0.02
9/9/2019				<0.02				
9/11/2019	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
4/20/2020				<0.02				
4/21/2020	<0.02	<0.02	<0.02		<0.02			
4/22/2020						<0.02	<0.02	<0.02
8/11/2020						<0.02		
8/12/2020							<0.02	<0.02
8/17/2020				<0.02				
8/18/2020	<0.02	<0.02	<0.02		<0.02			
3/15/2021	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
3/16/2021				<0.02				
8/17/2021				<0.02				
8/18/2021	<0.02	<0.02	<0.02		<0.02			
8/23/2021						<0.02	<0.02	<0.02
3/28/2022	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
4/5/2022				<0.02				

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.02			
1/15/2019				0.0141 (J)		0.399	0.407	0.0411
1/16/2019		<0.02						
1/17/2019	<0.02							
1/30/2019			<0.02					
9/10/2019	<0.02						0.545	
9/11/2019		<0.02	<0.02		<0.02	0.45		0.0396
4/20/2020							0.628	
4/21/2020		<0.02						
4/22/2020	<0.02		<0.02	0.0134 (J)	<0.02	0.41		
4/29/2020								0.041
8/11/2020			<0.02			0.47		
8/12/2020	<0.02						0.669	
8/18/2020		<0.02						0.039
8/19/2020				0.0108 (J)	<0.02			
3/9/2021			<0.02			0.474		
3/10/2021					<0.02		0.772	
3/15/2021	<0.02							0.0459
3/16/2021		<0.02		0.0107 (J)				
8/23/2021	<0.02							
8/24/2021		<0.02	<0.02	0.0112 (J)	<0.02	0.47		
8/25/2021							0.734	0.0545
3/28/2022	<0.02							
3/29/2022				0.00867 (J)				
3/30/2022			<0.02		<0.02		0.707	
4/6/2022		<0.02				0.336		0.0809

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.0146 (J)							
1/16/2019		0.178	<0.02					
9/11/2019	0.0169 (J)	0.254	<0.02					
4/20/2020			<0.02	0.148				
4/21/2020	0.0174 (J)	0.376					0.0924	0.0733
5/28/2020						0.0527		
7/6/2020					0.089			
8/11/2020					0.097	0.0457		
8/12/2020			<0.02					
8/17/2020				0.212			0.108	
8/19/2020	0.0168 (J)	0.336						0.0511
3/8/2021					0.0991	0.0456		
3/9/2021	0.0172 (J)	0.448						
3/10/2021			<0.02	0.194			0.102	0.0681
8/17/2021					0.112	0.0453		
8/18/2021	0.0304	0.344		0.367			0.0821	0.0538
8/23/2021			<0.02					
3/23/2022					0.122	0.0531		
3/29/2022				0.411				
3/30/2022							0.0704	0.0726
4/4/2022			<0.02					
4/6/2022	0.0231	0.261						

Time Series

Constituent: Lithium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.0883							
4/12/2016	0.0862							
5/31/2016	0.085							
8/17/2016	0.093							
10/11/2016	0.0928							
1/24/2017	0.094							
5/9/2017	0.0865							
6/28/2017	0.0879							
2/27/2018	0.113							
6/5/2018	0.101							
11/6/2018	0.116							
3/27/2019	0.0988							
9/11/2019	0.117							
4/20/2020				0.0107 (J)	0.101		<0.02	
4/21/2020	0.13							
5/28/2020		0.0979				<0.02		<0.02
7/6/2020			<0.02					
8/11/2020		0.0825	<0.02	0.0125 (J)		<0.02		<0.02
8/12/2020	0.132				0.105		<0.02	
3/8/2021		0.119	<0.02					
3/9/2021						<0.02		<0.02
3/10/2021				<0.02	0.0906		<0.02	
3/16/2021	0.149							
8/16/2021			<0.02					
8/17/2021		0.106				<0.02		<0.02
8/23/2021	0.116			<0.02	0.0805		<0.02	
3/23/2022		0.11	<0.02			<0.02		<0.02
4/4/2022	0.102							
4/5/2022					0.0584		<0.02	
4/6/2022				<0.02				

Time Series

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.02
2/17/2016	<0.02						<0.02	
4/12/2016	<0.02							
4/13/2016							<0.02	<0.02
5/31/2016	<0.02						<0.02	
6/1/2016								0.0101 (J)
8/17/2016	<0.02						<0.02	0.0143 (J)
10/11/2016	<0.02							
10/12/2016							<0.02	0.0166 (J)
1/24/2017	0.0591							
1/25/2017							<0.02	0.0272 (J)
5/10/2017	0.0519						<0.02	0.0436 (J)
6/28/2017	0.0403 (J)						<0.02	0.0401 (J)
2/27/2018	0.0201 (J)						<0.02	0.0309 (J)
6/5/2018	0.0218 (J)						<0.02	0.0286 (J)
11/7/2018	0.0141 (J)						<0.02	0.0371
3/26/2019	0.0192 (J)						<0.02	0.0537
9/10/2019	0.0267						<0.02	0.0928
4/21/2020	0.0518						<0.02	0.0582
8/19/2020	0.0197 (J)						<0.02	0.0511
3/9/2021	0.013 (J)						<0.02	0.0249
8/17/2021		<0.02	<0.02	<0.02	<0.02	0.142		
8/24/2021	0.00951 (J)						<0.02	0.0155 (J)
3/23/2022		<0.02	<0.02	<0.02	<0.02	0.159		
3/29/2022	<0.02						<0.02	0.00828 (J)

Time Series

Constituent: Lithium (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.0359 (J)	
4/13/2016	0.0276 (J)	
6/1/2016	0.0296 (J)	
8/17/2016	0.0398 (J)	
10/12/2016	0.0433 (J)	
1/25/2017	0.0366 (J)	
5/10/2017	0.039 (J)	
6/28/2017	0.0345 (J)	
2/27/2018	0.0349 (J)	
6/5/2018	0.0338 (J)	
11/7/2018	0.0616	
3/26/2019	0.0931	
9/10/2019	0.128	<0.02
4/20/2020		<0.02
4/21/2020	0.0693	
8/17/2020		<0.02
8/18/2020	0.0591	
3/9/2021	0.0417	
3/10/2021		<0.02
8/17/2021		<0.02
8/24/2021	0.0383	
3/29/2022	0.0126 (J)	
4/5/2022		<0.02

Time Series

Constituent: Mercury (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0005		<0.0005	<0.0005	<0.0005		
2/17/2016	<0.0005		<0.0005				<0.0005	<0.0005
4/12/2016					<0.0005	<0.0005	<0.0005	
4/13/2016	<0.0005	<0.0005	<0.0005	<0.0005				<0.0005
5/31/2016		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
6/1/2016	<0.0005							<0.0005
8/15/2016	<0.0005							<0.0005
8/16/2016		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	
8/17/2016						<0.0005		
10/11/2016	<0.0005						<0.0005	
10/12/2016		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
1/24/2017	<0.0005						<0.0005	<0.0005
1/25/2017		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
5/9/2017	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		
5/10/2017		<0.0005					<0.0005	<0.0005
6/27/2017	<0.0005						<0.0005	<0.0005
6/28/2017		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
2/27/2018	<0.0005	<0.0005	<0.0005			<0.0005		
2/28/2018				<0.0005	<0.0005		<0.0005	<0.0005
6/4/2018	<0.0005							
6/5/2018		<0.0005	<0.0005				<0.0005	<0.0005
6/6/2018				<0.0005	<0.0005	<0.0005		
11/5/2018			<0.0005	<0.0005	<0.0005			
11/6/2018	<0.0005						<0.0005	<0.0005
11/7/2018		<0.0005				<0.0005		
3/26/2019				<0.0005	<0.0005		<0.0005	<0.0005
3/27/2019	<0.0005	<0.0005	<0.0005			<0.0005		
9/10/2019	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
9/11/2019					<0.0005			
4/20/2020					<0.0005		<0.0005	<0.0005
4/21/2020	<0.0005			<0.0005		<0.0005		
4/22/2020		<0.0005	<0.0005					
8/11/2020						<0.0005		<0.0005
8/12/2020							<0.0005	
8/17/2020	<0.0005							
8/18/2020		<0.0005	<0.0005	<0.0005	<0.0005			
3/9/2021						<0.0005		<0.0005
3/10/2021			<0.0005	<0.0005			<0.0005	
3/15/2021		<0.0005			<0.0005			
3/16/2021	<0.0005							
8/17/2021	<0.0005							<0.0005
8/24/2021		<0.0005						
8/25/2021			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
3/29/2022				<0.0005			<0.0005	
3/30/2022			<0.0005					
4/4/2022	<0.0005	<0.0005				<0.0005		
4/6/2022					<0.0005			<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0005				
2/17/2016	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
4/12/2016		<0.0005			<0.0005	<0.0005	<0.0005	
4/13/2016	<0.0005		<0.0005	<0.0005				
6/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/15/2016	<0.0005	<0.0005	<0.0005					
8/16/2016				<0.0005	<0.0005	<0.0005		
8/17/2016							<0.0005	<0.0005
9/20/2016								<0.0005
10/11/2016			<0.0005		<0.0005	<0.0005	<0.0005	
10/12/2016	<0.0005	<0.0005		<0.0005				<0.0005
11/15/2016								<0.0005
1/4/2017								<0.0005
1/23/2017								<0.0005
1/24/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
1/25/2017				<0.0005				
5/9/2017			<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
5/10/2017	<0.0005	<0.0005				<0.0005		
6/27/2017	<0.0005	<0.0005			<0.0005			<0.0005
6/28/2017			<0.0005	<0.0005		<0.0005	<0.0005	
2/27/2018			<0.0005		<0.0005	<0.0005		<0.0005
2/28/2018	<0.0005	<0.0005		<0.0005			<0.0005	
6/4/2018			<0.0005					
6/5/2018	<0.0005	<0.0005			<0.0005	<0.0005		<0.0005
6/6/2018				<0.0005			<0.0005	
11/5/2018				<0.0005				
11/6/2018	<0.0005	<0.0005	<0.0005				<0.0005	<0.0005
11/7/2018					<0.0005	<0.0005		
3/26/2019	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
3/27/2019			<0.0005				<0.0005	
9/9/2019	<0.0005	<0.0005	<0.0005					
9/10/2019				<0.0005	<0.0005	<0.0005	<0.0005	
9/11/2019								<0.0005
4/21/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005
4/22/2020						<0.0005	<0.0005	
8/11/2020	<0.0005						<0.0005	
8/12/2020		<0.0005			<0.0005	<0.0005		
8/17/2020			<0.0005					
8/18/2020				<0.0005				<0.0005
3/9/2021	<0.0005	<0.0005						
3/10/2021				<0.0005	<0.0005	<0.0005	<0.0005	
3/15/2021								<0.0005
3/16/2021			<0.0005					
8/17/2021	<0.0005	<0.0005	<0.0005					
8/18/2021								<0.0005
8/24/2021					<0.0005	<0.0005	<0.0005	
8/25/2021				<0.0005				
3/28/2022			<0.0005		<0.0005			
3/29/2022							<0.0005	
3/30/2022				<0.0005				
4/4/2022	<0.0005					<0.0005		<0.0005
4/6/2022		<0.0005						

Time Series

Constituent: Mercury (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0005				
4/12/2016				<0.0005				
6/1/2016				<0.0005				
8/15/2016				<0.0005				
8/16/2016			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
8/17/2016	<0.0005	<0.0005						
9/19/2016						<0.0005	<0.0005	<0.0005
9/20/2016	<0.0005	<0.0005	<0.0005		<0.0005			
10/11/2016			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10/12/2016	<0.0005	<0.0005						
11/14/2016						<0.0005	<0.0005	<0.0005
11/15/2016	<0.0005	<0.0005	<0.0005		<0.0005			
1/3/2017						<0.0005	<0.0005	<0.0005
1/4/2017	<0.0005	<0.0005	<0.0005		<0.0005			
1/23/2017	<0.0005				<0.0005			
1/24/2017		<0.0005		<0.0005		<0.0005	<0.0005	
1/25/2017								<0.0005
1/26/2017			<0.0005					
5/9/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
5/10/2017						<0.0005	<0.0005	<0.0005
6/27/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
6/28/2017				<0.0005				
2/27/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/4/2018				<0.0005				
6/5/2018	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
11/5/2018							<0.0005	
11/6/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
3/26/2019	<0.0005	<0.0005	<0.0005		<0.0005			
3/27/2019				<0.0005		<0.0005	<0.0005	<0.0005
9/9/2019				<0.0005				
9/11/2019	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
4/20/2020				<0.0005				
4/21/2020	<0.0005	<0.0005	<0.0005		<0.0005			
4/22/2020						<0.0005	<0.0005	<0.0005
8/11/2020						<0.0005		
8/12/2020							<0.0005	<0.0005
8/17/2020				<0.0005				
8/18/2020	<0.0005	<0.0005	<0.0005		<0.0005			
3/15/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
3/16/2021				<0.0005				
8/17/2021				<0.0005				
8/18/2021	<0.0005	<0.0005	<0.0005		<0.0005			
8/23/2021						<0.0005	<0.0005	<0.0005
3/28/2022	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
4/5/2022				<0.0005				

Time Series

Constituent: Mercury (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0005			
1/15/2019				<0.0005		<0.0005	<0.0005	<0.0005
1/16/2019		<0.0005						
1/17/2019	<0.0005							
1/30/2019			<0.0005					
9/10/2019	<0.0005						<0.0005	
9/11/2019		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005
4/20/2020							<0.0005	
4/21/2020		<0.0005						
4/22/2020	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		
4/29/2020								<0.0005
8/11/2020			<0.0005			<0.0005		
8/12/2020	<0.0005						<0.0005	
8/18/2020		<0.0005						<0.0005
8/19/2020				<0.0005	<0.0005			
3/9/2021			<0.0005			<0.0005		
3/10/2021					<0.0005		<0.0005	
3/15/2021	<0.0005							<0.0005
3/16/2021		<0.0005		<0.0005				
8/23/2021	<0.0005							
8/24/2021		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/25/2021							<0.0005	<0.0005
3/28/2022	<0.0005							
3/29/2022				<0.0005				
3/30/2022			<0.0005		<0.0005		<0.0005	
4/6/2022		<0.0005				<0.0005		<0.0005

Time Series

Constituent: Mercury (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0005							
1/16/2019		<0.0005	<0.0005					
9/11/2019	<0.0005	<0.0005	<0.0005					
4/20/2020			<0.0005	<0.0005				
4/21/2020	<0.0005	<0.0005					<0.0005	<0.0005
5/28/2020						<0.0005		
7/6/2020					<0.0005			
8/11/2020					<0.0005	<0.0005		
8/12/2020			<0.0005					
8/17/2020				<0.0005			<0.0005	
8/19/2020	<0.0005	<0.0005						<0.0005
3/8/2021					<0.0005	<0.0005		
3/9/2021	<0.0005	<0.0005						
3/10/2021			<0.0005	<0.0005			<0.0005	<0.0005
8/17/2021					<0.0005	<0.0005		
8/18/2021	<0.0005	<0.0005		<0.0005			<0.0005	<0.0005
8/23/2021			<0.0005					
3/23/2022					<0.0005	<0.0005		
3/29/2022				<0.0005				
3/30/2022							<0.0005	<0.0005
4/4/2022			<0.0005					
4/6/2022	<0.0005	<0.0005						

Time Series

Constituent: Mercury (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.0005							
4/12/2016	<0.0005							
5/31/2016	<0.0005							
8/17/2016	<0.0005							
10/11/2016	<0.0005							
1/24/2017	<0.0005							
5/9/2017	<0.0005							
6/28/2017	<0.0005							
2/27/2018	<0.0005							
6/5/2018	<0.0005							
11/6/2018	<0.0005							
3/27/2019	<0.0005							
9/11/2019	<0.0005							
4/20/2020				<0.0005	<0.0005		<0.0005	
4/21/2020	<0.0005							
5/28/2020		<0.0005				<0.0005		<0.0005
7/6/2020			<0.0005					
8/11/2020		<0.0005	<0.0005	<0.0005		<0.0005		<0.0005
8/12/2020	<0.0005				<0.0005		<0.0005	
3/8/2021		<0.0005	<0.0005					
3/9/2021						<0.0005		<0.0005
3/10/2021				<0.0005	<0.0005		<0.0005	
3/16/2021	<0.0005							
8/16/2021			<0.0005					
8/17/2021		<0.0005				<0.0005		<0.0005
8/23/2021	<0.0005			<0.0005	<0.0005		<0.0005	
3/23/2022		<0.0005	<0.0005			<0.0005		<0.0005
4/4/2022	<0.0005							
4/5/2022					<0.0005		<0.0005	
4/6/2022				<0.0005				

Time Series

Constituent: Mercury (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0005
2/17/2016	<0.0005						<0.0005	
4/12/2016	<0.0005							
4/13/2016							<0.0005	<0.0005
5/31/2016	<0.0005						<0.0005	
6/1/2016								<0.0005
8/17/2016	<0.0005						<0.0005	<0.0005
10/11/2016	<0.0005							
10/12/2016							<0.0005	<0.0005
1/24/2017	<0.0005							
1/25/2017							<0.0005	<0.0005
5/10/2017	<0.0005						<0.0005	<0.0005
6/28/2017	<0.0005						<0.0005	<0.0005
2/27/2018	<0.0005						<0.0005	<0.0005
6/5/2018	<0.0005						<0.0005	<0.0005
11/7/2018	<0.0005						<0.0005	<0.0005
3/26/2019	<0.0005						<0.0005	<0.0005
9/10/2019	<0.0005						<0.0005	<0.0005
4/21/2020	<0.0005						<0.0005	<0.0005
8/19/2020	<0.0005						<0.0005	<0.0005
3/9/2021	<0.0005						<0.0005	<0.0005
8/17/2021		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/24/2021	<0.0005						<0.0005	<0.0005
3/23/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
3/29/2022	<0.0005						<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0005	
4/13/2016	<0.0005	
6/1/2016	<0.0005	
8/17/2016	<0.0005	
10/12/2016	<0.0005	
1/25/2017	<0.0005	
5/10/2017	<0.0005	
6/28/2017	<0.0005	
2/27/2018	<0.0005	
6/5/2018	<0.0005	
11/7/2018	<0.0005	
3/26/2019	<0.0005	
9/10/2019	<0.0005	<0.0005
4/20/2020		<0.0005
4/21/2020	<0.0005	
8/17/2020		<0.0005
8/18/2020	<0.0005	
3/9/2021	<0.0005	
3/10/2021		<0.0005
8/17/2021		<0.0005
8/24/2021	<0.0005	
3/29/2022	<0.0005	
4/5/2022		<0.0005

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.0101		0.107	0.0769	0.00839 (J)		
2/17/2016	<0.0002		0.00651 (J)				<0.0002	<0.0002
4/12/2016					0.0442	0.00918 (J)	<0.0002	
4/13/2016	<0.0002	0.0127	0.00646 (J)	0.101				<0.0002
5/31/2016		0.0106	0.00546 (J)	0.0915	0.0481	0.00877 (J)	<0.0002	
6/1/2016	<0.0002							<0.0002
8/15/2016	<0.0002							<0.0002
8/16/2016		0.00991 (J)	0.00582 (J)	0.127	0.0956		<0.0002	
8/17/2016						0.0236		
10/11/2016	<0.0002						<0.0002	
10/12/2016		0.00919 (J)	0.00589 (J)	0.11	0.114	0.0289		<0.0002
1/24/2017	<0.0002						<0.0002	<0.0002
1/25/2017		0.0101	0.00556 (J)	0.0741	0.078	0.00501 (J)		
5/9/2017	<0.0002		0.0058 (J)	0.0883	0.0484	0.0108		
5/10/2017		0.00984 (J)					<0.0002	<0.0002
6/27/2017	<0.0002						<0.0002	<0.0002
6/28/2017		0.0102	0.00616 (J)	0.109	0.0598	0.00752 (J)		
2/27/2018	<0.0002	0.011	0.00962 (J)			0.0121		
2/28/2018				0.0903	0.0346		<0.0002	<0.0002
6/4/2018	<0.0002							
6/5/2018		0.00752 (J)	0.00984 (J)				<0.0002	<0.0002
6/6/2018				0.0757	0.0253	0.0101		
11/5/2018			0.00944 (J)	0.0906	0.044			
11/6/2018	<0.0002						<0.0002	<0.0002
11/7/2018		0.00748 (J)				0.0155		
3/26/2019				0.11	0.0262		<0.0002	<0.0002
3/27/2019	<0.0002	0.00778 (J)	0.0151			0.0167		
9/10/2019	<0.0002	0.00757 (J)	0.0205	0.134		0.0125	<0.0002	<0.0002
9/11/2019					0.0226			
4/20/2020					0.0924		<0.0002	<0.0002
4/21/2020	<0.0002			0.0947		0.0141		
4/22/2020		0.00747 (J)	0.0147					
8/11/2020						0.0117		<0.0002
8/12/2020							<0.0002	
8/17/2020	<0.0002							
8/18/2020		0.00808 (J)	0.0146	0.0938	0.145			
3/9/2021						0.0205		0.000113 (J)
3/10/2021			0.00701	0.0611			<0.0002	
3/15/2021		0.0103			0.0146			
3/16/2021	0.000117 (J)							
8/17/2021	<0.0002							0.00014 (J)
8/24/2021		0.0132						
8/25/2021			0.0106	0.0547	0.0319	0.0127	<0.0002	
3/29/2022				0.0514			<0.0002	
3/30/2022			0.00425					
4/4/2022	<0.0002	0.0117				0.0166		
4/6/2022					0.0201			0.00015 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.0433				
2/17/2016	0.066	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.0002	
4/13/2016	0.0835		<0.0002	0.0567				
6/1/2016	0.0835	<0.0002	<0.0002	0.0565	<0.0002	<0.0002	<0.0002	
8/15/2016	0.0838	<0.0002	<0.0002					
8/16/2016				0.0791	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.0002		<0.0002	<0.0002	<0.0002	
10/12/2016	0.111	<0.0002		0.0767				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	0.111	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
1/25/2017				0.0398				
5/9/2017			<0.0002	0.0467	<0.0002		<0.0002	<0.0002
5/10/2017	0.0566	<0.0002				<0.0002		
6/27/2017	0.0702	<0.0002			<0.0002			<0.0002
6/28/2017			<0.0002	0.0833		<0.0002	<0.0002	
2/27/2018			<0.0002		<0.0002	<0.0002		<0.0002
2/28/2018	0.0957	<0.0002		0.0643			<0.0002	
6/4/2018			<0.0002					
6/5/2018	0.0363	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				0.0579			<0.0002	
11/5/2018				0.0548				
11/6/2018	0.0418	<0.0002	<0.0002				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	0.062	<0.0002		0.071	<0.0002	<0.0002		<0.0002
3/27/2019			<0.0002				<0.0002	
9/9/2019	0.0681	<0.0002	<0.0002					
9/10/2019				0.0609	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	0.0694	<0.0002	<0.0002	0.0562	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	0.0506						<0.0002	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.0002					
8/18/2020				0.0505				<0.0002
3/9/2021	0.067	0.000362						
3/10/2021				0.0123	0.000179 (J)	<0.0002	8.43E-05 (J)	
3/15/2021								<0.0002
3/16/2021			8.04E-05 (J)					
8/17/2021	0.0468	0.0004	0.00017 (J)					
8/18/2021								<0.0002
8/24/2021					0.00017 (J)	<0.0002	<0.0002	
8/25/2021				0.00789				
3/28/2022			<0.0002		0.00012 (J)			
3/29/2022							<0.0002	
3/30/2022				0.00682				
4/4/2022	0.054					<0.0002		<0.0002
4/6/2022		0.00032						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0002				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	0.00201 (J)	<0.0002	<0.0002
8/17/2016	<0.0002	<0.0002						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	0.00308 (J)		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			<0.0002					
5/9/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	7.41E-05 (J)	<0.0002	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	<0.0002	<0.0002	<0.0002		<0.0002			
8/23/2021						<0.0002	<0.0002	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/5/2022				<0.0002				

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.00574 (J)			
1/15/2019				<0.0002		0.00419 (J)	<0.0002	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.0002					
9/10/2019	<0.0002						<0.0002	
9/11/2019		<0.0002	<0.0002		0.00203 (J)	0.00338 (J)		<0.0002
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	0.00246 (J)		
4/29/2020								<0.0002
8/11/2020			<0.0002			0.00401 (J)		
8/12/2020	<0.0002						<0.0002	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			0.000166 (J)			0.0047		
3/10/2021					0.000699		<0.0002	
3/15/2021	<0.0002							0.000131 (J)
3/16/2021		<0.0002		0.000373				
8/23/2021	<0.0002							
8/24/2021		<0.0002	9E-05 (J)	0.00037	0.00048	0.00376		
8/25/2021							<0.0002	0.0001 (J)
3/28/2022	<0.0002							
3/29/2022				0.00079				
3/30/2022			0.00017 (J)		0.00076		<0.0002	
4/6/2022		<0.0002				0.00174		0.00013 (J)

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0002							
1/16/2019		<0.0002	<0.0002					
9/11/2019	<0.0002	<0.0002	<0.0002					
4/20/2020			<0.0002	0.0703				
4/21/2020	<0.0002	<0.0002					<0.0002	<0.0002
5/28/2020						<0.0002		
7/6/2020					0.0661			
8/11/2020					0.0443	<0.0002		
8/12/2020			<0.0002					
8/17/2020				0.0737			<0.0002	
8/19/2020	<0.0002	<0.0002						<0.0002
3/8/2021					0.0761	<0.0002		
3/9/2021	0.000315	0.0026						
3/10/2021			0.000171 (J)	0.0852			0.000144 (J)	0.000173 (J)
8/17/2021					0.0555	<0.0002		
8/18/2021	0.00015 (J)	0.00283		0.0752			7E-05 (J)	0.00022
8/23/2021			0.00018 (J)					
3/23/2022					0.0489	<0.0002		
3/29/2022				0.0652				
3/30/2022							<0.0002	0.00019 (J)
4/4/2022			<0.0002					
4/6/2022	0.00023	0.00264						

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.00347 (J)							
4/12/2016	0.00297 (J)							
5/31/2016	0.00261 (J)							
8/17/2016	0.0033 (J)							
10/11/2016	0.0041 (J)							
1/24/2017	0.00336 (J)							
5/9/2017	0.0031 (J)							
6/28/2017	0.00356 (J)							
2/27/2018	0.0042 (J)							
6/5/2018	0.00293 (J)							
11/6/2018	0.00318 (J)							
3/27/2019	0.00284 (J)							
9/11/2019	0.00328 (J)							
4/20/2020				<0.0002	0.00223 (J)		<0.0002	
4/21/2020	0.00255 (J)							
5/28/2020		<0.0002				<0.0002		<0.0002
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002
8/12/2020	0.00292 (J)				0.00278 (J)		<0.0002	
3/8/2021		<0.0002	<0.0002					
3/9/2021						<0.0002		0.000127 (J)
3/10/2021				0.00131	0.00289		0.000369	
3/16/2021	0.00358							
8/16/2021			<0.0002					
8/17/2021		9E-05 (J)				<0.0002		0.00018 (J)
8/23/2021	0.0031			0.00142	0.00312		0.00089	
3/23/2022		<0.0002	<0.0002			<0.0002		0.00012 (J)
4/4/2022	0.00354							
4/5/2022					0.00291		0.0004	
4/6/2022				0.00082				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	0.0024						0.000156 (J)	8.12E-05 (J)
8/17/2021		<0.0002	0.00151	0.00055	7E-05 (J)	0.0676		
8/24/2021	0.00211						0.00013 (J)	<0.0002
3/23/2022		<0.0002	0.00052	0.00013 (J)	<0.0002	0.0639		
3/29/2022	0.00142						0.00016 (J)	<0.0002

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.0002
4/20/2020		<0.0002
4/21/2020	<0.0002	
8/17/2020		<0.0002
8/18/2020	<0.0002	
3/9/2021	<0.0002	
3/10/2021		<0.0002
8/17/2021		<0.0002
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		<0.0002

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		6.29		6.84	6.4	6.21		
2/17/2016	5.8		6.04				6.02	6.18
4/12/2016					6.41	6.37	6.17	
4/13/2016	5.85	6.21	6.07	7.03				6.28
5/31/2016		6.45	6.03	6.94	6.22	6.42	6.15	
6/1/2016	5.92							6.36
8/15/2016	5.99							6.37
8/16/2016		6.58	6.09	6.84	6.41		6.21	
8/17/2016						6.42		
10/11/2016	6.02						6.14	
10/12/2016		6.6	6.06	6.75	6.42	6.38		6.32
11/1/2016					6.55	6.33	6.15	
11/2/2016								6.33
1/24/2017	5.92						6.11	6.29
1/25/2017		6.47	5.94	6.87	6.76	6.37		
3/14/2017	5.96		6.08			6.3	6.09	6.27
3/15/2017		6.54		6.9	6.82			
5/9/2017	5.93		6.07	6.85	6.7	6.43		
5/10/2017		6.53					6.11	6.3
6/27/2017	5.86						6.09	6.28
6/28/2017		6.49	6.02	6.85	6.58	6.4		
8/29/2017		6.49	6.19	6.86	6.4	6.32		
8/30/2017	5.88						6.1	6.34
2/27/2018	5.92	6.59	6.21			6.28		
2/28/2018				6.94	6.72		6.11	6.33
6/4/2018	5.89							
6/5/2018		6.52	6.27				6.05	6.29
6/6/2018				6.99	6.57	6.25		
9/10/2018	5.89		6.33					
9/11/2018		6.53		6.87	6.64		6.18	
9/12/2018						6.42		6.36
11/5/2018			6.26	6.81	6.69			
11/6/2018	5.95						6.09	6.37
11/7/2018		6.51				6.42		
3/26/2019				6.95	6.54		6.1	6.34
3/27/2019	5.8	6.53	6.37			6.41		
9/10/2019	5.88	6.33	5.91	6.69		6.11	5.82	6.35
9/11/2019					6.22			
4/20/2020					6.68		6.16	6.43
4/21/2020	5.72			6.96		6.31		
4/22/2020		6.44	6.26					
8/11/2020						6.02		6.7
8/12/2020							6.1	
8/17/2020	5.54							
8/18/2020		6.33	6	6.98	6.76			
3/9/2021						6.48		6.29
3/10/2021			5.97	6.89			6.08	
3/15/2021		6.29			6			
3/16/2021	5.67							
8/17/2021	5.49							6.33
8/24/2021		6.04						
8/25/2021			6.38	7.04	6.66	6.21	6.12	

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
3/29/2022				6.44			5.81	
3/30/2022			6.02					
4/4/2022	5.17 (D)	6.21 (D)				6.39 (D)		
4/6/2022					6.24			6.42 (D)

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				7.15				
2/17/2016	6.32	6.23	6.01		6.8	5.39	5.36	
4/12/2016		6.3			6.54	5.29	5.31	
4/13/2016	6.44		6.17	7.1				
6/1/2016	6.24	6.24	6.18	6.76	6.49	5.39	5.35	
8/15/2016	6.34	6.25	6.12					
8/16/2016				6.99	6.57	5.51		
8/17/2016							5.38	5.85
9/20/2016								5.82
10/11/2016			6.09		6.54	5.44	5.31	
10/12/2016	6.42	6.26		6.89				5.76
11/2/2016	6.48	6.3			6.54	5.49	5.39	
11/15/2016								5.79
11/29/2016								5.73
1/4/2017								5.69
1/23/2017								5.45
1/24/2017	6.53	6.3	6.04		6.42	5.44	5.29	
1/25/2017				6.84				
3/13/2017								4.8
3/14/2017	6.43	6.31	6.11		6.59	5.48	5.19	
3/15/2017				6.78				
5/9/2017			6.1	6.83	6.42		5.29	4.82
5/10/2017	6.33	6.34				5.43		
6/27/2017	6.38	6.32			6.44			5.27
6/28/2017			6.09	6.98		5.49	5.27	
8/29/2017				6.8	6.43	5.46	5.27	5.28
8/30/2017	6.31	6.38	6.07					
2/27/2018			6.09		6.49	5.48		5.11
2/28/2018	6.57	6.31		6.87			5.28	
6/4/2018			6.07					
6/5/2018	6.21	6.16			6.43	5.31		5.24
6/6/2018				6.94			5.21	
9/10/2018			6	6.74				
9/11/2018					6.35	5.36		5.28
9/12/2018	6.43	6.29					5.23	
11/5/2018				6.66				
11/6/2018	6.47	6.31	6.04				5.28	5.54
11/7/2018					6.37	5.34		
3/26/2019	6.52	6.3		6.84	6.46	5.32		5.4
3/27/2019			6.06				5.27	
9/9/2019	5.84	6.28	6.13					
9/10/2019				6.58	5.85	4.9	5.15	
9/11/2019								5.53
4/21/2020	6.61	6.31	5.99	6.81	6.26			5.3
4/22/2020						5.3	5.26	
8/11/2020	6.71						4.81	
8/12/2020		6.62			6.03	5.04		
8/17/2020			5.91					
8/18/2020				6.31				4.79
3/9/2021	6.52	6.39						
3/10/2021				6.26	6.17	5.14	5.71	
3/15/2021								5.32

Time Series

Constituent: pH (SU) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/16/2021			5.87					
8/17/2021	6.57	6.38	5.99					
8/18/2021								5.25
8/24/2021					6.09	5.16	5.25	
8/25/2021				6.51				
3/28/2022			5.32		6.08			
3/29/2022							5.26	
3/30/2022				6.09				
4/4/2022	6.71 (D)					4.4 (D)		5.2 (D)
4/6/2022		6.29 (D)						

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:57 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				6.29				
4/12/2016				6.33				
6/1/2016				6.4				
8/15/2016				6.36				
8/16/2016			6.21		5.39	7.13	6	6.34
8/17/2016	5.47	6.15						
9/19/2016						6.94	6	6.11
9/20/2016	5.22	4.99	6.05		5.37			
10/11/2016			6.2	6.38	5.39	6.82	6.02	5.99
10/12/2016	5.1	4.88						
10/31/2016		4.87	6.61		5.36			
11/1/2016						6.71	5.97	5.84
11/14/2016						6.57	5.98	5.83
11/15/2016	5.07	4.81	6.64		5.33			
11/28/2016						6.57	6	5.79
11/29/2016	5.1	4.84	6.39		5.33			
1/3/2017						6.56	6.03	5.39
1/4/2017	5.3	4.88	6.06		5.49			
1/23/2017	5.12				5.48			
1/24/2017		5.4		6.34		6.41	5.9	
1/25/2017								5.09
1/26/2017			6.02					
3/13/2017			5.68					
3/14/2017	4.74	5.13		6.42	5.17	6.37	6.07	4.99
5/9/2017	4.83	4.96	5.05	6.35	5.11			
5/10/2017						6.41	6	4.63
5/31/2017							6.02	
6/27/2017	4.87	5.34	4.9		5.29	6.14	6.05	4.76
6/28/2017				6.32				
8/29/2017	4.71							
8/30/2017		4.69	4.73	6.32	5.09	6.08	6.13	4.85
2/27/2018	4.96	4.91	4.87	6.39	5.25	5.99	6.1	4.69
6/4/2018				6.4				
6/5/2018	5	4.87	4.89		5.12	5.93	6.05	4.62
9/11/2018	4.94	4.65	4.88		5.19	5.86	6.07	4.79
9/12/2018				6.35				
11/5/2018							6.01	
11/6/2018	4.9	4.67	4.86	6.34	5.12	5.89		4.62
3/26/2019	4.96	4.92	4.97		5.16			
3/27/2019				6.44		5.95	6.15	4.68
9/9/2019				6.22				
9/11/2019	4.85	4.33	3.96		4.11	5.85	5.87	4.57
4/20/2020				6.4				
4/21/2020	4.29	4.07	3.9		4.44			
4/22/2020						5.75	5.92	4.71
8/11/2020						5.63		
8/12/2020							5.84	4.65
8/17/2020				5.85				
8/18/2020	4.75	4.59	4.22		4.76			
3/15/2021	4.73	4.45	4.79		5.02	5.61	4.57	5.83
3/16/2021				6.23				
8/17/2021				6.13				

Time Series

Constituent: pH (SU) Analysis Run 6/10/2022 12:57 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
8/18/2021	4.52	3.78	3.94		4.01			
8/23/2021						5.67	4.17	6.04
3/28/2022	4.73	4.69	4.67		4.93	5.05	5.01	4.29
4/5/2022				6.27 (D)				

Time Series

Constituent: pH (SU) Analysis Run 6/10/2022 12:57 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					6.56			
1/15/2019				5.88		6.4	5.7	6.71
1/16/2019		5.99						
1/17/2019	5.65							
1/30/2019			7.87					
9/10/2019	4.87						5.61	
9/11/2019		5.6	7.2		6.55	6.17		5.96
4/20/2020							5.63	
4/21/2020		6.54						
4/22/2020	5.45		7.72	6.23	6.66	6.42		
4/29/2020								6.37
8/11/2020			7.69			6.7		
8/12/2020	4.78						5.83	
8/18/2020		6.03						5.93
8/19/2020				5.95	6.57			
3/9/2021			7.79			6.47		
3/10/2021					6.67		5.99	
3/15/2021	5.32							6.43
3/16/2021		6.16		6.32				
8/23/2021	5.54							
8/24/2021		6.08	7.06	6.12	5.84	6.13		
8/25/2021							5.91	6.13
3/28/2022	4.44							
3/29/2022				6.36				
3/30/2022			7.81		6.62		5.69	
4/6/2022		5.24				6.31 (D)		6.16

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	6.29							
1/16/2019		6.48	6.39					
9/11/2019	6.2	6.52	6.11					
4/20/2020			6.11	7.14				
4/21/2020	6.01	6.18					6.5	6.28
5/28/2020						6.99		
7/6/2020					6.69			
8/11/2020					6.38	6.25		
8/12/2020			6.27					
8/17/2020				6.94			6.24	
8/19/2020	6.27	6.18						6.14
3/8/2021					6.86	5.74		
3/9/2021	6.29	6.47						
3/10/2021			6.14	6.83			6.35	6.14
8/17/2021					6.7	5.98		
8/18/2021	6.16	6.46		6.84			5.96	6.05
8/23/2021			6.07					
3/23/2022					6.55	5.3		
3/29/2022				6.83				
3/30/2022							5.4	5.72
4/4/2022			5.56 (D)					
4/6/2022	6.1 (D)	6.43 (D)						

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	6.63							
4/12/2016	6.59							
5/31/2016	6.57							
8/17/2016	6.72							
10/11/2016	6.69							
1/24/2017	6.61							
3/14/2017	6.55							
5/9/2017	6.65							
6/28/2017	6.66							
8/30/2017	6.66							
2/27/2018	6.73							
6/5/2018	6.63							
9/11/2018	6.65							
11/6/2018	6.65							
3/27/2019	6.59							
9/11/2019	6.36							
4/20/2020				6.17	6.58		6.12	
4/21/2020	6.5							
5/28/2020		6.42				4.47		5.99
7/6/2020			6.07					
8/11/2020		6.24	6.08	5.8		5.1		6.16
8/12/2020	6.36				6.67		6.48	
3/8/2021		6.36	5.98					
3/9/2021						5.13		5.94
3/10/2021				6.58	6.87		5.96	
3/16/2021	6.64							
8/16/2021			5.98					
8/17/2021		6.07				4.89		5.85
8/23/2021	6.5			6.33	6.67		6.34	
3/23/2022		6.17	6.14			5.2		5.88
4/4/2022	6.42 (D)							
4/5/2022					6.59 (D)		5.41 (D)	
4/6/2022				6.23 (D)				

Time Series

Constituent: pH (SU)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								6.16
2/17/2016	6.46						6.45	
4/12/2016	6.45							
4/13/2016							6.49	6.29
5/31/2016	6.51						6.43	
6/1/2016								6.33
8/17/2016	6.54						6.43	6.27
10/11/2016	6.53							
10/12/2016							6.46	6.3
1/24/2017	6.44							
1/25/2017							6.43	6.27
3/14/2017	6.4						6.41	
3/15/2017								6.27
5/10/2017	6.4						6.41	6.25
6/28/2017	6.46						6.46	6.25
8/29/2017	6.47						6.46	6.32
2/27/2018	6.53						6.45	6.36
6/5/2018	6.49						6.36	6.3
9/11/2018	6.48						6.38	6.36
11/7/2018	6.48						6.37	6.31
3/26/2019	6.54						6.39	6.32
9/10/2019	6.55						6.39	6.31
4/21/2020	6.54						6.39	6.06
8/19/2020	6.49						6.14	6.06
3/9/2021	6.43						6.45	6.31
8/17/2021		5.15	6.84	6.33	5.58	7.03		
8/24/2021	6.22						6.4	6.16
3/23/2022		5.22	6.38	5.82	5.34	6.92		
3/29/2022	5.99						6.62	6.21

Time Series

Constituent: pH (SU) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	6.5	
4/13/2016	6.32	
6/1/2016	6.43	
8/17/2016	6.46	
10/12/2016	6.53	
1/25/2017	6.45	
3/15/2017	6.39	
5/10/2017	6.39	
6/28/2017	6.4	
8/29/2017	6.47	
2/27/2018	6.54	
6/5/2018	6.47	
9/11/2018	6.53	
9/12/2018		6.13
11/7/2018	6.49	
3/26/2019	6.47	
9/10/2019	6.43	5.79
4/20/2020		5.99
4/21/2020	6.25	
8/17/2020		5.94
8/18/2020	6.21	
3/9/2021	6.14	
3/10/2021		6.04
8/17/2021		5.64
8/24/2021	6.08	
3/29/2022	5.61	
4/5/2022		5.95 (D)

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.00102		<0.00102	0.0227	<0.00102		
2/17/2016	0.00277 (J)		<0.00102				<0.00102	<0.00102
4/12/2016					0.0701	<0.00102	<0.00102	
4/13/2016	<0.00102	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	<0.00102	0.0129	<0.00102	<0.00102	
6/1/2016	<0.00102							<0.00102
8/15/2016	<0.00102							<0.00102
8/16/2016		<0.00102	<0.00102	<0.00102	0.0208		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.00102						<0.00102	
10/12/2016		<0.00102	<0.00102	<0.00102	0.00431 (J)	<0.00102		<0.00102
1/24/2017	<0.00102						<0.00102	<0.00102
1/25/2017		<0.00102	<0.00102	<0.00102	0.00779 (J)	<0.00102		
5/9/2017	<0.00102		<0.00102	<0.00102	0.00905 (J)	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	0.00206 (J)						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	<0.00102	0.0072 (J)	<0.00102		
2/27/2018	0.00206 (J)	<0.00102	<0.00102			<0.00102		
2/28/2018				<0.00102	0.00826 (J)		<0.00102	<0.00102
6/4/2018	<0.00102							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	0.00496 (J)	<0.00102		
11/5/2018			<0.00102	<0.00102	<0.00102			
11/6/2018	<0.00102						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				<0.00102	0.0239		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					<0.00102			
4/20/2020					0.0125		<0.00102	<0.00102
4/21/2020	<0.00102			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.00102							
8/18/2020		<0.00102	<0.00102	<0.00102	0.00416 (J)			
3/9/2021						<0.00102		<0.00102
3/10/2021			<0.00102	<0.00102			<0.00102	
3/15/2021		<0.00102			0.0175			
3/16/2021	0.00163							
8/17/2021	0.00209							<0.00102
8/24/2021		<0.00102						
8/25/2021			<0.00102	0.00281	0.00826	<0.00102	<0.00102	
3/29/2022				<0.00102			<0.00102	
3/30/2022			<0.00102					
4/4/2022	0.00221	<0.00102				<0.00102		
4/6/2022					0.111 (o)			<0.00102
5/17/2022					0.0452 (R)			

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
4/12/2016		<0.00102			0.00205 (J)	<0.00102	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.00102	<0.00102		
8/17/2016							<0.00102	<0.00102
9/20/2016								<0.00102
10/11/2016			<0.00102		<0.00102	<0.00102	<0.00102	
10/12/2016	<0.00102	<0.00102		<0.00102				<0.00102
11/15/2016								<0.00102
1/4/2017								<0.00102
1/23/2017								0.00247 (J)
1/24/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
1/25/2017				<0.00102				
5/9/2017			<0.00102	<0.00102	<0.00102		<0.00102	0.0072 (J)
5/10/2017	<0.00102	<0.00102				<0.00102		
6/27/2017	<0.00102	<0.00102			<0.00102			0.00443 (J)
6/28/2017			<0.00102	<0.00102		0.00268 (J)	<0.00102	
2/27/2018			<0.00102		<0.00102	0.00281 (J)		<0.00102
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.00102	0.00294 (J)		<0.00102
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102
11/7/2018					<0.00102	<0.00102		
3/26/2019	<0.00102	<0.00102		<0.00102	<0.00102	0.00208 (J)		<0.00102
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.00102	<0.00102	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			<0.00102
4/22/2020						<0.00102	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.00102	<0.00102		
8/17/2020			<0.00102					
8/18/2020				<0.00102				<0.00102
3/9/2021	<0.00102	<0.00102						
3/10/2021				<0.00102	0.00117	0.00139	<0.00102	
3/15/2021								<0.00102
3/16/2021			<0.00102					
8/17/2021	<0.00102	<0.00102	0.00054 (J)					
8/18/2021								<0.00102
8/24/2021					0.00113	0.00093 (J)	<0.00102	
8/25/2021				<0.00102				
3/28/2022			0.00058 (J)		0.00099 (J)			
3/29/2022							<0.00102	
3/30/2022				<0.00102				
4/4/2022	<0.00102					0.00093 (J)		<0.00102
4/6/2022		<0.00102						

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.00102				
4/12/2016				<0.00102				
6/1/2016				<0.00102				
8/15/2016				<0.00102				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	<0.00102				<0.00102			
1/24/2017		<0.00102		<0.00102		<0.00102	<0.00102	
1/25/2017								<0.00102
1/26/2017			<0.00102					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.00102				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.00102				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/26/2019	<0.00102	<0.00102	<0.00102		<0.00102			
3/27/2019				<0.00102		<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.00102				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.00102				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
3/16/2021				0.000959 (J)				
8/17/2021				0.00097 (J)				
8/18/2021	<0.00102	<0.00102	<0.00102		<0.00102			
8/23/2021						<0.00102	0.00059 (J)	<0.00102
3/28/2022	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	0.00071 (J)
4/5/2022				0.00074 (J)				

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.018			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		0.00367 (J)						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		0.00404 (J)	<0.00102		0.0155	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		0.00451 (J)						
4/22/2020	<0.00102		<0.00102	<0.00102	0.0111	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		0.00268 (J)						<0.00102
8/19/2020				<0.00102	0.0108			
3/9/2021			<0.00102			<0.00102		
3/10/2021					0.0124		<0.00102	
3/15/2021	0.000704 (J)							<0.00102
3/16/2021		0.00362		<0.00102				
8/23/2021	<0.00102							
8/24/2021		0.00237	<0.00102	<0.00102	0.0148	<0.00102		
8/25/2021							<0.00102	<0.00102
3/28/2022	0.0006 (J)							
3/29/2022				<0.00102				
3/30/2022			<0.00102		0.00902		<0.00102	
4/6/2022		0.00364				<0.00102		<0.00102

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	<0.00102	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	<0.00102	<0.00102						
3/10/2021			<0.00102	<0.00102			<0.00102	<0.00102
8/17/2021					<0.00102	<0.00102		
8/18/2021	<0.00102	<0.00102		<0.00102			<0.00102	<0.00102
8/23/2021			<0.00102					
3/23/2022					<0.00102	<0.00102		
3/29/2022				<0.00102				
3/30/2022							<0.00102	<0.00102
4/4/2022			<0.00102					
4/6/2022	<0.00102	<0.00102						

Time Series

Constituent: Selenium (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	<0.00102							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		<0.00102
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		<0.00102	<0.00102					
3/9/2021						<0.00102		0.000652 (J)
3/10/2021				<0.00102	<0.00102		<0.00102	
3/16/2021	<0.00102							
8/16/2021			<0.00102					
8/17/2021		<0.00102				<0.00102		0.00051 (J)
8/23/2021	<0.00102			<0.00102	<0.00102		<0.00102	
3/23/2022		<0.00102	<0.00102			<0.00102		0.00097 (J)
4/4/2022	<0.00102							
4/5/2022					<0.00102		0.00059 (J)	
4/6/2022				<0.00102				

Time Series

Constituent: Selenium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	<0.00102							
1/25/2017							<0.00102	<0.00102
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	<0.00102						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	<0.00102						<0.00102	<0.00102
8/17/2021		0.00115	0.00058 (J)	<0.00102	<0.00102	<0.00102		
8/24/2021	<0.00102						<0.00102	<0.00102
3/23/2022		0.00122	0.00071 (J)	<0.00102	<0.00102	<0.00102		
3/29/2022	<0.00102						<0.00102	<0.00102

Time Series

Constituent: Selenium (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	<0.00102	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.00102
4/20/2020		0.00237 (J)
4/21/2020	<0.00102	
8/17/2020		<0.00102
8/18/2020	<0.00102	
3/9/2021	<0.00102	
3/10/2021		0.0013
8/17/2021		0.00321
8/24/2021	<0.00102	
3/29/2022	<0.00102	
4/5/2022		0.00192

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		9.03		119	113	108		
2/17/2016	785		40.2				187	87.4
4/12/2016					86.7	114	188	
4/13/2016	715	10.7	33.1	122				92.7
5/31/2016		10.2	28.1	94.3	83.1	114	183	
6/1/2016	832							111
8/15/2016	862							98.3
8/16/2016		9.1	38.5	67.1	59.3		196	
8/17/2016						85.4		
10/11/2016	888						216	
10/12/2016		7.24	38.3	94.1	99.3	53.5		99.3
1/24/2017	906						183	85.4
1/25/2017		9.71	32	101	113	75.4		
5/9/2017	810		44	91	74	84		
5/10/2017		11					160	74
6/27/2017	830						150	75
6/28/2017		10	88	71	71	120		
8/29/2017		14	110	80	72	180		
8/30/2017	910						160	87
6/4/2018	850							
6/5/2018		39	79				160	87
6/6/2018				62	48	450		
9/10/2018	920		80					
9/11/2018		29		63	62		140	
9/12/2018						200		63
11/5/2018			81	74	81			
11/6/2018	880						160	97
11/7/2018		45				180		
3/26/2019				92.3	92.4		157	123
3/27/2019	1090	66.2	83.2			335		
9/10/2019	992	50.5	87.2	89.3		193	150	68
9/11/2019					128			
4/20/2020					76.5		142	49.6
4/21/2020	874			121		168		
4/22/2020		63.2	58.7					
8/11/2020						242		55
8/12/2020							160	
8/17/2020	919							
8/18/2020		58.6	81.1	89	203			
3/9/2021						165		43.9
3/10/2021			73.2	155			136	
3/15/2021		68.5			204			
3/16/2021	933							
8/17/2021	745							46.6
8/24/2021		71.6						
8/25/2021			126	118	181	346	153	
3/29/2022				108			165	
3/30/2022			125					
4/4/2022	812.5 (D)	116.5 (D)				195.5 (D)		
4/6/2022					157			45.3 (D)

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				125				
2/17/2016	72.3	60.2	304		14.7	10.4	28.7	
4/12/2016		68.2			20	11.3	32.5	
4/13/2016	123		307	119				
6/1/2016	144	61.4	273	99.2	20.1	10.4	31.9	
8/15/2016	50.1	56	275					
8/16/2016				71.9	19.1	12.2		
8/17/2016							30.5	16.2
9/20/2016								14.9
10/11/2016			284		18.4	19.8	32.3	
10/12/2016	72.6	36.6		93.9				12.4
11/15/2016								8.6
1/4/2017								12.2
1/23/2017								16
1/24/2017	63.4	12.3	302		15	30.7	33.5	
1/25/2017				103				
5/9/2017			250	100	14		33	55
5/10/2017	82	10				33		
6/27/2017	44	9.7			14			45
6/28/2017			230	69		56	35	
8/29/2017				77	16	61	37	37
8/30/2017	230	7.8	250					
6/4/2018			260					
6/5/2018	230	13			14	97		9.3
6/6/2018				81			47	
9/10/2018			280	64				
9/11/2018					13	83		7.8
9/12/2018	33	28					41	
11/5/2018				68				
11/6/2018	220	11	280				48	6
11/7/2018					14	91		
3/26/2019	161	21.3		92	12.3	103		6.86
3/27/2019			375				62.4	
9/9/2019	57.3	17.8	385					
9/10/2019				63.1	12.4	83.4	66	
9/11/2019								5.29
4/21/2020	78	19.2	522	99	10.2			6.28
4/22/2020						84.7	76.1	
8/11/2020	46.7						79.5	
8/12/2020		13.8			10.2	82.2		
8/17/2020			497					
8/18/2020				63.4				9.57
3/9/2021	95.8	11.6						
3/10/2021				51.7	11.8	99.9	70.3	
3/15/2021								7.66
3/16/2021			548					
8/17/2021	32.8	12.2	502					
8/18/2021								7.07
8/24/2021					11.6	81.8	66.6	
8/25/2021				76.1				
3/28/2022			563		11.8			
3/29/2022							68.6	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/30/2022				115				
4/4/2022	68.9 (D)					90.2		12.5
4/6/2022		16.05 (D)						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<1				
4/12/2016				0.49 (J)				
6/1/2016				0.544 (J)				
8/15/2016				0.332 (J)				
8/16/2016			0.894 (J)		0.702 (J)	1.78	2.06	9.33
8/17/2016	0.928 (J)	6.46						
9/19/2016						2.06	1.44	11.2
9/20/2016	0.478 (J)	8.3	<1		<1			
10/11/2016			<1	<1	<1	2.33	1.38	12.6
10/12/2016	0.727 (J)	8.36						
11/14/2016						2.31	1.15	12.4
11/15/2016	0.448 (J)	8.75	1.19		<1			
1/3/2017						2.81	1.57	14.3
1/4/2017	0.627 (J)	7.85	<1		<1			
1/23/2017	1.34				0.493 (J)			
1/24/2017		6.62		<1		3.34	2.06	
1/25/2017								15.2
1/26/2017			0.6 (J)					
5/9/2017	<1	5.6	<1	2.1 (J)	<1			
5/10/2017						2.9 (J)	2.1 (J)	12
6/27/2017	<1	5.3	<1		<1	3.4 (J)	2.7 (J)	13
6/28/2017				<1				
8/29/2017	<1							
8/30/2017		8.2	<1	<1	<1	3.7 (J)	2.6 (J)	15
6/4/2018				1.4 (J)				
6/5/2018	2.1 (J)	8.3	1.4 (J)		<1	3.7 (J)	3.1 (J)	17
9/11/2018	<1	8.9	<1		<1	2.2 (J)	1.6 (J)	16
9/12/2018				<1				
11/5/2018							2.4 (J)	
11/6/2018	<1	8.6	<1	<1	<1	3.1 (J)		15
3/26/2019	1.66	10.1	0.594 (J)		<1			
3/27/2019				6.64		3.55	3.24	15.1
9/9/2019				6.56				
9/11/2019	1.29	10.6	<1		<1	3.83	2.66	14.5
4/20/2020				10.5				
4/21/2020	2.21	9.4	0.694 (J)		<1			
4/22/2020						3.78	2.51	9.64
8/11/2020						4.33		
8/12/2020							2.54	13.6
8/17/2020				17.3				
8/18/2020	1.57	10.3	0.608 (J)		<1			
3/15/2021	2.5	10.4	<1		<1	3.74	8.5	2.76
3/16/2021				7.62				
8/17/2021				12				
8/18/2021	3.18	10.1	0.86 (J)		0.754 (J)			
8/23/2021						4	9.18	2.44
3/28/2022	6.24	11.2	1.29 (J)		0.951 (J)	3.34	2.55	11.8
4/5/2022				14.95 (D)				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					103			
1/15/2019				780		48.5	224	96
1/16/2019		34.9						
1/17/2019	47.9							
1/30/2019			11					
9/10/2019	27.1						291	
9/11/2019		30	11		60.5	44.1		79.1
4/20/2020							247	
4/21/2020		44.5						
4/22/2020	26.8		10.9	510	66.5	31.7		
4/29/2020								77.2
8/11/2020			8.73			51.7		
8/12/2020	13.5						285	
8/18/2020		28.8						76.6
8/19/2020				402	70			
3/9/2021			10.4			32.2		
3/10/2021					44.8		292	
3/15/2021	25.6							80.9
3/16/2021		32.4		368				
8/23/2021	24.8							
8/24/2021		22.9	9.79	383	68.2	34.1		
8/25/2021							330	147
3/28/2022	27							
3/29/2022				303				
3/30/2022			10.3		51.9		290	
4/6/2022		32.3				32.95 (D)		236

Time Series

Constituent: Sulfate (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	9.73							
1/16/2019		74	394					
9/11/2019	9.43	45.7	409					
4/20/2020			429	157				
4/21/2020	12.4	59.7					90.2	90.8
5/28/2020						81.5		
7/6/2020					83.4			
8/11/2020					54.5	49.3		
8/12/2020			415					
8/17/2020				128			78	
8/19/2020	55.7	71.8						70.7
3/8/2021					96.1	31.4		
3/9/2021	74.8	91.3						
3/10/2021			410	90.9			62	76.1
8/17/2021					115	52.1		
8/18/2021	83.6	107		395			47	51.4
8/23/2021			406					
3/23/2022					131	61.1		
3/29/2022				337				
3/30/2022							36.4	106
4/4/2022			390					
4/6/2022	95.1 (D)	105.5 (D)						

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<1							
4/12/2016	0.483 (J)							
5/31/2016	0.518 (J)							
8/17/2016	3.63							
10/11/2016	15.6							
1/24/2017	28.9							
5/9/2017	25							
6/28/2017	45							
8/30/2017	96							
6/5/2018	36							
9/11/2018	48							
11/6/2018	93							
3/27/2019	33.4							
9/11/2019	149							
4/20/2020				14.7	242		252	
4/21/2020	163							
5/28/2020		94.7				10.3		198
7/6/2020			78.2					
8/11/2020		79	64.1	12.6		9.32		206
8/12/2020	132				180		274	
3/8/2021		71.5	56.9					
3/9/2021						9.2		202
3/10/2021				44.2	139		66.5	
3/16/2021	167							
8/16/2021			42.2					
8/17/2021		83.1				7.2		214
8/23/2021	155			11.6	106		117	
3/23/2022		60.4	38.9			8.46		225
4/4/2022	160							
4/5/2022					119 (D)		50.75 (D)	
4/6/2022				120 (D)				

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								49.4
2/17/2016	132						311	
4/12/2016	130							
4/13/2016							330	51.7
5/31/2016	111						324	
6/1/2016								51.2
8/17/2016	95.8						306	42.9
10/11/2016	101							
10/12/2016							296	39.5
1/24/2017	129							
1/25/2017							243	31.3
5/10/2017	120						210	30
6/28/2017	100						210	35
8/29/2017	95						220	40
6/5/2018	98						390	25
9/11/2018	100						360	23
11/7/2018	97						390	30
3/26/2019	120						430	21.6
9/10/2019	140						409	37.4
4/21/2020	153						318	43.3
8/19/2020	163						296	44.5
3/9/2021	187						347	71.7
8/17/2021		6.86	13	14.9	22.7	128		
8/24/2021	210						234	71.4
3/23/2022		6.73	10.1	15.9	18.5	156		
3/29/2022	190						187	75.3

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	45.2	
4/13/2016	43.9	
6/1/2016	32	
8/17/2016	31.9	
10/12/2016	39.6	
1/25/2017	44	
5/10/2017	32	
6/28/2017	34	
8/29/2017	34	
6/5/2018	22	
9/11/2018	33	
9/12/2018		400
11/7/2018	76	
3/26/2019	138	
9/10/2019	115	499
4/20/2020		482
4/21/2020	133	
8/17/2020		493
8/18/2020	115	
3/9/2021	107	
3/10/2021		510
8/17/2021		569
8/24/2021	139	
3/29/2022	193	
4/5/2022		822.5 (D)

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		312		264	242	340		
2/17/2016	1540		158				408	310
4/12/2016					176	298	334	
4/13/2016	1200	324	161	238				372
5/31/2016		333	173	206	189	309	351	
6/1/2016	1440							360
8/15/2016	1420							366
8/16/2016		327	173	180	192		367	
8/17/2016						269		
10/11/2016	1420							
10/12/2016		312	173	223				
11/1/2016					244	252	372	
11/2/2016								374
1/24/2017	1350						354	380
1/25/2017		286	161	271	274	259		
5/9/2017	1540		195	236	191	285		
5/10/2017		326					332	381
6/27/2017	1470						331	404
6/28/2017		304	227	198	176	348		
8/29/2017		348	229	187	163	528		
8/30/2017	1530						317	420
6/4/2018	1370							
6/5/2018		346	200				318	408
6/6/2018				199	138	932		
9/10/2018	1380		183					
9/11/2018		335		184	185		321	
9/12/2018						180		415
11/5/2018			193	210	208			
11/6/2018	1450						331	447
11/7/2018		342				528		
3/26/2019				230	198		338 (D)	481
3/27/2019	1910	347	211			834		
9/10/2019	1740	351	201	218 (D)		658	358	453
9/11/2019					316			
4/20/2020					201		369	461
4/21/2020	1530			291		628		
4/22/2020		338	249					
8/11/2020						688		482
8/12/2020							401	
8/17/2020	1590							
8/18/2020		376	260	250	444			
3/9/2021						618		524
3/10/2021			274	331			397	
3/15/2021		406			374			
3/16/2021	1620							
8/17/2021	1340							490
8/24/2021		423						
8/25/2021			358	263	359	774	407	
3/29/2022				290			406	
3/30/2022			280					
4/4/2022	1310 (D)	443.5 (D)				644 (D)		
4/6/2022					298			472 (D)

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				264				
2/17/2016	328	464	516		142	53	144	
4/12/2016		491			155	38.7	140	
4/13/2016	373		508	226				
6/1/2016	442	468	494	231	148	46	139	
8/15/2016	392	454	476					
8/16/2016				181	132	48		
8/17/2016							142	64
9/20/2016								60
10/11/2016			508					
10/12/2016				225				54.7
11/2/2016	469	422			115	66.7	128	
11/29/2016								42
1/4/2017								56
1/23/2017								50.7
1/24/2017	464	408	510		107	78.7	124	
1/25/2017				277				
5/9/2017			510	255	80.7		136	126
5/10/2017	492	358				92.7		
6/27/2017	516	382			96.7			93.3
6/28/2017			480	175		118	145	
8/29/2017				218	120	128	139	84
8/30/2017	646	392	478					
6/4/2018			528					
6/5/2018	644	352			113	171		38.7
6/6/2018				207			153	
9/10/2018			472	197				
9/11/2018					108	170		35.3
9/12/2018	476	339					156	
11/5/2018				200				
11/6/2018	634	368	522				153	40.7
11/7/2018					96.7	163		
3/26/2019	516	406		218	103	174		36.7
3/27/2019			562				178	
9/9/2019	500	409 (D)	666					
9/10/2019				198	107	167	182	
9/11/2019								40.7
4/21/2020	490	429	878	265	107			39.3
4/22/2020						162	195	
8/11/2020	522						193	
8/12/2020		390			96	165		
8/17/2020			818					
8/18/2020				179				42
3/9/2021	684	412						
3/10/2021				296	105	179	246	
3/15/2021								42.7
3/16/2021			890					
8/17/2021	506	397	808					
8/18/2021								43.3
8/24/2021					96.7	167	224	
8/25/2021				207				
3/28/2022			868		96			

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/29/2022							247	
3/30/2022				320				
4/4/2022	553 (D)					155		40.7
4/6/2022		408.5 (D)						

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				358				
4/12/2016				393				
6/1/2016				381				
8/15/2016				348				
8/16/2016			41.3		<25	142	49.3	101
8/17/2016	36.7	65.3						
9/19/2016						121	44.7	80
9/20/2016	25.3	44	42.7		26.7			
10/11/2016				379				
10/12/2016	<25							
10/31/2016		38.7	140		25.3			
11/1/2016						103	48	78
11/28/2016						84	40.7	68.7
11/29/2016	<25	34	78		<25			
1/3/2017						89.3	49.3	60.7
1/4/2017	27.3	42	34		34.7			
1/23/2017	<25				33.3			
1/24/2017		45.3		354		83.3	48.7	
1/25/2017								54.7
1/26/2017			32.7					
5/9/2017	28.7	49.3	<25	368	<25			
5/10/2017						31.3	46.7	60.7
6/27/2017	27.3	46	30.7		<25	67.3	55.3	58
6/28/2017				368				
8/29/2017	30.7							
8/30/2017		38.7	25.3	370	28	64	57.3	66.7
6/4/2018				369				
6/5/2018	26	34.7	<25		28.7	50	52.7	71.3
9/11/2018	<25	34.7	<25		29.3	53.3	60	66.7
9/12/2018				354				
11/5/2018							53.3	
11/6/2018	26	36	<25	354	<25	66		61.3
3/26/2019	<25	30	<25		19.9 (D)			
3/27/2019				362		48.7	51.35 (D)	65.3
9/9/2019				371				
9/11/2019	27.3	40	<25		34	52.7	55.3	68.3 (D)
4/20/2020				371				
4/21/2020	30.7	36	<25		26.7			
4/22/2020						49.3	52.7	62.7
8/11/2020						52		
8/12/2020							49.3	62
8/17/2020				361				
8/18/2020	27.3	35.3	<25		30			
3/15/2021	30.7	30	<25		30	49.3	46	48
3/16/2021				340				
8/17/2021				297				
8/18/2021	28.7	32	<25		28.7			
8/23/2021						49.3	64.7	48.7
3/28/2022	32.7	38.7	<25		27.3	43.3	51.3	57.3
4/5/2022				338 (D)				

Time Series

Constituent: TDS (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					381			
1/15/2019				1210		597	392	433
1/16/2019		85.3						
1/17/2019	156							
1/30/2019			184					
9/10/2019	112						576	
9/11/2019		100	182		280	454		334
4/20/2020							534	
4/21/2020		176						
4/22/2020	114		199	977	290	512		
4/29/2020								317
8/11/2020			184			526		
8/12/2020	66						588	
8/18/2020		100						299
8/19/2020				834	308			
3/9/2021			185			524		
3/10/2021					308		602	
3/15/2021	96							321
3/16/2021		111		756				
8/23/2021	89.3							
8/24/2021		94	181	742	345	490		
8/25/2021							562	376
3/28/2022	88.7							
3/29/2022				624				
3/30/2022			170		282		493	
4/6/2022		92				450 (D)		488

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	334							
1/16/2019		345	706					
9/11/2019	299	366 (D)	1570					
4/20/2020			790	369				
4/21/2020	299	463					208	222
5/28/2020						195		
7/6/2020					260			
8/11/2020					258	109		
8/12/2020			728					
8/17/2020				305			181	
8/19/2020	371	534						171
3/8/2021					282	93.3		
3/9/2021	375	570						
3/10/2021			794	247			158	181
8/17/2021					303	121		
8/18/2021	401	578		730			121	130
8/23/2021			714					
3/23/2022					300	137		
3/29/2022				646				
3/30/2022							84	184
4/4/2022			604					
4/6/2022	363.5 (D)	551 (D)						

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	238							
4/12/2016	316							
5/31/2016	320							
8/17/2016	325							
10/11/2016	333							
1/24/2017	336							
5/9/2017	317							
6/28/2017	373							
8/30/2017	432							
6/5/2018	347							
9/11/2018	370							
11/6/2018	409							
3/27/2019	328							
9/11/2019	455							
4/20/2020				441	545		502	
4/21/2020	494							
5/28/2020		242				56.7		401
7/6/2020			498					
8/11/2020		229	462	434		52.7		407
8/12/2020	433				497		491	
3/8/2021		218	469					
3/9/2021						52		386
3/10/2021				408	444		273	
3/16/2021	510							
8/16/2021			423					
8/17/2021		217				45.3		403
8/23/2021	481			390	405		301	
3/23/2022		236	518			47.3		389
4/4/2022	488							
4/5/2022					419 (D)		154 (D)	
4/6/2022				428 (D)				

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								656
2/17/2016	640						892	
4/12/2016	610							
4/13/2016							1010	634
5/31/2016	626						1100	
6/1/2016								672
8/17/2016	628						1070	624
10/11/2016	636							
10/12/2016							1040	586
1/24/2017	696							
1/25/2017							972	596
5/10/2017	687						740	576
6/28/2017	622						914	612
8/29/2017	616						924	640
6/5/2018	582						1060	474
9/11/2018	616						1020	496
11/7/2018	576						1050	514
3/26/2019	682						1100	546
9/10/2019	744						1100	601 (D)
4/21/2020	742						1010	638
8/19/2020	788						1050	658
3/9/2021	716						1090	746
8/17/2021		43.3	107	59.3	53.3	318		
8/24/2021	792						930	690
3/23/2022		39.3	74	44.7	41.3	373		
3/29/2022	722						894	730

Time Series

Constituent: TDS (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	226	
4/13/2016	202	
6/1/2016	224	
8/17/2016	290	
10/12/2016	315	
1/25/2017	332	
5/10/2017	361	
6/28/2017	396	
8/29/2017	402	
6/5/2018	448	
9/11/2018	462	
9/12/2018		714
11/7/2018	506	
3/26/2019	586	
9/10/2019	586	854
4/20/2020		824
4/21/2020	578	
8/17/2020		826
8/18/2020	542	
3/9/2021	532	
3/10/2021		876
8/17/2021		900
8/24/2021	624	
3/29/2022	800	
4/5/2022		1225 (D)

Time Series

Constituent: Thallium (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0002		<0.0002	<0.0002	<0.0002		
2/17/2016	0.000601 (J)		0.000869 (J)				0.000697 (J)	0.000687 (J)
4/12/2016					<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002	<0.0002	<0.0002	<0.0002				<0.0002
5/31/2016		<0.0002	<0.0002	<0.0002	0.000212 (J)	<0.0002	<0.0002	
6/1/2016	<0.0002							0.000272 (J)
8/15/2016	<0.0002							0.000278 (J)
8/16/2016		<0.0002	<0.0002	<0.0002	0.000449 (J)		<0.0002	
8/17/2016						<0.0002		
10/11/2016	<0.0002						<0.0002	
10/12/2016		<0.0002	<0.0002	<0.0002	0.000532 (J)	<0.0002		0.000322 (J)
1/24/2017	<0.0002						<0.0002	0.000265 (J)
1/25/2017		<0.0002	<0.0002	<0.0002	0.000309 (J)	<0.0002		
5/9/2017	<0.0002		<0.0002	<0.0002	0.00021 (J)	<0.0002		
5/10/2017		<0.0002					<0.0002	0.000327 (J)
6/27/2017	<0.0002						<0.0002	0.000301 (J)
6/28/2017		<0.0002	<0.0002	<0.0002	0.000244 (J)	<0.0002		
2/27/2018	<0.0002	<0.0002	<0.0002			<0.0002		
2/28/2018				<0.0002	<0.0002		<0.0002	0.000321 (J)
6/4/2018	<0.0002							
6/5/2018		<0.0002	<0.0002				<0.0002	0.000288 (J)
6/6/2018				<0.0002	0.000239 (J)	<0.0002		
11/5/2018			<0.0002	<0.0002	0.000623 (J)			
11/6/2018	<0.0002						<0.0002	0.000354 (J)
11/7/2018		<0.0002				<0.0002		
3/26/2019				<0.0002	0.000215 (J)		<0.0002	0.00041 (J)
3/27/2019	<0.0002	<0.0002	<0.0002			<0.0002		
9/10/2019	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.000396 (J)
9/11/2019					0.00214			
4/20/2020					0.000433 (J)		<0.0002	0.00032 (J)
4/21/2020	<0.0002			<0.0002		<0.0002		
4/22/2020		<0.0002	<0.0002					
8/11/2020						<0.0002		0.000329 (J)
8/12/2020							<0.0002	
8/17/2020	<0.0002							
8/18/2020		<0.0002	<0.0002	<0.0002	0.00114			
3/9/2021						<0.0002		0.000369
3/10/2021			8.7E-05 (J)	<0.0002			8.78E-05 (J)	
3/15/2021		<0.0002			0.000506			
3/16/2021	0.000107 (J)							
8/17/2021	0.00012 (J)							0.00036
8/24/2021		<0.0002						
8/25/2021			9E-05 (J)	<0.0002	0.00124	<0.0002	<0.0002	
3/29/2022				<0.0002			0.00012 (J)	
3/30/2022			7E-05 (J)					
4/4/2022	0.00016 (J)	<0.0002				<0.0002		
4/6/2022					0.00169			0.00035

Time Series

Constituent: Thallium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	0.00067 (J)	0.000404 (J)	0.000388 (J)		0.000364 (J)	0.00039 (J)	0.000232 (J)	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002		<0.0002	<0.0002				
6/1/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/15/2016	<0.0002	<0.0002	<0.0002					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.0002		<0.0002	<0.0002	<0.0002	
10/12/2016	<0.0002	<0.0002		<0.0002				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
1/25/2017				<0.0002				
5/9/2017			<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
5/10/2017	<0.0002	<0.0002				<0.0002		
6/27/2017	<0.0002	<0.0002			<0.0002			<0.0002
6/28/2017			<0.0002	<0.0002		<0.0002	<0.0002	
2/27/2018			<0.0002		<0.0002	<0.0002		<0.0002
2/28/2018	<0.0002	<0.0002		<0.0002			<0.0002	
6/4/2018			<0.0002					
6/5/2018	<0.0002	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.0002	
11/5/2018				<0.0002				
11/6/2018	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			<0.0002				<0.0002	
9/9/2019	<0.0002	<0.0002	<0.0002					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	<0.0002						<0.0002	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.0002					
8/18/2020				<0.0002				<0.0002
3/9/2021	<0.0002	<0.0002						
3/10/2021				0.000106 (J)	<0.0002	<0.0002	<0.0002	
3/15/2021								<0.0002
3/16/2021			0.000101 (J)					
8/17/2021	<0.0002	<0.0002	0.00013 (J)					
8/18/2021								<0.0002
8/24/2021					<0.0002	<0.0002	<0.0002	
8/25/2021				<0.0002				
3/28/2022			0.00015 (J)		<0.0002			
3/29/2022							<0.0002	
3/30/2022				0.00011 (J)				
4/4/2022	<0.0002					<0.0002		<0.0002
4/6/2022		<0.0002						

Time Series

Constituent: Thallium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.00038 (J)				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/17/2016	<0.0002	<0.0002						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	<0.0002		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			<0.0002					
5/9/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	<0.0002	<0.0002	<0.0002		<0.0002			
8/23/2021						<0.0002	<0.0002	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/5/2022				<0.0002				

Time Series

Constituent: Thallium (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		0.00092 (J)	<0.0002	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.0002					
9/10/2019	<0.0002						0.000223 (J)	
9/11/2019		<0.0002	<0.0002		<0.0002	0.000983 (J)		<0.0002
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	0.0008 (J)		
4/29/2020								<0.0002
8/11/2020			<0.0002			0.000814 (J)		
8/12/2020	<0.0002						0.000208 (J)	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			<0.0002			0.000828		
3/10/2021					<0.0002		0.000186 (J)	
3/15/2021	<0.0002							<0.0002
3/16/2021		<0.0002		<0.0002				
8/23/2021	<0.0002							
8/24/2021		<0.0002	<0.0002	<0.0002	<0.0002	0.00076		
8/25/2021							0.00013 (J)	<0.0002
3/28/2022	<0.0002							
3/29/2022				<0.0002				
3/30/2022			<0.0002		<0.0002		0.00017 (J)	
4/6/2022		<0.0002				0.00059		<0.0002

Time Series

Constituent: Thallium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0002							
1/16/2019		<0.0002	<0.0002					
9/11/2019	<0.0002	<0.0002	<0.0002					
4/20/2020			<0.0002	<0.0002				
4/21/2020	<0.0002	<0.0002					<0.0002	<0.0002
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			<0.0002					
8/17/2020				<0.0002			<0.0002	
8/19/2020	<0.0002	<0.0002						<0.0002
3/8/2021					<0.0002	<0.0002		
3/9/2021	<0.0002	<0.0002						
3/10/2021			<0.0002	0.000103 (J)			<0.0002	<0.0002
8/17/2021					<0.0002	<0.0002		
8/18/2021	<0.0002	<0.0002		0.00021			<0.0002	<0.0002
8/23/2021			<0.0002					
3/23/2022					7E-05 (J)	<0.0002		
3/29/2022				0.00013 (J)				
3/30/2022							<0.0002	<0.0002
4/4/2022			<0.0002					
4/6/2022	<0.0002	<0.0002						

Time Series

Constituent: Thallium (mg/L)   Analysis Run 6/10/2022 12:58 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.000779 (J)							
4/12/2016	<0.0002							
5/31/2016	<0.0002							
8/17/2016	<0.0002							
10/11/2016	<0.0002							
1/24/2017	<0.0002							
5/9/2017	<0.0002							
6/28/2017	<0.0002							
2/27/2018	<0.0002							
6/5/2018	<0.0002							
11/6/2018	<0.0002							
3/27/2019	<0.0002							
9/11/2019	<0.0002							
4/20/2020				<0.0002	<0.0002		<0.0002	
4/21/2020	<0.0002							
5/28/2020		<0.0002				<0.0002		<0.0002
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002
8/12/2020	<0.0002				<0.0002		<0.0002	
3/8/2021		<0.0002	<0.0002					
3/9/2021						<0.0002		<0.0002
3/10/2021				<0.0002	<0.0002		<0.0002	
3/16/2021	<0.0002							
8/16/2021			<0.0002					
8/17/2021		8E-05 (J)				<0.0002		0.00012 (J)
8/23/2021	<0.0002			<0.0002	<0.0002		<0.0002	
3/23/2022		0.00011 (J)	<0.0002			<0.0002		0.00013 (J)
4/4/2022	<0.0002							
4/5/2022					<0.0002		<0.0002	
4/6/2022				<0.0002				

Time Series

Constituent: Thallium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	0.000639 (J)						0.00042 (J)	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	<0.0002						<0.0002	<0.0002
8/17/2021		<0.0002	<0.0002	<0.0002	<0.0002	8E-05 (J)		
8/24/2021	<0.0002						<0.0002	<0.0002
3/23/2022		<0.0002	<0.0002	<0.0002	<0.0002	9E-05 (J)		
3/29/2022	<0.0002						<0.0002	<0.0002

Time Series

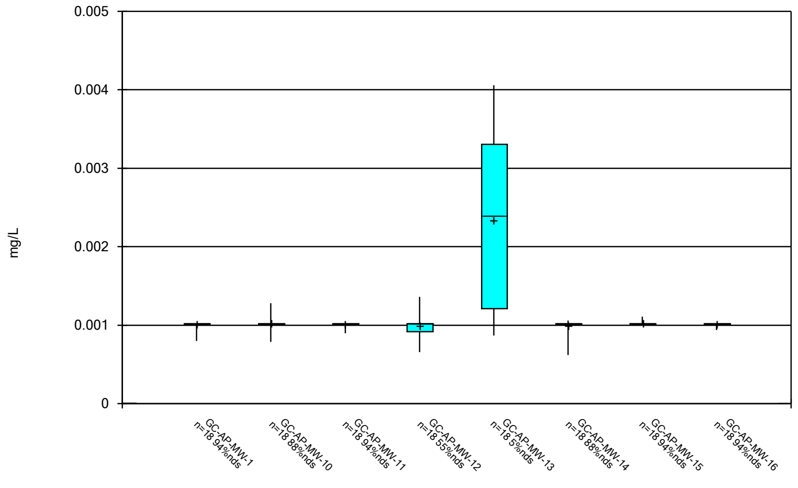
Constituent: Thallium (mg/L) Analysis Run 6/10/2022 12:58 PM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.0002
4/20/2020		<0.0002
4/21/2020	<0.0002	
8/17/2020		<0.0002
8/18/2020	<0.0002	
3/9/2021	<0.0002	
3/10/2021		7.61E-05 (J)
8/17/2021		0.00011 (J)
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		9E-05 (J)

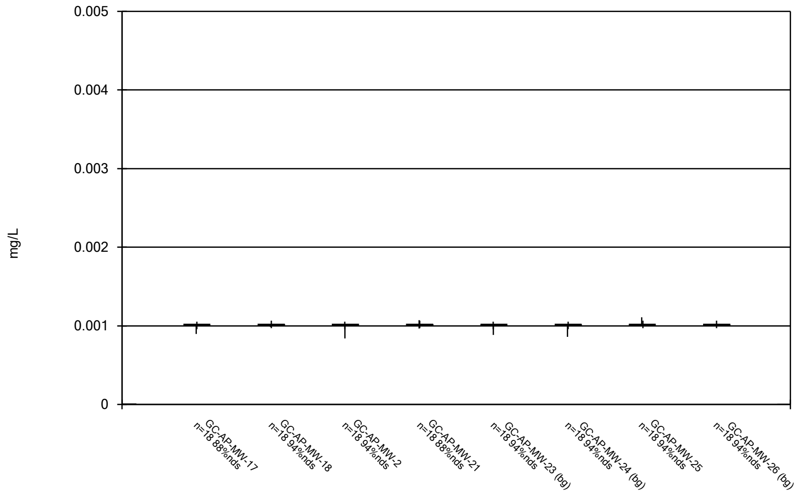
FIGURE B.

Box & Whiskers Plot



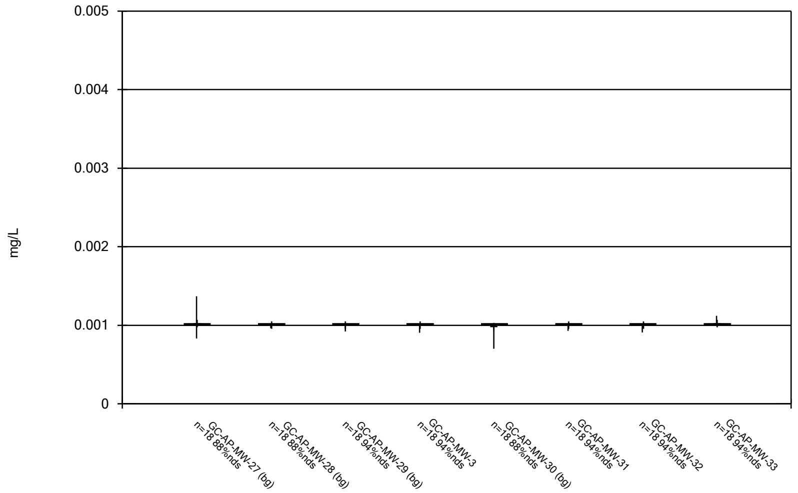
Constituent: Antimony   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Box & Whiskers Plot



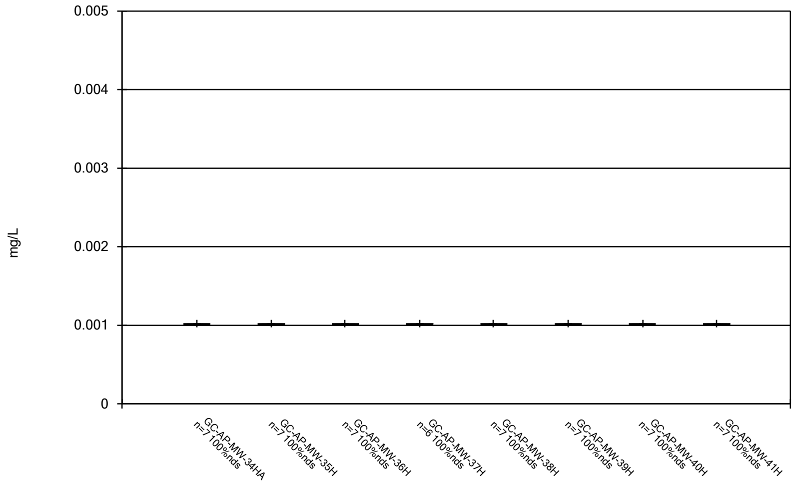
Constituent: Antimony   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Box & Whiskers Plot



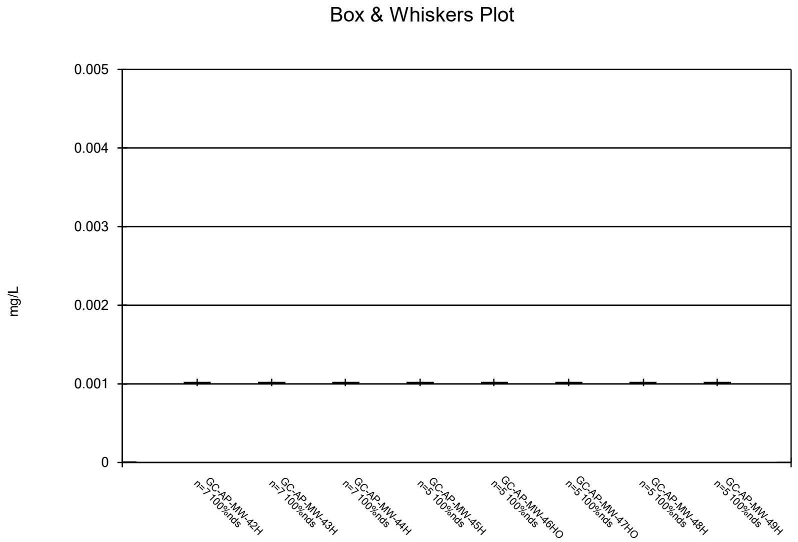
Constituent: Antimony   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Box & Whiskers Plot



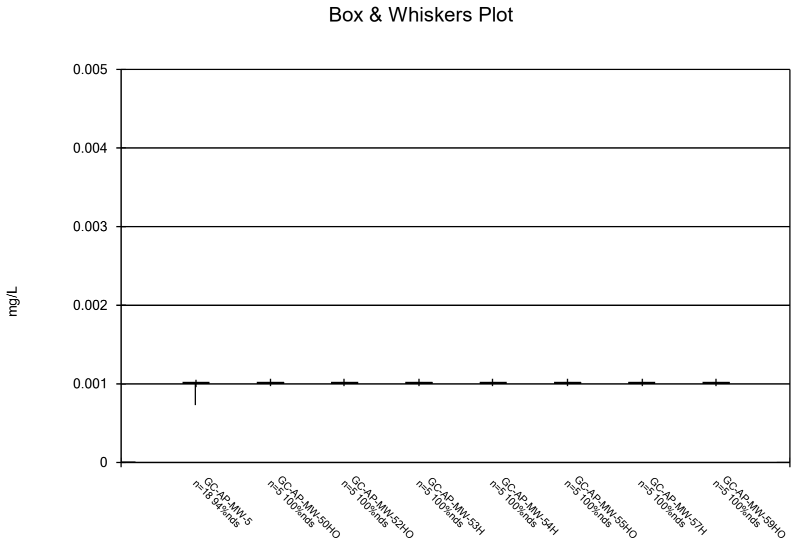
Constituent: Antimony   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



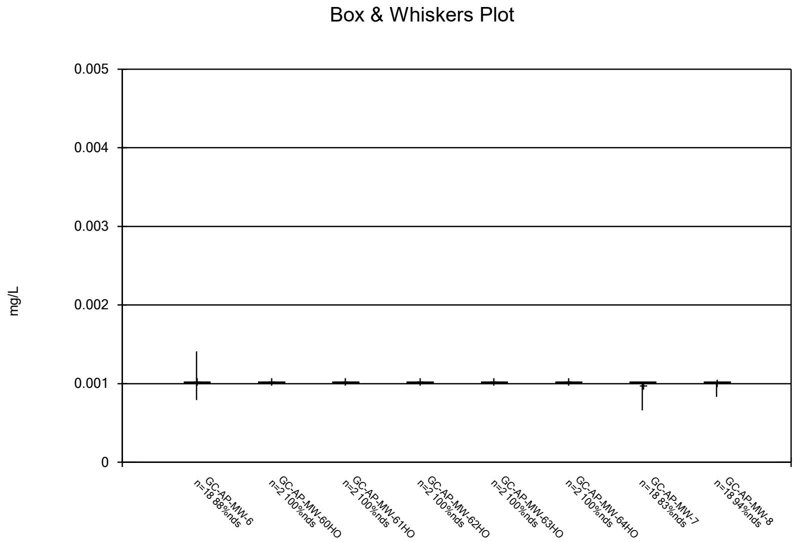
Constituent: Antimony Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



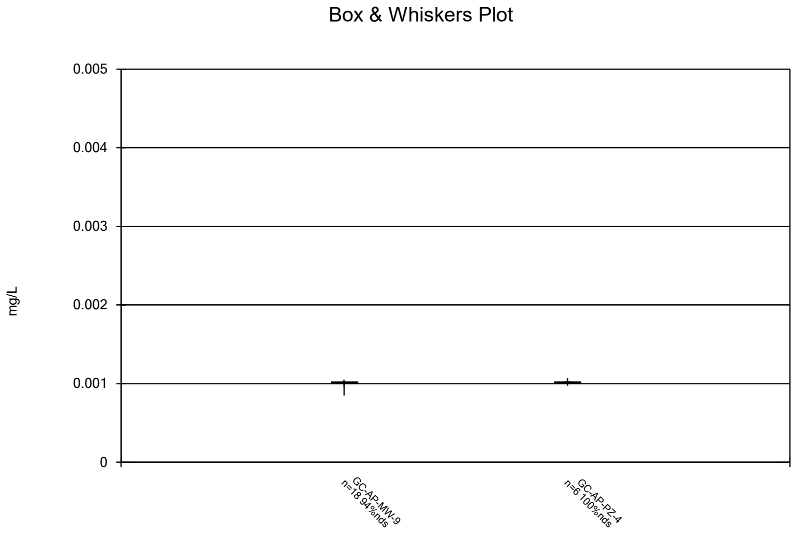
Constituent: Antimony Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Antimony Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

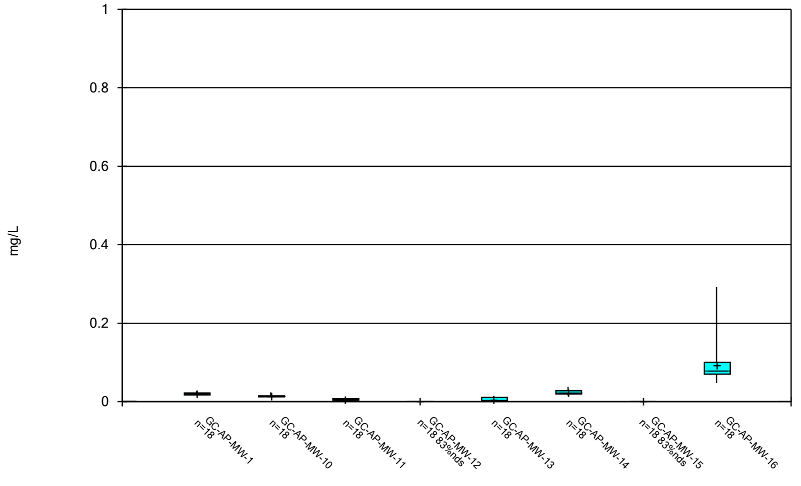
Sanitas™ v.9.6.34 . UG



Constituent: Antimony Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

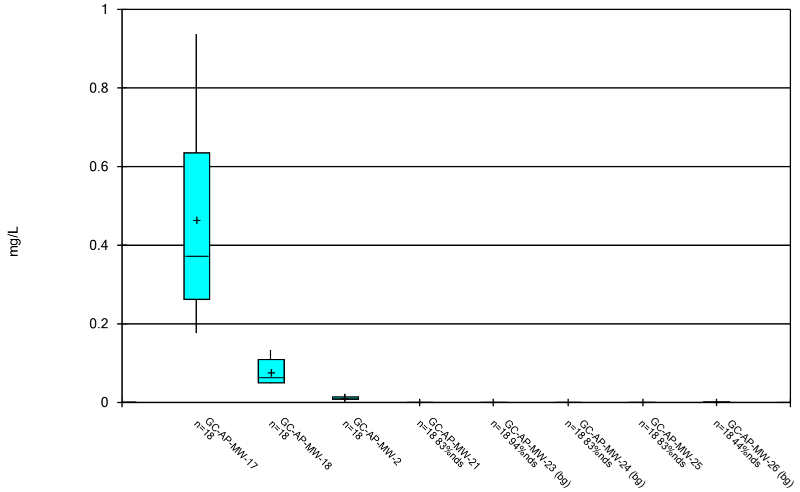
Box & Whiskers Plot



Constituent: Arsenic   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

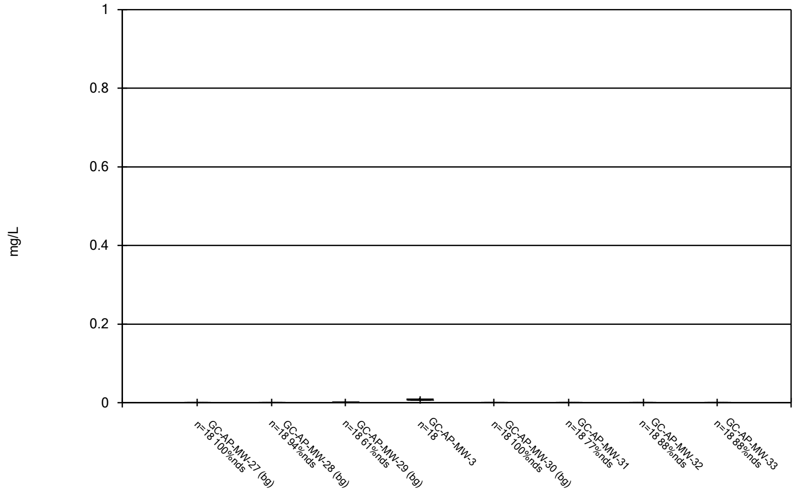
Box & Whiskers Plot



Constituent: Arsenic   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

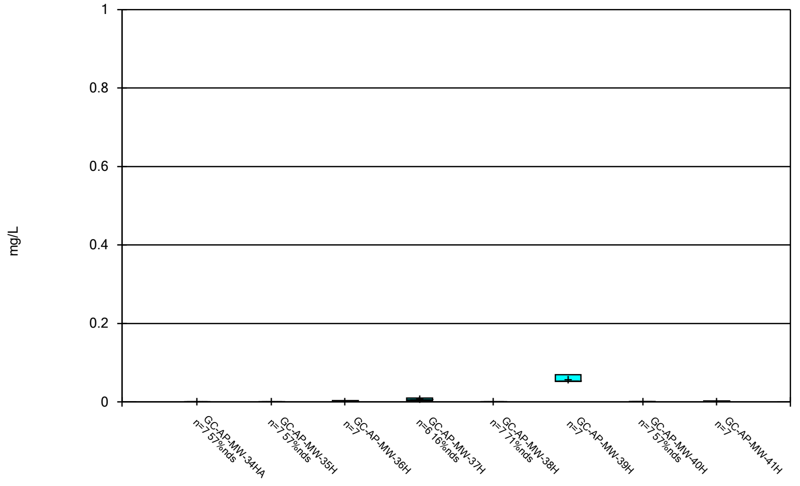
Box & Whiskers Plot



Constituent: Arsenic   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

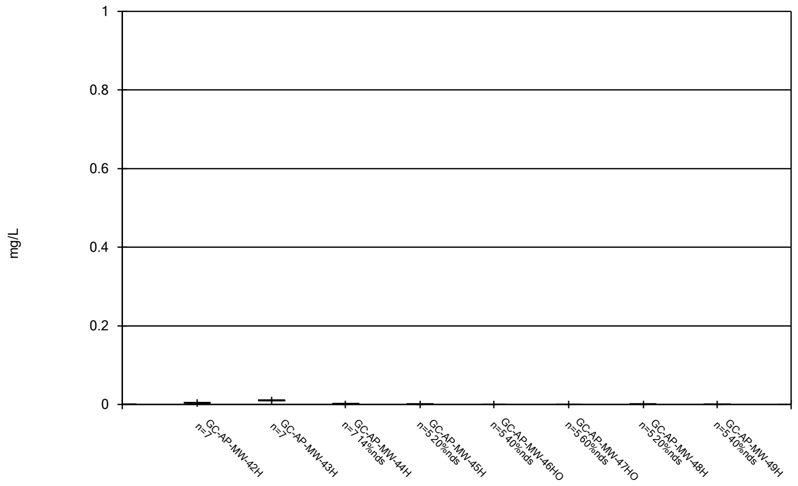
Box & Whiskers Plot



Constituent: Arsenic   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

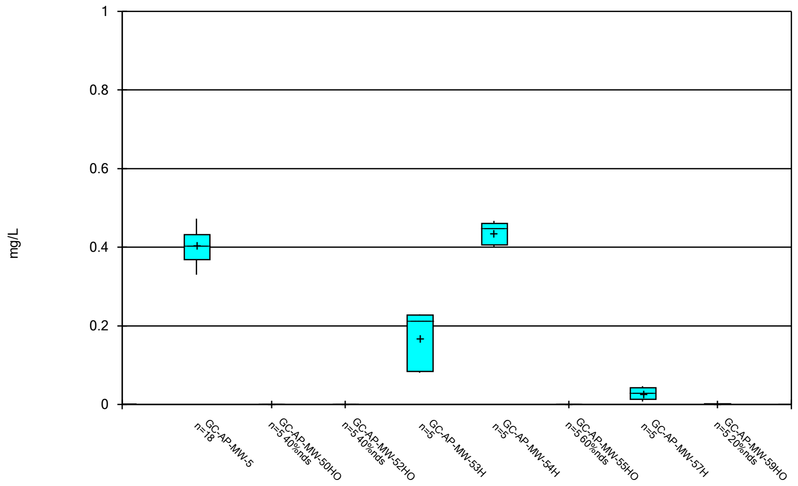
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

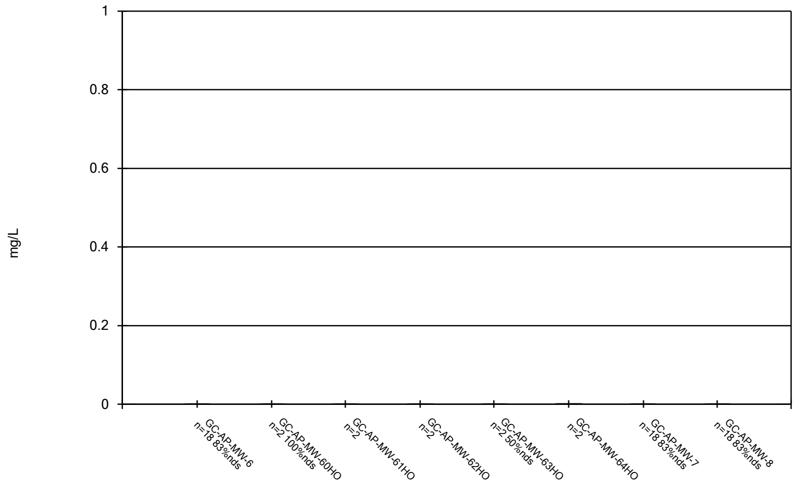
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

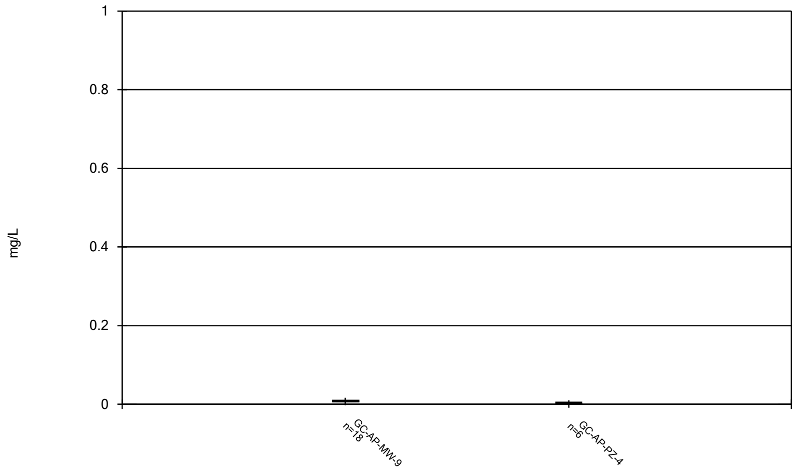
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

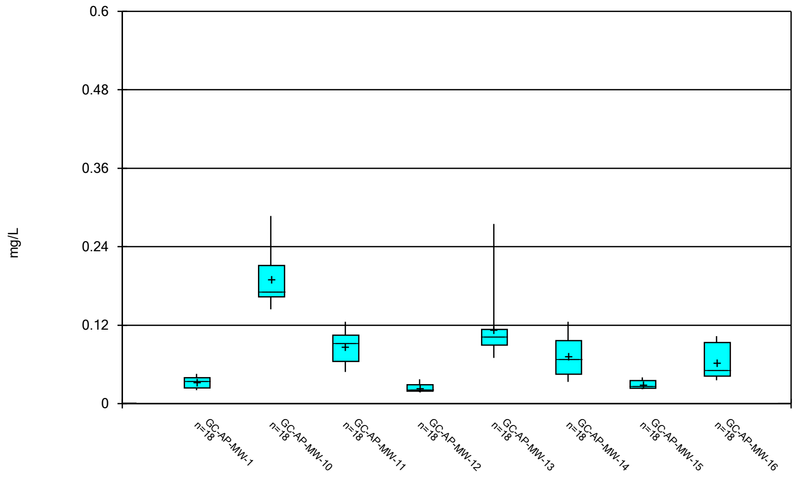
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

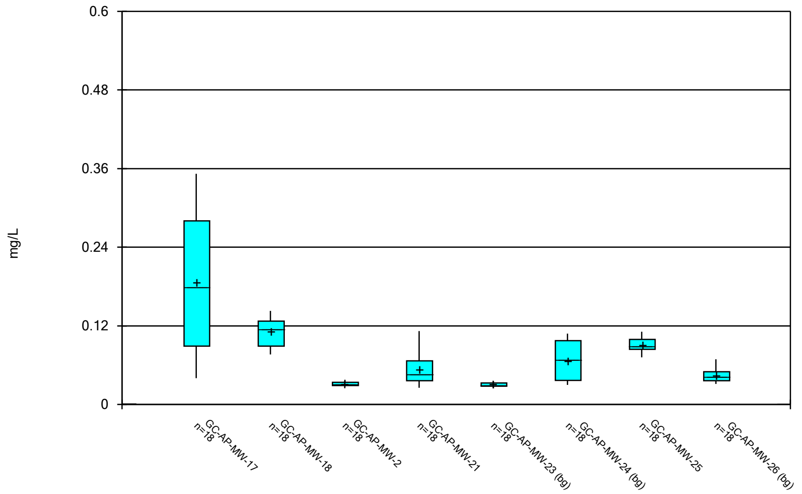
Box & Whiskers Plot



Constituent: Barium Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

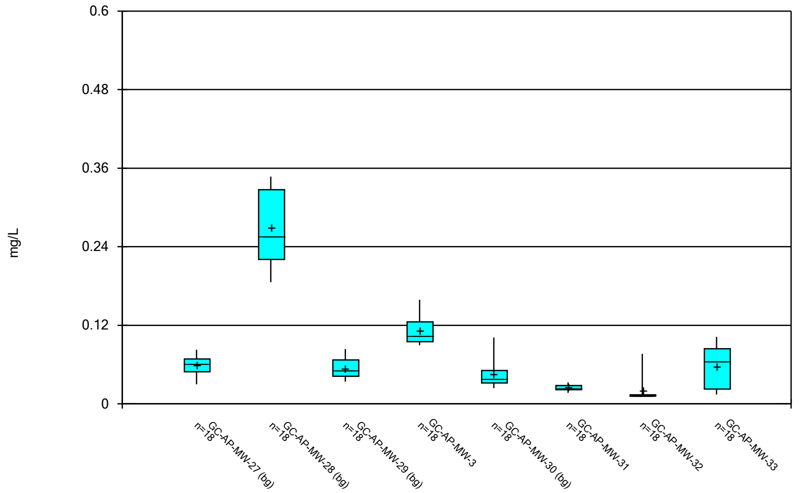
Box & Whiskers Plot



Constituent: Barium Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

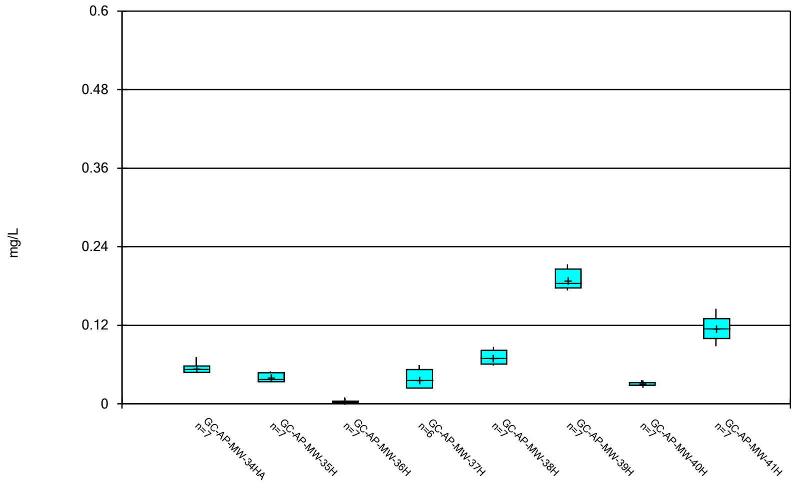
Box & Whiskers Plot



Constituent: Barium Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

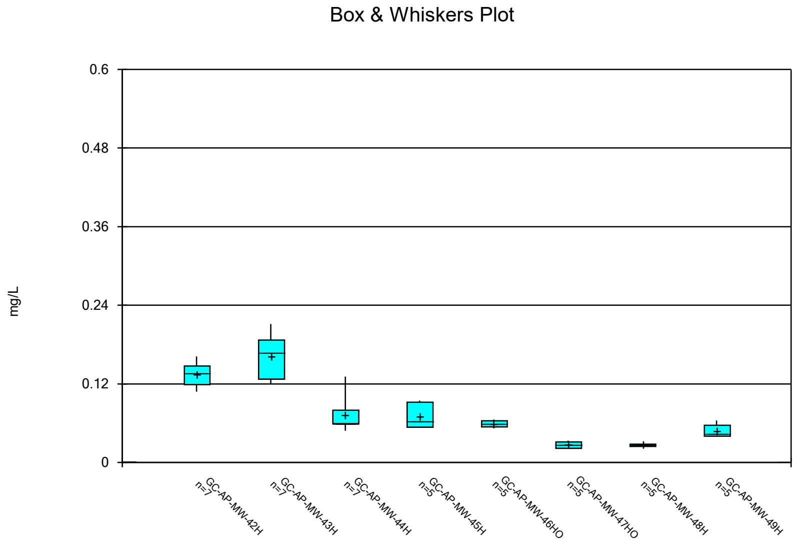
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



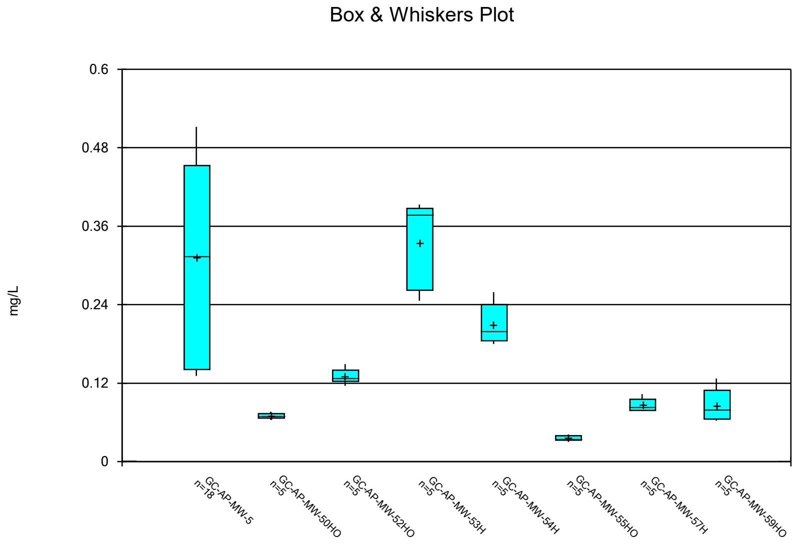
Constituent: Barium Analysis Run 6/10/2022 12:58 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



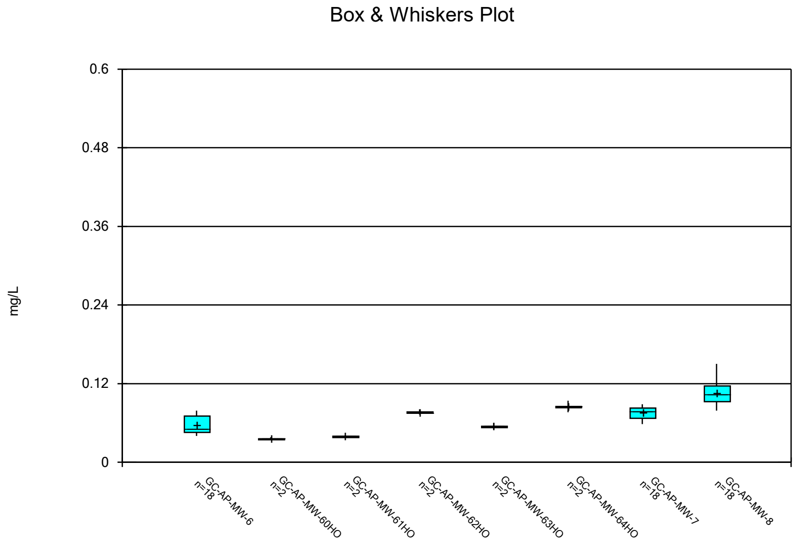
Constituent: Barium   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



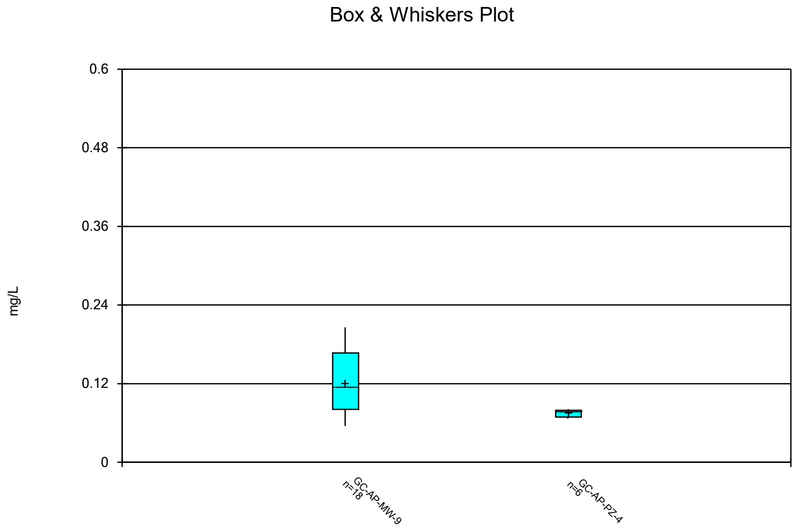
Constituent: Barium   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Barium   Analysis Run 6/10/2022 12:58 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

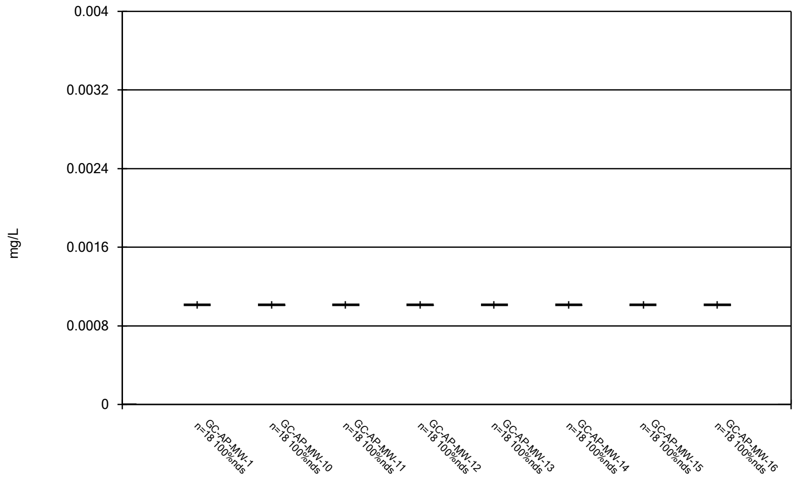
Sanitas™ v.9.6.34 . UG



Constituent: Barium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot

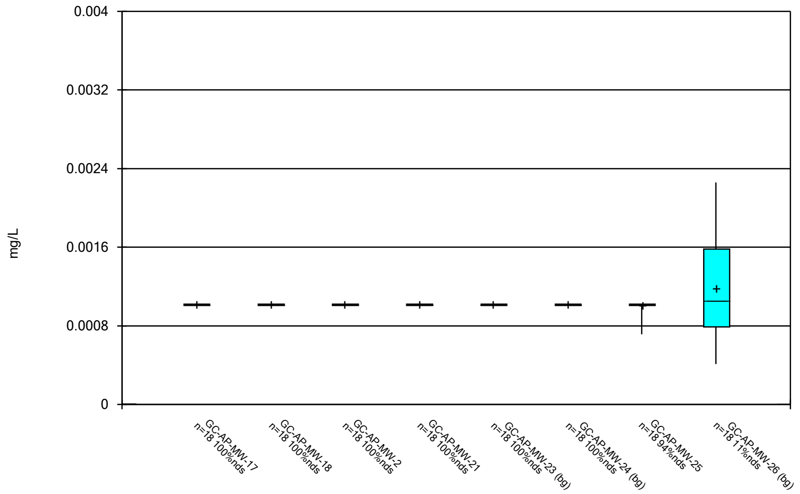


Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot

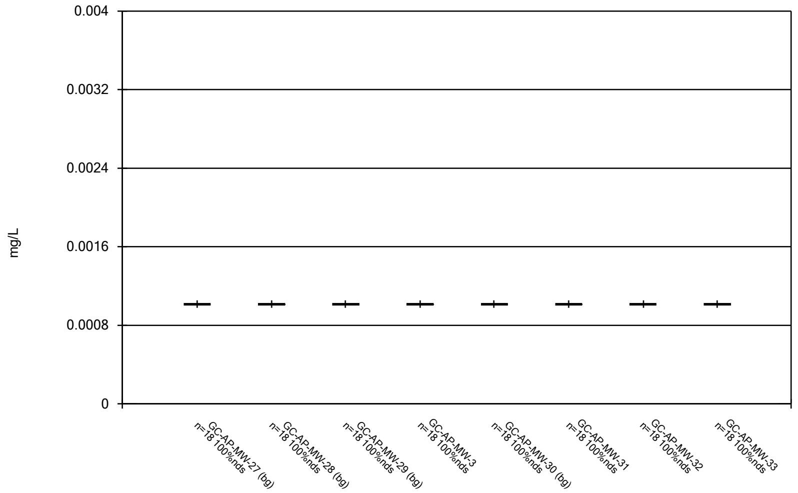


Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot

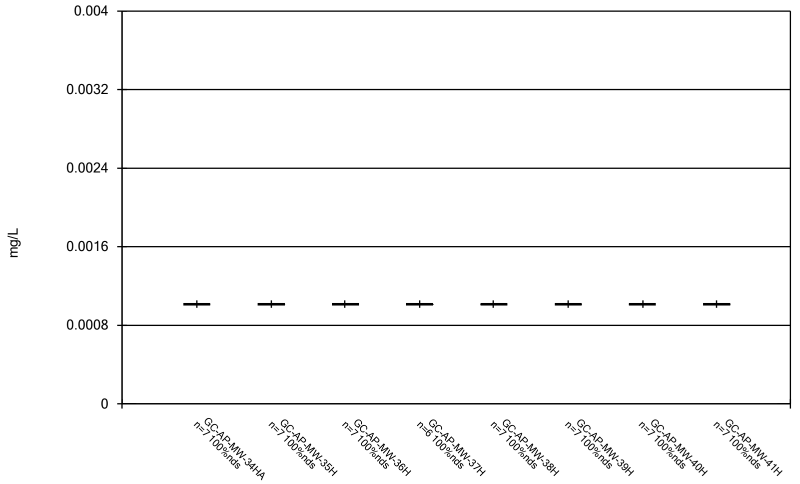


Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot

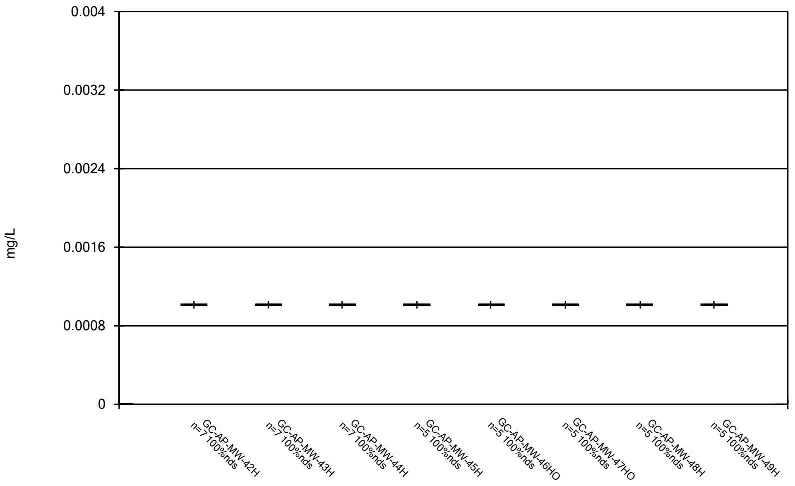


Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

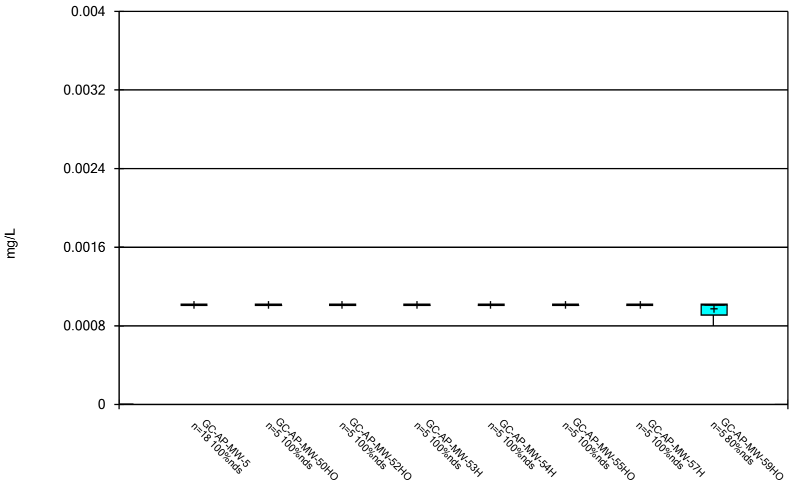
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

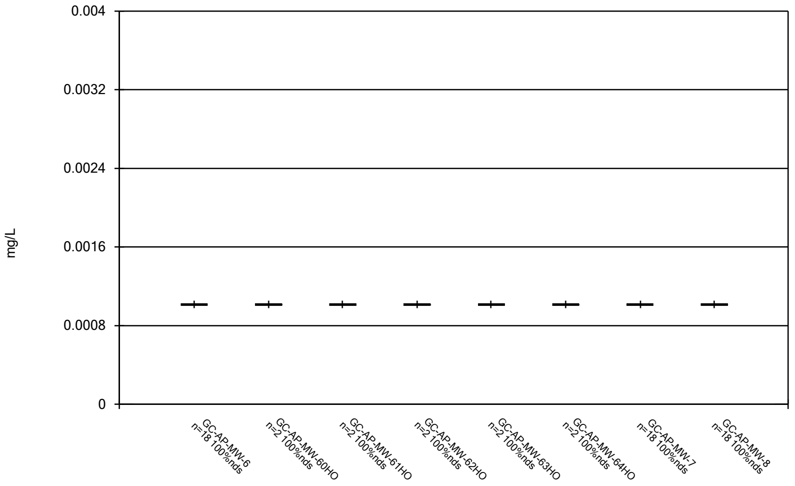
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

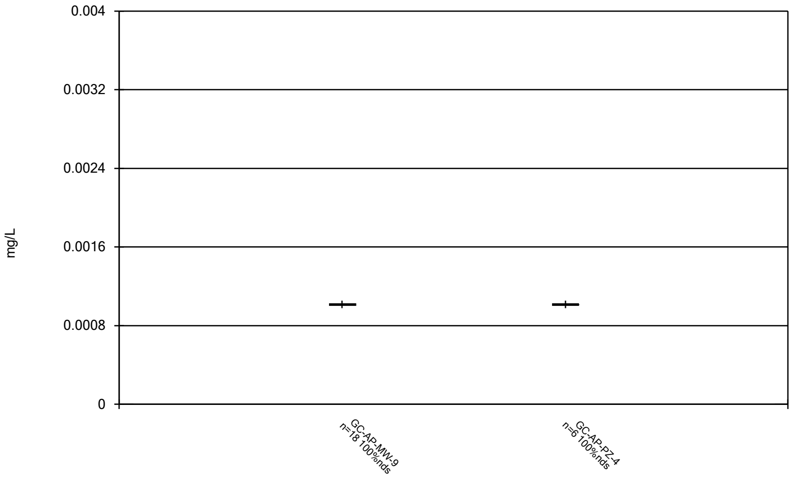
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

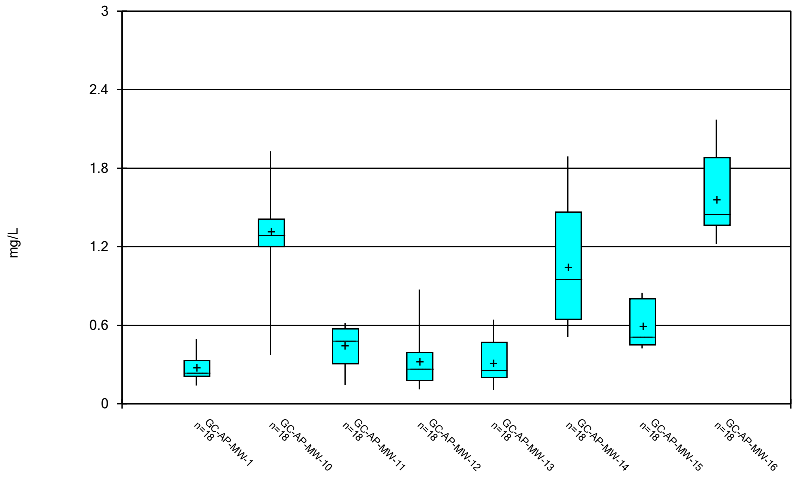
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

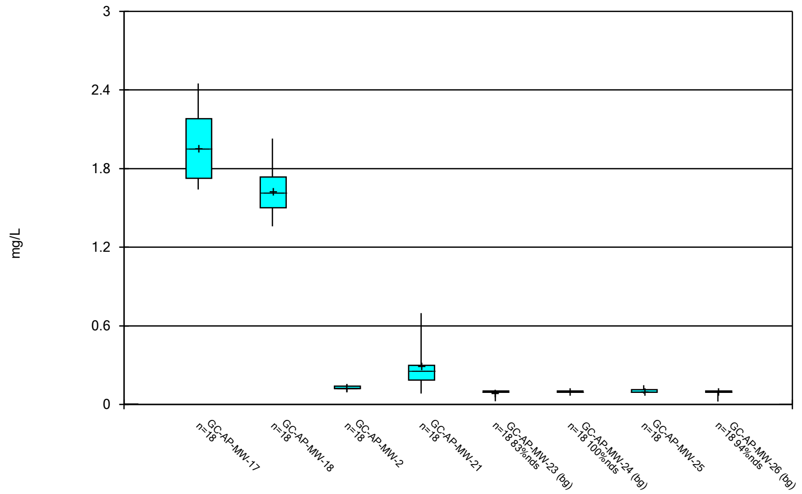
Box & Whiskers Plot



Constituent: Boron   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

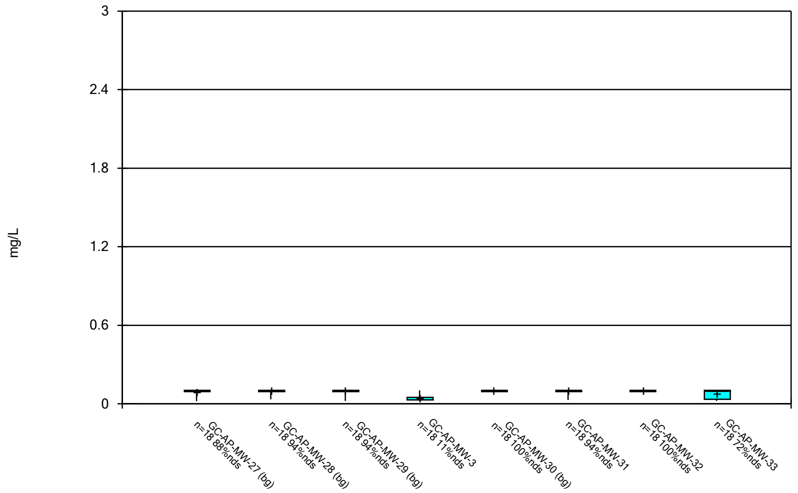
Box & Whiskers Plot



Constituent: Boron   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

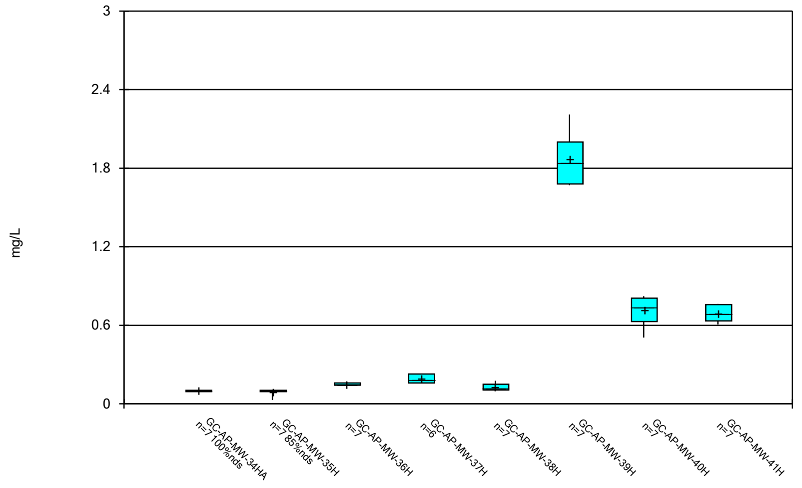
Box & Whiskers Plot



Constituent: Boron   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

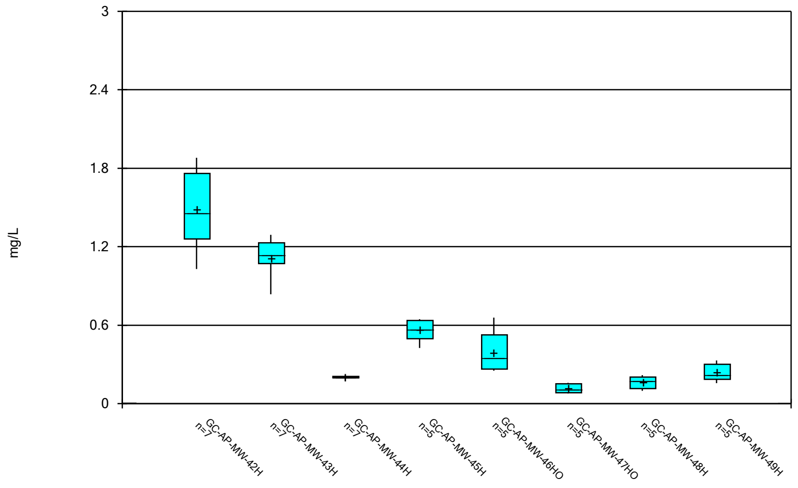
Box & Whiskers Plot



Constituent: Boron   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

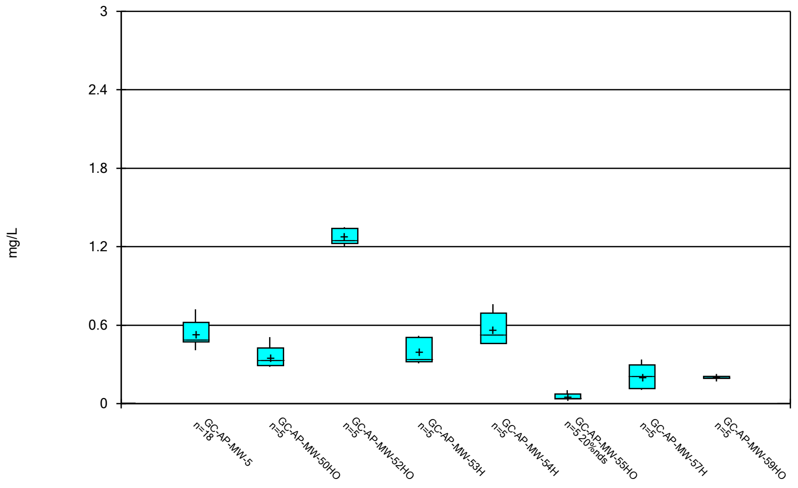
Box & Whiskers Plot



Constituent: Boron Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

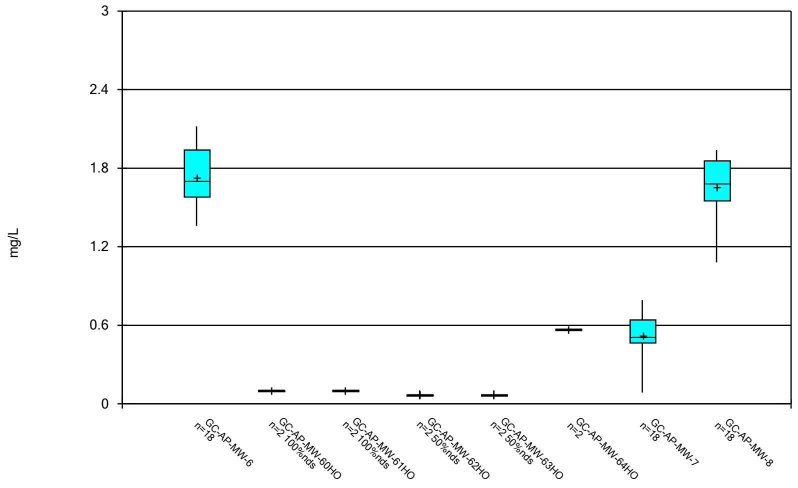
Box & Whiskers Plot



Constituent: Boron Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

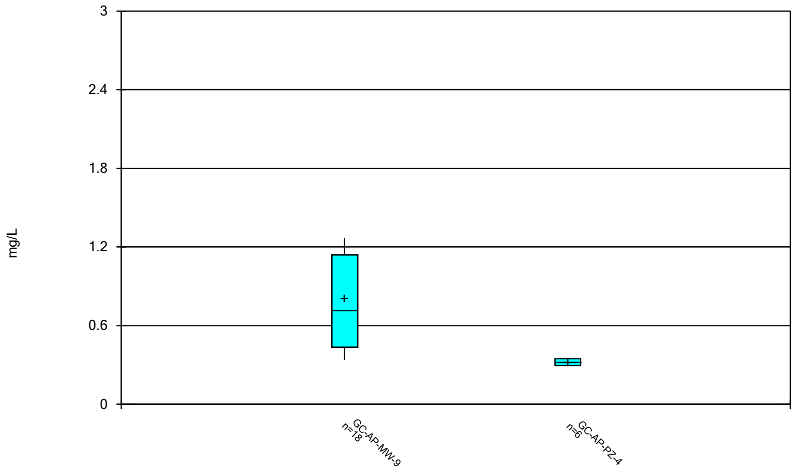
Box & Whiskers Plot



Constituent: Boron Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

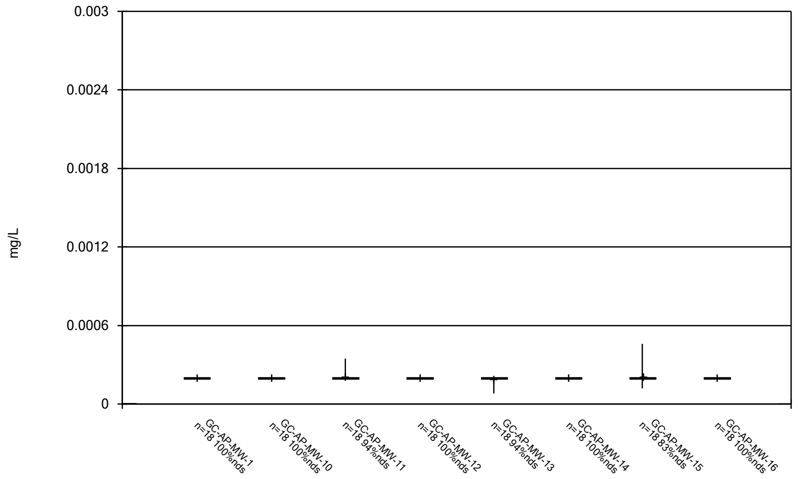
Box & Whiskers Plot



Constituent: Boron Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

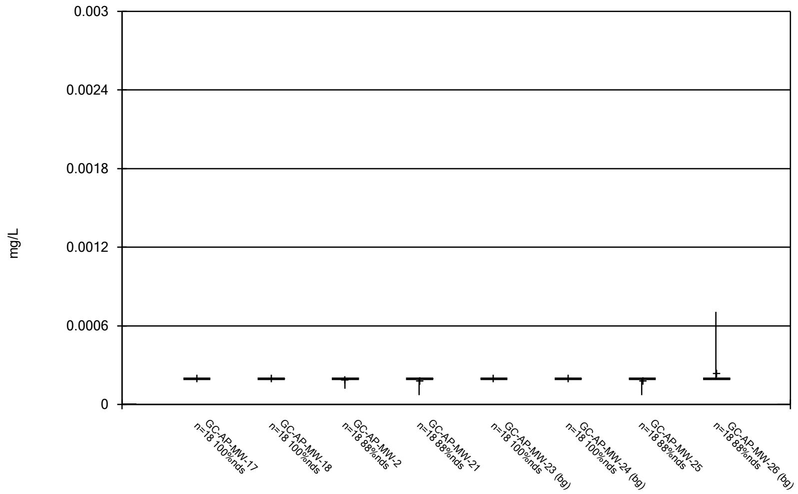
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

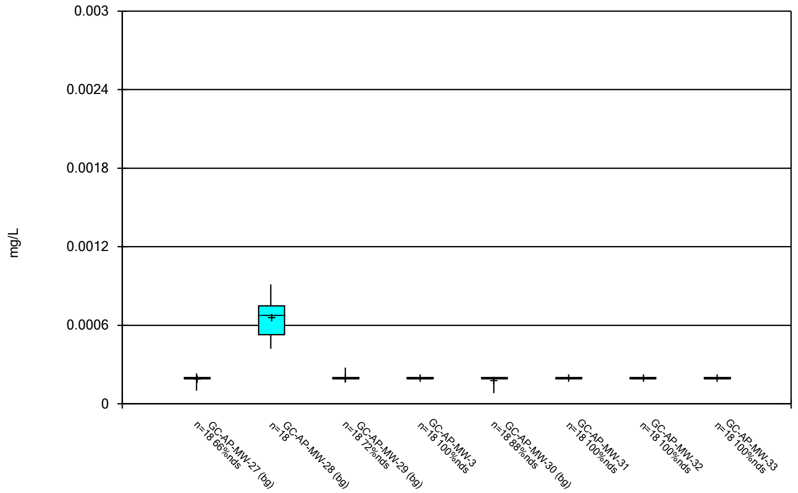
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

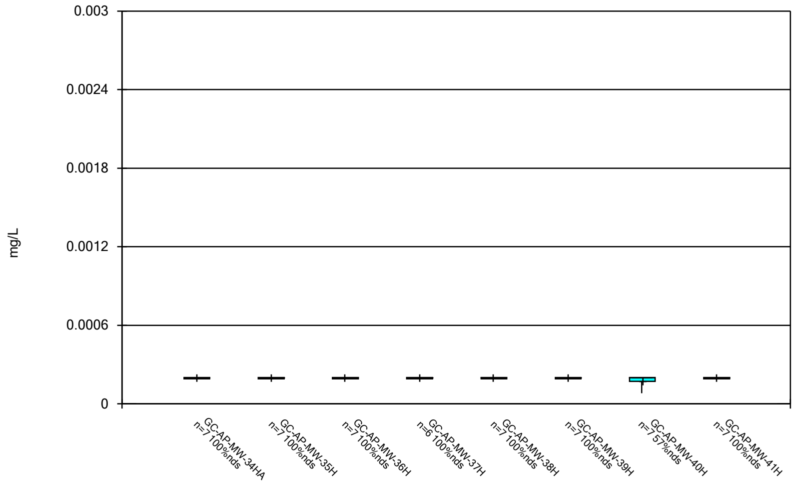
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

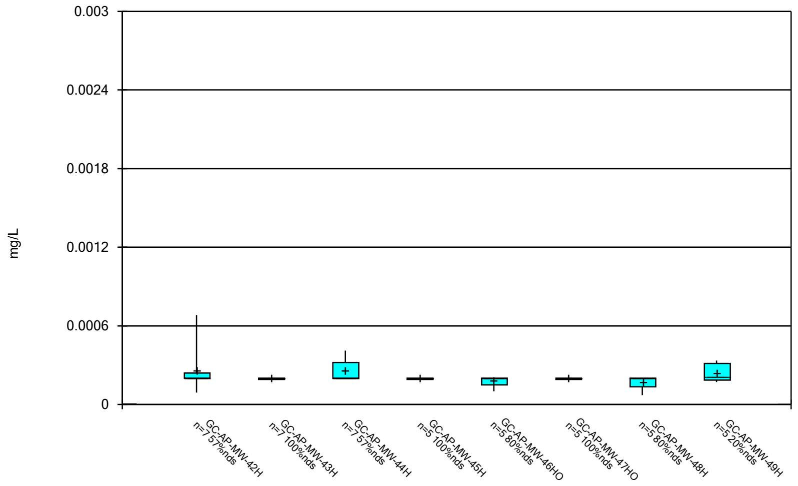
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

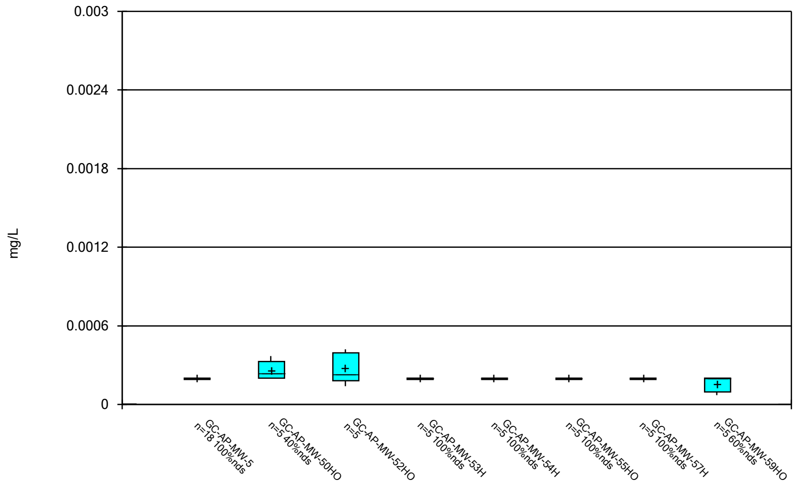
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

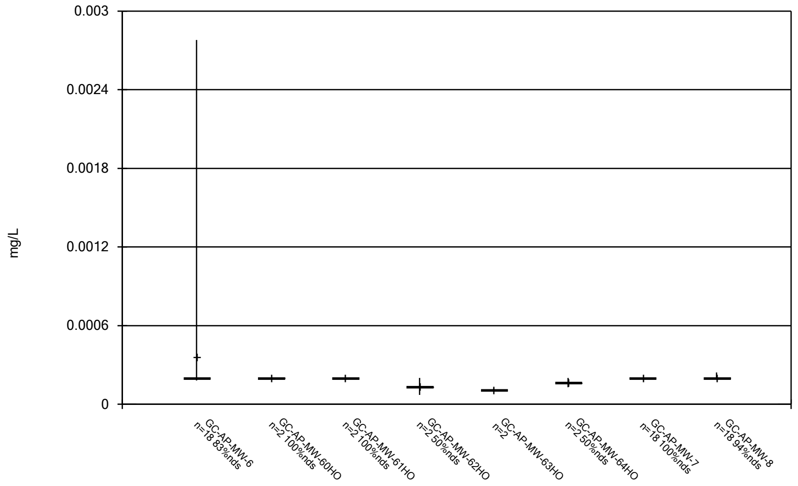
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

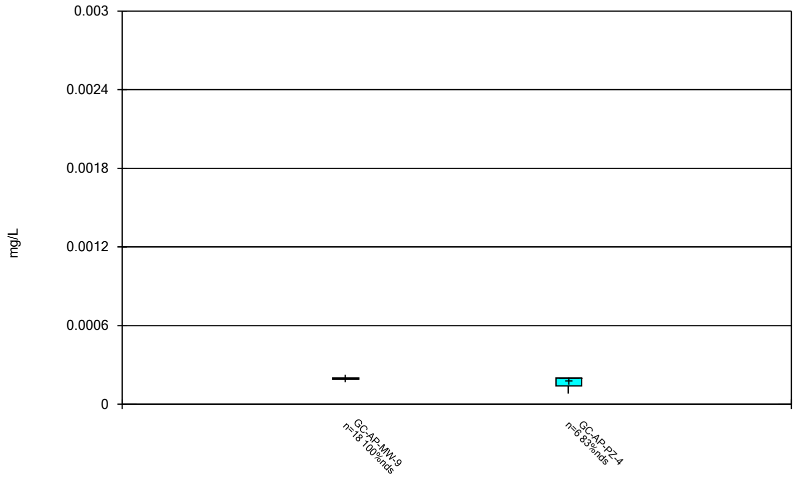
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

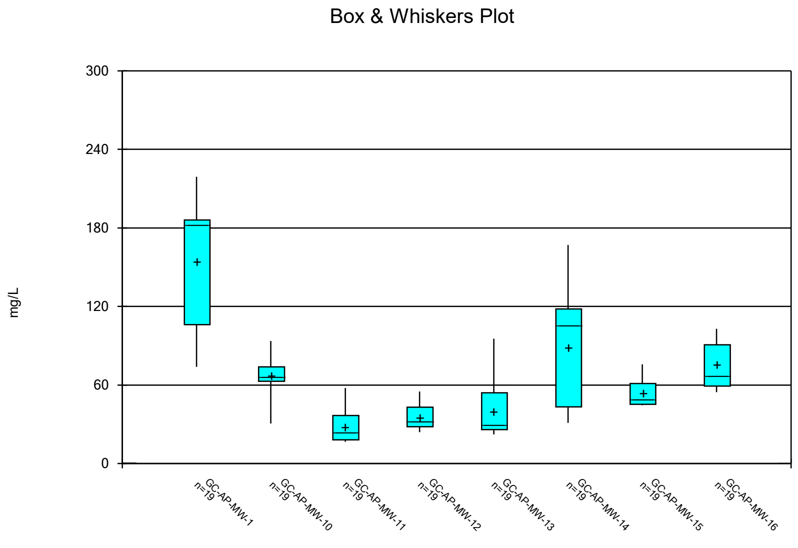
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



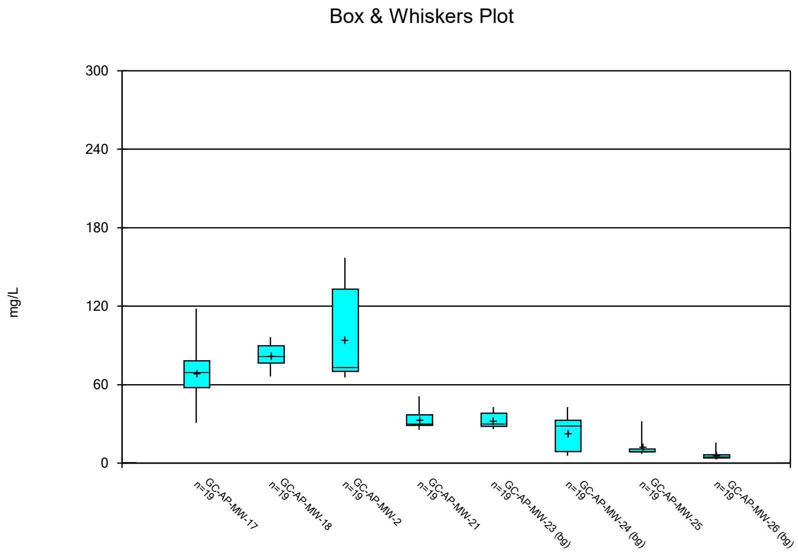
Constituent: Cadmium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



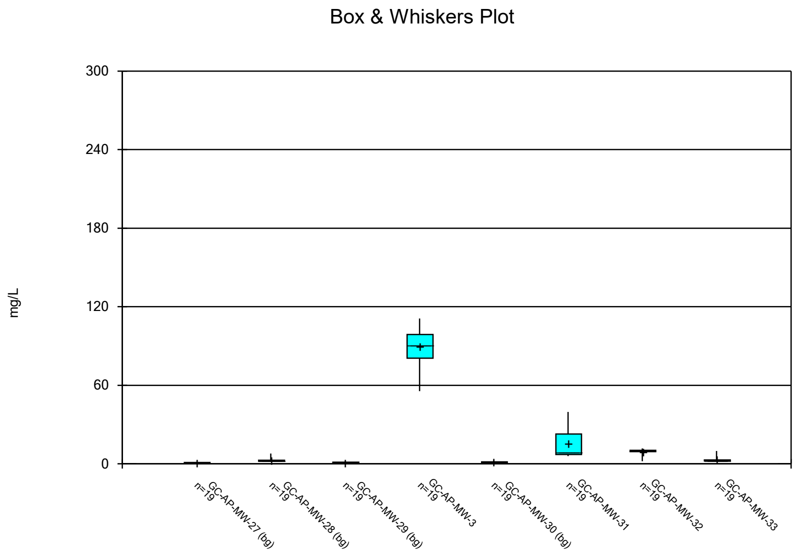
Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



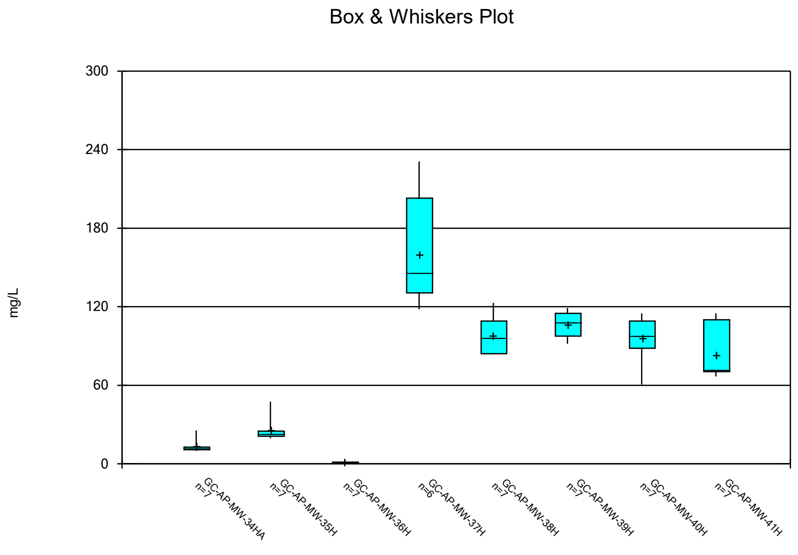
Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

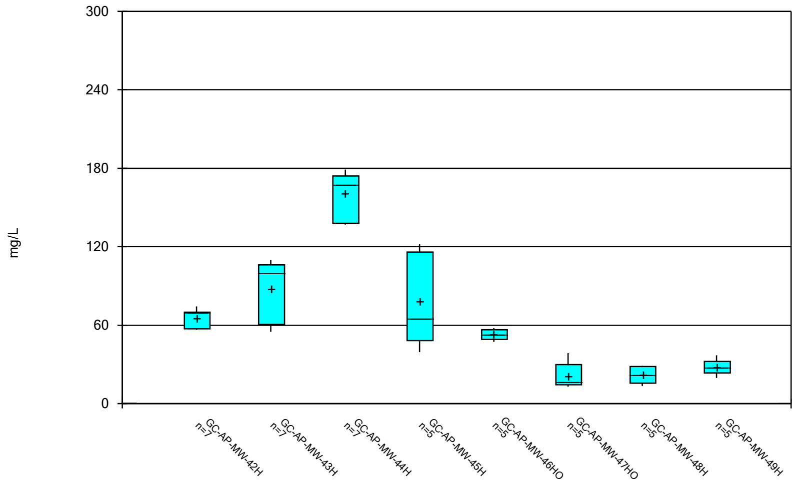
Sanitas™ v.9.6.34 . UG



Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

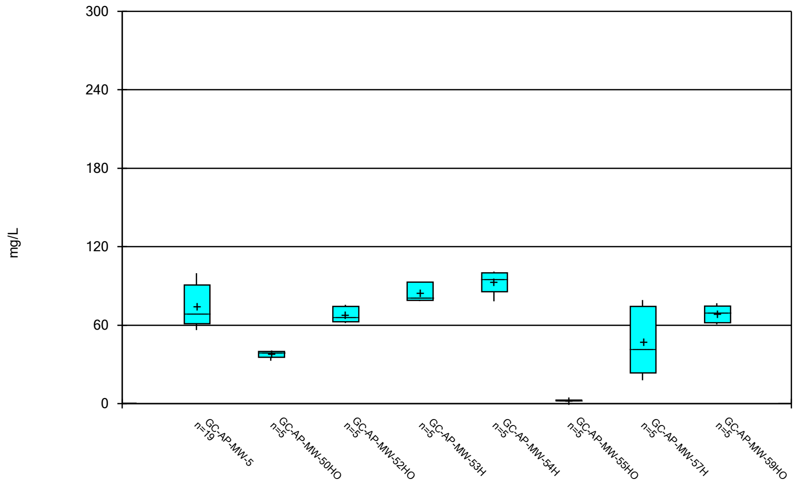
Box & Whiskers Plot



Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

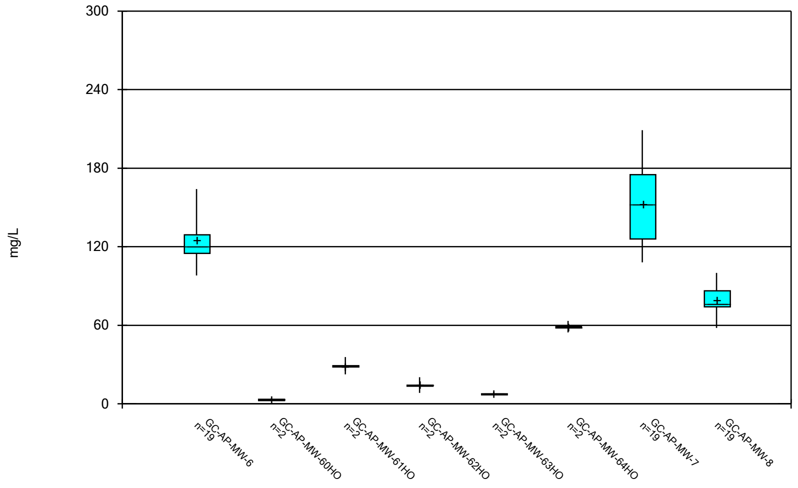
Box & Whiskers Plot



Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

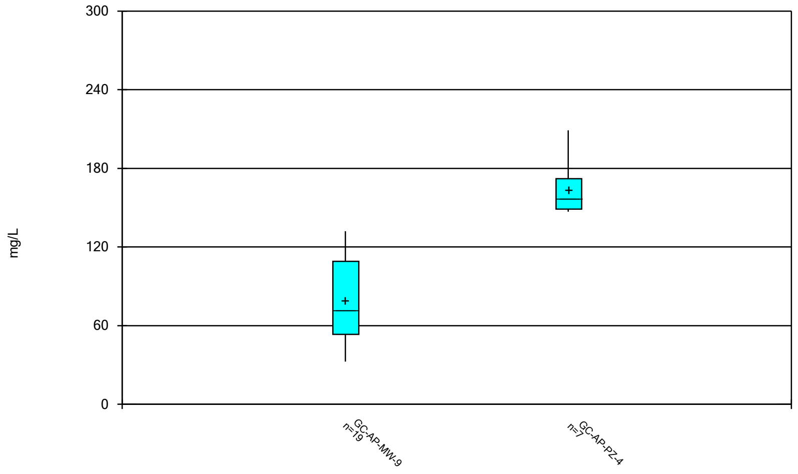
Box & Whiskers Plot



Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

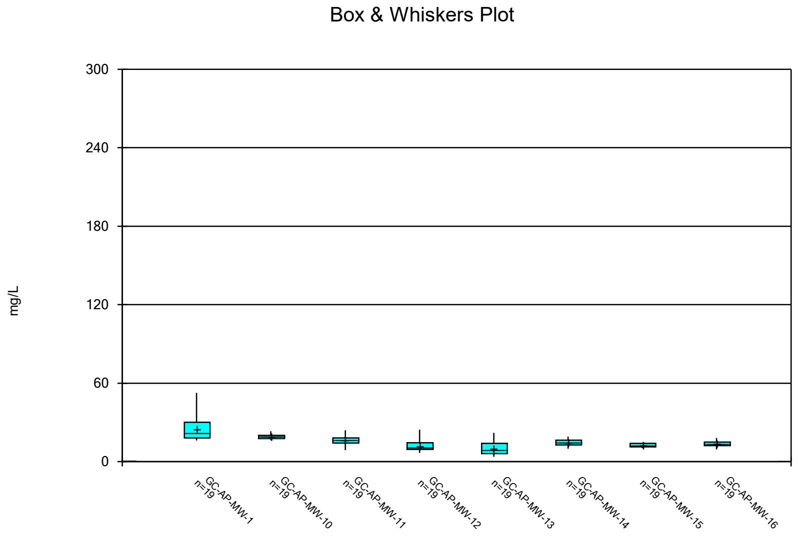
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



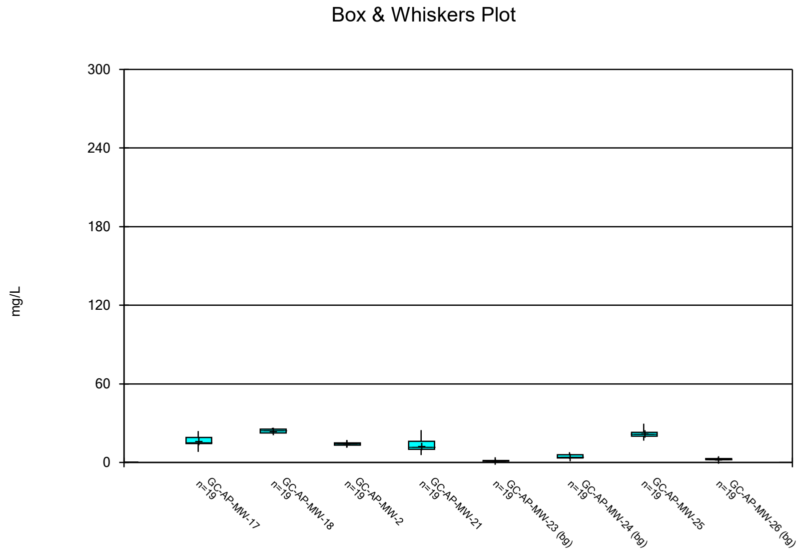
Constituent: Calcium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



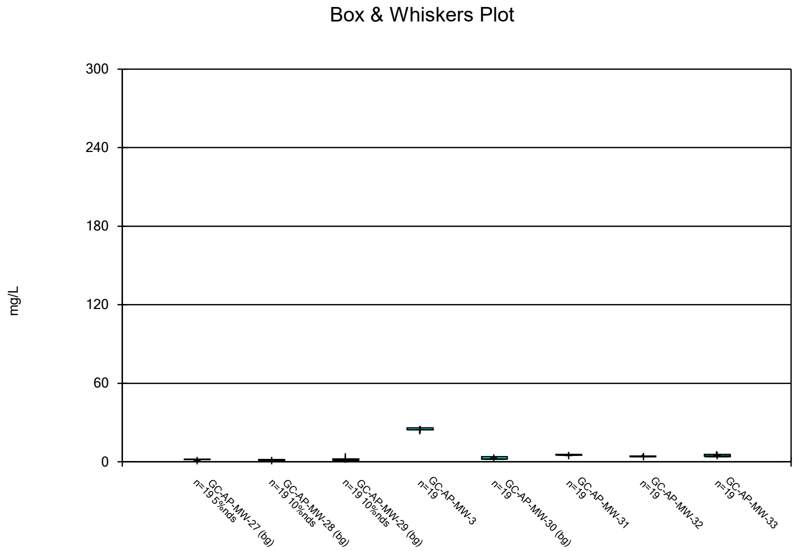
Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



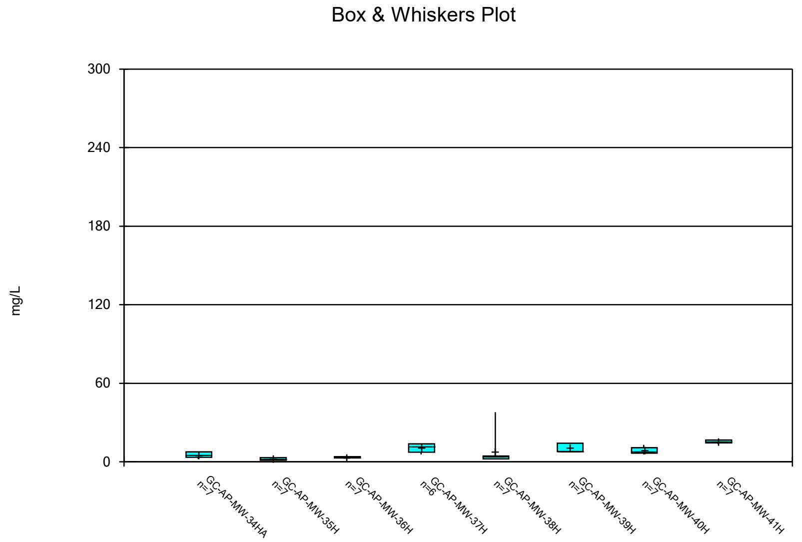
Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



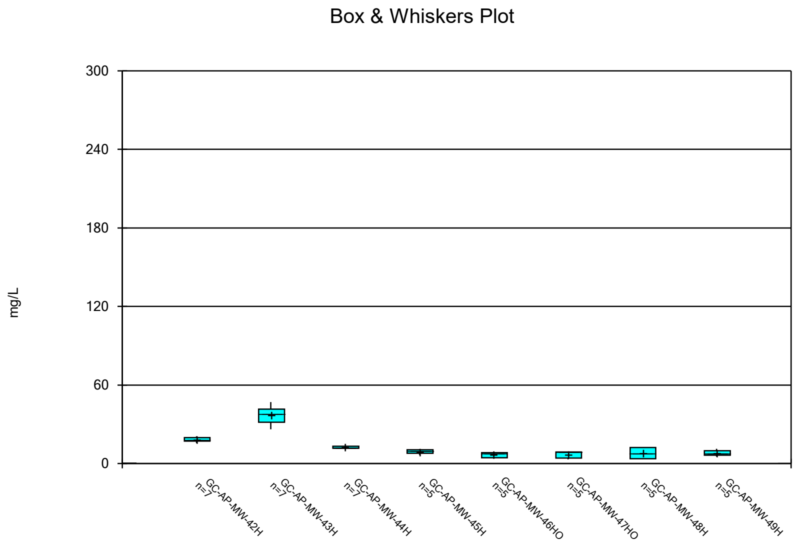
Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



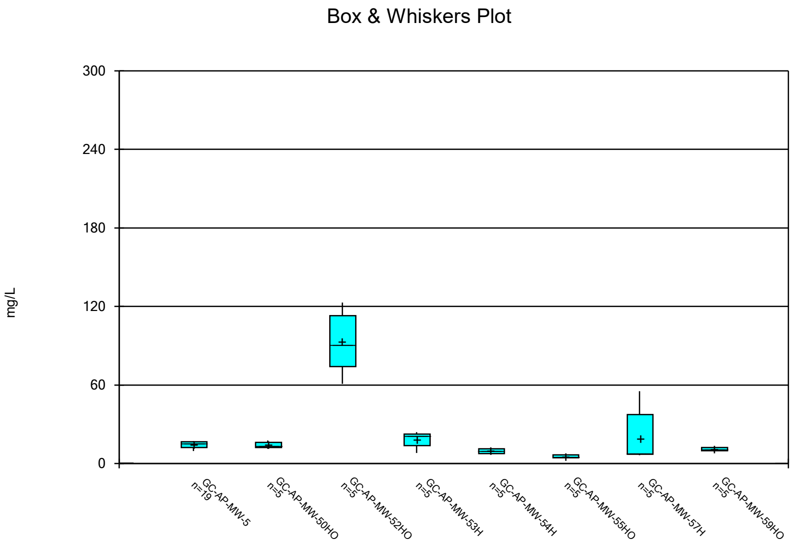
Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



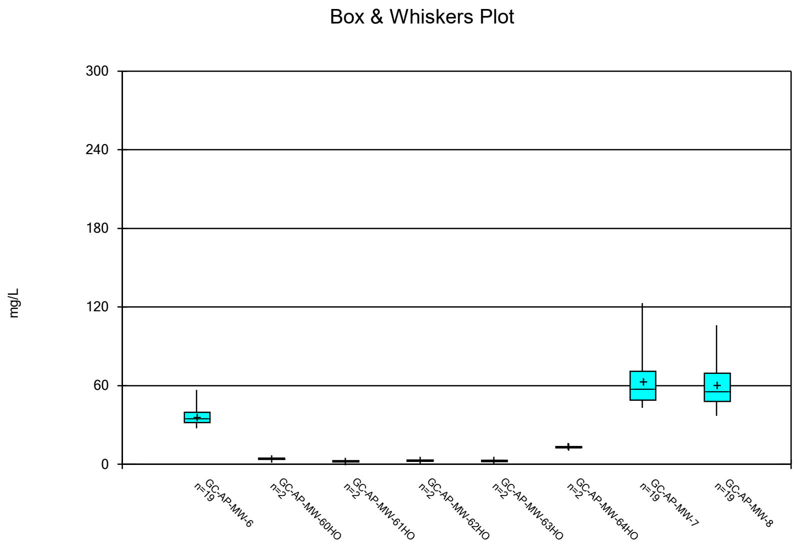
Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



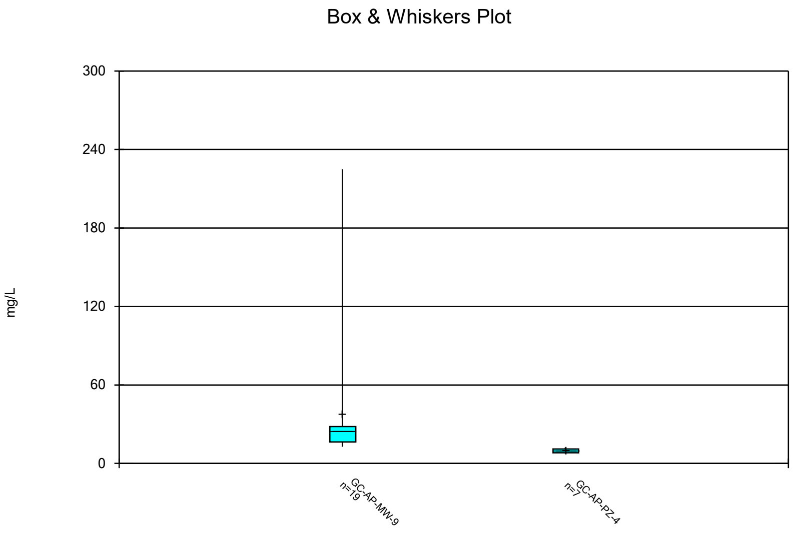
Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

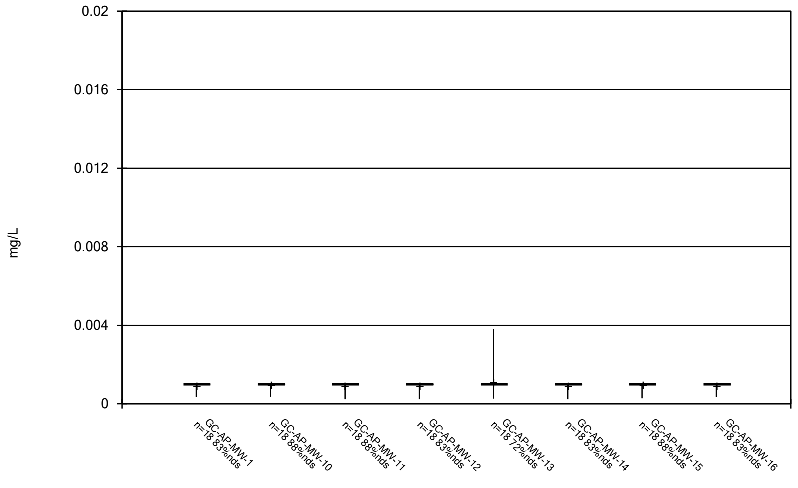
Sanitas™ v.9.6.34 . UG



Constituent: Chloride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

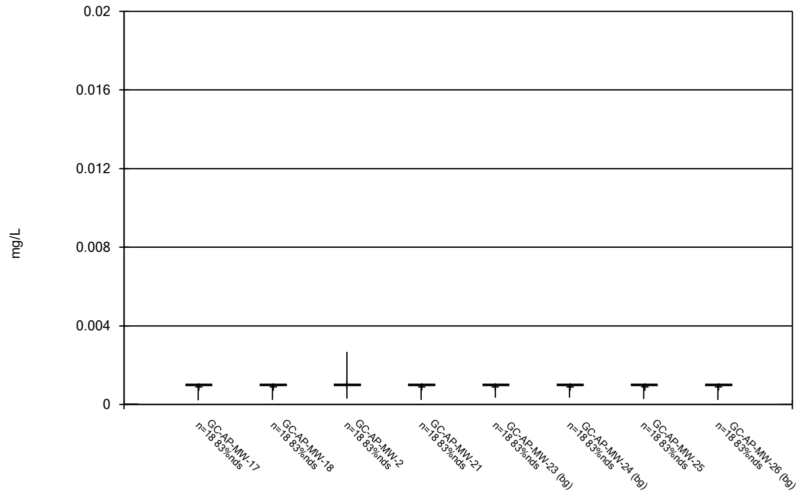
Box & Whiskers Plot



Constituent: Chromium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

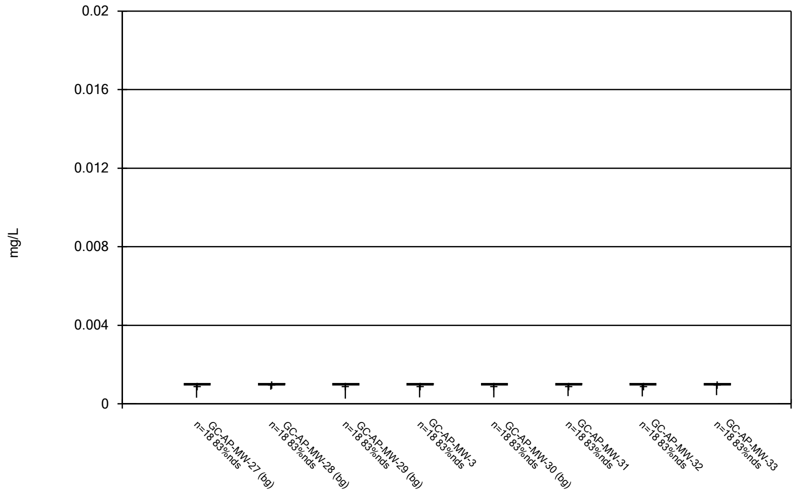
Box & Whiskers Plot



Constituent: Chromium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

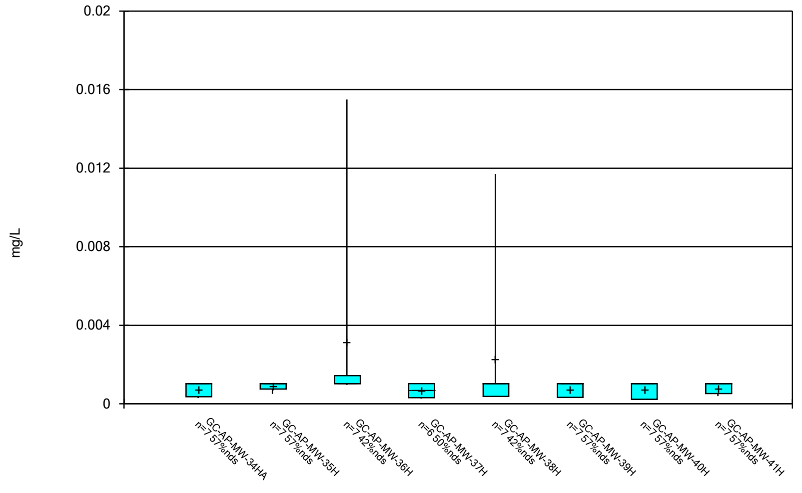
Box & Whiskers Plot



Constituent: Chromium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

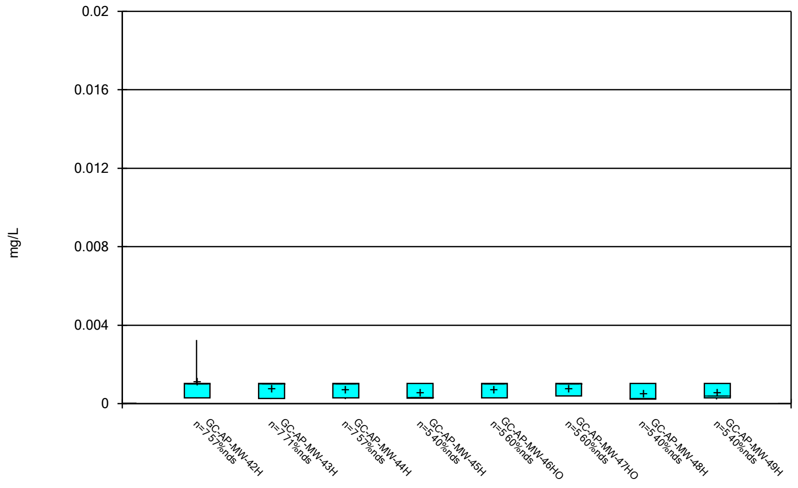
Box & Whiskers Plot



Constituent: Chromium   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

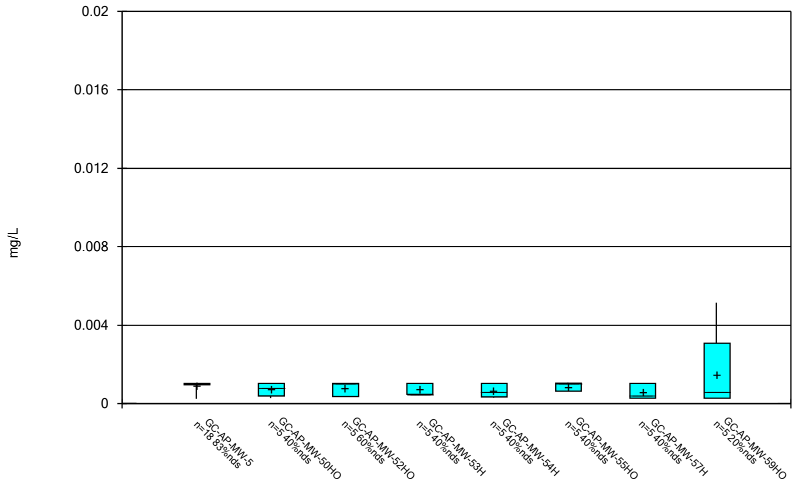
Box & Whiskers Plot



Constituent: Chromium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

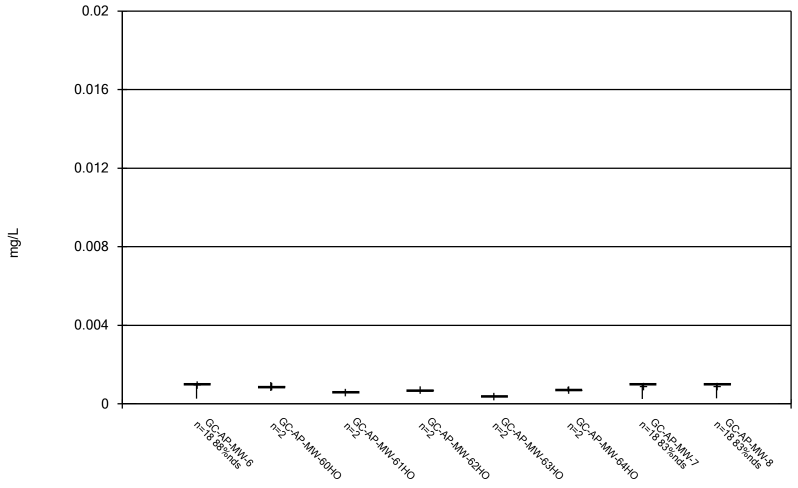
Box & Whiskers Plot



Constituent: Chromium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

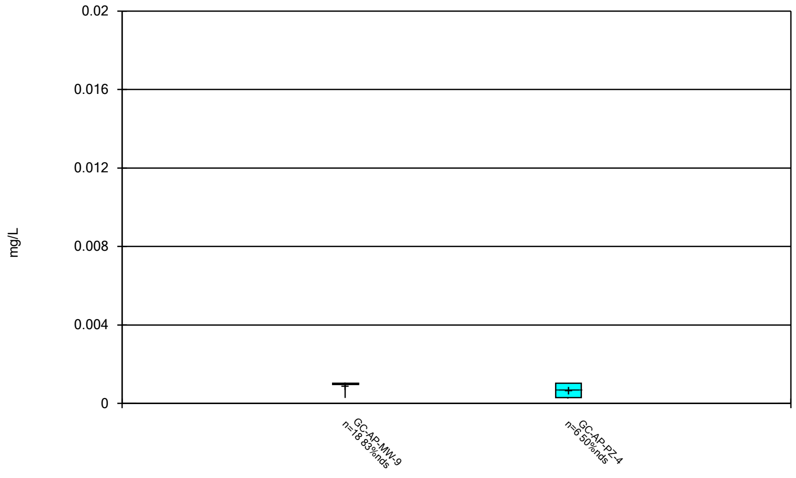
Box & Whiskers Plot



Constituent: Chromium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

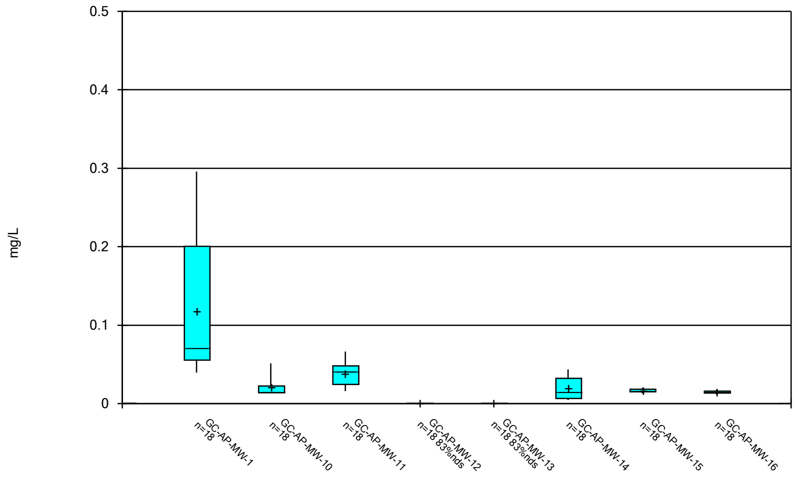
Box & Whiskers Plot



Constituent: Chromium Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

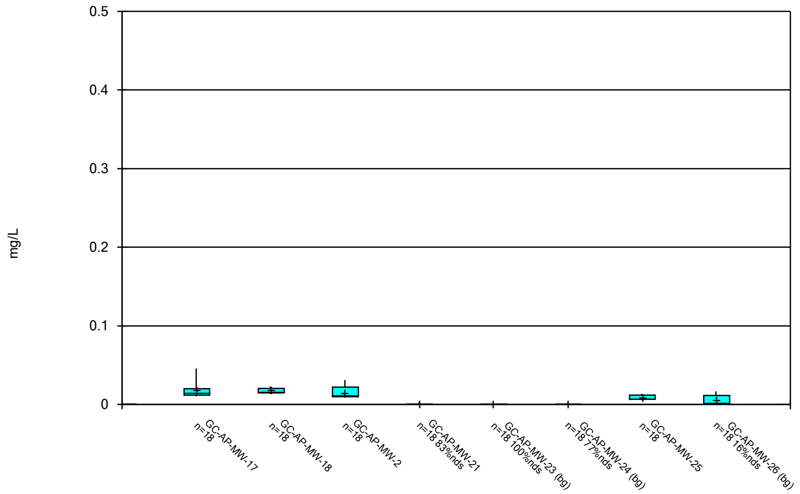
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

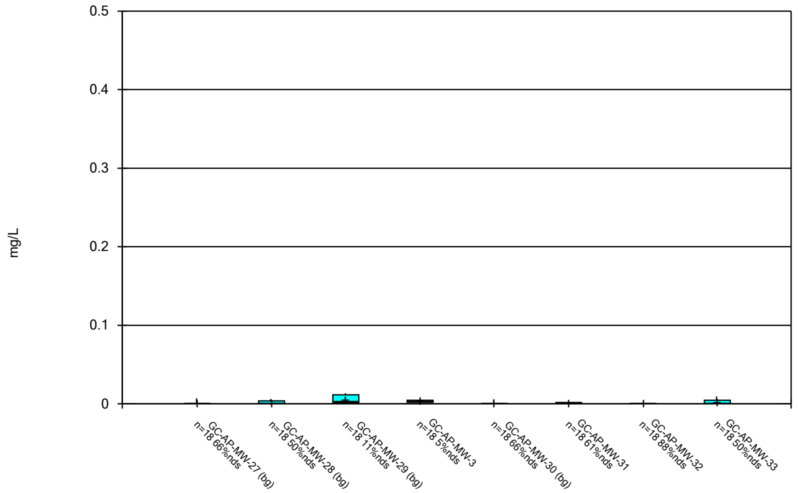
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

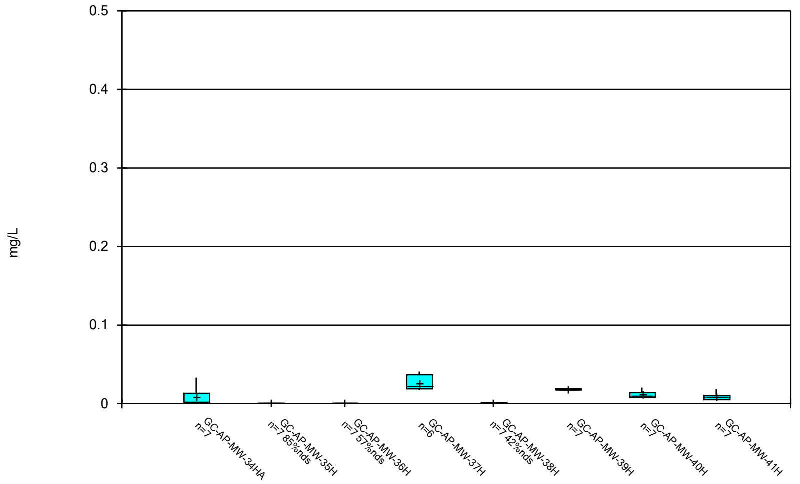
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

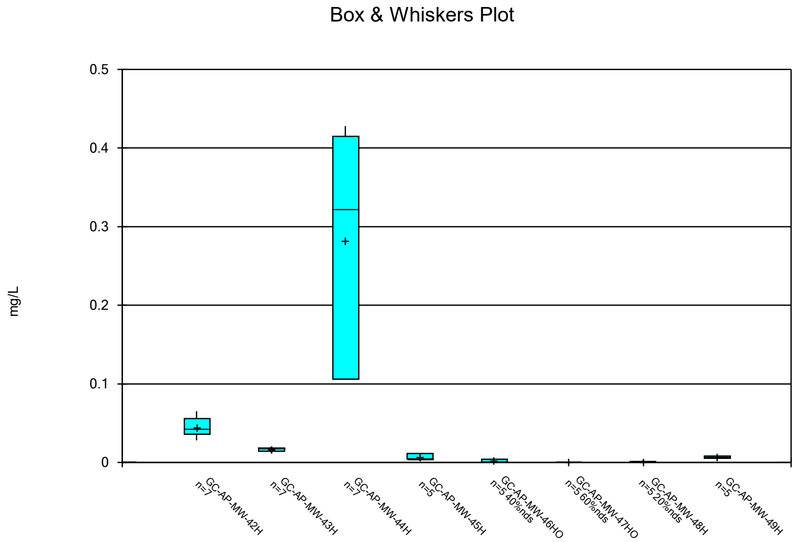
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



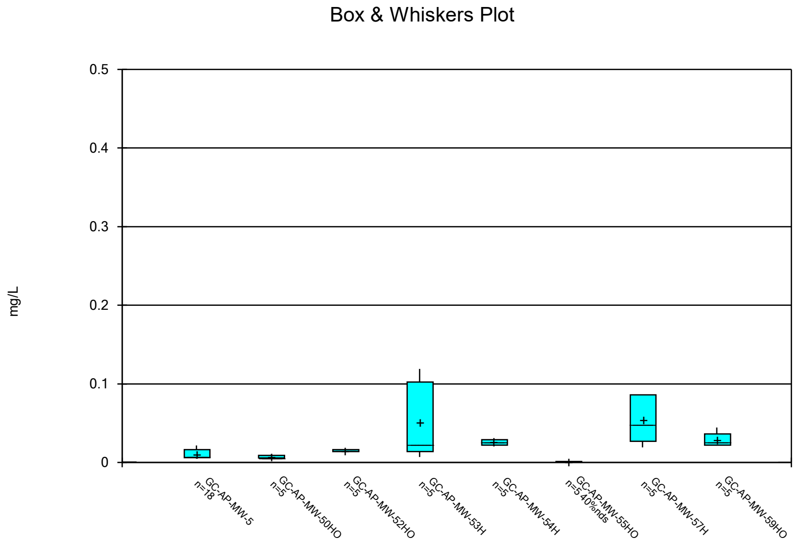
Constituent: Cobalt Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



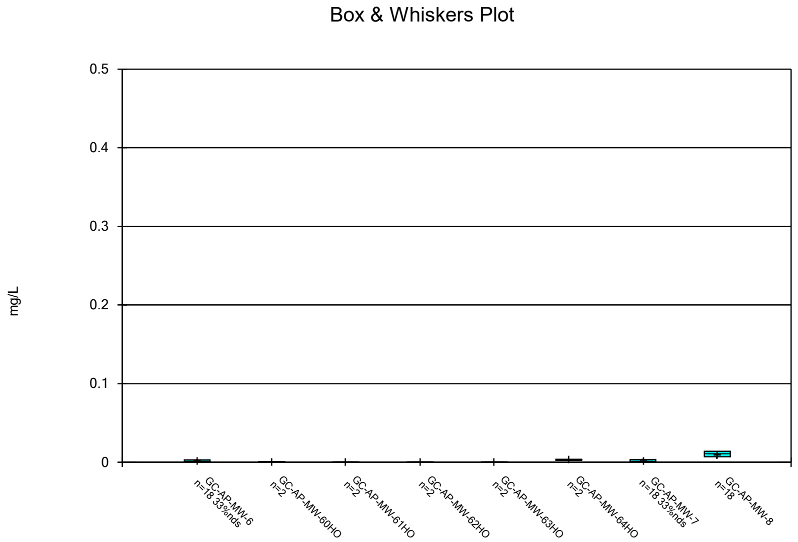
Constituent: Cobalt   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



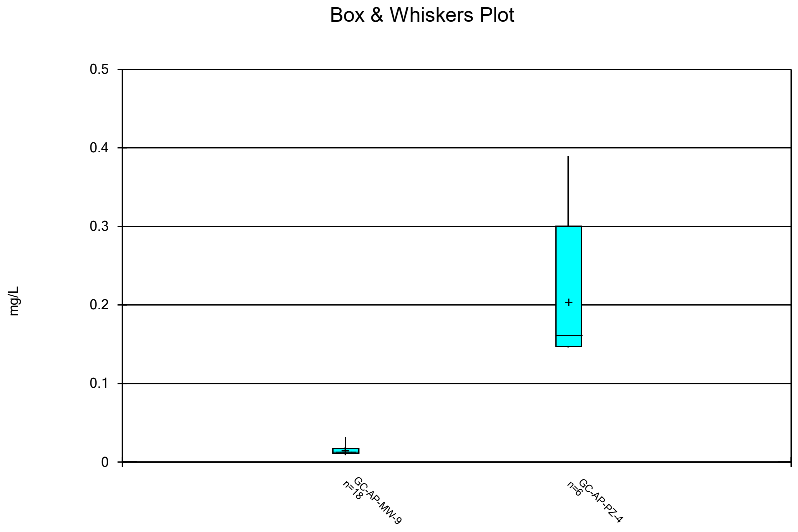
Constituent: Cobalt   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Cobalt   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

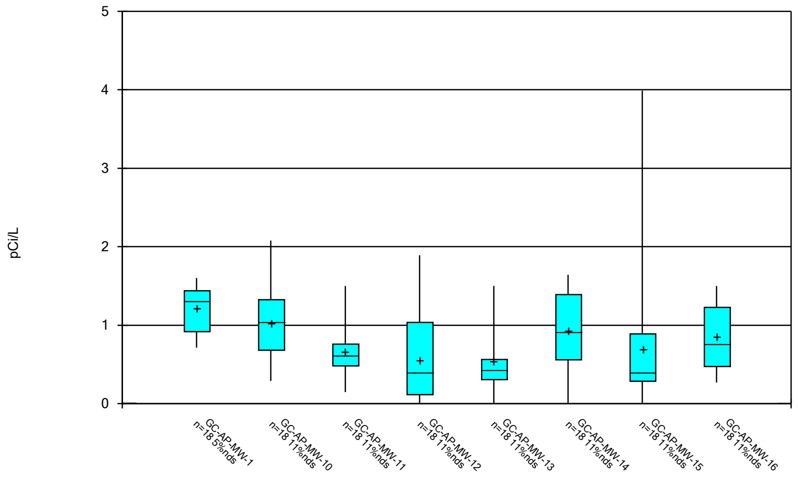
Sanitas™ v.9.6.34 . UG



Constituent: Cobalt   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

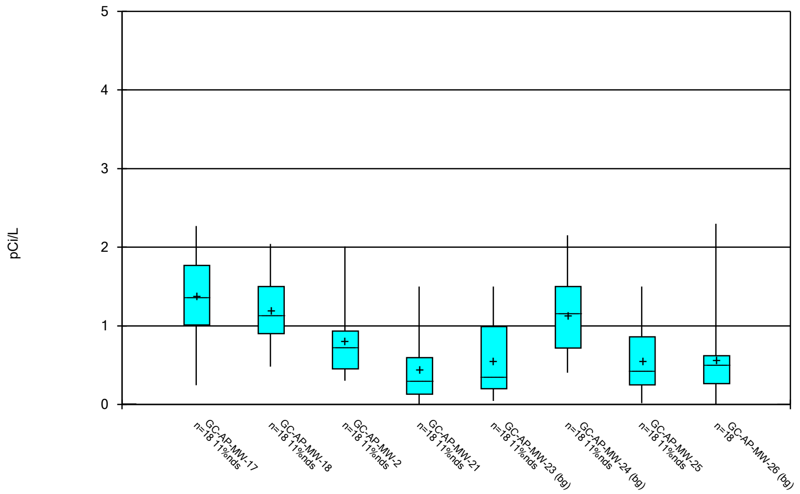
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

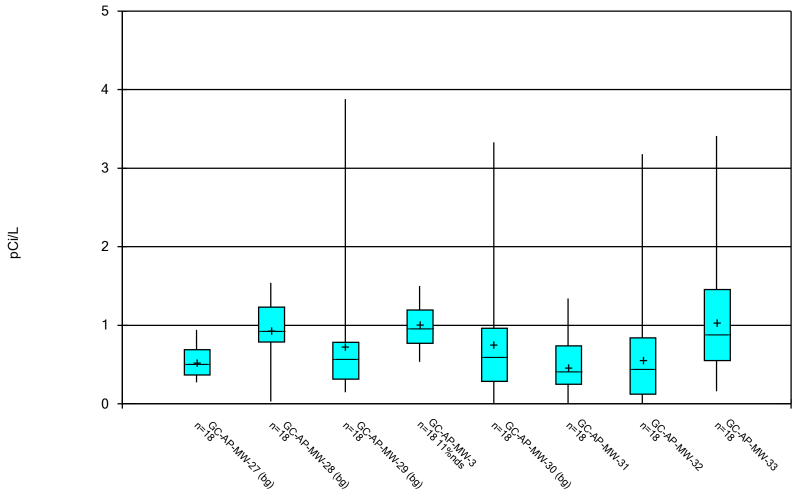
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

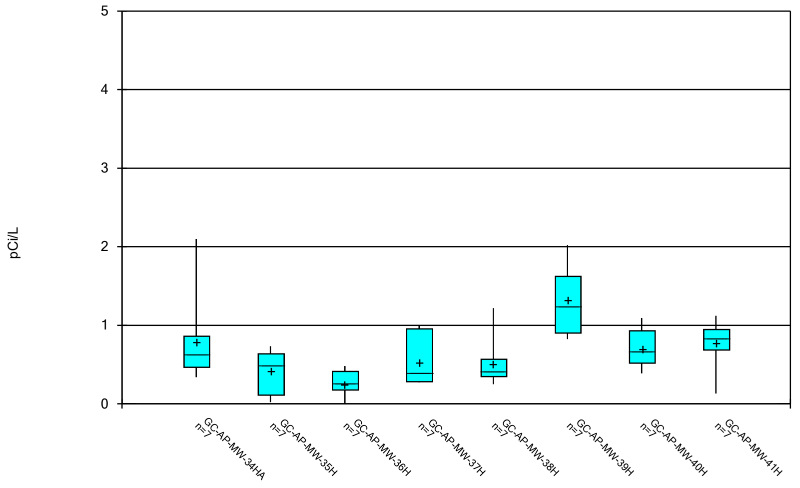
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

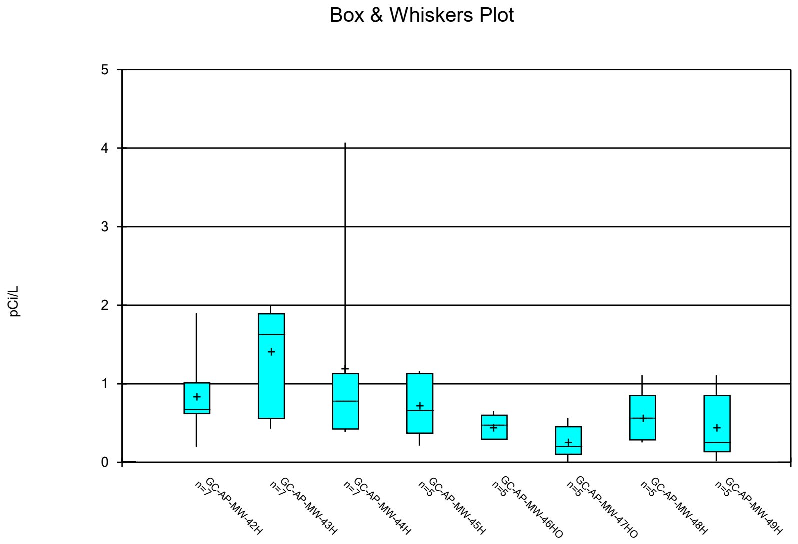
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



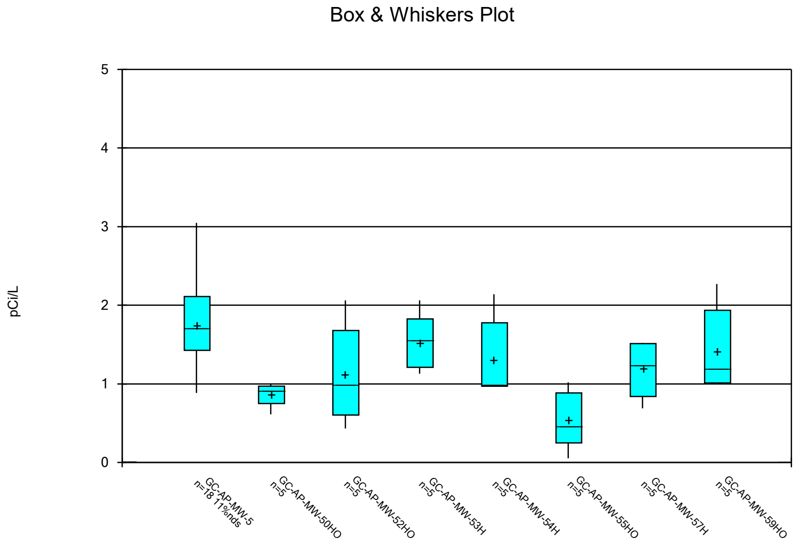
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



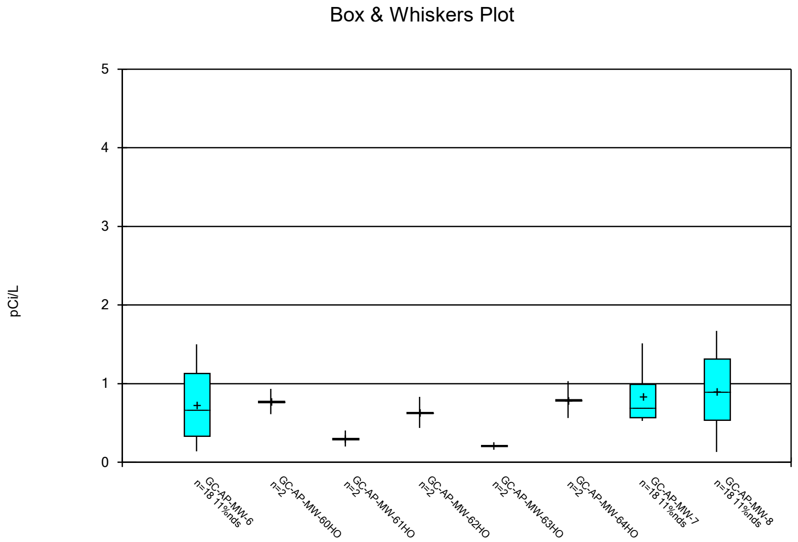
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



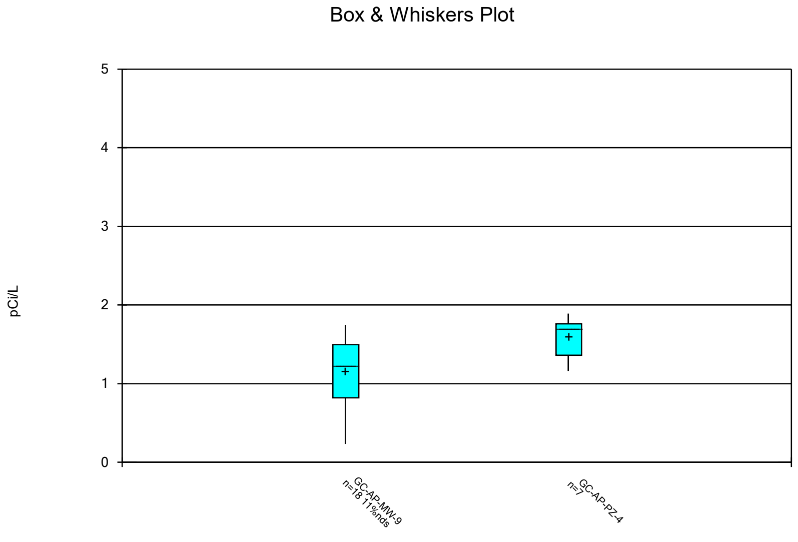
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



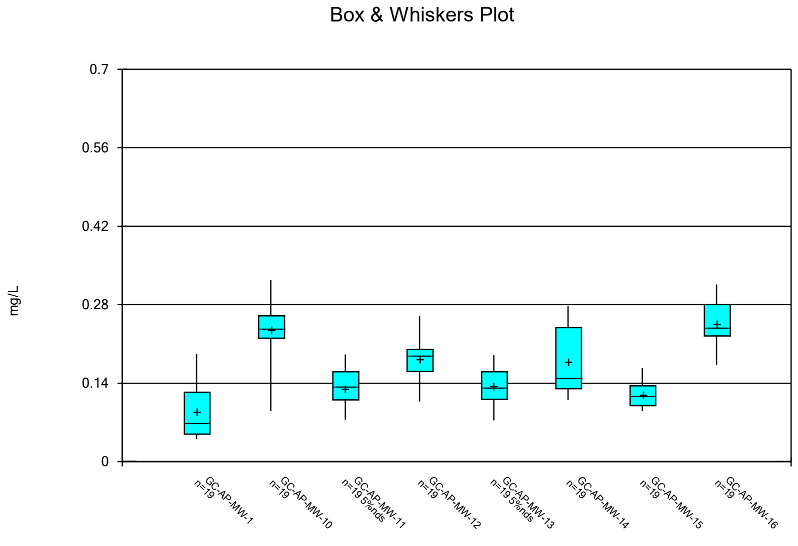
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



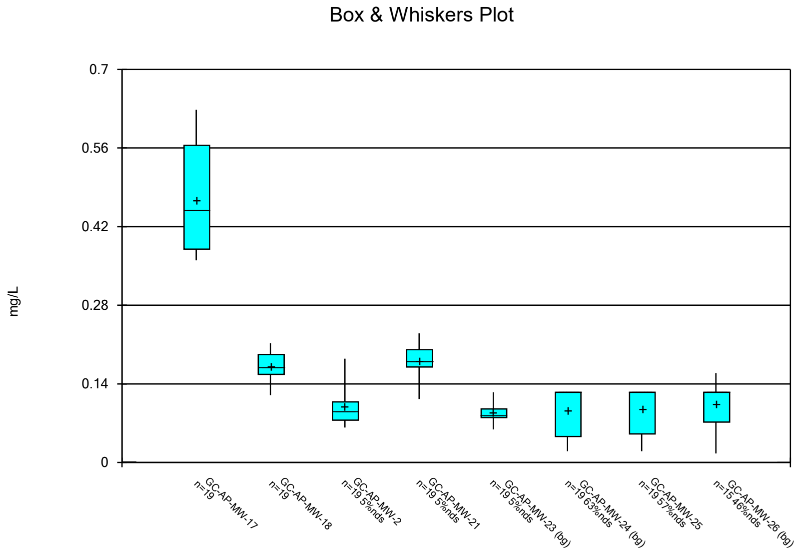
Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



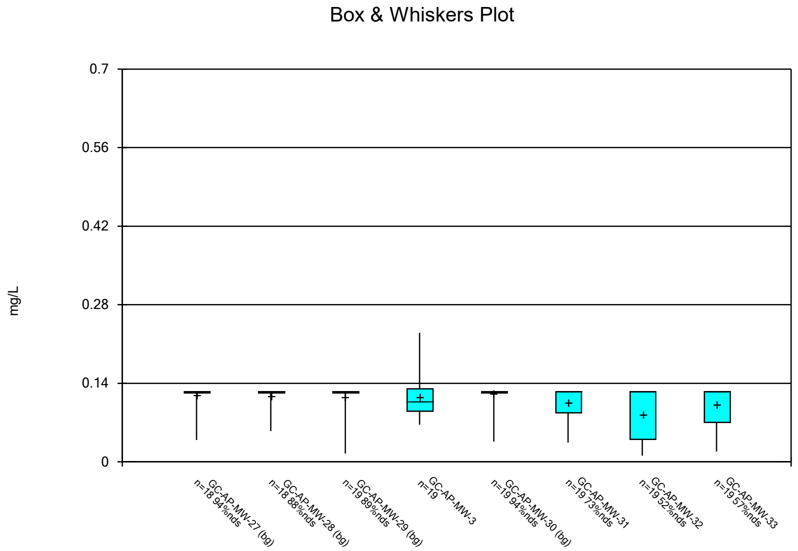
Constituent: Fluoride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



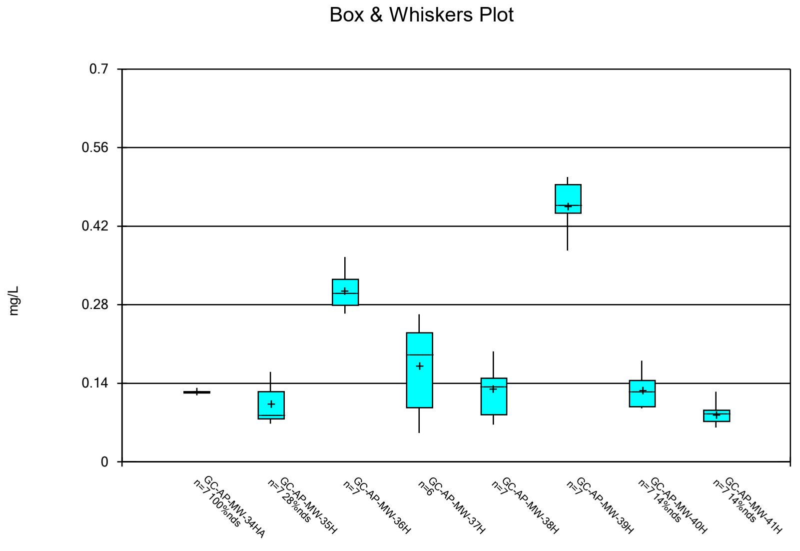
Constituent: Fluoride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Fluoride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

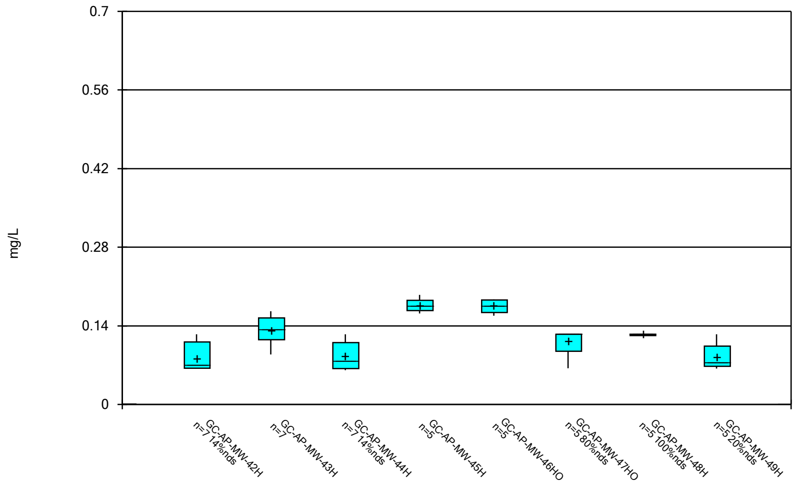
Sanitas™ v.9.6.34 . UG



Constituent: Fluoride Analysis Run 6/10/2022 12:59 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

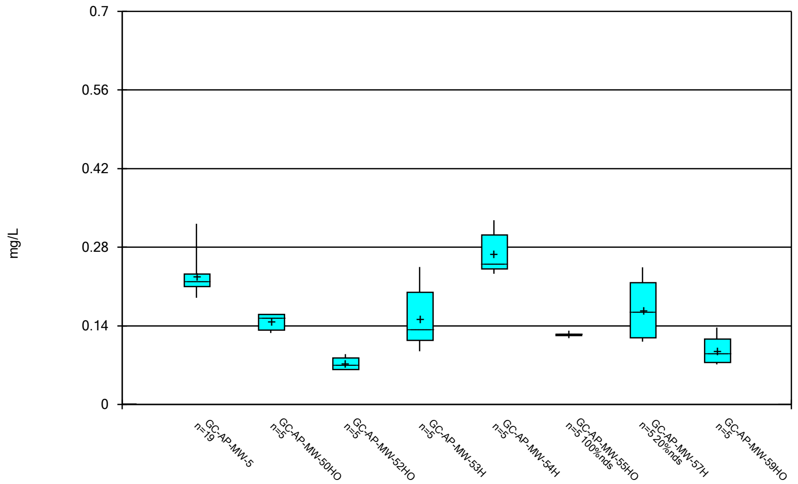
Box & Whiskers Plot



Constituent: Fluoride   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

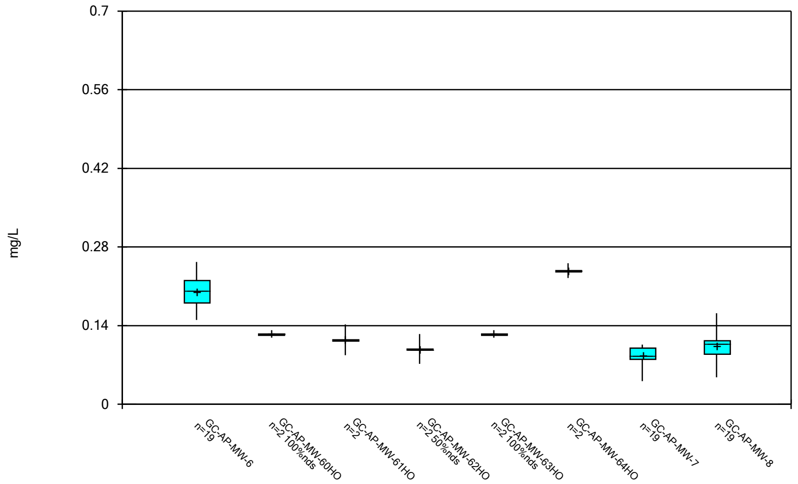
Box & Whiskers Plot



Constituent: Fluoride   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

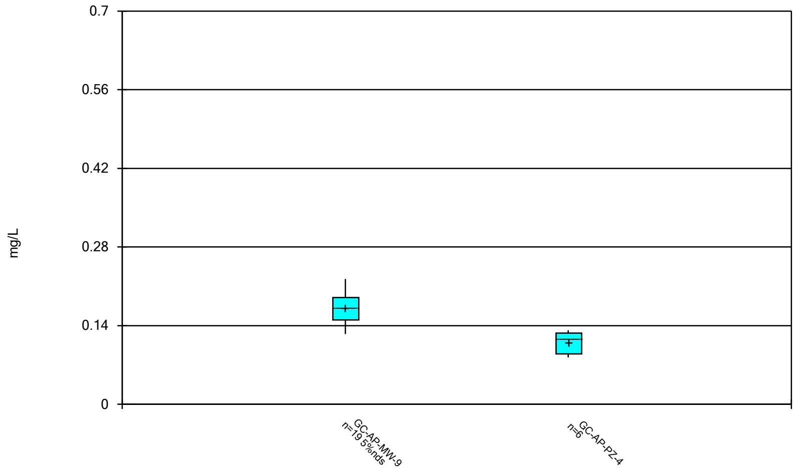
Box & Whiskers Plot



Constituent: Fluoride   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

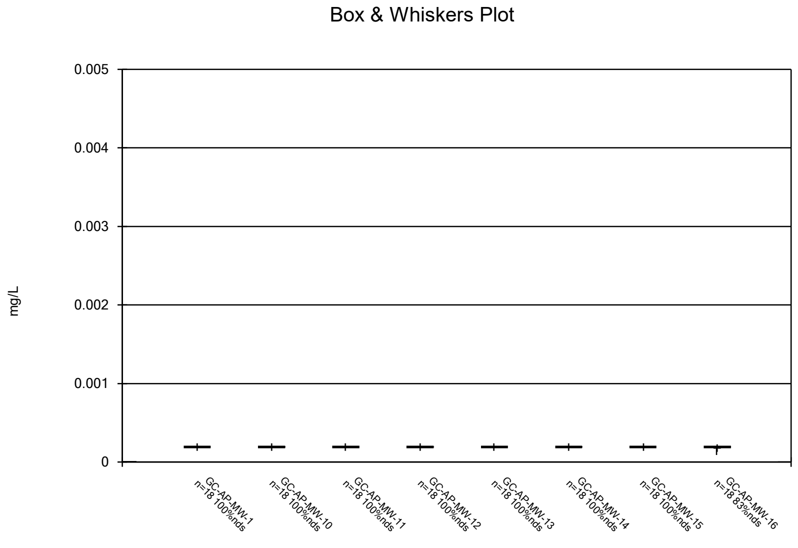
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



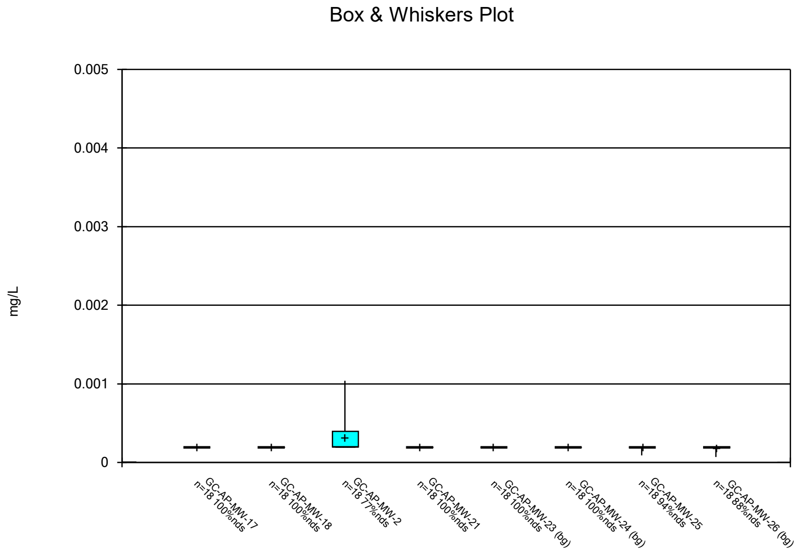
Constituent: Fluoride   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



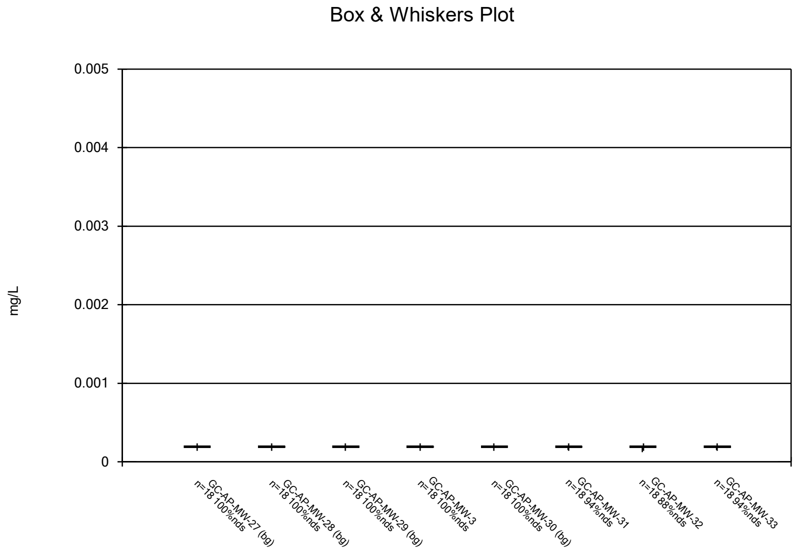
Constituent: Lead   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



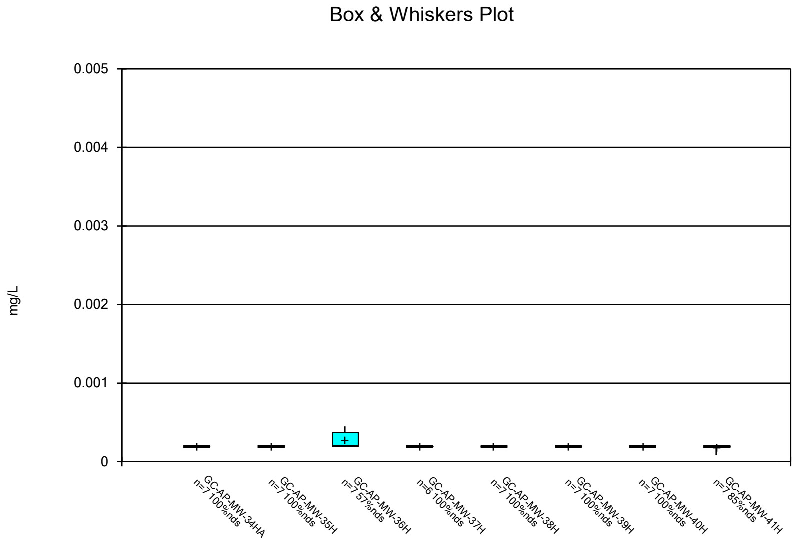
Constituent: Lead   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Lead   Analysis Run 6/10/2022 12:59 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

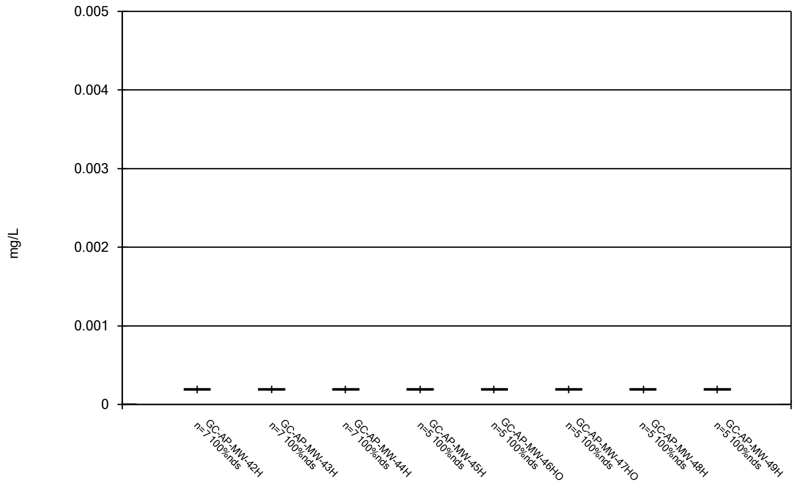
Sanitas™ v.9.6.34 . UG



Constituent: Lead   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

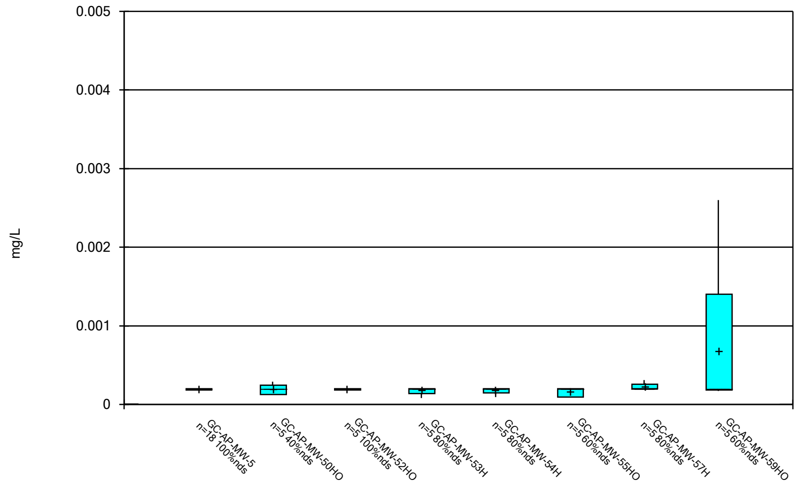
Box & Whiskers Plot



Constituent: Lead Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

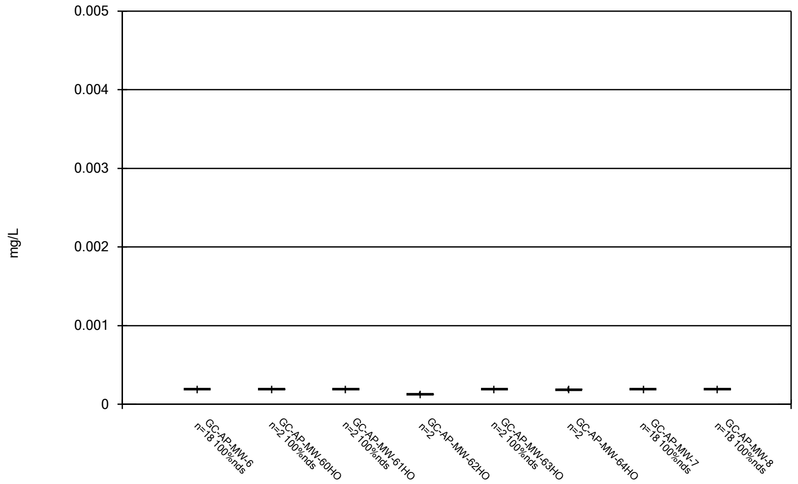
Box & Whiskers Plot



Constituent: Lead Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

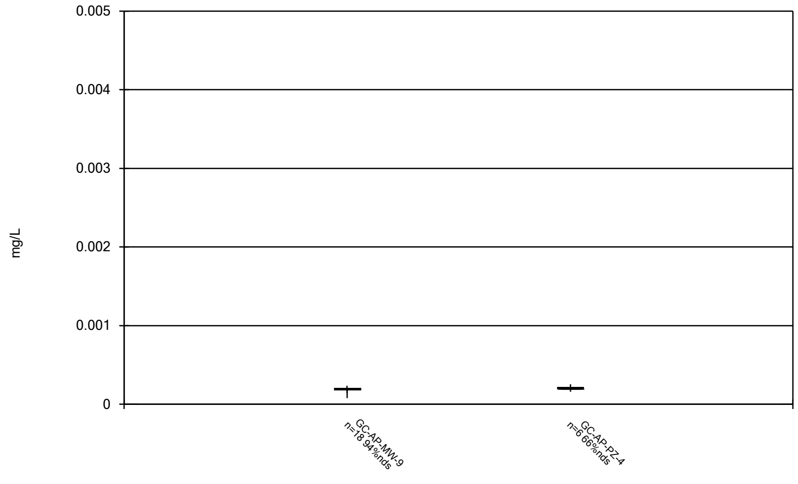
Box & Whiskers Plot



Constituent: Lead Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

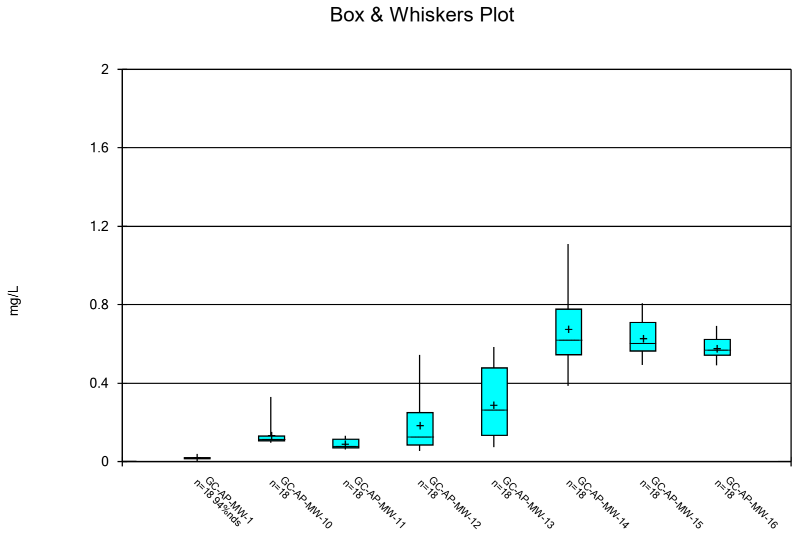
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



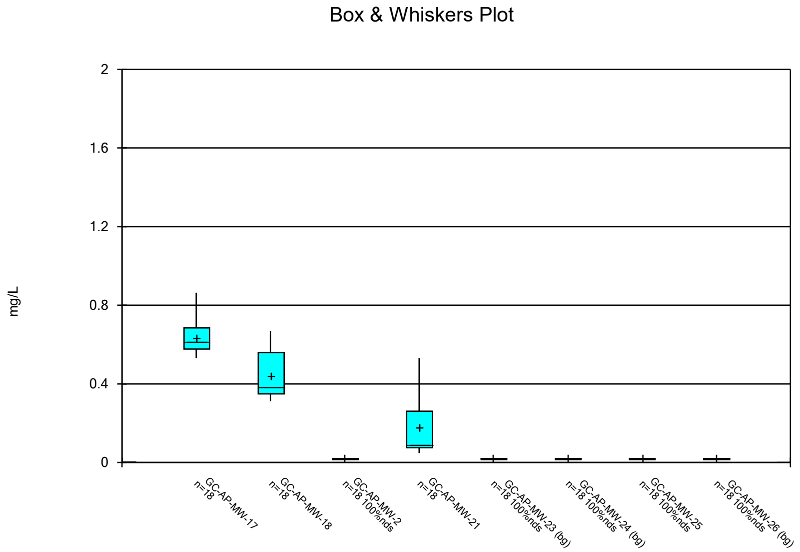
Constituent: Lead Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



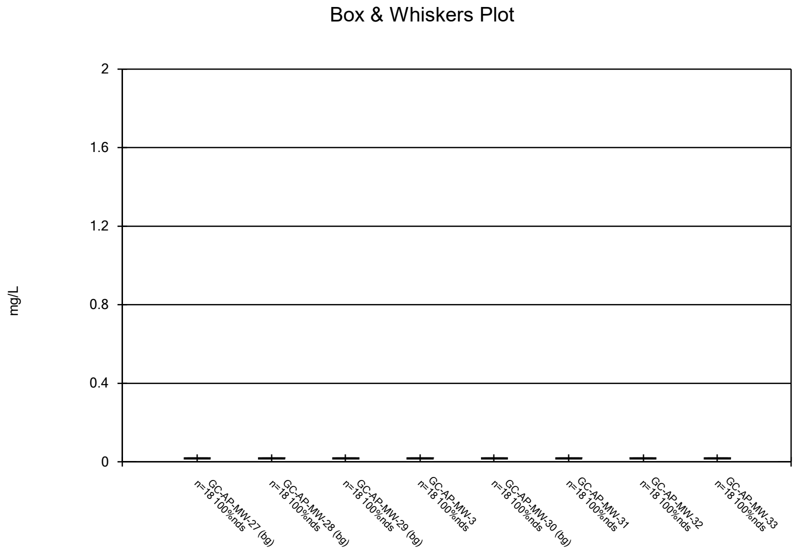
Constituent: Lithium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



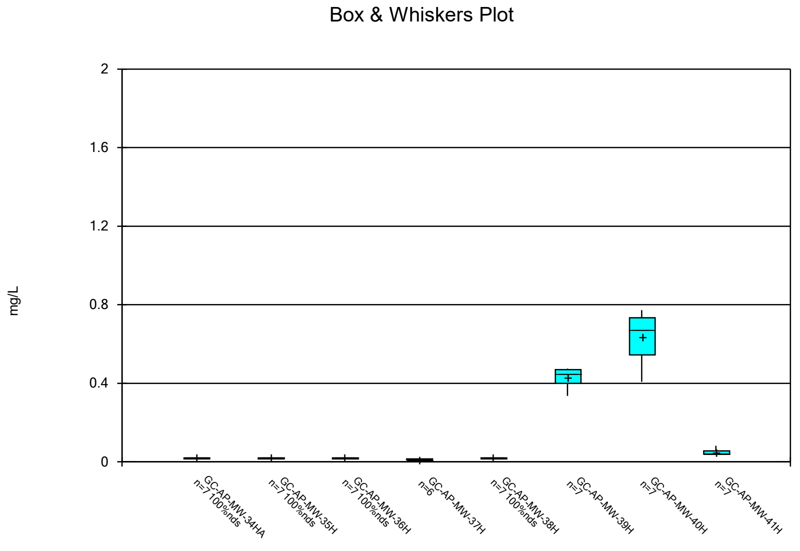
Constituent: Lithium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Lithium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

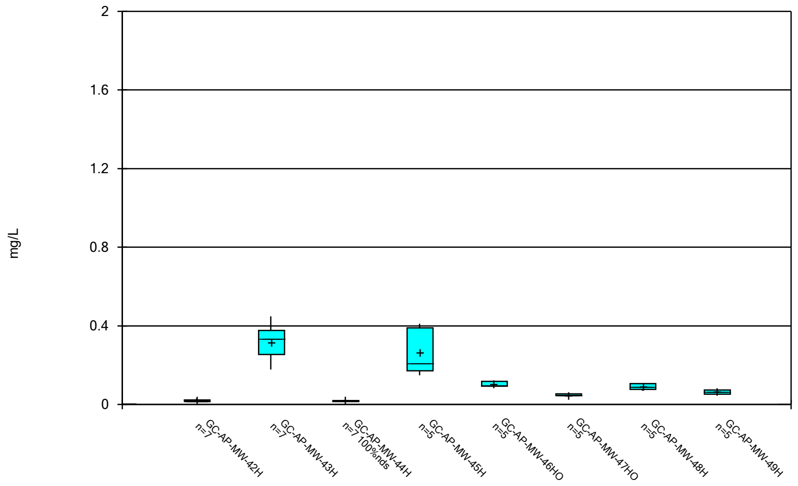
Sanitas™ v.9.6.34 . UG



Constituent: Lithium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

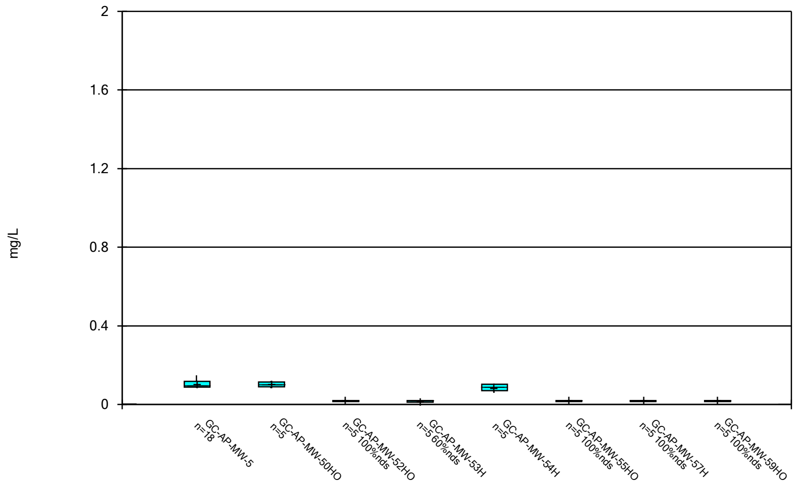
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

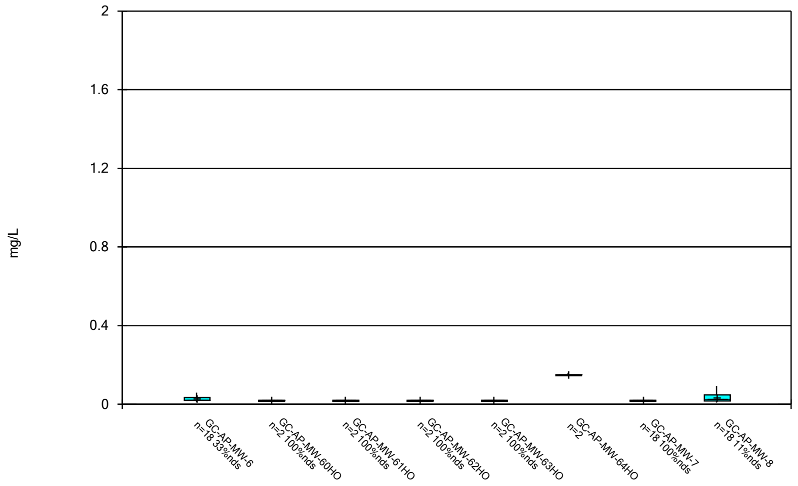
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

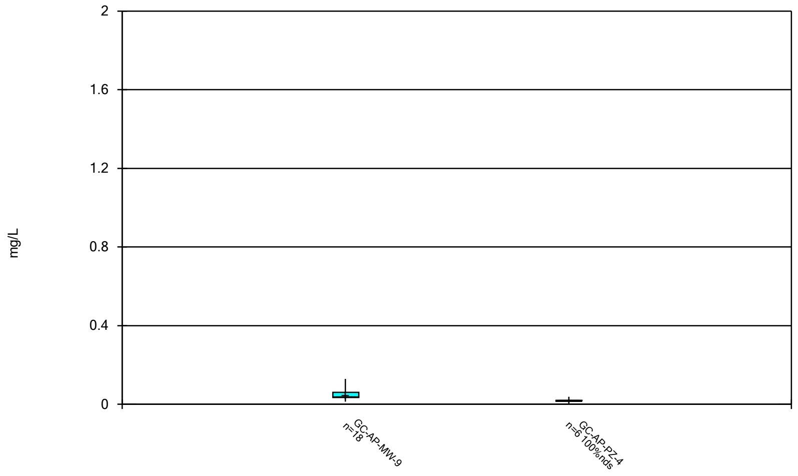
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

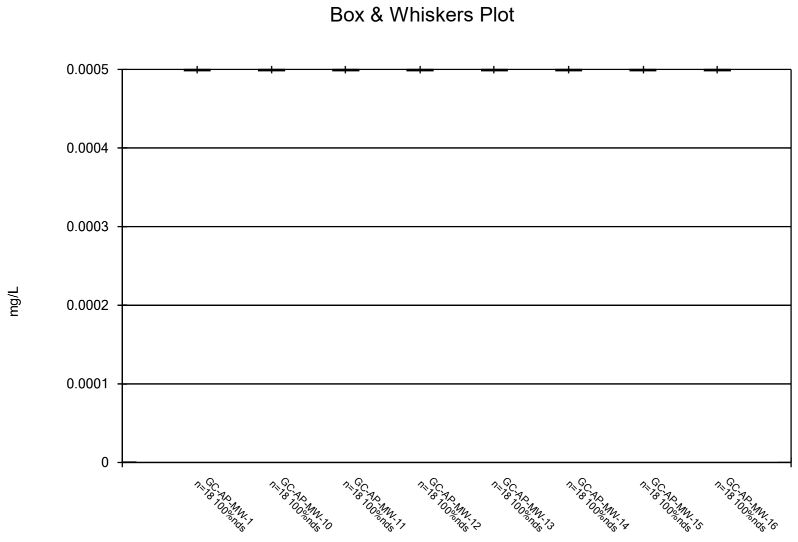
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



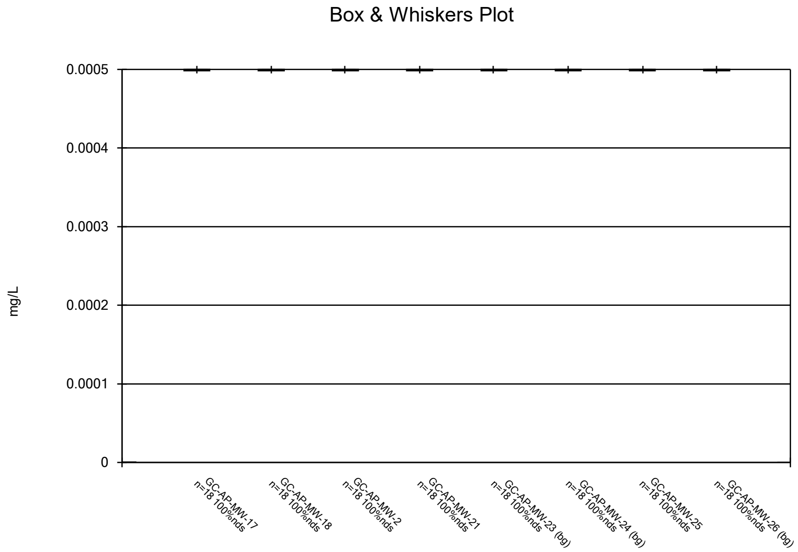
Constituent: Lithium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG



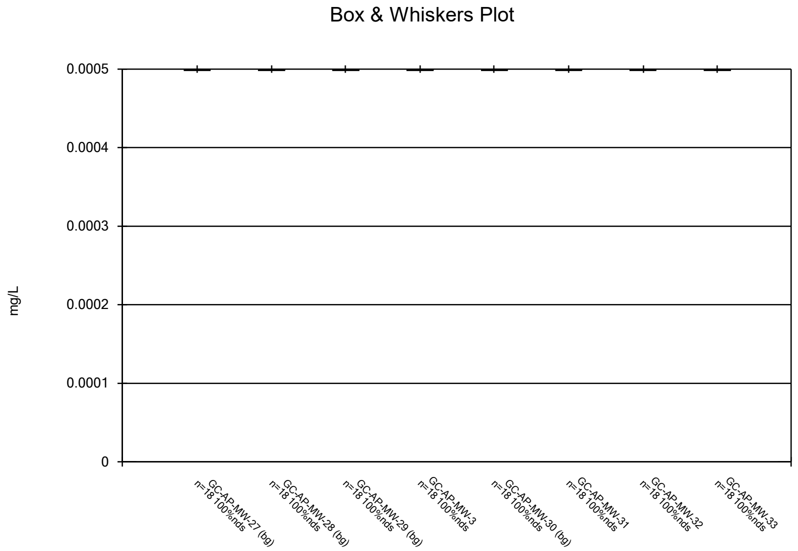
Constituent: Mercury Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



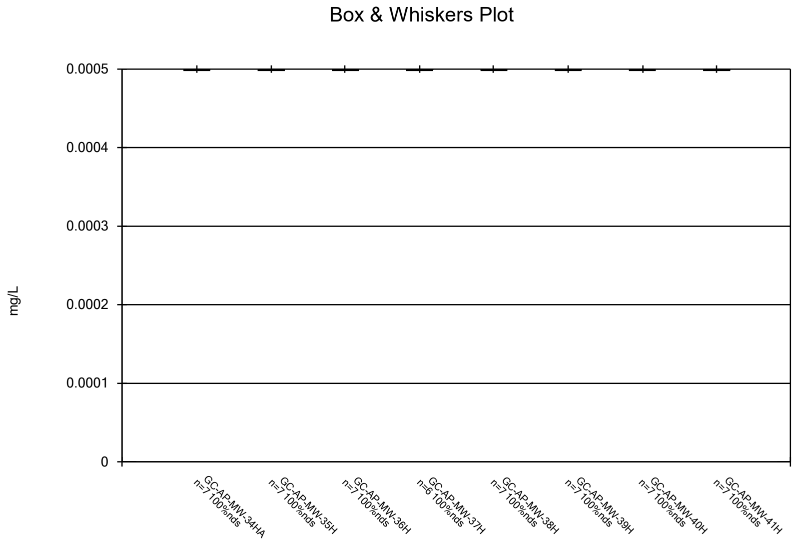
Constituent: Mercury Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: Mercury Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

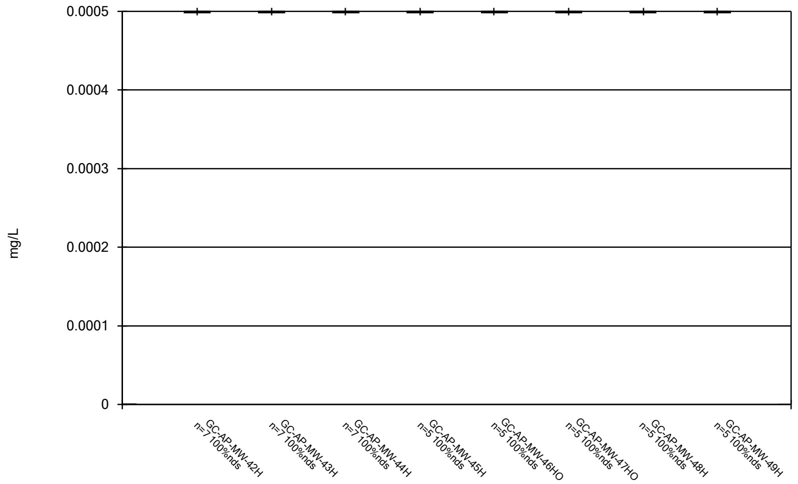
Sanitas™ v.9.6.34 . UG



Constituent: Mercury Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

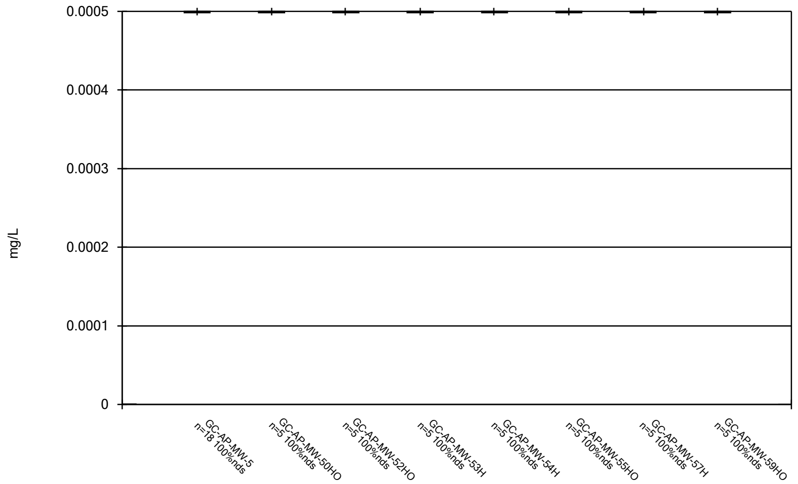
Box & Whiskers Plot



Constituent: Mercury   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

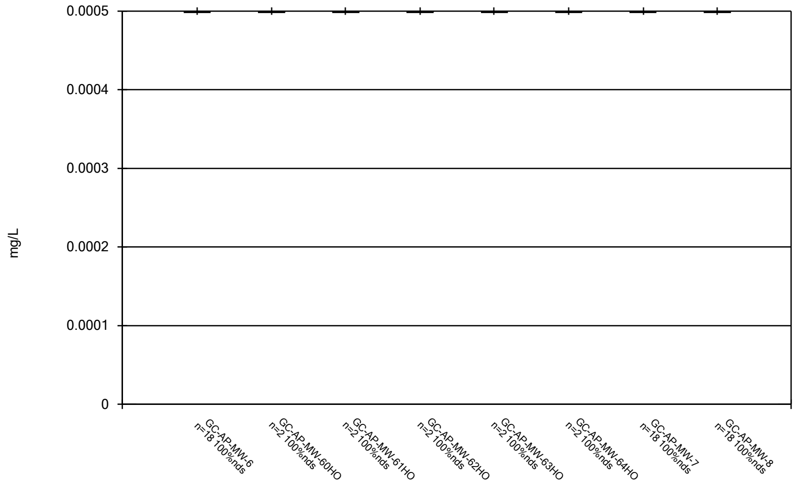
Box & Whiskers Plot



Constituent: Mercury   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

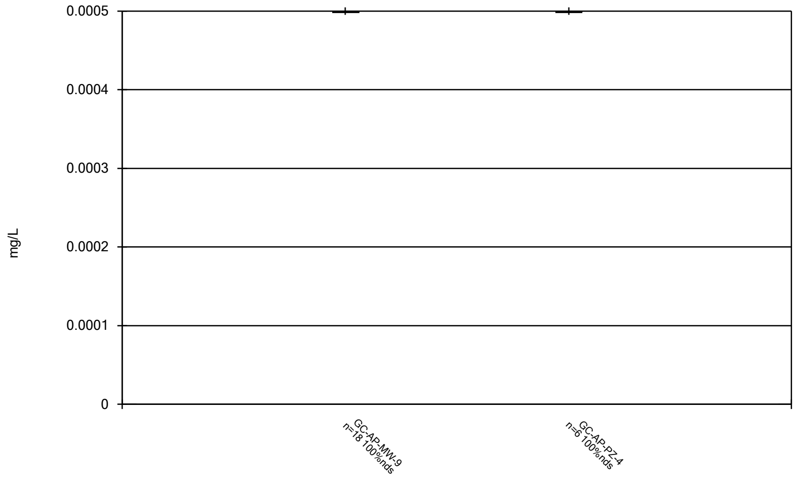
Box & Whiskers Plot



Constituent: Mercury   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

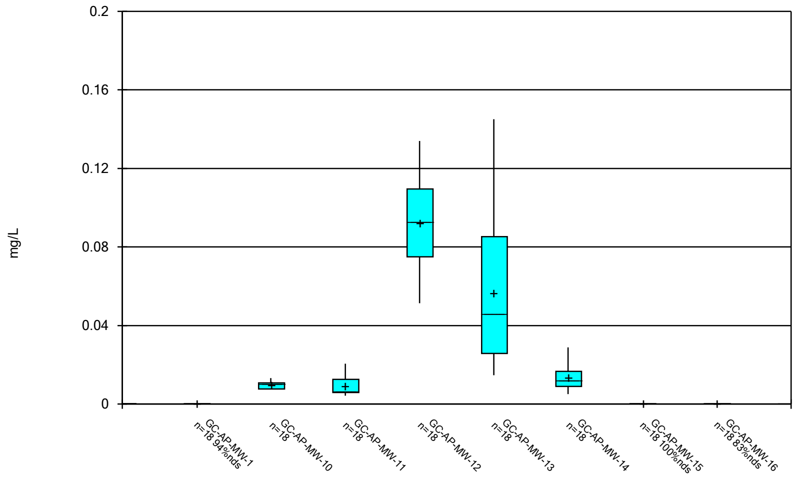
Box & Whiskers Plot



Constituent: Mercury   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

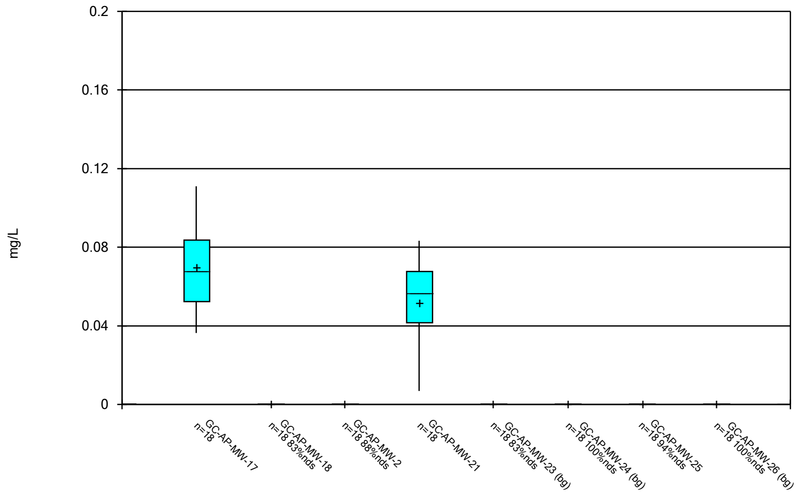
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

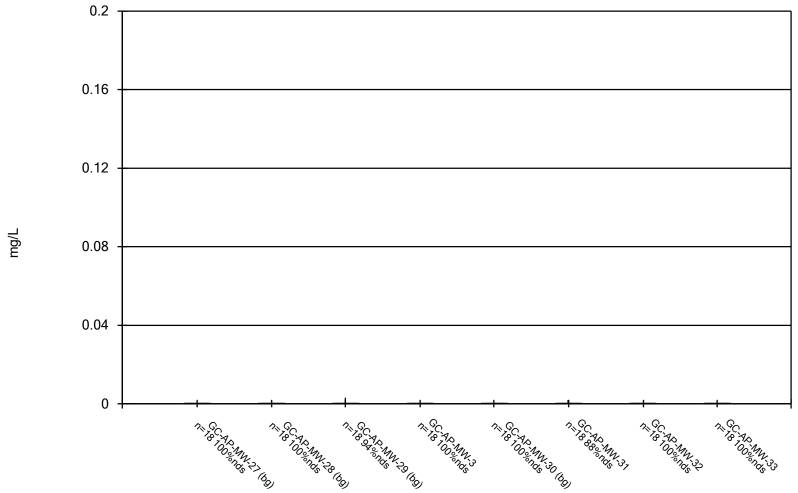
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

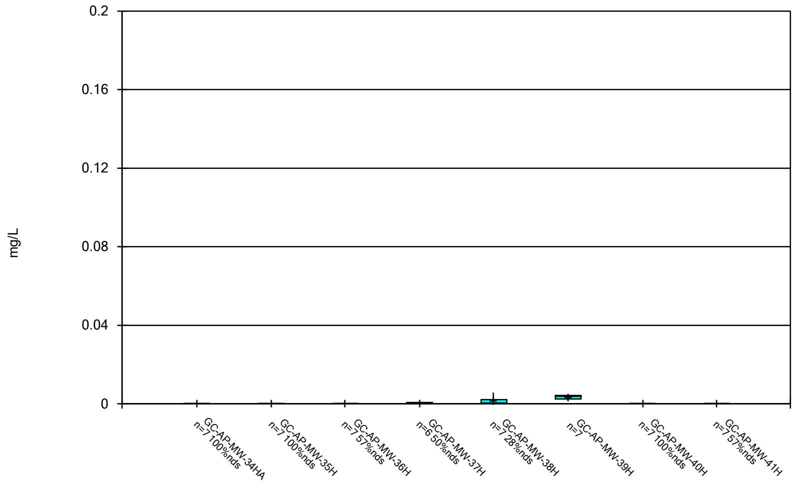
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

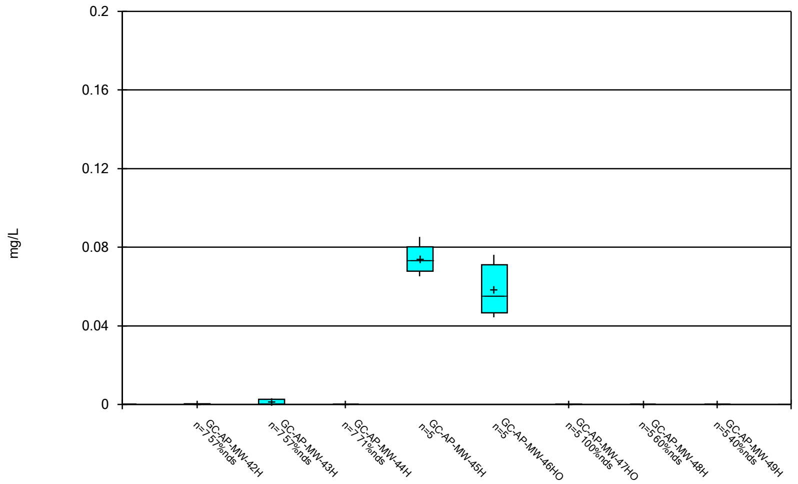
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



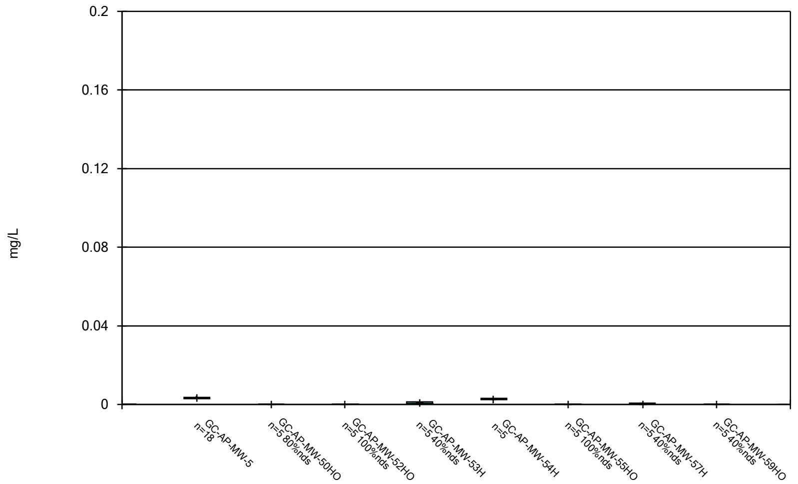
Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Box & Whiskers Plot



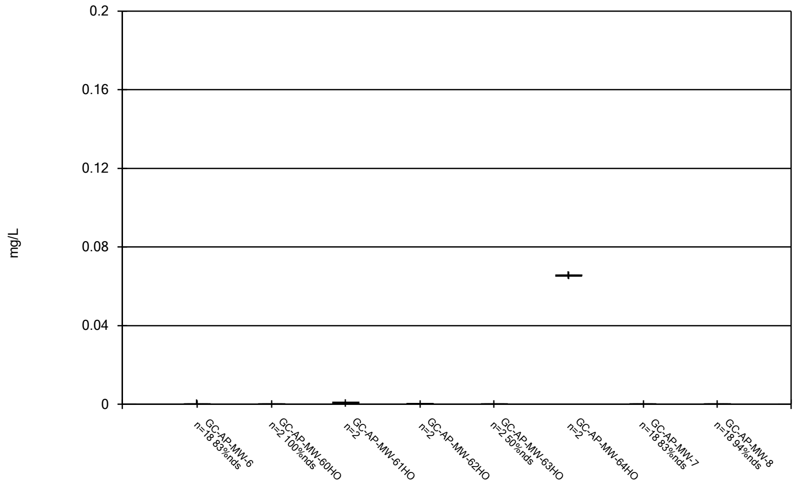
Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Box & Whiskers Plot



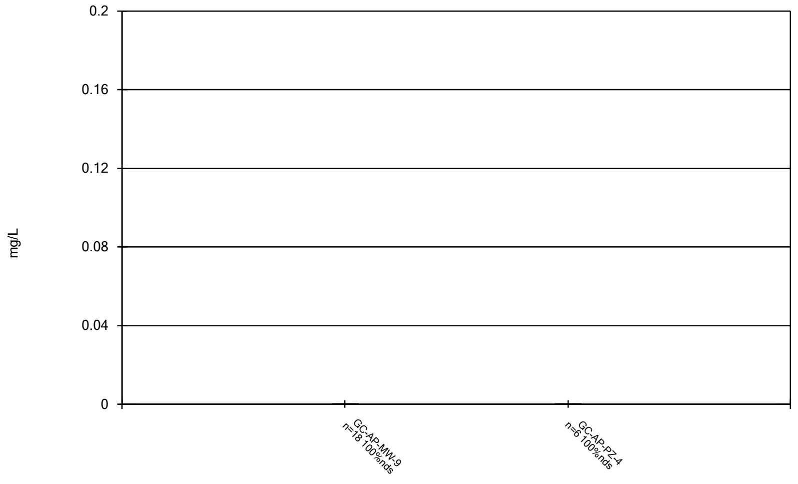
Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

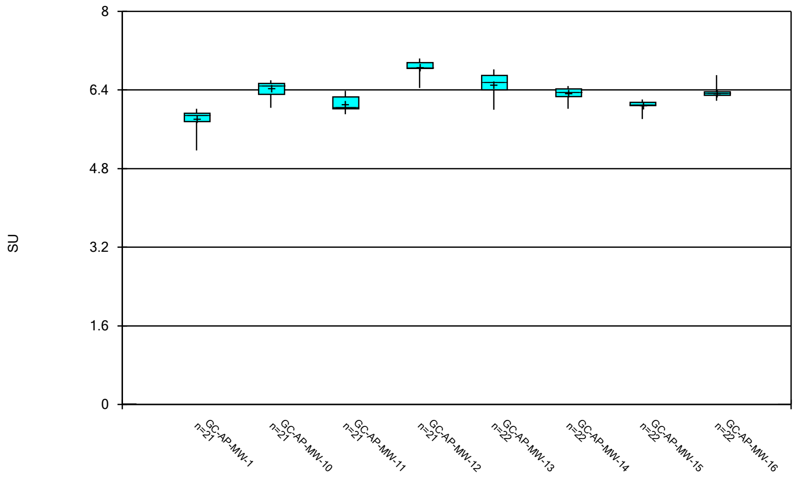
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

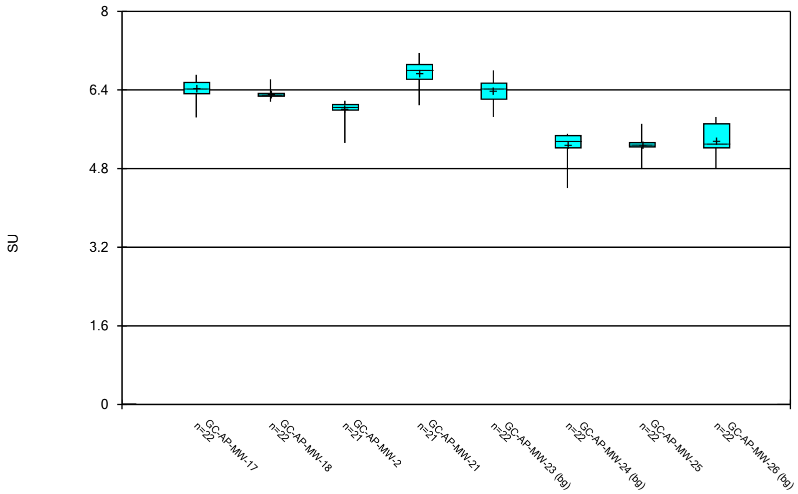
Box & Whiskers Plot



Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

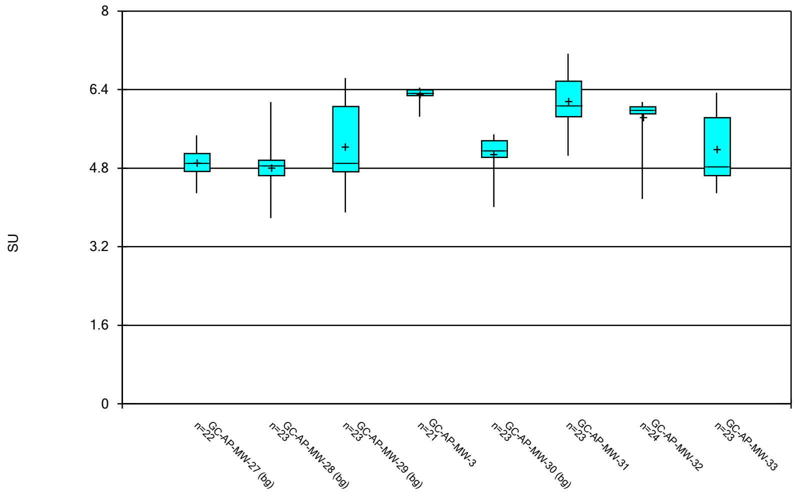
Box & Whiskers Plot



Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

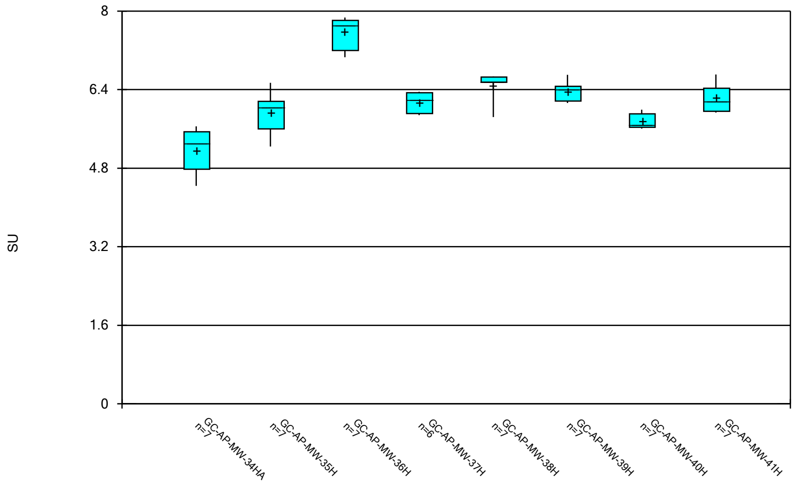
Box & Whiskers Plot



Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

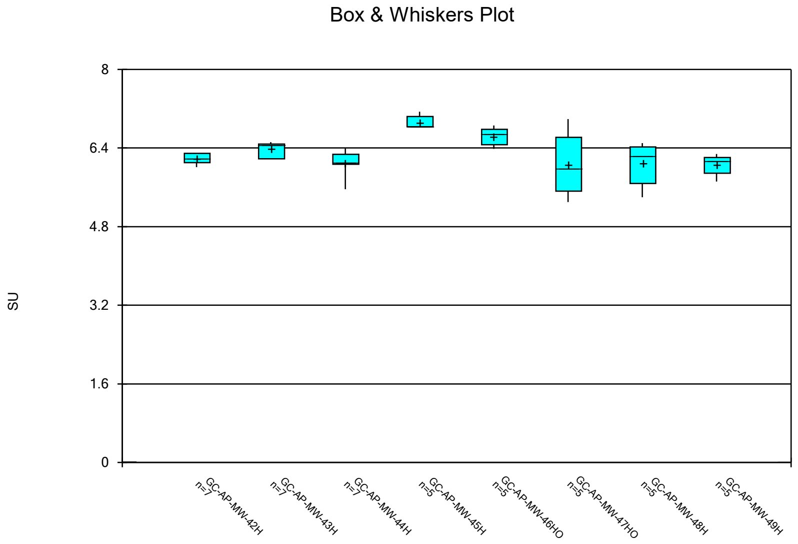
Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



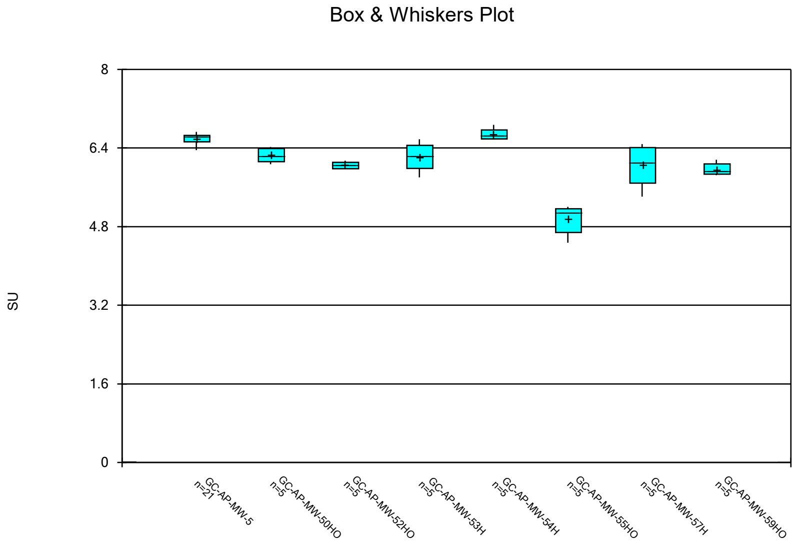
Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



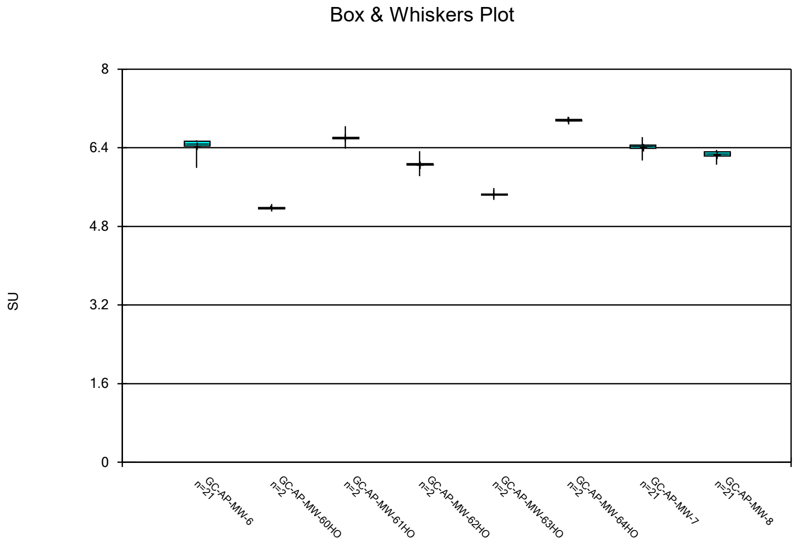
Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



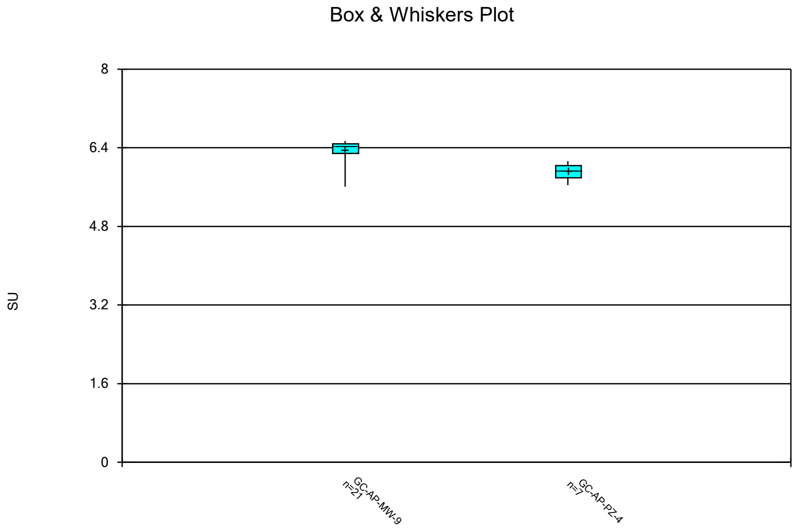
Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

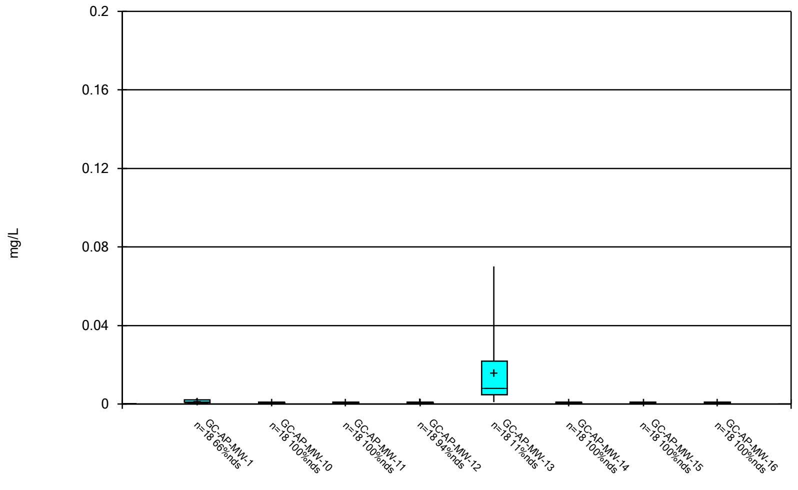
Sanitas™ v.9.6.34 . UG



Constituent: pH Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

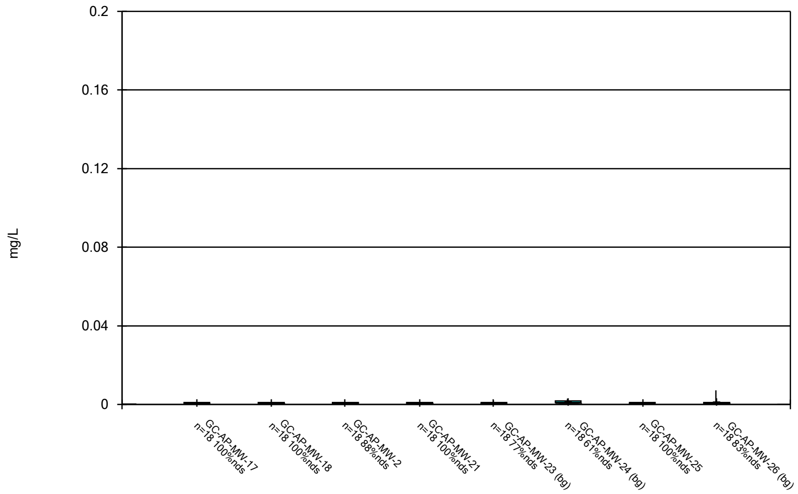
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

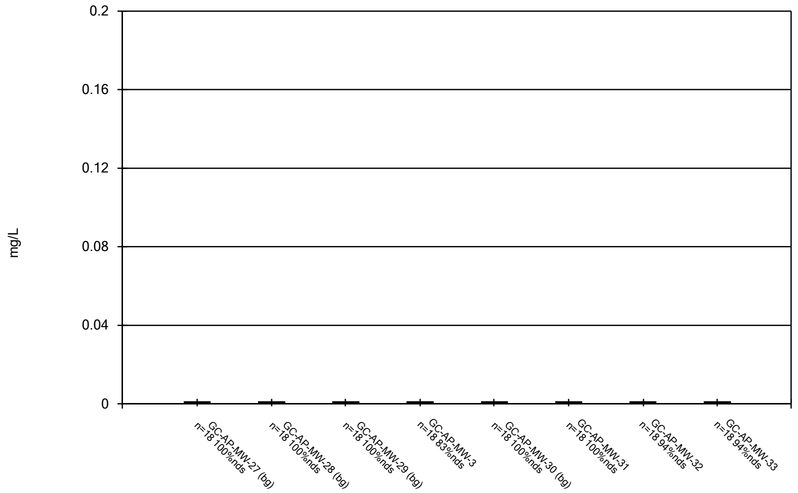
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

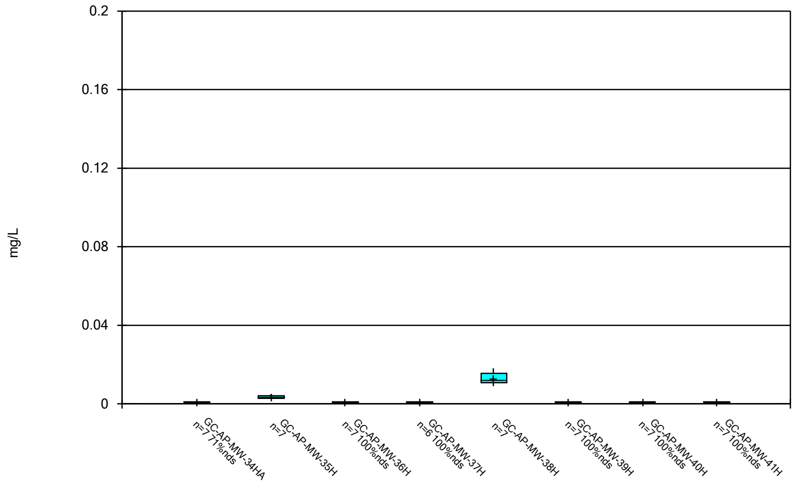
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

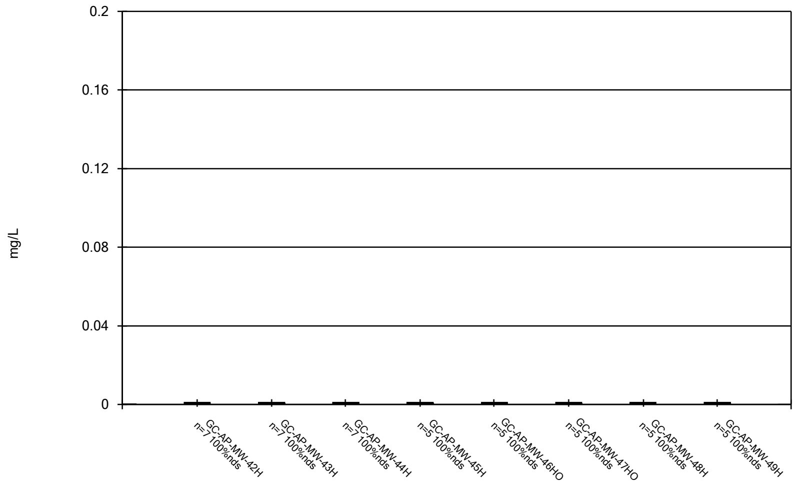
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

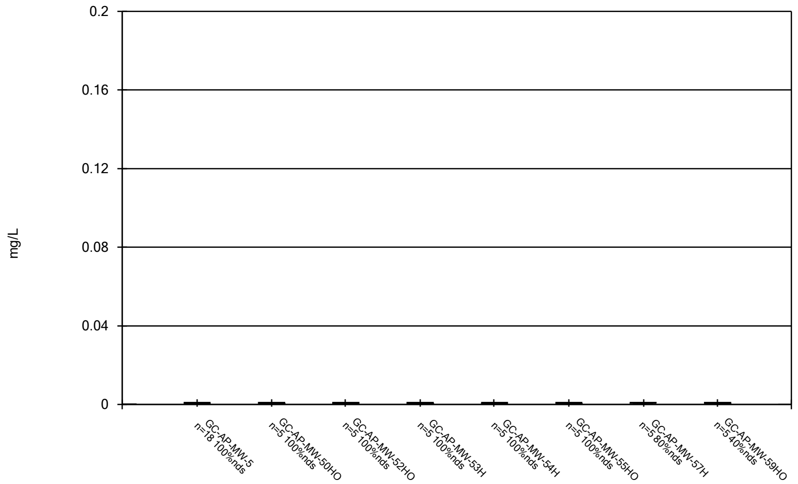
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

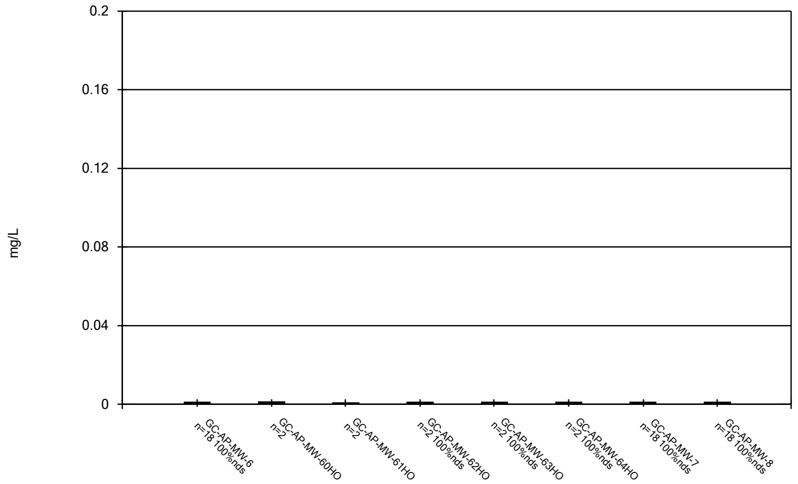
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

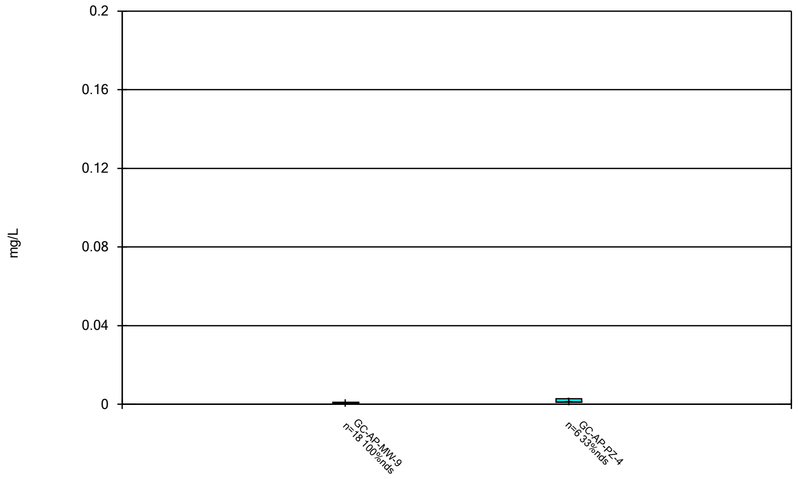
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

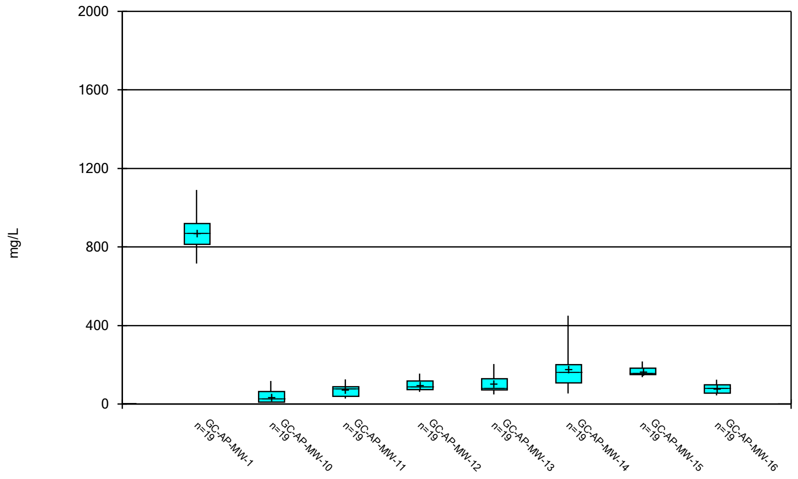
Box & Whiskers Plot



Constituent: Selenium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

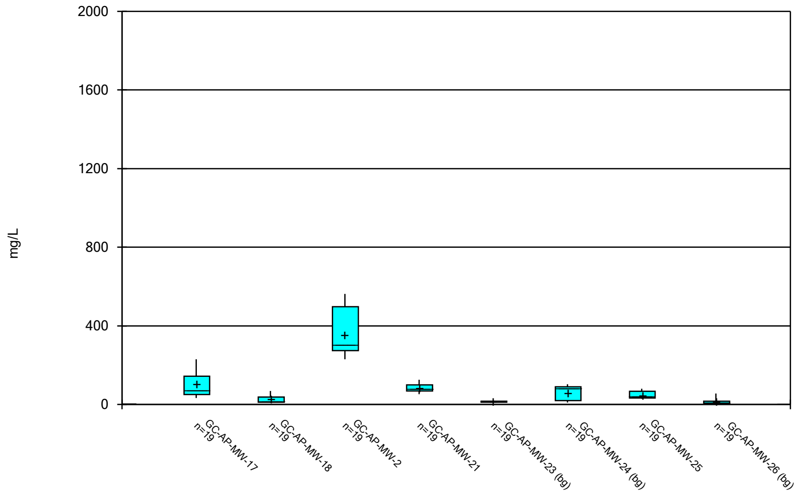
Box & Whiskers Plot



Constituent: Sulfate   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

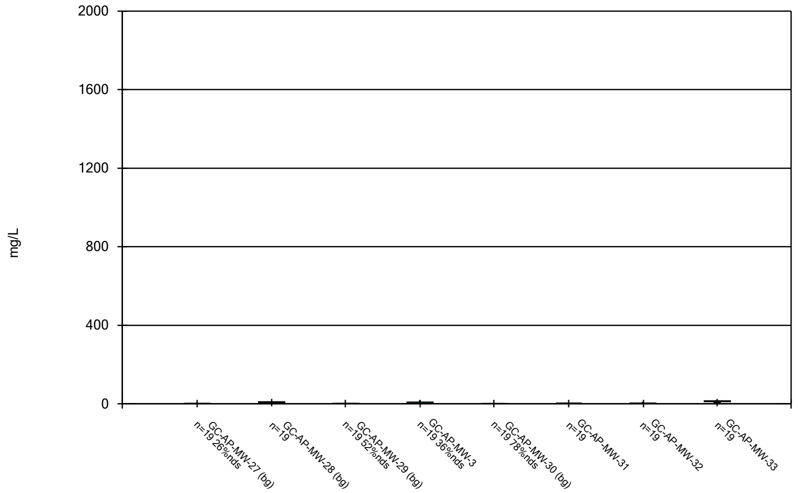
Box & Whiskers Plot



Constituent: Sulfate   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

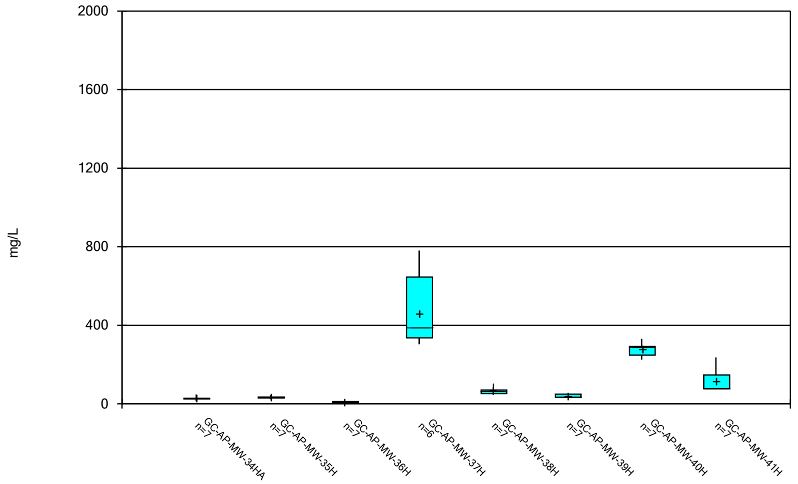
Box & Whiskers Plot



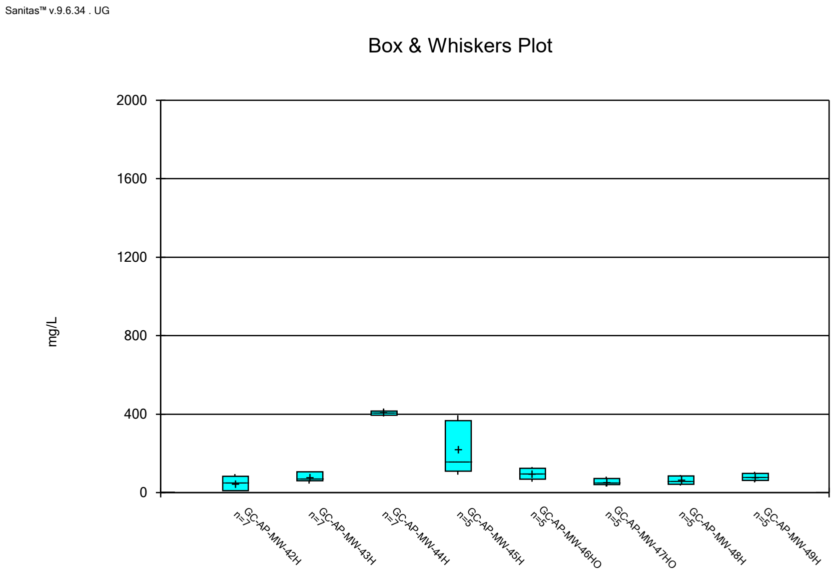
Constituent: Sulfate   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

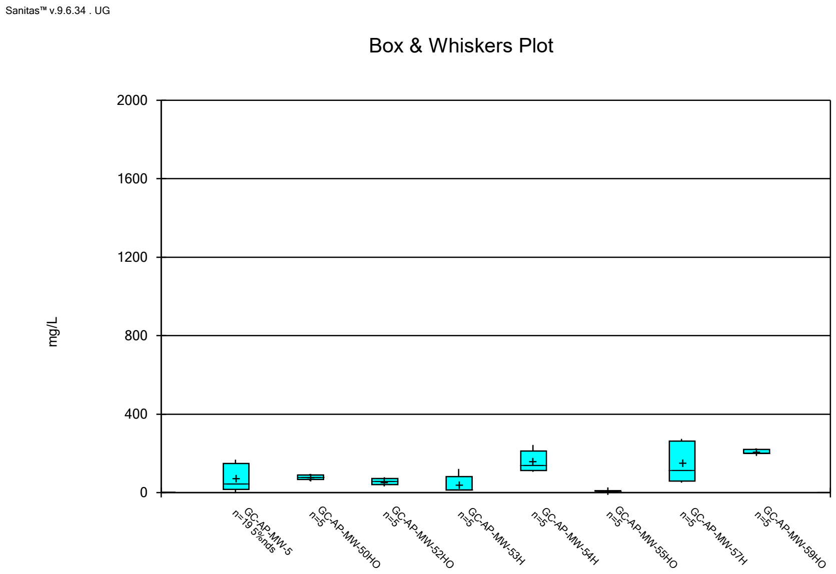
Box & Whiskers Plot



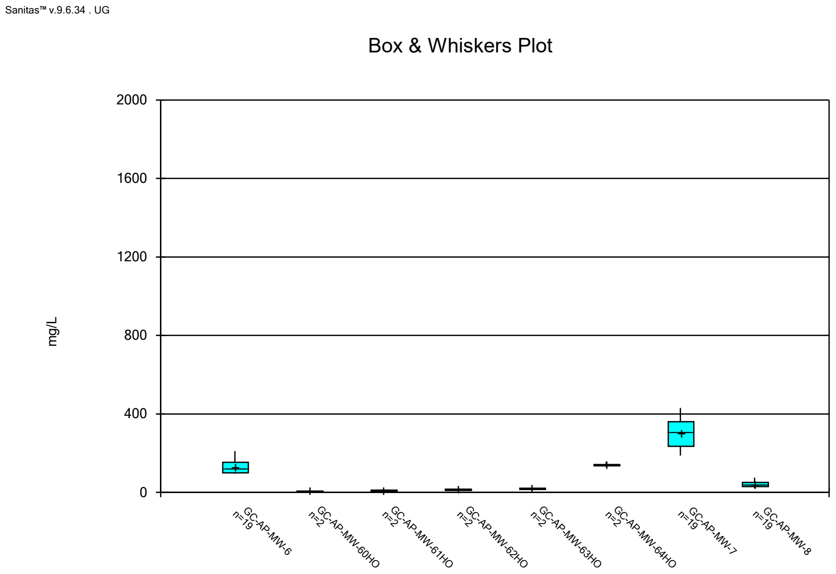
Constituent: Sulfate   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP



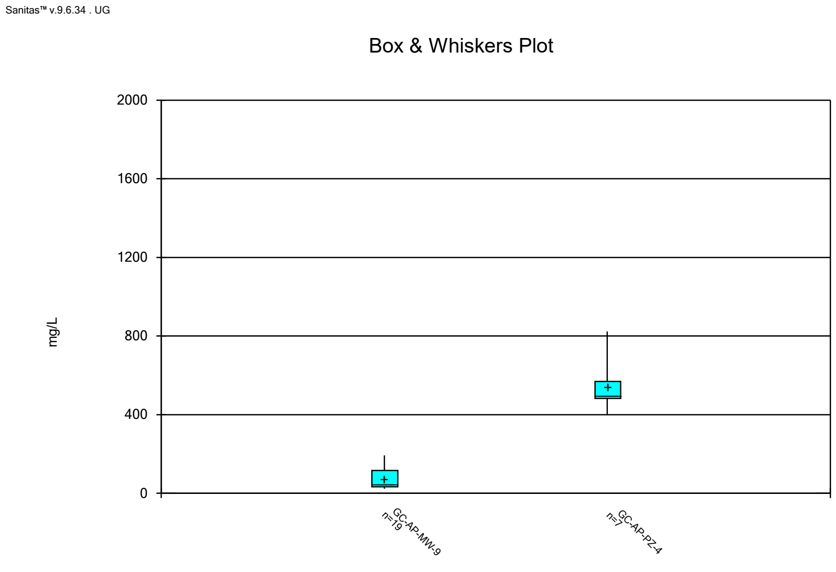
Constituent: Sulfate Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



Constituent: Sulfate Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



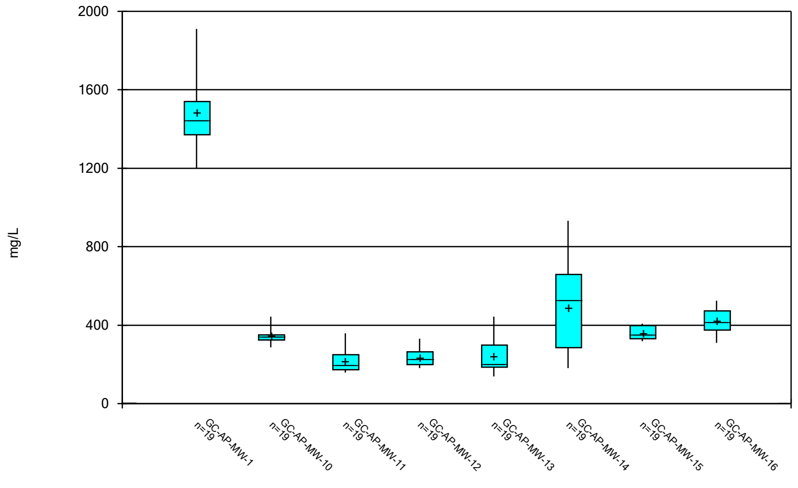
Constituent: Sulfate Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



Constituent: Sulfate Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

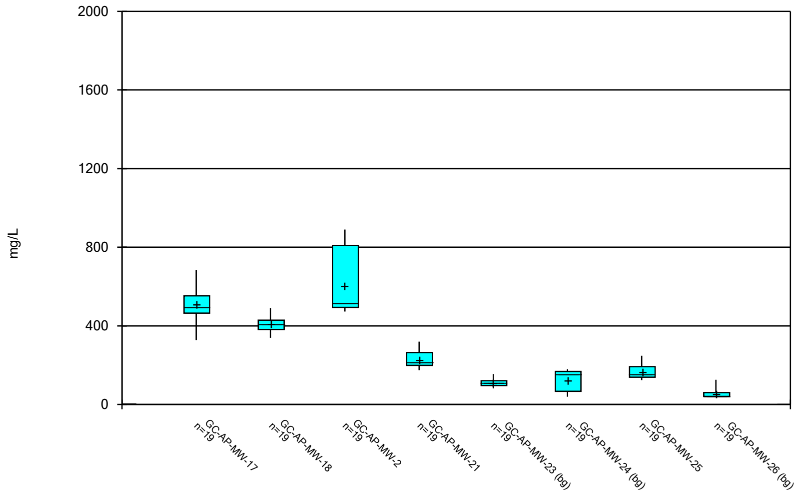
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

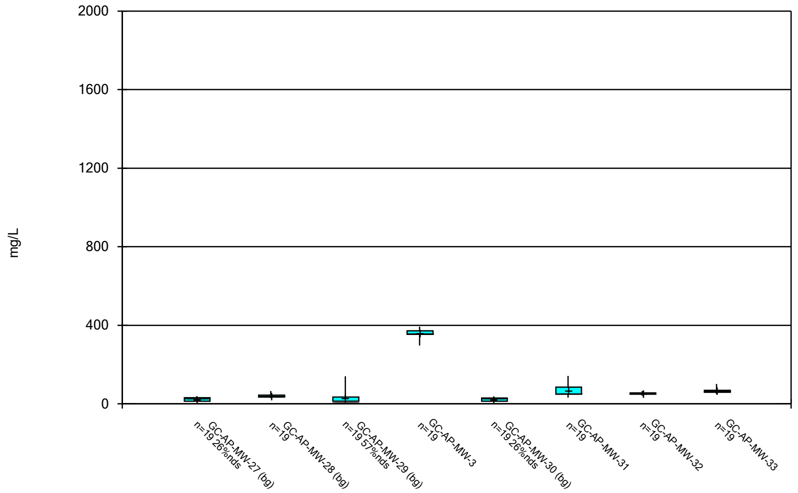
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

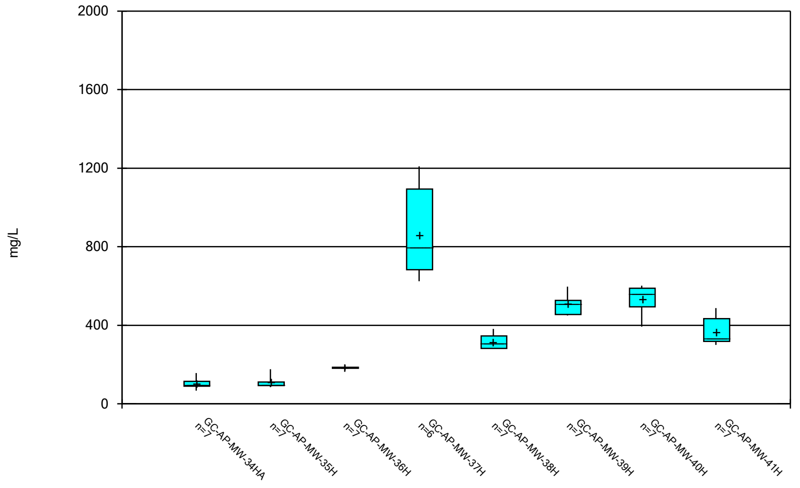
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

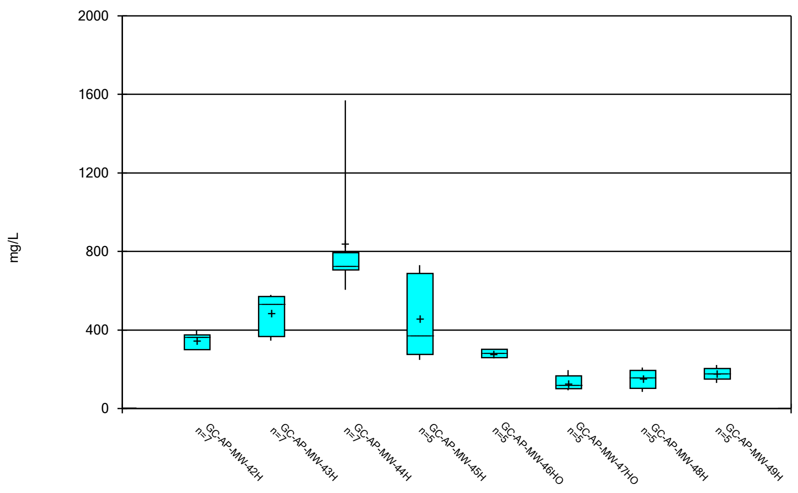
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

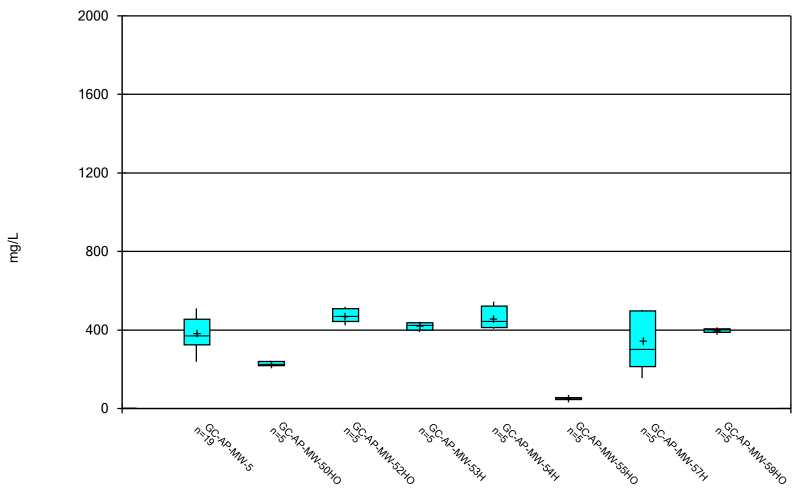
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

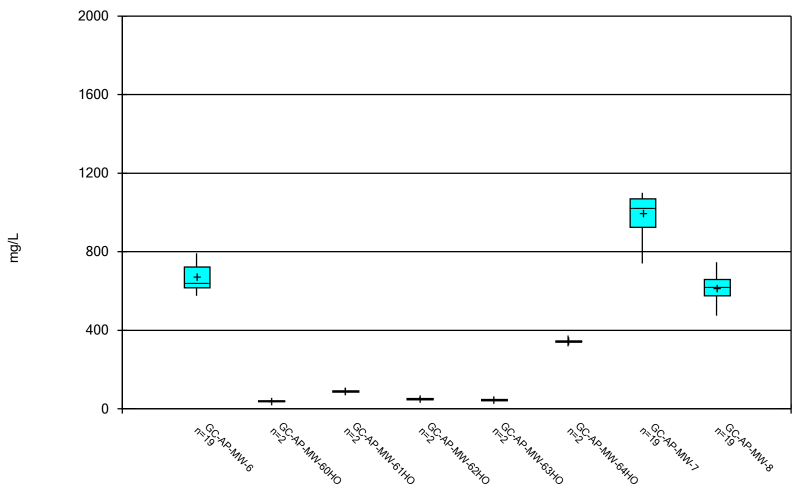
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

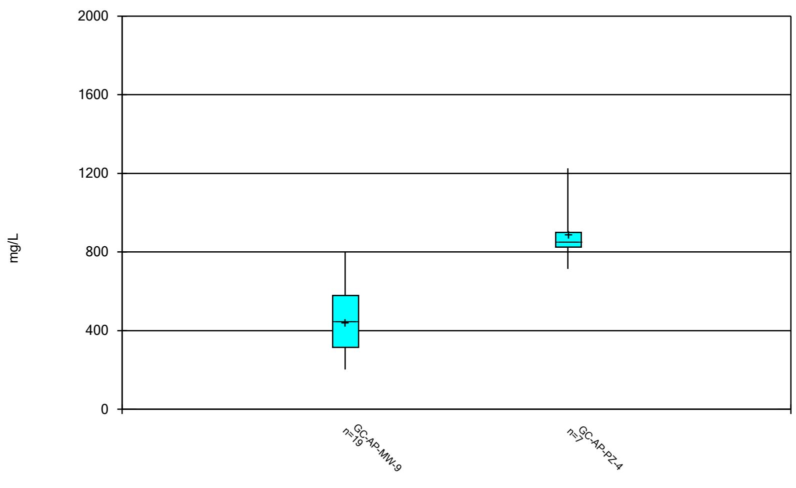
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

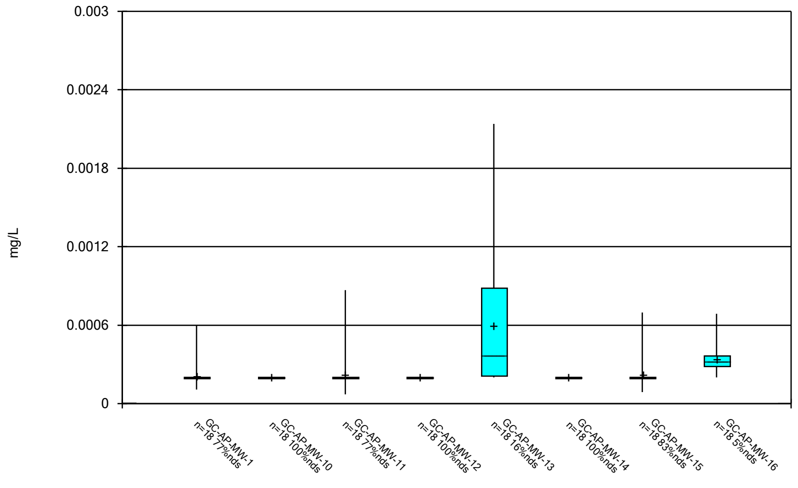
Box & Whiskers Plot



Constituent: TDS Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

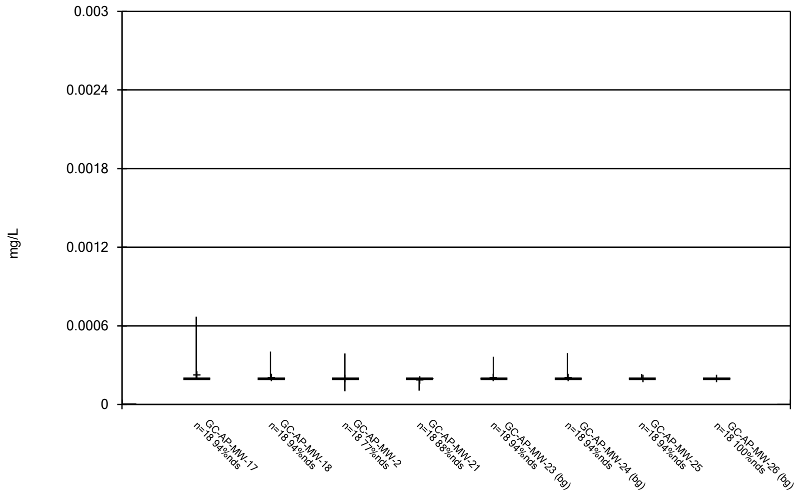
Box & Whiskers Plot



Constituent: Thallium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

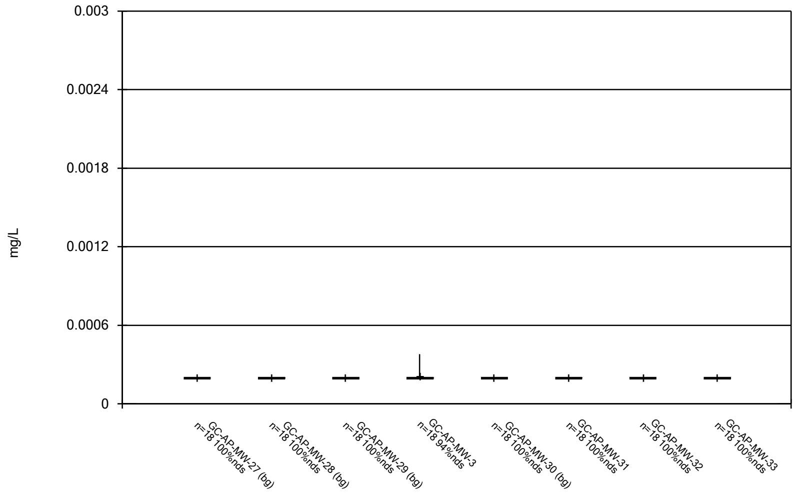
Box & Whiskers Plot



Constituent: Thallium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

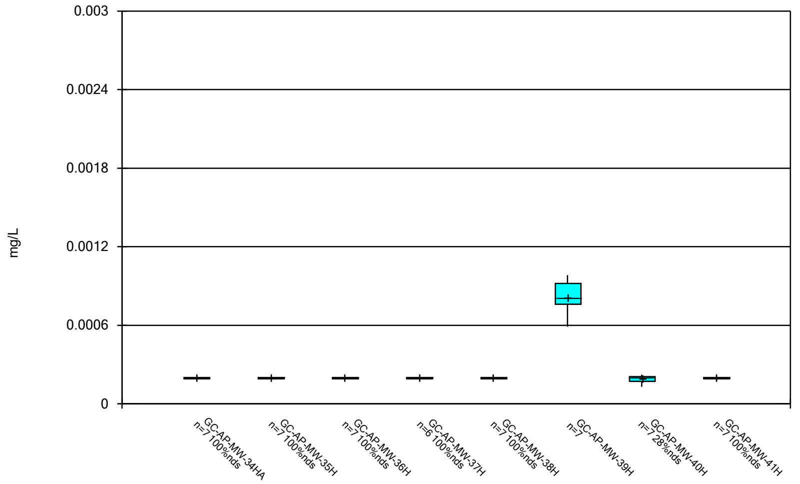
Box & Whiskers Plot



Constituent: Thallium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

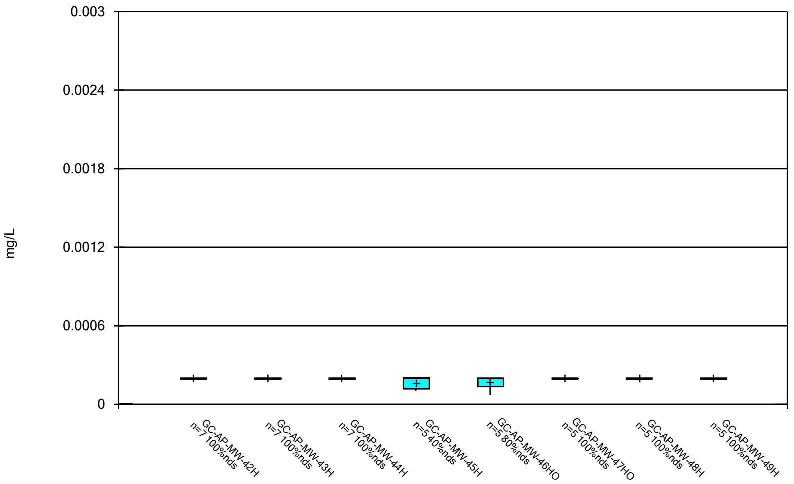
Box & Whiskers Plot



Constituent: Thallium Analysis Run 6/10/2022 1:00 PM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

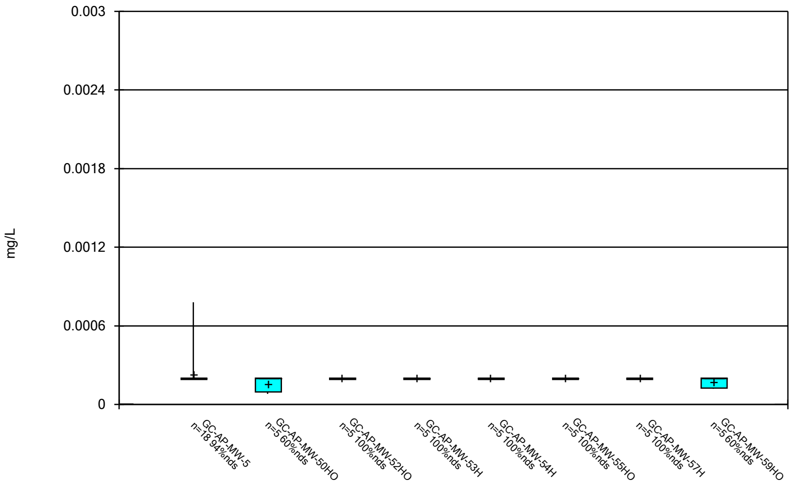
Box & Whiskers Plot



Constituent: Thallium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

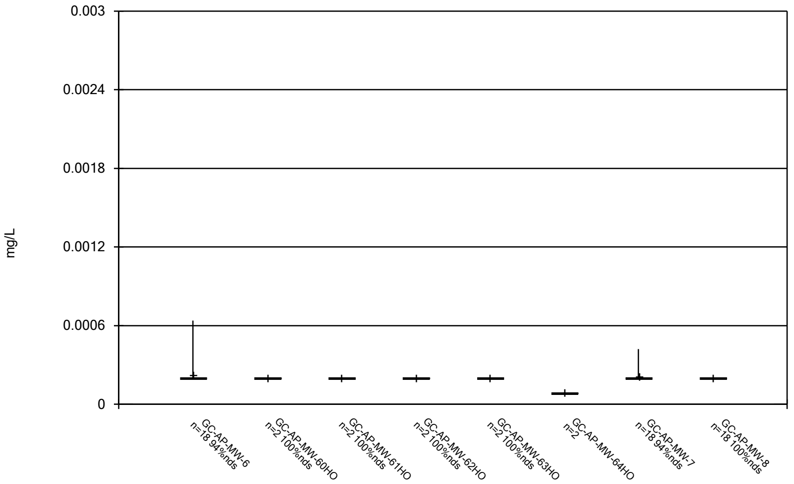
Box & Whiskers Plot



Constituent: Thallium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

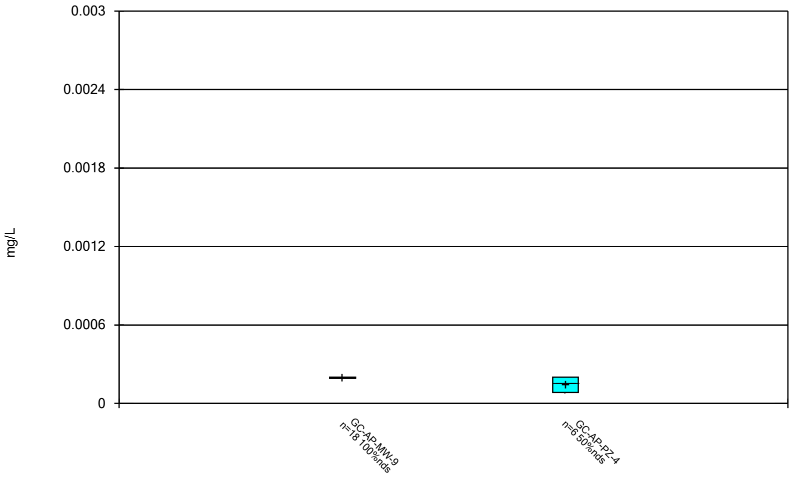
Box & Whiskers Plot



Constituent: Thallium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Box & Whiskers Plot



Constituent: Thallium   Analysis Run 6/10/2022 1:00 PM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

FIGURE C.

Outlier Summary

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 6/10/2022, 1:02 PM

	GC-AP-MW-26 Fluoride (mg/L)	GC-AP-MW-27 Fluoride (mg/L)	GC-AP-MW-28 Fluoride (mg/L)	GC-AP-MW-13 Selenium (mg/L)
9/20/2016		0.01 (o)	0.021 (o)	
3/13/2017	0.31 (o)			
5/9/2017	0.25 (o)			
6/27/2017	0.22 (o)			
8/29/2017	0.22 (o)			
4/6/2022				0.111 (o)

FIGURE D.

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	4/4/2022	0.269	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	4/4/2022	1.92	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	3/30/2022	0.472	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	3/29/2022	0.416	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	4/6/2022	0.26	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	4/4/2022	1.89	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	3/29/2022	0.848	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	4/6/2022	2.17	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	4/4/2022	2.32	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	4/6/2022	1.6	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	3/28/2022	0.125	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	3/30/2022	0.696	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	3/29/2022	0.122	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	4/4/2022	0.615	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	3/29/2022	1.39	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	3/29/2022	1.08	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	3/29/2022	0.71	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	4/4/2022	106	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	4/4/2022	93.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	3/29/2022	52	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	4/6/2022	55.5	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	4/4/2022	117	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	3/29/2022	75.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	4/6/2022	101	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	4/4/2022	104	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	4/6/2022	96.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	3/28/2022	157	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	3/30/2022	51	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	4/5/2022	67.4	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	4/4/2022	98.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	3/29/2022	128	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	3/29/2022	126	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	3/29/2022	92.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	3/29/2022	72.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.842	n/a	4/4/2022	41.75	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.842	n/a	4/4/2022	16.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.842	n/a	3/30/2022	12.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.842	n/a	3/29/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.842	n/a	4/4/2022	9.875	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.842	n/a	3/29/2022	10.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.842	n/a	4/6/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.842	n/a	4/4/2022	8.06	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.842	n/a	4/6/2022	24.35	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.842	n/a	3/28/2022	11.5	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.842	n/a	3/30/2022	12.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.842	n/a	3/29/2022	29.6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.842	n/a	4/5/2022	21.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.842	n/a	3/28/2022	6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.842	n/a	4/4/2022	9.63	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.842	n/a	3/29/2022	45.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.842	n/a	3/29/2022	94.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.842	n/a	3/29/2022	95.4	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.842	n/a	3/29/2022	225	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	4/4/2022	0.2785	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-14	0.159	n/a	4/4/2022	0.226	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-16	0.159	n/a	4/6/2022	0.2395	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-17	0.159	n/a	4/4/2022	0.5855	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-5	0.159	n/a	4/4/2022	0.216	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-6	0.159	n/a	3/29/2022	0.193	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	GC-AP-MW-1	103	n/a	4/4/2022	812.5	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-10	103	n/a	4/4/2022	116.5	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-11	103	n/a	3/30/2022	125	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-12	103	n/a	3/29/2022	108	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-13	103	n/a	4/6/2022	157	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-14	103	n/a	4/4/2022	195.5	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-15	103	n/a	3/29/2022	165	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-2	103	n/a	3/28/2022	563	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-21	103	n/a	3/30/2022	115	Yes	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**4/4/2022**	**160**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**3/29/2022**	**190**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**3/29/2022**	**187**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**3/29/2022**	**193**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**4/4/2022**	**1310**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**4/4/2022**	**443.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**3/30/2022**	**280**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**3/29/2022**	**290**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**4/6/2022**	**298**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**4/4/2022**	**644**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**3/29/2022**	**406**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**4/6/2022**	**472**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**4/4/2022**	**553**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**4/6/2022**	**408.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**3/28/2022**	**868**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**3/30/2022**	**320**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**3/29/2022**	**247**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**4/5/2022**	**338**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**4/4/2022**	**488**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**3/29/2022**	**722**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**3/29/2022**	**894**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**3/29/2022**	**730**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**3/29/2022**	**800**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	4/4/2022	0.269	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	4/4/2022	1.92	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	3/30/2022	0.472	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	3/29/2022	0.416	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	4/6/2022	0.26	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	4/4/2022	1.89	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	3/29/2022	0.848	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	4/6/2022	2.17	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	4/4/2022	2.32	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	4/6/2022	1.6	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	3/28/2022	0.125	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	3/30/2022	0.696	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	3/29/2022	0.122	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-3	0.1015	n/a	4/5/2022	0.0453J	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-31	0.1015	n/a	3/28/2022	0.1015ND	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-32	0.1015	n/a	3/28/2022	0.1015ND	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-33	0.1015	n/a	3/28/2022	0.1015ND	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	4/4/2022	0.615	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	3/29/2022	1.39	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-7	0.1015	n/a	3/29/2022	0.0842J	No	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	3/29/2022	1.08	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	3/29/2022	0.71	Yes	126	n/a	n/a	93.65	n/a	n/a	0.0001232	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	4/4/2022	106	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	4/4/2022	93.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-11	42.8	n/a	3/30/2022	39.6	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	3/29/2022	52	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	4/6/2022	55.5	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	4/4/2022	117	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	3/29/2022	75.7	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	4/6/2022	101	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	4/4/2022	104	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	4/6/2022	96.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	3/28/2022	157	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	3/30/2022	51	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-25	42.8	n/a	3/29/2022	31.9	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	4/5/2022	67.4	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-31	42.8	n/a	3/28/2022	5.95	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-32	42.8	n/a	3/28/2022	9.61	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-33	42.8	n/a	3/28/2022	2.21	No	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	4/4/2022	98.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	3/29/2022	128	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	3/29/2022	126	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	3/29/2022	92.8	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	3/29/2022	72.1	Yes	133	n/a	n/a	0	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.842	n/a	4/4/2022	41.75	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.842	n/a	4/4/2022	16.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.842	n/a	3/30/2022	12.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.842	n/a	3/29/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-13	5.842	n/a	4/6/2022	3.71	No	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.842	n/a	4/4/2022	9.875	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.842	n/a	3/29/2022	10.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.842	n/a	4/6/2022	11.8	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.842	n/a	4/4/2022	8.06	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.842	n/a	4/6/2022	24.35	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.842	n/a	3/28/2022	11.5	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.842	n/a	3/30/2022	12.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.842	n/a	3/29/2022	29.6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.842	n/a	4/5/2022	21.1	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.842	n/a	3/28/2022	6	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-32	5.842	n/a	3/28/2022	3.98	No	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-33	5.842	n/a	3/28/2022	5.47	No	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.842	n/a	4/4/2022	9.63	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.842	n/a	3/29/2022	45.3	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.842	n/a	3/29/2022	94.7	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.842	n/a	3/29/2022	95.4	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.842	n/a	3/29/2022	225	Yes	133	0.7552	0.4753	3.759	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-1	0.159	n/a	4/4/2022	0.124	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	4/4/2022	0.2785	Yes	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-11	0.159	n/a	3/30/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-12	0.159	n/a	3/29/2022	0.107J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-13	0.159	n/a	4/6/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-14**	**0.159**	**n/a**	**4/4/2022**	**0.226**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-15	0.159	n/a	3/29/2022	0.117J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-16**	**0.159**	**n/a**	**4/6/2022**	**0.2395**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.159**	**n/a**	**4/4/2022**	**0.5855**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-18	0.159	n/a	4/6/2022	0.1385	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-2	0.159	n/a	3/28/2022	0.105J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-21	0.159	n/a	3/30/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-25	0.159	n/a	3/29/2022	0.0724J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-3	0.159	n/a	4/5/2022	0.146	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-31	0.159	n/a	3/28/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-32	0.159	n/a	3/28/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-33	0.159	n/a	3/28/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-5**	**0.159**	**n/a**	**4/4/2022**	**0.216**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-6**	**0.159**	**n/a**	**3/29/2022**	**0.193**	**Yes**	**127**	**n/a**	**n/a**	**69.29**	**n/a**	**n/a**	**0.0001215**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-7	0.159	n/a	3/29/2022	0.104J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-8	0.159	n/a	3/29/2022	0.108J	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-9	0.159	n/a	3/29/2022	0.125ND	No	127	n/a	n/a	69.29	n/a	n/a	0.0001215	NP Inter (NDs) 1 of 2
pH (SU)	GC-AP-MW-1	6.8	3.78	4/4/2022	5.17	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-10	6.8	3.78	4/4/2022	6.21	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-11	6.8	3.78	3/30/2022	6.02	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-12	6.8	3.78	3/29/2022	6.44	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-13	6.8	3.78	4/6/2022	6.24	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-14	6.8	3.78	4/4/2022	6.39	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-15	6.8	3.78	3/29/2022	5.81	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-16	6.8	3.78	4/6/2022	6.42	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-17	6.8	3.78	4/4/2022	6.71	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-18	6.8	3.78	4/6/2022	6.29	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-2	6.8	3.78	3/28/2022	5.32	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-21	6.8	3.78	3/30/2022	6.09	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-25	6.8	3.78	3/29/2022	5.26	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-3	6.8	3.78	4/5/2022	6.27	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-31	6.8	3.78	3/28/2022	5.05	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-32	6.8	3.78	3/28/2022	5.01	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-33	6.8	3.78	3/28/2022	4.29	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-5	6.8	3.78	4/4/2022	6.42	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-6	6.8	3.78	3/29/2022	5.99	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-7	6.8	3.78	3/29/2022	6.62	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-8	6.8	3.78	3/29/2022	6.21	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-9	6.8	3.78	3/29/2022	5.61	No	157	n/a	n/a	0	n/a	n/a	0.000159	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-1**	**103**	**n/a**	**4/4/2022**	**812.5**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-10**	**103**	**n/a**	**4/4/2022**	**116.5**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-11**	**103**	**n/a**	**3/30/2022**	**125**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-12**	**103**	**n/a**	**3/29/2022**	**108**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-13**	**103**	**n/a**	**4/6/2022**	**157**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-14**	**103**	**n/a**	**4/4/2022**	**195.5**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-15**	**103**	**n/a**	**3/29/2022**	**165**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-16	103	n/a	4/6/2022	45.3	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-17	103	n/a	4/4/2022	68.9	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-18	103	n/a	4/6/2022	16.05	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-2**	**103**	**n/a**	**3/28/2022**	**563**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-21**	**103**	**n/a**	**3/30/2022**	**115**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-25	103	n/a	3/29/2022	68.6	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-3	103	n/a	4/5/2022	14.95	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-31	103	n/a	3/28/2022	3.34	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-32	103	n/a	3/28/2022	2.55	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-33	103	n/a	3/28/2022	11.8	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**4/4/2022**	**160**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**3/29/2022**	**190**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**3/29/2022**	**187**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-8	103	n/a	3/29/2022	75.3	No	133	n/a	n/a	22.56	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**3/29/2022**	**193**	**Yes**	**133**	**n/a**	**n/a**	**22.56**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**4/4/2022**	**1310**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**4/4/2022**	**443.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**3/30/2022**	**280**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**3/29/2022**	**290**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 4:30 PM

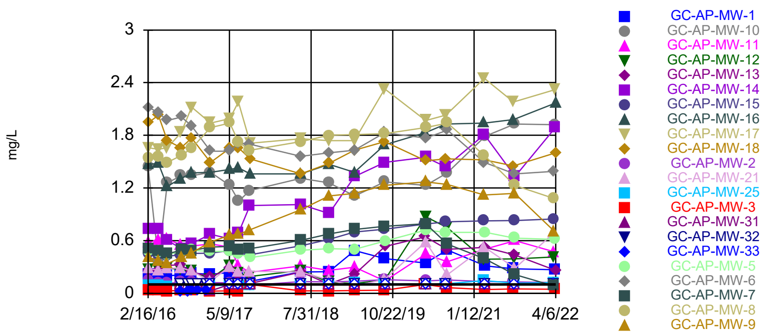
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**4/6/2022**	**298**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**4/4/2022**	**644**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**3/29/2022**	**406**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**4/6/2022**	**472**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**4/4/2022**	**553**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**4/6/2022**	**408.5**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**3/28/2022**	**868**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**3/30/2022**	**320**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**3/29/2022**	**247**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**4/5/2022**	**338**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GC-AP-MW-31	179	n/a	3/28/2022	43.3	No	133	n/a	n/a	15.79	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-32	179	n/a	3/28/2022	51.3	No	133	n/a	n/a	15.79	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-33	179	n/a	3/28/2022	57.3	No	133	n/a	n/a	15.79	n/a	n/a	0.000111	NP Inter (normality) 1 of 2
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**4/4/2022**	**488**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**3/29/2022**	**722**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**3/29/2022**	**894**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**3/29/2022**	**730**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**3/29/2022**	**800**	**Yes**	**133**	**n/a**	**n/a**	**15.79**	**n/a**	**n/a**	**0.000111**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Non-parametric



Limit = 0.1015

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 126 background values. 93.65% NDs. Annual per-constituent alpha = 0.005406. Individual comparison alpha = 0.0001232 (1 of 2). Comparing 22 points to limit.

Constituent: Boron Analysis Run 6/1/2022 1:03 PM View: AIII

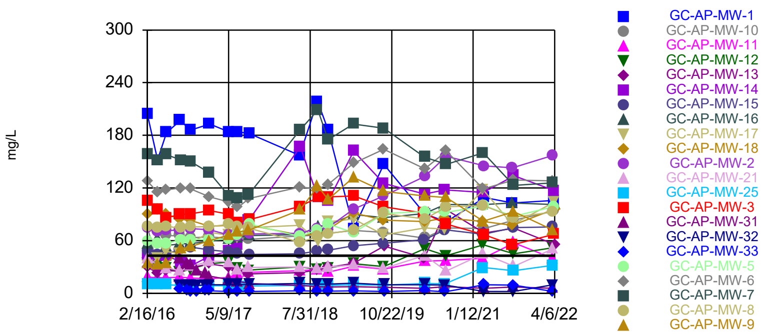
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16,..

Prediction Limit

Interwell Non-parametric



Limit = 42.8

Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 133 background values. Annual per-constituent alpha = 0.004874. Individual comparison alpha = 0.000111 (1 of 2). Comparing 22 points to limit.

Constituent: Calcium Analysis Run 6/1/2022 1:03 PM View: AIII

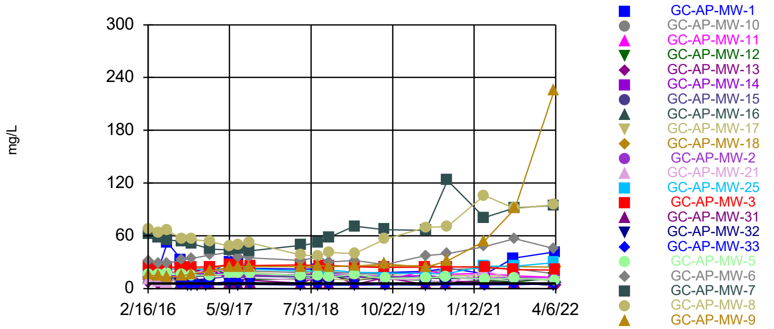
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16,..

Prediction Limit

Interwell Parametric



Limit = 5.842

Background Data Summary (based on natural log transformation): Mean=0.7552, Std. Dev.=0.4753, n=133, 3.759% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 11.44, critical = 14.07. Kappa = 2.125 (c=7, w=22, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000342. Comparing 22 points to limit.

Constituent: Chloride Analysis Run 6/1/2022 1:03 PM View: AIII

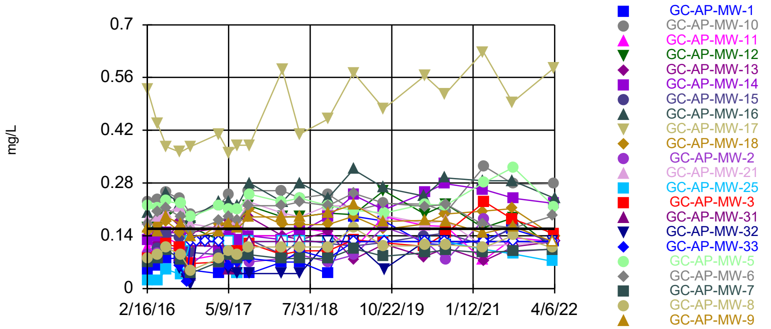
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-10, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-5, GC-AP-MW-6

Prediction Limit

Interwell Non-parametric



Limit = 0.159

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 127 background values. 69.29% NDs. Annual per-constituent alpha = 0.00533. Individual comparison alpha = 0.0001215 (1 of 2). Comparing 22 points to limit.

Constituent: Fluoride Analysis Run 6/1/2022 1:03 PM View: AIII

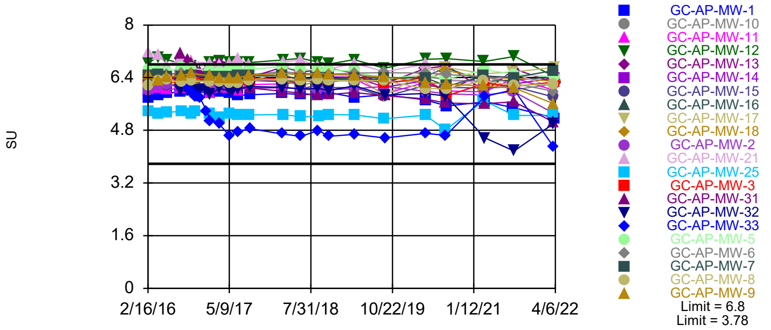
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 157 background values. Annual per-constituent alpha = 0.006983. Individual comparison alpha = 0.000159 (1 of 2). Comparing 22 points to limit.

Constituent: pH Analysis Run 6/1/2022 1:03 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

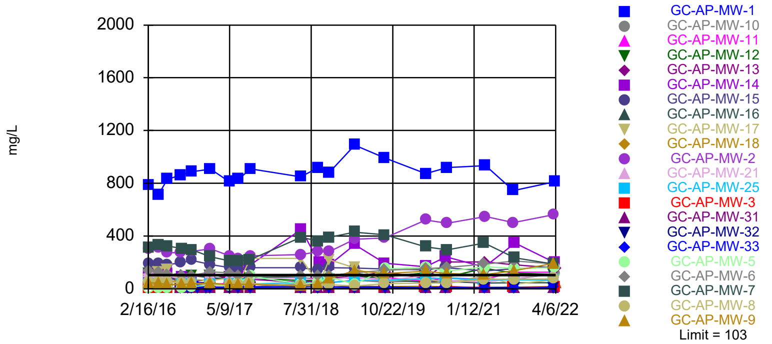
Sanitas™ v.9.6.34 . UG

Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 133 background values. 22.56% NDs. Annual per-constituent alpha = 0.004874. Individual comparison alpha = 0.000111 (1 of 2). Comparing 22 points to limit.

Constituent: Sulfate Analysis Run 6/1/2022 1:03 PM View: AIII

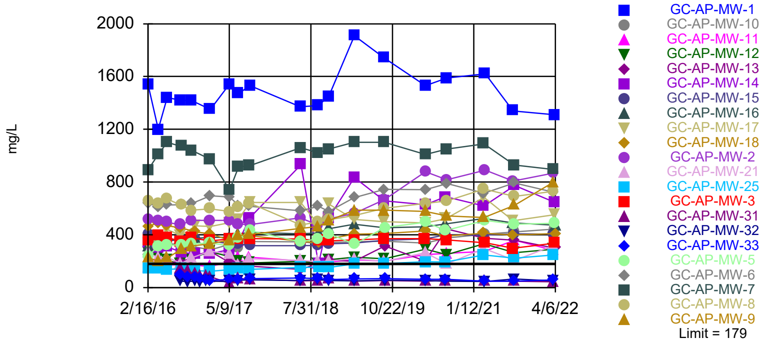
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 133 background values. 15.79% NDs. Annual per-constituent alpha = 0.004874. Individual comparison alpha = 0.000111 (1 of 2). Comparing 22 points to limit.

Constituent: TDS Analysis Run 6/1/2022 1:03 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-10	GC-AP-MW-21	GC-AP-MW-9	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-24 (bg)	GC-AP-MW-11
2/16/2016	0.273	1.54	1.44	0.286	0.412	0.739	0.26		
2/17/2016								<0.1015	0.581
4/12/2016						0.733	0.26	<0.1015	
4/13/2016	0.276	1.56	0.373	0.26	0.376				0.61
5/31/2016	0.291		1.26			0.603	0.318		0.615
6/1/2016		1.49		0.283	0.338			<0.1015	
8/15/2016									
8/16/2016	0.268		1.34	0.292			0.322	<0.1015	0.554
8/17/2016		1.57			0.412	0.509			
9/19/2016									
9/20/2016									
10/11/2016								<0.1015	
10/12/2016	0.252	1.65	1.34	0.254	0.46	0.569	0.244		0.537
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								<0.1015	
1/25/2017	0.167	1.89	1.38	0.133	0.586	0.671	0.188		0.562
1/26/2017									
5/9/2017	0.32			0.304		0.622	0.281		0.528
5/10/2017		1.94	1.23		0.661			<0.1015	
6/27/2017									
6/28/2017	0.231	1.72	1.05	0.243	0.673	0.695	0.153	<0.1015	0.313
8/29/2017	0.191	1.63	1.17	0.249	0.723	1	0.112	<0.1015	0.241
8/30/2017									
6/4/2018									
6/5/2018		1.73	1.31		0.954			<0.1015	0.311
6/6/2018	0.26			0.245		1.01	0.244		
11/5/2018	0.127			0.151			0.104		0.262
11/6/2018									
11/7/2018		1.8	1.26		1.11	0.908		<0.1015	
3/26/2019	0.111	1.81		0.0834 (J)	1.14		0.213	<0.1015	
3/27/2019			1.11			1.33			0.298
9/9/2019									
9/10/2019	0.153	1.82	1.27	0.16	1.23	1.49		<0.1015	0.141
9/11/2019							0.535		
4/20/2020							0.642		
4/21/2020	0.872	1.89		0.586	1.27	1.55			
4/22/2020			1.23					<0.1015	0.447
8/11/2020						1.44			
8/12/2020								<0.1015	
8/17/2020									
8/18/2020	0.748		1.37	0.211	1.24		0.501		0.358
8/19/2020		1.94							
3/9/2021		1.57			1.12	1.81			
3/10/2021	0.389			0.528				<0.1015	0.502
3/15/2021			1.79				0.523		
3/16/2021									
8/17/2021									
8/18/2021									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-10	GC-AP-MW-21	GC-AP-MW-9	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-24 (bg)	GC-AP-MW-11
8/23/2021									
8/24/2021		1.23	1.93		1.14			<0.1015	
8/25/2021	0.393			0.288		1.33	0.438		0.601
3/28/2022									
3/29/2022	0.416	1.08			0.71				
3/30/2022				0.696					0.472
4/4/2022			1.92			1.89		<0.1015	
4/5/2022									
4/6/2022							0.26		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-2	GC-AP-MW-16	GC-AP-MW-5	GC-AP-MW-23 (bg)	GC-AP-MW-7	GC-AP-MW-17	GC-AP-MW-6	GC-AP-MW-1	GC-AP-MW-15
2/16/2016									
2/17/2016	0.146	1.47	0.478	0.0271 (J)	0.503	1.66	2.12	0.219	0.454
4/12/2016			0.467	<0.1015			2.06		0.444
4/13/2016	0.125	1.48			0.478	1.64		0.211	
5/31/2016			0.443		0.452		1.97		0.424
6/1/2016	0.114	1.22		<0.1015		1.66		0.2	
8/15/2016	0.128	1.31				1.83		0.211	
8/16/2016				<0.1015					0.438
8/17/2016			0.477		0.492		2.01		
9/19/2016									
9/20/2016									
10/11/2016	0.129		0.489	0.024 (J)			1.91	0.23	0.456
10/12/2016		1.37			0.487	2.12			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	0.124	1.38	0.475	0.0333 (J)		1.94	1.62	0.218	0.458
1/25/2017					0.529				
1/26/2017									
5/9/2017	0.121		0.479	<0.1015				0.235	
5/10/2017		1.41			0.533	1.99	1.62		0.486
6/27/2017		1.43		<0.1015		2.18		0.206	0.454
6/28/2017	0.111		0.448		0.501		1.71		
8/29/2017				<0.1015	0.51		1.7		
8/30/2017	0.0915 (J)	1.36	0.407			1.71		0.138	0.441
6/4/2018	0.134							0.242	
6/5/2018		1.36	0.489	<0.1015	0.605	1.76	1.56		0.543
6/6/2018									
11/5/2018									
11/6/2018	0.131	1.47	0.508			1.74		0.247	0.614
11/7/2018				<0.1015	0.677		1.6		
3/26/2019		1.38		<0.1015	0.727	1.74	1.63		0.697
3/27/2019	0.138		0.502					0.488	
9/9/2019	0.157					2.33			
9/10/2019		1.69		<0.1015	0.764		1.83	0.398	0.73
9/11/2019			0.595						
4/20/2020		1.83							0.791
4/21/2020	0.14		0.72	<0.1015	0.793	1.97	1.77	0.347	
4/22/2020									
8/11/2020		1.93				2.03			
8/12/2020			0.695	<0.1015					0.813
8/17/2020	0.152							0.496	
8/18/2020									
8/19/2020					0.561		1.86		
3/9/2021		1.94			0.397	2.45	1.49		
3/10/2021				<0.1015					0.825
3/15/2021									
3/16/2021	0.134		0.694					0.313	
8/17/2021	0.131	1.98				2.18		0.281	
8/18/2021									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-2	GC-AP-MW-16	GC-AP-MW-5	GC-AP-MW-23 (bg)	GC-AP-MW-7	GC-AP-MW-17	GC-AP-MW-6	GC-AP-MW-1	GC-AP-MW-15
8/23/2021			0.628						
8/24/2021				<0.1015	0.216		1.36		
8/25/2021									0.83
3/28/2022	0.125			<0.1015					
3/29/2022					0.0842 (J)		1.39		0.848
3/30/2022									
4/4/2022			0.615			2.32		0.269	
4/5/2022									
4/6/2022		2.17							

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-18	GC-AP-MW-31	GC-AP-MW-30 (bg)	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-29 (bg)	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	0.0922 (J)	0.0288 (J)	1.94						
4/12/2016	0.0935 (J)	0.0293 (J)	2.03						
4/13/2016									
5/31/2016									
6/1/2016	0.0826 (J)	0.0279 (J)	1.74						
8/15/2016		0.0332 (J)	1.66						
8/16/2016				<0.1015	<0.1015	0.0268 (J)	<0.1015	<0.1015	
8/17/2016	0.092 (J)								<0.1015
9/19/2016				<0.1015		0.0225 (J)	<0.1015		
9/20/2016					<0.1015			<0.1015	<0.1015
10/11/2016	0.0976 (J)	0.0328 (J)		<0.1015	<0.1015	0.0304 (J)	<0.1015	<0.1015	
10/12/2016			1.77						0.02 (J)
11/14/2016				<0.1015		0.0355 (J)	<0.1015		
11/15/2016					<0.1015			0.0229 (J)	<0.1015
1/3/2017				<0.1015		0.0304 (J)	<0.1015		
1/4/2017					<0.1015			<0.1015	<0.1015
1/23/2017					<0.1015				0.0287 (J)
1/24/2017	0.0877 (J)	0.0262 (J)	1.49	0.0282 (J)			<0.1015		
1/25/2017						<0.1015			
1/26/2017								<0.1015	
5/9/2017	0.0953 (J)	0.0298 (J)			<0.1015			<0.1015	<0.1015
5/10/2017			1.65	<0.1015		<0.1015	<0.1015		
6/27/2017			1.66	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
6/28/2017	0.0835 (J)	0.0226 (J)							
8/29/2017	0.0914 (J)								<0.1015
8/30/2017		<0.1015	1.53	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	
6/4/2018		0.0296 (J)							
6/5/2018			1.36	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
6/6/2018	0.102								
11/5/2018							<0.1015		
11/6/2018	0.0995 (J)	0.0268 (J)	1.48	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015
11/7/2018									
3/26/2019			1.63		<0.1015			<0.1015	<0.1015
3/27/2019	0.113	0.0316 (J)		<0.1015		<0.1015	<0.1015		
9/9/2019		0.035 (J)	1.73						
9/10/2019	0.105								
9/11/2019				<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
4/20/2020		<0.1015							
4/21/2020			1.51		<0.1015			<0.1015	<0.1015
4/22/2020	0.104			<0.1015		<0.1015	<0.1015		
8/11/2020	0.11			<0.1015					
8/12/2020			1.53			<0.1015	<0.1015		
8/17/2020		0.0636 (J)							
8/18/2020					<0.1015			<0.1015	<0.1015
8/19/2020									
3/9/2021			1.52						
3/10/2021	0.146								
3/15/2021				<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
3/16/2021		0.0445 (J)							
8/17/2021		0.0518 (J)	1.45						
8/18/2021					<0.1015			<0.1015	<0.1015

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-18	GC-AP-MW-31	GC-AP-MW-30 (bg)	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-29 (bg)	GC-AP-MW-27 (bg)
8/23/2021				<0.1015		<0.1015	<0.1015		
8/24/2021	0.115								
8/25/2021									
3/28/2022				<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
3/29/2022	0.122								
3/30/2022									
4/4/2022									
4/5/2022		0.0453 (J)							
4/6/2022			1.6						

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	<0.1015	<0.1015
9/19/2016		
9/20/2016	<0.1015	<0.1015
10/11/2016		
10/12/2016	<0.1015	<0.1015
11/14/2016		
11/15/2016	<0.1015	<0.1015
1/3/2017		
1/4/2017	<0.1015	<0.1015
1/23/2017		0.0217 (J)
1/24/2017	0.0331 (J)	
1/25/2017		
1/26/2017		
5/9/2017	<0.1015	<0.1015
5/10/2017		
6/27/2017	<0.1015	<0.1015
6/28/2017		
8/29/2017		<0.1015
8/30/2017	<0.1015	
6/4/2018		
6/5/2018	<0.1015	<0.1015
6/6/2018		
11/5/2018		
11/6/2018	<0.1015	<0.1015
11/7/2018		
3/26/2019	<0.1015	<0.1015
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	<0.1015	<0.1015
4/20/2020		
4/21/2020	<0.1015	<0.1015
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	<0.1015	<0.1015
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	<0.1015	<0.1015
3/16/2021		
8/17/2021		
8/18/2021	<0.1015	<0.1015

Prediction Limit

Constituent: Boron (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	<0.1015	
3/29/2022		
3/30/2022		
4/4/2022		<0.1015
4/5/2022		
4/6/2022		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
2/16/2016	40.4	44.4	29.8	76.3	75.9	34.6	33.9		
2/17/2016								106	38.7
4/12/2016		43.2	23.3					95.2	42.7
4/13/2016	32.2			30.5	74.1	32.2	32.5		
5/31/2016		43	25.9	65.9		28.8			
6/1/2016	29.3				76.4		33.9	86.1	41.8
8/15/2016								89.7	
8/16/2016	25.4		25.5	65.6		24			40.9
8/17/2016		35.9			74.2		50.3		
9/19/2016									
9/20/2016									
10/11/2016								90.6	38.1
10/12/2016	30.7	31.1	29.5	63.4	75.7	27.8	53.3		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								94.2	27.7
1/25/2017	36.8	42.7	33.6	64.2	76.1	33.7	59.9		
1/26/2017									
5/9/2017	36.1	48.1	30.4			35.5		90.3	29.3
5/10/2017				62.6	78.6		66.5		
6/27/2017									28.6
6/28/2017	26.9	55	26	60.8	76.4	28	69.8	80.7	
8/29/2017	29.4	83.6	22.3	61.4	74.1	26.4	72		32.3
8/30/2017								84	
6/4/2018								98.8	
6/5/2018				65.5	58		95.1		34.5
6/6/2018	30.2	167	23.7			30.1			
9/10/2018	28.8								
9/11/2018			26.8	66.1	64.9	27.4	122		32
9/12/2018		109						109	
11/5/2018	29.7		29.4			28.8			
11/6/2018								110	
11/7/2018		105		68.5	68.1		107		30.3
3/26/2019	32.4		34.1		72	33.7	132		31.3
3/27/2019		162		71.8				111	
9/9/2019								98.5	
9/10/2019	28.4	125		69.3	91	30.5	116		30.7
9/11/2019			53.9						
4/20/2020			40.3					91.2	
4/21/2020	43.1	113			84.8	51	111		30.8
4/22/2020				62.9					
8/11/2020		118							
8/12/2020									28
8/17/2020								78.9	
8/18/2020	25.5		95.3	74.4		42.9	109		
8/19/2020					98.6				
3/9/2021		115			100		82.1		
3/10/2021	44.9					55.1			26.6
3/15/2021			68.9	73.8					

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
3/16/2021								66.6	
8/17/2021								55.4	
8/18/2021									
8/23/2021									
8/24/2021				83.4	86.4		93.1		26.3
8/25/2021	31	134	74.2			45.2			
3/28/2022									26
3/29/2022					92.8	52	72.1		
3/30/2022	51								
4/4/2022		117		93.7					
4/5/2022								67.4	
4/6/2022			55.5						

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
2/16/2016									
2/17/2016	18.6	75	89.6	30.7	57	158	47.7	59.8	10.2
4/12/2016			96.2				44.4	56.1	10
4/13/2016	17.8	70.2		39.5	62.5	151			
5/31/2016	17.7					158	45.3	56.6	
6/1/2016		71.2	90.2	47.7	54.4				9.87
8/15/2016		72.2	84.4	45.6	56.2				
8/16/2016	18.4						49.4		
8/17/2016						152		61	8.88
9/19/2016									
9/20/2016									
10/11/2016		73.8					52.7	61.3	9.22
10/12/2016	17.3		82.9	57.6	56.6	150			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017		72.2	76.4	69.4	59.1		49.4	61	8.72
1/25/2017	16.6					137			
1/26/2017									
5/9/2017	18	66.4						61.7	8.56
5/10/2017			77.4	66.2	62.5	111	47.4		
6/27/2017			75.4	63.8	63.6		44.9		
6/28/2017	22.6	65.4				108		66.1	7.16
8/29/2017	23.9					113			8.32
8/30/2017		67.8	78	75.1	65.7		44.4	78.9	
6/4/2018		68.3							
6/5/2018	25.7		66.3	77.4	66.8	186	45.1	64.8	
6/6/2018									9.05
9/10/2018	27.2	73.9							
9/11/2018						209	48.5	72.2	
9/12/2018			67.8	58.9	76.3				8.98
11/5/2018	24.1								
11/6/2018		75.1	72.7	81.6	77.4		49.2	78.9	9.21
11/7/2018						175			
3/26/2019			91.5	84.7	90	193	54		
3/27/2019	31	96.1						69.1	9.77
9/9/2019		111	83.2	66.4					
9/10/2019	27.7				86.3	188	57.2		9.28
9/11/2019								90.8	
4/20/2020					90.8		61		
4/21/2020		133	81.8	74.4		155		93	
4/22/2020	36.7								11.3
8/11/2020				73	101				10.7
8/12/2020			85.9				72.2	92.2	
8/17/2020		156							
8/18/2020	37.6								
8/19/2020						147			
3/9/2021			82	118	101	160			
3/10/2021	39.9						67.4		29.3
3/15/2021									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
3/16/2021		145						99.7	
8/17/2021		143	77.4	78.3	103				
8/18/2021									
8/23/2021								87.6	
8/24/2021						123			25.9
8/25/2021	57.6						74.8		
3/28/2022		157							
3/29/2022						126	75.7		31.9
3/30/2022	39.6								
4/4/2022				104				98.8	
4/5/2022									
4/6/2022			96.1		101				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	128	6.54	204						
4/12/2016	115	6.15							
4/13/2016			152						
5/31/2016	118								
6/1/2016		5.7	183						
8/15/2016			197						
8/16/2016		6.77		5.54	9.33	39.5	2.02	1.24	
8/17/2016	120								1.1
9/19/2016				3.01	9.26	34.5			
9/20/2016							1.22	1.11	0.771
10/11/2016	119	8.84	186	2.74	9.31	32.4	1.48	1.22	
10/12/2016									0.711
11/14/2016				2.47	9.17	26.5			
11/15/2016							1.36	1.34	0.641
1/3/2017				2.94	9.66	22.6			
1/4/2017							1.11	2.39	0.797
1/23/2017								1.83	0.655
1/24/2017	110	12.8	193		9.67	19.5			
1/25/2017				2.91					
1/26/2017							1.03		
5/9/2017			184				0.289 (J)	0.823	0.538
5/10/2017	104	12.4		2.27	9.81	15.7			
6/27/2017			184	2.2	9.88	13.8	0.292 (J)	0.956	0.413 (J)
6/28/2017	98	17.9							
8/29/2017	108	19							0.504
8/30/2017			182	2.26	10.3	11.1	0.336 (J)	1.04	
6/4/2018			157						
6/5/2018	121	30		2.97	11.4	9.12	0.2 (J)	1.18	0.339 (J)
6/6/2018									
9/10/2018			219						
9/11/2018	119	28.7		2.6	10.5	7.5	0.171 (J)	1.5	0.776
9/12/2018									
11/5/2018					10.5				
11/6/2018			186	2.42		7.39	0.193 (J)	1.64	0.746
11/7/2018	124	30.7							
3/26/2019	148	32.3					0.223 (J)	1.33	0.526
3/27/2019			73.8	2.75	11.6	7.65			
9/9/2019									
9/10/2019	164	32.8	147						
9/11/2019				2.17	9.95	6.96	0.158 (J)	0.925	0.638
4/20/2020									
4/21/2020	142		90.5				0.287 (J)	0.864	1.15
4/22/2020		31.4		3.15	9.87	5.92			
8/11/2020						7.46			
8/12/2020		35.8		1.78	9.48				
8/17/2020			81.5						
8/18/2020							0.231 (J)	0.926	0.884
8/19/2020	162								
3/9/2021	119								
3/10/2021		42.8							
3/15/2021				9.77	2.02	5.9	0.239 (J)	0.646	0.745

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
3/16/2021			109						
8/17/2021			103						
8/18/2021							0.283 (J)	0.716	1.11
8/23/2021				9.48	2.16	7.11			
8/24/2021	129	36.5							
8/25/2021									
3/28/2022				2.21	9.61	5.95	0.172 (J)	0.542	1.37
3/29/2022	128								
3/30/2022									
4/4/2022		37	106						
4/5/2022									
4/6/2022									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	7.74	5.88
9/19/2016		
9/20/2016	2.43	5.95
10/11/2016		
10/12/2016	2.46	6.1
11/14/2016		
11/15/2016	2.28	6.28
1/3/2017		
1/4/2017	2.7	4.97
1/23/2017		5.17
1/24/2017	4.19	
1/25/2017		
1/26/2017		
5/9/2017	3.28	15.7
5/10/2017		
6/27/2017	3.76	14.2
6/28/2017		
8/29/2017		11.1
8/30/2017	2.31	
6/4/2018		
6/5/2018	2.76	3.93
6/6/2018		
9/10/2018		
9/11/2018	2.04	3.76
9/12/2018		
11/5/2018		
11/6/2018	2	4.81
11/7/2018		
3/26/2019	2.13	3.18
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	1.98	3.98
4/20/2020		
4/21/2020	2.41	3.83
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	2.23	4.58
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	1.73	4.67

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
3/16/2021		
8/17/2021		
8/18/2021	1.94	4.84
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	1.94	
3/29/2022		
3/30/2022		
4/4/2022		6.7
4/5/2022		
4/6/2022		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
2/16/2016	9.95	16.4	6.52	18.4	67.9	10.8	15.6		
2/17/2016								25.2	1.54
4/12/2016		15.9	4.47					24.6	1.51
4/13/2016	7.33			19	64.1	8.2	14.3		
5/31/2016		13.6	10.8	19.2		7.74			
6/1/2016	6.97				66.3		12.6	24.5	1.46
8/15/2016								24.2	
8/16/2016	12		16.6	17.7		12.5			1.5
8/17/2016		12.8			56.7		14.4		
9/19/2016									
9/20/2016									
10/11/2016								24.4	1.52
10/12/2016	15.4	16.3	18.5	16.8	56.1	15.7	16.4		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								24.6	1.38
1/25/2017	24.7	16.4	22	18.6	53.6	24.4	20		
1/26/2017									
5/9/2017	17	19	10			15		27	2.4
5/10/2017				22	48		24		
6/27/2017									2.1
6/28/2017	11	17	9.4	20	49	12	25	26	
8/29/2017	12	17	9.3	20	52	10	25		2.4
8/30/2017								26	
6/4/2018								27	
6/5/2018				18	38		25		1.7 (J)
6/6/2018	9.7	14	6.1			11			
9/10/2018	12								
9/11/2018			14	19	37	12	26		1.5 (J)
9/12/2018		14						26	
11/5/2018	16		18			17			
11/6/2018								26	
11/7/2018		15		19	41		25		1.4 (J)
3/26/2019	17.2		4.7		39.7	14.5	25.3		1.23
3/27/2019		14.9		17.1				24.8	
9/9/2019								23.8	
9/10/2019	11	13.5		16.5	56.1	10.9	28		1.38
9/11/2019			12.3						
4/20/2020			4.7					24.5	
4/21/2020	10.1	14.8			69.5	9.49	24.2		1.08
4/22/2020				17.6					
8/11/2020		12.7							
8/12/2020									1.28
8/17/2020								24.6	
8/18/2020	5.54		8.24	21.3		6.46	31.4		
8/19/2020					70.5				
3/9/2021		10.4			106		53.9		
3/10/2021	20.4					9.3			1.3
3/15/2021			7.68	23.2					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
3/16/2021								24.4	
8/17/2021								21.3	
8/18/2021									
8/23/2021									
8/24/2021				22.4	90.8		90.7		1.19
8/25/2021	10.4	11.5	6.37			7.43			
3/28/2022									1.09
3/29/2022					95.4	11.8	225		
3/30/2022	12.1								
4/4/2022		9.875 (D)		16.8 (D)					
4/5/2022								21.1 (D)	
4/6/2022			3.71						

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
2/16/2016									
2/17/2016	16.6	14.7	22.3	14.6	12.5	62.7	11.8	16.4	22.9
4/12/2016			22.1				12.6	16.6	22.2
4/13/2016	17	14.3		14.9	13.6	57.8			
5/31/2016	19					55.6	12.9	16.8	
6/1/2016		14.6	22	15.9	14.2				22.3
8/15/2016		14.7	22.4	19.5	13.6				
8/16/2016	17						10.2		
8/17/2016						53.3		16.4	22.1
9/19/2016									
9/20/2016									
10/11/2016		14.8					10.2	15.2	21.8
10/12/2016	16.2		22.1	18.5	13.8	51.2			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017		15	23.2	19	14.2		11.2	15.1	21.8
1/25/2017	18					44.8			
1/26/2017									
5/9/2017	23	16						17	23
5/10/2017			26	24	18	44	14		
6/27/2017			25	24	17		14		
6/28/2017	24	15				45		17	22
8/29/2017	15					43			22
8/30/2017		15	25	18	16		14	17	
6/4/2018		16							
6/5/2018	16		25	15	15	49	13	15	
6/6/2018									20
9/10/2018	13	17							
9/11/2018						52	14	14	
9/12/2018			23	23	17				20
11/5/2018	13								
11/6/2018		17	26	11	15		14	13	21
11/7/2018						58			
3/26/2019			25.4	9.52	9.27	71	13		
3/27/2019	14.2	14.8						16.1	18.4
9/9/2019		14	25.6	15.4					
9/10/2019	8.88				12.7	67	12.8		17.7
9/11/2019								11.6	
4/20/2020					12.1		12		
4/21/2020		12.3	26.3	11.1		66.2		12.3	
4/22/2020	20.5								17.1
8/11/2020				15.4	12.1				16.7
8/12/2020			24.5				11.4	13	
8/17/2020		13.1							
8/18/2020	16.2								
8/19/2020						123			
3/9/2021			25.2	14.3	12	80.7			
3/10/2021	17.1						11.9		25.3
3/15/2021									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
3/16/2021		11.6						10.9	
8/17/2021		12.7	25.1	14.3	10.4				
8/18/2021									
8/23/2021								11.6	
8/24/2021						91.7			25.3
8/25/2021	14.4						10.3		
3/28/2022		11.5							
3/29/2022						94.7	10.3		29.6
3/30/2022	12.7								
4/4/2022				8.06 (D)				9.63	
4/5/2022									
4/6/2022			24.35 (D)		11.8 (D)				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	31.8	3.3	16						
4/12/2016	28.9	3.25							
4/13/2016			21.5						
5/31/2016	28.7								
6/1/2016		3.55	52.5						
8/15/2016			33.3						
8/16/2016		3.45		4.88	4.24	5.32	2.21	2.54	
8/17/2016	32.2								1.78
9/19/2016				4.45	4.13	5.29			
9/20/2016							2.12	2.51	1.61
10/11/2016	34.2	3.78	22.2	4.36	4.07	5.26	2.24	2.34	
10/12/2016									1.51
11/14/2016				4.42	4.08	5.28			
11/15/2016							6.65	2.1	1.5
1/3/2017				5.18	4.06	5.18			
1/4/2017							2.15	2.44	1.53
1/23/2017								2.37	1.62
1/24/2017	38.1	4.61	18.4		4.4	5.41			
1/25/2017				5.66					
1/26/2017							2.31		
5/9/2017			30				2.3	2.8	2.2
5/10/2017	41	5.9		8	4.4	5.8			
6/27/2017			29	7.2	4	5.4	2.1	2.1	1.9 (J)
6/28/2017	36	5.7							
8/29/2017	35	6.8							2
8/30/2017			23	6.9	4.8	6	2.8	3	
6/4/2018			22						
6/5/2018	32	7.9		4.2	3.8	5.2	1.8 (J)	2.3	1.9 (J)
6/6/2018									
9/10/2018			22						
9/11/2018	36	6.1		4.2	4.1	5.5	<2	1.5 (J)	<2
9/12/2018									
11/5/2018					3.9				
11/6/2018			17	4.5		5.1	<2	1.4 (J)	1.9 (J)
11/7/2018	30	5.2							
3/26/2019	31.9	6.92					1.07	2.42	2.18
3/27/2019			18	4.33	3.9	5.26			
9/9/2019									
9/10/2019	27.3	4.39	18.1						
9/11/2019				4.16	4.21	5.31	1.19	3.72	1.7
4/20/2020									
4/21/2020	37.4		19.5				1.09	3.89	1.9
4/22/2020		2.75		5.66	4	5.37			
8/11/2020						5.45			
8/12/2020		4.14		4.46	4.17				
8/17/2020			23.2						
8/18/2020							1.05	3.8	1.63
8/19/2020	39.6								
3/9/2021	47.5								
3/10/2021		3.51							
3/15/2021				4.18	5.57	5.47	1.25	4.38	2.46

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
3/16/2021			16.6						
8/17/2021			34.4						
8/18/2021							1.42	4.46	2.45
8/23/2021				4.33	5.61	6.37			
8/24/2021	56.6	3.42							
8/25/2021									
3/28/2022				5.47	3.98	6	1.24	4.12	1.96
3/29/2022	45.3								
3/30/2022									
4/4/2022		3.09	41.75 (D)						
4/5/2022									
4/6/2022									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	1.77	2.44
9/19/2016		
9/20/2016	1.56	2.54
10/11/2016		
10/12/2016	1.54	2.67
11/14/2016		
11/15/2016	1.53	2.94
1/3/2017		
1/4/2017	1.58	2.92
1/23/2017		3.21
1/24/2017	1.71	
1/25/2017		
1/26/2017		
5/9/2017	2.1	2.5
5/10/2017		
6/27/2017	2	3
6/28/2017		
8/29/2017		3.6
8/30/2017	1.5 (J)	
6/4/2018		
6/5/2018	1.2 (J)	2.2
6/6/2018		
9/10/2018		
9/11/2018	<2	1.5 (J)
9/12/2018		
11/5/2018		
11/6/2018	<2	2.5
11/7/2018		
3/26/2019	1.2	2
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	1.26	2.34
4/20/2020		
4/21/2020	1.32	2.04
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	1.38	2.16
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	1.27	2.83

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
3/16/2021		
8/17/2021		
8/18/2021	1.42	2.97
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	1.35	
3/29/2022		
3/30/2022		
4/4/2022		2.93
4/5/2022		
4/6/2022		

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-14	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-9	GC-AP-MW-10	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-16
2/16/2016	0.13 (J)	0.08 (J)	0.16 (J)	0.14 (J)	0.16 (J)	0.23 (J)	0.18 (J)		
2/17/2016								0.02 (J)	0.2 (J)
4/12/2016	0.137 (J)			0.119 (J)				0.021 (J)	
4/13/2016		0.088 (J)	0.163 (J)		0.15 (J)	0.236 (J)	0.191 (J)		0.173 (J)
5/31/2016	0.149 (J)		0.19 (J)	0.132 (J)		0.255 (J)			
6/1/2016		0.109 (J)			0.19 (J)		0.201 (J)	0.051 (J)	0.253 (J)
8/15/2016									0.224 (J)
8/16/2016			0.219 (J)	0.177 (J)		0.238 (J)	0.218 (J)		
8/17/2016	0.147 (J)	0.089 (J)			0.171 (J)			0.037 (J)	
9/19/2016									
9/20/2016									
10/11/2016								<0.125	
10/12/2016	0.115 (J)	0.048 (J)	0.163 (J)	0.149 (J)	0.137 (J)	0.198 (J)	0.171 (J)		0.187 (J)
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
3/13/2017									
3/14/2017	0.11							<0.125	0.23
3/15/2017		0.08 (J)	0.13	0.16	0.15	0.22	0.16		
5/9/2017	0.14		0.15	0.18			0.17	<0.125	
5/10/2017		0.1			0.17	0.25			0.23
6/27/2017									0.22
6/28/2017	0.13	0.09 (J)	0.17	0.18	0.16	0.09 (J)	0.18	0.04 (J)	
8/29/2017	0.14	0.11	0.22	0.19	0.19	0.26	0.23	<0.125	
8/30/2017									0.28
2/27/2018	0.13	0.11			0.19	0.26			
2/28/2018			0.19	0.14			0.2	<0.125	0.23
6/4/2018									
6/5/2018		0.11			0.19	0.24			0.28
6/6/2018	0.15		0.19	0.13			0.19	<0.125	
11/5/2018			0.2	0.15			0.22		
11/6/2018								<0.125	0.24
11/7/2018	0.19	0.11			0.2	0.25			
3/26/2019		0.162	0.196	0.0775 (J)	0.223		0.219		0.316
3/27/2019	0.248					0.206		<0.125	
9/9/2019									
9/10/2019	0.209	0.113	0.26		0.178	0.226	0.194	<0.125	0.267
9/11/2019				0.118					
4/20/2020				0.0844 (J)					0.245
4/21/2020	0.254	0.114	0.198		0.181		0.173		
4/22/2020						0.224		<0.125	
8/11/2020	0.278							<0.125	0.294
8/12/2020									
8/17/2020									
8/18/2020			0.223	0.108	0.177	0.203	0.18		
8/19/2020		0.116							
3/9/2021	0.263	0.109			0.147				0.286
3/10/2021			0.161				0.113	0.104	
3/15/2021				0.0737 (J)		0.324			
3/16/2021									
8/17/2021									0.286

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-14	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-9	GC-AP-MW-10	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-16
8/18/2021									
8/23/2021									
8/24/2021		0.141			0.164	0.277		0.0914 (J)	
8/25/2021	0.239		0.188	0.111			0.117		
3/28/2022									
3/29/2022		0.108 (J)	0.107 (J)		<0.125			0.0724 (J)	
3/30/2022							<0.125		
4/4/2022	0.226 (D)					0.2785 (D)			
4/5/2022									
4/6/2022				<0.125					0.2395 (D)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-7	GC-AP-MW-3	GC-AP-MW-17	GC-AP-MW-23 (bg)	GC-AP-MW-5	GC-AP-MW-11	GC-AP-MW-6	GC-AP-MW-18
2/16/2016									
2/17/2016	0.09 (J)	0.07 (J)	0.08 (J)	0.53	0.08 (J)	0.22 (J)	0.11 (J)	0.17 (J)	0.15 (J)
4/12/2016	0.107 (J)		0.083 (J)		0.077 (J)	0.214 (J)		0.203 (J)	0.168 (J)
4/13/2016		0.081 (J)		0.437			0.119 (J)		
5/31/2016	0.145 (J)	0.103 (J)				0.232 (J)	0.134 (J)	0.212 (J)	
6/1/2016			0.118 (J)	0.376	0.101 (J)				0.178 (J)
8/15/2016			0.109 (J)	0.362					0.149 (J)
8/16/2016	0.135 (J)				0.093 (J)		0.116 (J)		
8/17/2016		0.078 (J)				0.225 (J)		0.19 (J)	
9/19/2016									
9/20/2016									
10/11/2016	0.096 (J)		0.066 (J)		0.059 (J)	0.19 (J)		0.15 (J)	
10/12/2016		0.041 (J)		0.377			0.076 (J)		0.12 (J)
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
3/13/2017									
3/14/2017	0.09 (J)	0.07 (J)	0.07 (J)	0.41	0.07 (J)	0.22	0.09 (J)	0.18	0.17
3/15/2017									
5/9/2017			0.09 (J)		0.08 (J)	0.21	0.11		
5/10/2017	0.11	0.09 (J)		0.36				0.19	0.17
6/27/2017	0.1			0.38	0.08 (J)				0.18
6/28/2017		0.08 (J)	0.1			0.21	0.17	0.18	
8/29/2017		0.09 (J)			0.1		0.14	0.22	
8/30/2017	0.13		0.12	0.38		0.25			0.21
2/27/2018		0.08 (J)	0.09 (J)		0.08 (J)	0.23	0.14	0.22	
2/28/2018	0.09 (J)			0.58					0.17
6/4/2018			0.1						
6/5/2018	0.13	0.08 (J)		0.41	0.09 (J)	0.24	0.16	0.23	0.17
6/6/2018									
11/5/2018							0.15		
11/6/2018	0.12		0.1	0.45		0.22			0.17
11/7/2018		0.08 (J)			0.08 (J)			0.22	
3/26/2019	0.113	0.106		0.573	0.123			0.253	0.192
3/27/2019			0.13			0.208	0.104		
9/9/2019			0.121	0.477					0.157
9/10/2019	0.122	0.086 (J)			0.0914 (J)		0.191	0.227	
9/11/2019						0.2			
4/20/2020	0.14		0.112						
4/21/2020		0.0951 (J)		0.565	0.095 (J)	0.224		0.218	0.171
4/22/2020							0.167		
8/11/2020				0.515					
8/12/2020	0.147				0.0867 (J)	0.221			0.198
8/17/2020			0.148						
8/18/2020							0.165		
8/19/2020		0.103						0.223	
3/9/2021		0.0949 (J)		0.628				0.17	0.205
3/10/2021	0.115				0.085 (J)		0.0749 (J)		
3/15/2021									
3/16/2021			0.23			0.282			
8/17/2021			0.184	0.494					0.212

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-7	GC-AP-MW-3	GC-AP-MW-17	GC-AP-MW-23 (bg)	GC-AP-MW-5	GC-AP-MW-11	GC-AP-MW-6	GC-AP-MW-18
8/18/2021									
8/23/2021						0.322			
8/24/2021		0.1			0.0713 (J)			0.161	
8/25/2021	0.167						0.135		
3/28/2022					<0.125				
3/29/2022	0.117 (J)	0.104 (J)						0.193	
3/30/2022							<0.125		
4/4/2022				0.5855 (D)		0.216			
4/5/2022			0.146 (D)						
4/6/2022									0.1385 (D)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-2	GC-AP-MW-29 (bg)	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	0.02 (J)	0.05 (J)	0.09 (J)						
4/12/2016	0.026 (J)								
4/13/2016		0.061 (J)	0.092 (J)						
5/31/2016									
6/1/2016	0.057 (J)	0.079 (J)	0.108 (J)						
8/15/2016		0.081 (J)	0.105 (J)						
8/16/2016	0.046 (J)			0.05 (J)	0.061 (J)	0.054 (J)	0.036 (J)	0.087 (J)	
8/17/2016									0.039 (J)
9/19/2016					0.018 (J)	0.023 (J)		0.045 (J)	
9/20/2016				0.015 (J)			<0.125		0.01 (o)
10/11/2016	<0.125	0.049 (J)	0.062 (J)	<0.125	<0.125	0.011 (J)	<0.125	0.034 (J)	
10/12/2016									<0.125
11/14/2016					<0.125	<0.125		<0.125	
11/15/2016				<0.125			<0.125		<0.125
1/3/2017					<0.125	<0.125		<0.125	
1/4/2017				<0.125			<0.125		<0.125
3/13/2017				<0.125					
3/14/2017	<0.125	0.04 (J)	<0.125		<0.125	<0.125	<0.125	<0.125	<0.125
3/15/2017									
5/9/2017		0.05 (J)	0.07 (J)	<0.125			<0.125		<0.125
5/10/2017	<0.125				0.06 (J)	0.05 (J)		0.05 (J)	
6/27/2017		0.04 (J)		<0.125	0.07 (J)	0.04 (J)	<0.125	0.05 (J)	<0.125
6/28/2017	<0.125		0.09 (J)						
8/29/2017	0.04 (J)								<0.125
8/30/2017		0.04 (J)	0.07 (J)	<0.125	0.08 (J)	0.04 (J)	<0.125	<0.125	
2/27/2018	<0.125	0.07 (J)	0.08 (J)	<0.125	0.07 (J)	0.04 (J)	<0.125	<0.125	<0.125
2/28/2018									
6/4/2018		0.07 (J)	0.09 (J)						
6/5/2018	0.04 (J)			<0.125	0.1	0.04 (J)	<0.125	<0.125	<0.125
6/6/2018									
11/5/2018						<0.125			
11/6/2018		0.04 (J)	0.07 (J)	<0.125	0.08 (J)		<0.125	<0.125	<0.125
11/7/2018	<0.125								
3/26/2019	<0.125			<0.125			<0.125		<0.125
3/27/2019		0.192	0.089 (J)		<0.125	<0.125		<0.125	
9/9/2019			0.163						
9/10/2019	0.0545 (J)	0.179							
9/11/2019				<0.125	<0.125	0.0518 (J)	<0.125	<0.125	<0.125
4/20/2020									
4/21/2020		0.12	0.126	<0.125			<0.125		<0.125
4/22/2020	<0.125				<0.125	<0.125		<0.125	
8/11/2020								<0.125	
8/12/2020	<0.125				<0.125	<0.125			
8/17/2020		0.115	0.0753 (J)						
8/18/2020				<0.125			<0.125		<0.125
8/19/2020									
3/9/2021									
3/10/2021	<0.125								
3/15/2021				<0.125	<0.125	<0.125	<0.125	<0.125	<0.125
3/16/2021		0.129	0.185						
8/17/2021		0.158	0.0974 (J)						

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-2	GC-AP-MW-29 (bg)	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-27 (bg)
8/18/2021				<0.125			<0.125		<0.125
8/23/2021					<0.125	<0.125		<0.125	
8/24/2021	<0.125								
8/25/2021									
3/28/2022			0.105 (J)	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125
3/29/2022									
3/30/2022									
4/4/2022	<0.125	0.124 (D)							
4/5/2022									
4/6/2022									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-26 (bg)	GC-AP-MW-28 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	0.159 (J)	0.055 (J)
9/19/2016		
9/20/2016	0.126 (J)	0.021 (o)
10/11/2016		
10/12/2016	0.1 (J)	<0.125
11/14/2016		
11/15/2016	0.016 (J)	<0.125
1/3/2017		
1/4/2017	<0.125	<0.125
3/13/2017	0.31 (o)	
3/14/2017		<0.125
3/15/2017		
5/9/2017	0.25 (o)	<0.125
5/10/2017		
6/27/2017	0.22 (o)	<0.125
6/28/2017		
8/29/2017	0.22 (o)	
8/30/2017		<0.125
2/27/2018	0.08 (J)	<0.125
2/28/2018		
6/4/2018		
6/5/2018	0.07 (J)	<0.125
6/6/2018		
11/5/2018		
11/6/2018	0.07 (J)	<0.125
11/7/2018		
3/26/2019	<0.125	<0.125
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	0.0716 (J)	0.0649 (J)
4/20/2020		
4/21/2020	<0.125	<0.125
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	<0.125	<0.125
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	<0.125	<0.125
3/16/2021		
8/17/2021		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-26 (bg)	GC-AP-MW-28 (bg)
8/18/2021	<0.125	<0.125
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022		<0.125
3/29/2022		
3/30/2022		
4/4/2022	<0.125	
4/5/2022		
4/6/2022		

Prediction Limit

Constituent: pH (SU) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-10	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-21	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-9	GC-AP-MW-11	GC-AP-MW-7
2/16/2016	6.29	6.84	6.16	7.15	6.4	6.21	6.5		
2/17/2016								6.04	6.45
4/12/2016					6.41	6.37			
4/13/2016	6.21	7.03	6.29	7.1			6.32	6.07	6.49
5/31/2016	6.45	6.94			6.22	6.42		6.03	6.43
6/1/2016			6.33	6.76			6.43		
8/15/2016									
8/16/2016	6.58	6.84		6.99	6.41			6.09	
8/17/2016			6.27			6.42	6.46		6.43
9/19/2016									
9/20/2016									
10/11/2016									
10/12/2016	6.6	6.75	6.3	6.89	6.42	6.38	6.53	6.06	6.46
10/31/2016									
11/1/2016					6.55	6.33			
11/2/2016									
11/14/2016									
11/15/2016									
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017									
1/25/2017	6.47	6.87	6.27	6.84	6.76	6.37	6.45	5.94	6.43
1/26/2017									
3/13/2017									
3/14/2017						6.3		6.08	6.41
3/15/2017	6.54	6.9	6.27	6.78	6.82		6.39		
5/9/2017		6.85		6.83	6.7	6.43		6.07	
5/10/2017	6.53		6.25				6.39		6.41
5/31/2017									
6/27/2017									
6/28/2017	6.49	6.85	6.25	6.98	6.58	6.4	6.4	6.02	6.46
8/29/2017	6.49	6.86	6.32	6.8	6.4	6.32	6.47	6.19	6.46
8/30/2017									
2/27/2018	6.59		6.36			6.28	6.54	6.21	6.45
2/28/2018		6.94		6.87	6.72				
6/4/2018									
6/5/2018	6.52		6.3				6.47	6.27	6.36
6/6/2018		6.99		6.94	6.57	6.25			
9/10/2018				6.74				6.33	
9/11/2018	6.53	6.87	6.36		6.64		6.53		6.38
9/12/2018						6.42			
11/5/2018		6.81		6.66	6.69			6.26	
11/6/2018									
11/7/2018	6.51		6.31			6.42	6.49		6.37
3/26/2019		6.95	6.32	6.84	6.54		6.47		6.39
3/27/2019	6.53					6.41		6.37	
9/9/2019									
9/10/2019	6.33	6.69	6.31	6.58		6.11	6.43	5.91	6.39
9/11/2019					6.22				

Prediction Limit

Constituent: pH (SU) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-10	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-21	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-9	GC-AP-MW-11	GC-AP-MW-7
4/20/2020					6.68				
4/21/2020		6.96	6.06	6.81		6.31	6.25		6.39
4/22/2020	6.44							6.26	
8/11/2020						6.02			
8/12/2020									
8/17/2020									
8/18/2020	6.33	6.98		6.31	6.76		6.21	6	
8/19/2020			6.06						6.14
3/9/2021			6.31			6.48	6.14		6.45
3/10/2021		6.89		6.26				5.97	
3/15/2021	6.29				6				
3/16/2021									
8/17/2021									
8/18/2021									
8/23/2021									
8/24/2021	6.04		6.16				6.08		6.4
8/25/2021		7.04		6.51	6.66	6.21		6.38	
3/28/2022									
3/29/2022		6.44	6.21				5.61		6.62
3/30/2022				6.09				6.02	
4/4/2022	6.21 (D)					6.39 (D)			
4/5/2022									
4/6/2022					6.24				

Prediction Limit

Constituent: pH (SU)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-5	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25
2/16/2016									
2/17/2016	6.02	6.18	6.32	6.63	6.23	6.01	6.8	5.39	5.36
4/12/2016	6.17			6.59	6.3		6.54	5.29	5.31
4/13/2016		6.28	6.44			6.17			
5/31/2016	6.15			6.57					
6/1/2016		6.36	6.24		6.24	6.18	6.49	5.39	5.35
8/15/2016		6.37	6.34		6.25	6.12			
8/16/2016	6.21						6.57	5.51	
8/17/2016				6.72					5.38
9/19/2016									
9/20/2016									
10/11/2016	6.14			6.69		6.09	6.54	5.44	5.31
10/12/2016		6.32	6.42		6.26				
10/31/2016									
11/1/2016	6.15								
11/2/2016		6.33	6.48		6.3		6.54	5.49	5.39
11/14/2016									
11/15/2016									
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	6.11	6.29	6.53	6.61	6.3	6.04	6.42	5.44	5.29
1/25/2017									
1/26/2017									
3/13/2017									
3/14/2017	6.09	6.27	6.43	6.55	6.31	6.11	6.59	5.48	5.19
3/15/2017									
5/9/2017				6.65		6.1	6.42		5.29
5/10/2017	6.11	6.3	6.33		6.34			5.43	
5/31/2017									
6/27/2017	6.09	6.28	6.38		6.32		6.44		
6/28/2017				6.66		6.09		5.49	5.27
8/29/2017							6.43	5.46	5.27
8/30/2017	6.1	6.34	6.31	6.66	6.38	6.07			
2/27/2018				6.73		6.09	6.49	5.48	
2/28/2018	6.11	6.33	6.57		6.31				5.28
6/4/2018						6.07			
6/5/2018	6.05	6.29	6.21	6.63	6.16		6.43	5.31	
6/6/2018									5.21
9/10/2018						6			
9/11/2018	6.18			6.65			6.35	5.36	
9/12/2018		6.36	6.43		6.29				5.23
11/5/2018									
11/6/2018	6.09	6.37	6.47	6.65	6.31	6.04			5.28
11/7/2018							6.37	5.34	
3/26/2019	6.1	6.34	6.52		6.3		6.46	5.32	
3/27/2019				6.59		6.06			5.27
9/9/2019			5.84		6.28	6.13			
9/10/2019	5.82	6.35					5.85	4.9	5.15
9/11/2019				6.36					

Prediction Limit

Constituent: pH (SU) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-5	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25
4/20/2020	6.16	6.43							
4/21/2020			6.61	6.5	6.31	5.99	6.26		
4/22/2020								5.3	5.26
8/11/2020		6.7	6.71						4.81
8/12/2020	6.1			6.36	6.62		6.03	5.04	
8/17/2020						5.91			
8/18/2020									
8/19/2020									
3/9/2021		6.29	6.52		6.39				
3/10/2021	6.08						6.17	5.14	5.71
3/15/2021									
3/16/2021				6.64		5.87			
8/17/2021		6.33	6.57		6.38	5.99			
8/18/2021									
8/23/2021				6.5					
8/24/2021							6.09	5.16	5.25
8/25/2021	6.12								
3/28/2022						5.32	6.08		
3/29/2022	5.81								5.26
3/30/2022									
4/4/2022			6.71 (D)	6.42 (D)				4.4 (D)	
4/5/2022									
4/6/2022		6.42 (D)			6.29 (D)				

Prediction Limit

Constituent: pH (SU) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-1	GC-AP-MW-3	GC-AP-MW-33	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-26 (bg)
2/16/2016									
2/17/2016	6.46	5.8	6.29						
4/12/2016	6.45		6.33						
4/13/2016		5.85							
5/31/2016	6.51								
6/1/2016		5.92	6.4						
8/15/2016		5.99	6.36						
8/16/2016				6.34	7.13	6	5.39	6.21	
8/17/2016	6.54								5.85
9/19/2016				6.11	6.94	6			
9/20/2016							5.37	6.05	5.82
10/11/2016	6.53	6.02	6.38	5.99	6.82	6.02	5.39	6.2	
10/12/2016									5.76
10/31/2016							5.36	6.61	
11/1/2016				5.84	6.71	5.97			
11/2/2016									
11/14/2016				5.83	6.57	5.98			
11/15/2016							5.33	6.64	5.79
11/28/2016				5.79	6.57	6			
11/29/2016							5.33	6.39	5.73
1/3/2017				5.39	6.56	6.03			
1/4/2017							5.49	6.06	5.69
1/23/2017							5.48		5.45
1/24/2017	6.44	5.92	6.34		6.41	5.9			
1/25/2017				5.09					
1/26/2017								6.02	
3/13/2017								5.68	4.8
3/14/2017	6.4	5.96	6.42	4.99	6.37	6.07	5.17		
3/15/2017									
5/9/2017		5.93	6.35				5.11	5.05	4.82
5/10/2017	6.4			4.63	6.41	6			
5/31/2017						6.02			
6/27/2017		5.86		4.76	6.14	6.05	5.29	4.9	5.27
6/28/2017	6.46		6.32						
8/29/2017	6.47								5.28
8/30/2017		5.88	6.32	4.85	6.08	6.13	5.09	4.73	
2/27/2018	6.53	5.92	6.39	4.69	5.99	6.1	5.25	4.87	5.11
2/28/2018									
6/4/2018		5.89	6.4						
6/5/2018	6.49			4.62	5.93	6.05	5.12	4.89	5.24
6/6/2018									
9/10/2018		5.89							
9/11/2018	6.48			4.79	5.86	6.07	5.19	4.88	5.28
9/12/2018			6.35						
11/5/2018						6.01			
11/6/2018		5.95	6.34	4.62	5.89		5.12	4.86	5.54
11/7/2018	6.48								
3/26/2019	6.54						5.16	4.97	5.4
3/27/2019		5.8	6.44	4.68	5.95	6.15			
9/9/2019			6.22						
9/10/2019	6.55	5.88							
9/11/2019				4.57	5.85	5.87	4.11	3.96	5.53

Prediction Limit

Constituent: pH (SU)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-1	GC-AP-MW-3	GC-AP-MW-33	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-26 (bg)
4/20/2020			6.4						
4/21/2020	6.54	5.72					4.44	3.9	5.3
4/22/2020				4.71	5.75	5.92			
8/11/2020					5.63				
8/12/2020				4.65		5.84			
8/17/2020		5.54	5.85						
8/18/2020							4.76	4.22	4.79
8/19/2020	6.49								
3/9/2021	6.43								
3/10/2021									
3/15/2021				5.83	5.61	4.57	5.02	4.79	5.32
3/16/2021		5.67	6.23						
8/17/2021		5.49	6.13						
8/18/2021							4.01	3.94	5.25
8/23/2021				6.04	5.67	4.17			
8/24/2021	6.22								
8/25/2021									
3/28/2022				4.29	5.05	5.01	4.93	4.67	
3/29/2022	5.99								
3/30/2022									
4/4/2022		5.17 (D)							5.2 (D)
4/5/2022			6.27 (D)						
4/6/2022									

Prediction Limit

Constituent: pH (SU)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-27 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	6.15	5.47
9/19/2016		
9/20/2016	4.99	5.22
10/11/2016		
10/12/2016	4.88	5.1
10/31/2016	4.87	
11/1/2016		
11/2/2016		
11/14/2016		
11/15/2016	4.81	5.07
11/28/2016		
11/29/2016	4.84	5.1
1/3/2017		
1/4/2017	4.88	5.3
1/23/2017		5.12
1/24/2017	5.4	
1/25/2017		
1/26/2017		
3/13/2017		
3/14/2017	5.13	4.74
3/15/2017		
5/9/2017	4.96	4.83
5/10/2017		
5/31/2017		
6/27/2017	5.34	4.87
6/28/2017		
8/29/2017		4.71
8/30/2017	4.69	
2/27/2018	4.91	4.96
2/28/2018		
6/4/2018		
6/5/2018	4.87	5
6/6/2018		
9/10/2018		
9/11/2018	4.65	4.94
9/12/2018		
11/5/2018		
11/6/2018	4.67	4.9
11/7/2018		
3/26/2019	4.92	4.96
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	4.33	4.85

Prediction Limit

Constituent: pH (SU) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-27 (bg)
4/20/2020		
4/21/2020	4.07	4.29
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	4.59	4.75
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	4.45	4.73
3/16/2021		
8/17/2021		
8/18/2021	3.78	4.52
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	4.69	4.73
3/29/2022		
3/30/2022		
4/4/2022		
4/5/2022		
4/6/2022		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
2/16/2016	125	108	113	9.03	49.4	119	45.2		
2/17/2016								<1	14.7
4/12/2016		114	86.7					0.49 (J)	20
4/13/2016	119			10.7	51.7	122	43.9		
5/31/2016		114	83.1	10.2		94.3			
6/1/2016	99.2				51.2		32	0.544 (J)	20.1
8/15/2016								0.332 (J)	
8/16/2016	71.9		59.3	9.1		67.1			19.1
8/17/2016		85.4			42.9		31.9		
9/19/2016									
9/20/2016									
10/11/2016								<1	18.4
10/12/2016	93.9	53.5	99.3	7.24	39.5	94.1	39.6		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								<1	15
1/25/2017	103	75.4	113	9.71	31.3	101	44		
1/26/2017									
5/9/2017	100	84	74			91		2.1 (J)	14
5/10/2017				11	30		32		
6/27/2017									14
6/28/2017	69	120	71	10	35	71	34	<1	
8/29/2017	77	180	72	14	40	80	34		16
8/30/2017								<1	
6/4/2018								1.4 (J)	
6/5/2018				39	25		22		14
6/6/2018	81	450	48			62			
9/10/2018	64								
9/11/2018			62	29	23	63	33		13
9/12/2018		200						<1	
11/5/2018	68		81			74			
11/6/2018								<1	
11/7/2018		180		45	30		76		14
3/26/2019	92		92.4		21.6	92.3	138		12.3
3/27/2019		335		66.2				6.64	
9/9/2019								6.56	
9/10/2019	63.1	193		50.5	37.4	89.3	115		12.4
9/11/2019			128						
4/20/2020			76.5					10.5	
4/21/2020	99	168			43.3	121	133		10.2
4/22/2020				63.2					
8/11/2020		242							
8/12/2020									10.2
8/17/2020								17.3	
8/18/2020	63.4		203	58.6		89	115		
8/19/2020					44.5				
3/9/2021		165			71.7		107		
3/10/2021	51.7					155			11.8
3/15/2021			204	68.5					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
3/16/2021								7.62	
8/17/2021								12	
8/18/2021									
8/23/2021									
8/24/2021				71.6	71.4		139		11.6
8/25/2021	76.1	346	181			118			
3/28/2022									11.8
3/29/2022					75.3	108	193		
3/30/2022	115								
4/4/2022		195.5 (D)		116.5 (D)					
4/5/2022								14.95 (D)	
4/6/2022			157						

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
2/16/2016									
2/17/2016	40.2	304	60.2	72.3	87.4	311	187	<1	28.7
4/12/2016			68.2				188	0.483 (J)	32.5
4/13/2016	33.1	307		123	92.7	330			
5/31/2016	28.1					324	183	0.518 (J)	
6/1/2016		273	61.4	144	111				31.9
8/15/2016		275	56	50.1	98.3				
8/16/2016	38.5						196		
8/17/2016						306		3.63	30.5
9/19/2016									
9/20/2016									
10/11/2016		284					216	15.6	32.3
10/12/2016	38.3		36.6	72.6	99.3	296			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017		302	12.3	63.4	85.4		183	28.9	33.5
1/25/2017	32					243			
1/26/2017									
5/9/2017	44	250						25	33
5/10/2017			10	82	74	210	160		
6/27/2017			9.7	44	75		150		
6/28/2017	88	230				210		45	35
8/29/2017	110					220			37
8/30/2017		250	7.8	230	87		160	96	
6/4/2018		260							
6/5/2018	79		13	230	87	390	160	36	
6/6/2018									47
9/10/2018	80	280							
9/11/2018						360	140	48	
9/12/2018			28	33	63				41
11/5/2018	81								
11/6/2018		280	11	220	97		160	93	48
11/7/2018						390			
3/26/2019			21.3	161	123	430	157		
3/27/2019	83.2	375						33.4	62.4
9/9/2019		385	17.8	57.3					
9/10/2019	87.2				68	409	150		66
9/11/2019								149	
4/20/2020					49.6		142		
4/21/2020		522	19.2	78		318		163	
4/22/2020	58.7								76.1
8/11/2020				46.7	55				79.5
8/12/2020			13.8				160	132	
8/17/2020		497							
8/18/2020	81.1								
8/19/2020						296			
3/9/2021			11.6	95.8	43.9	347			
3/10/2021	73.2						136		70.3
3/15/2021									

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
3/16/2021		548						167	
8/17/2021		502	12.2	32.8	46.6				
8/18/2021									
8/23/2021								155	
8/24/2021						234			66.6
8/25/2021	126						153		
3/28/2022		563							
3/29/2022						187	165		68.6
3/30/2022	125								
4/4/2022				68.9 (D)				160	
4/5/2022									
4/6/2022			16.05 (D)		45.3 (D)				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	132	10.4	785						
4/12/2016	130	11.3							
4/13/2016			715						
5/31/2016	111								
6/1/2016		10.4	832						
8/15/2016			862						
8/16/2016		12.2		9.33	2.06	1.78	0.894 (J)	0.702 (J)	
8/17/2016	95.8								0.928 (J)
9/19/2016				11.2	1.44	2.06			
9/20/2016							<1	<1	0.478 (J)
10/11/2016	101	19.8	888	12.6	1.38	2.33	<1	<1	
10/12/2016									0.727 (J)
11/14/2016				12.4	1.15	2.31			
11/15/2016							1.19	<1	0.448 (J)
1/3/2017				14.3	1.57	2.81			
1/4/2017							<1	<1	0.627 (J)
1/23/2017								0.493 (J)	1.34
1/24/2017	129	30.7	906		2.06	3.34			
1/25/2017				15.2					
1/26/2017							0.6 (J)		
5/9/2017			810				<1	<1	<1
5/10/2017	120	33		12	2.1 (J)	2.9 (J)			
6/27/2017			830	13	2.7 (J)	3.4 (J)	<1	<1	<1
6/28/2017	100	56							
8/29/2017	95	61							<1
8/30/2017			910	15	2.6 (J)	3.7 (J)	<1	<1	
6/4/2018			850						
6/5/2018	98	97		17	3.1 (J)	3.7 (J)	1.4 (J)	<1	2.1 (J)
6/6/2018									
9/10/2018			920						
9/11/2018	100	83		16	1.6 (J)	2.2 (J)	<1	<1	<1
9/12/2018									
11/5/2018					2.4 (J)				
11/6/2018			880	15		3.1 (J)	<1	<1	<1
11/7/2018	97	91							
3/26/2019	120	103					0.594 (J)	<1	1.66
3/27/2019			1090	15.1	3.24	3.55			
9/9/2019									
9/10/2019	140	83.4	992						
9/11/2019				14.5	2.66	3.83	<1	<1	1.29
4/20/2020									
4/21/2020	153		874				0.694 (J)	<1	2.21
4/22/2020		84.7		9.64	2.51	3.78			
8/11/2020						4.33			
8/12/2020		82.2		13.6	2.54				
8/17/2020			919						
8/18/2020							0.608 (J)	<1	1.57
8/19/2020	163								
3/9/2021	187								
3/10/2021		99.9							
3/15/2021				2.76	8.5	3.74	<1	<1	2.5

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
3/16/2021			933						
8/17/2021			745						
8/18/2021							0.86 (J)	0.754 (J)	3.18
8/23/2021				2.44	9.18	4			
8/24/2021	210	81.8							
8/25/2021									
3/28/2022				11.8	2.55	3.34	1.29 (J)	0.951 (J)	6.24
3/29/2022	190								
3/30/2022									
4/4/2022		90.2	812.5 (D)						
4/5/2022									
4/6/2022									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	6.46	16.2
9/19/2016		
9/20/2016	8.3	14.9
10/11/2016		
10/12/2016	8.36	12.4
11/14/2016		
11/15/2016	8.75	8.6
1/3/2017		
1/4/2017	7.85	12.2
1/23/2017		16
1/24/2017	6.62	
1/25/2017		
1/26/2017		
5/9/2017	5.6	55
5/10/2017		
6/27/2017	5.3	45
6/28/2017		
8/29/2017		37
8/30/2017	8.2	
6/4/2018		
6/5/2018	8.3	9.3
6/6/2018		
9/10/2018		
9/11/2018	8.9	7.8
9/12/2018		
11/5/2018		
11/6/2018	8.6	6
11/7/2018		
3/26/2019	10.1	6.86
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	10.6	5.29
4/20/2020		
4/21/2020	9.4	6.28
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	10.3	9.57
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	10.4	7.66

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
3/16/2021		
8/17/2021		
8/18/2021	10.1	7.07
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	11.2	
3/29/2022		
3/30/2022		
4/4/2022		12.5
4/5/2022		
4/6/2022		

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
2/16/2016	264	340	242	312	656	264	226		
2/17/2016								358	142
4/12/2016		298	176					393	155
4/13/2016	226			324	634	238	202		
5/31/2016		309	189	333		206			
6/1/2016	231				672		224	381	148
8/15/2016								348	
8/16/2016	181		192	327		180			132
8/17/2016		269			624		290		
9/19/2016									
9/20/2016									
10/11/2016								379	
10/12/2016	225			312	586	223	315		
10/31/2016									
11/1/2016		252	244						
11/2/2016									115
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								354	107
1/25/2017	277	259	274	286	596	271	332		
1/26/2017									
5/9/2017	255	285	191			236		368	80.7
5/10/2017				326	576		361		
6/27/2017									96.7
6/28/2017	175	348	176	304	612	198	396	368	
8/29/2017	218	528	163	348	640	187	402		120
8/30/2017								370	
6/4/2018								369	
6/5/2018				346	474		448		113
6/6/2018	207	932	138			199			
9/10/2018	197								
9/11/2018			185	335	496	184	462		108
9/12/2018		180						354	
11/5/2018	200		208			210			
11/6/2018								354	
11/7/2018		528		342	514		506		96.7
3/26/2019	218		198		546	230	586		103
3/27/2019		834		347				362	
9/9/2019								371	
9/10/2019	198	658		351	601 (D)	218 (D)	586		107
9/11/2019			316						
4/20/2020			201					371	
4/21/2020	265	628			638	291	578		107
4/22/2020				338					
8/11/2020		688							
8/12/2020									96
8/17/2020								361	
8/18/2020	179		444	376		250	542		
8/19/2020					658				

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
3/9/2021		618			746		532		
3/10/2021	296					331			105
3/15/2021			374	406					
3/16/2021								340	
8/17/2021								297	
8/18/2021									
8/23/2021									
8/24/2021				423	690		624		96.7
8/25/2021	207	774	359			263			
3/28/2022									96
3/29/2022					730	290	800		
3/30/2022	320								
4/4/2022		644 (D)		443.5 (D)					
4/5/2022								338 (D)	
4/6/2022			298						

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
2/16/2016									
2/17/2016	158	516	464	328	310	892	408	238	144
4/12/2016			491				334	316	140
4/13/2016	161	508		373	372	1010			
5/31/2016	173					1100	351	320	
6/1/2016		494	468	442	360				139
8/15/2016		476	454	392	366				
8/16/2016	173						367		
8/17/2016						1070		325	142
9/19/2016									
9/20/2016									
10/11/2016		508						333	
10/12/2016	173					1040			
10/31/2016									
11/1/2016							372		
11/2/2016			422	469	374				128
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017		510	408	464	380		354	336	124
1/25/2017	161					972			
1/26/2017									
5/9/2017	195	510						317	136
5/10/2017			358	492	381	740	332		
6/27/2017			382	516	404		331		
6/28/2017	227	480				914		373	145
8/29/2017	229					924			139
8/30/2017		478	392	646	420		317	432	
6/4/2018		528							
6/5/2018	200		352	644	408	1060	318	347	
6/6/2018									153
9/10/2018	183	472							
9/11/2018						1020	321	370	
9/12/2018			339	476	415				156
11/5/2018	193								
11/6/2018		522	368	634	447		331	409	153
11/7/2018						1050			
3/26/2019			406	516	481	1100	338 (D)		
3/27/2019	211	562						328	178
9/9/2019		666	409 (D)	500					
9/10/2019	201				453	1100	358		182
9/11/2019								455	
4/20/2020					461		369		
4/21/2020		878	429	490		1010		494	
4/22/2020	249								195
8/11/2020				522	482				193
8/12/2020			390				401	433	
8/17/2020		818							
8/18/2020	260								
8/19/2020						1050			

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
3/9/2021			412	684	524	1090			
3/10/2021	274						397		246
3/15/2021									
3/16/2021		890						510	
8/17/2021		808	397	506	490				
8/18/2021									
8/23/2021								481	
8/24/2021						930			224
8/25/2021	358						407		
3/28/2022		868							
3/29/2022						894	406		247
3/30/2022	280								
4/4/2022				553 (D)				488	
4/5/2022									
4/6/2022			408.5 (D)		472 (D)				

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	640	53	1540						
4/12/2016	610	38.7							
4/13/2016			1200						
5/31/2016	626								
6/1/2016		46	1440						
8/15/2016			1420						
8/16/2016		48		101	49.3	142	41.3	<25	
8/17/2016	628								36.7
9/19/2016				80	44.7	121			
9/20/2016							42.7	26.7	25.3
10/11/2016	636		1420						
10/12/2016									<25
10/31/2016							140	25.3	
11/1/2016				78	48	103			
11/2/2016		66.7							
11/28/2016				68.7	40.7	84			
11/29/2016							78	<25	<25
1/3/2017				60.7	49.3	89.3			
1/4/2017							34	34.7	27.3
1/23/2017								33.3	<25
1/24/2017	696	78.7	1350		48.7	83.3			
1/25/2017				54.7					
1/26/2017							32.7		
5/9/2017			1540				<25	<25	28.7
5/10/2017	687	92.7		60.7	46.7	31.3			
6/27/2017			1470	58	55.3	67.3	30.7	<25	27.3
6/28/2017	622	118							
8/29/2017	616	128							30.7
8/30/2017			1530	66.7	57.3	64	25.3	28	
6/4/2018			1370						
6/5/2018	582	171		71.3	52.7	50	<25	28.7	26
6/6/2018									
9/10/2018			1380						
9/11/2018	616	170		66.7	60	53.3	<25	29.3	<25
9/12/2018									
11/5/2018					53.3				
11/6/2018			1450	61.3		66	<25	<25	26
11/7/2018	576	163							
3/26/2019	682	174					<25	19.9 (D)	<25
3/27/2019			1910	65.3	51.35 (D)	48.7			
9/9/2019									
9/10/2019	744	167	1740						
9/11/2019				68.3 (D)	55.3	52.7	<25	34	27.3
4/20/2020									
4/21/2020	742		1530				<25	26.7	30.7
4/22/2020		162		62.7	52.7	49.3			
8/11/2020						52			
8/12/2020		165		62	49.3				
8/17/2020			1590						
8/18/2020							<25	30	27.3
8/19/2020	788								

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
3/9/2021	716								
3/10/2021		179							
3/15/2021				48	46	49.3	<25	30	30.7
3/16/2021			1620						
8/17/2021			1340						
8/18/2021							<25	28.7	28.7
8/23/2021				48.7	64.7	49.3			
8/24/2021	792	167							
8/25/2021									
3/28/2022				57.3	51.3	43.3	<25	27.3	32.7
3/29/2022	722								
3/30/2022									
4/4/2022		155	1310 (D)						
4/5/2022									
4/6/2022									

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 6/1/2022 1:05 PM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	65.3	64
9/19/2016		
9/20/2016	44	60
10/11/2016		
10/12/2016		54.7
10/31/2016	38.7	
11/1/2016		
11/2/2016		
11/28/2016		
11/29/2016	34	42
1/3/2017		
1/4/2017	42	56
1/23/2017		50.7
1/24/2017	45.3	
1/25/2017		
1/26/2017		
5/9/2017	49.3	126
5/10/2017		
6/27/2017	46	93.3
6/28/2017		
8/29/2017		84
8/30/2017	38.7	
6/4/2018		
6/5/2018	34.7	38.7
6/6/2018		
9/10/2018		
9/11/2018	34.7	35.3
9/12/2018		
11/5/2018		
11/6/2018	36	40.7
11/7/2018		
3/26/2019	30	36.7
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	40	40.7
4/20/2020		
4/21/2020	36	39.3
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	35.3	42
8/19/2020		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 6/1/2022 1:05 PM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
3/9/2021		
3/10/2021		
3/15/2021	30	42.7
3/16/2021		
8/17/2021		
8/18/2021	32	43.3
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	38.7	
3/29/2022		
3/30/2022		
4/4/2022		40.7
4/5/2022		
4/6/2022		

FIGURE E.

Trend Test - Significant Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 6/1/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-1**	**0.0172**	**76**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-14**	**0.2078**	**104**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.07797**	**124**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1243**	**90**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08488**	**78**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.05048**	**-71**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**99**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-5**	**0.03094**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.08416**	**-84**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-9**	**0.2024**	**111**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-16.33**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**2.867**	**75**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-13**	**6.611**	**93**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**17.34**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**4.579**	**103**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.345**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**9.432**	**117**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-2**	**13.77**	**100**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.384**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.704**	**153**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1803**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1907**	**-103**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-5**	**7.139**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-9**	**18.09**	**102**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8313**	**-80**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.07045**	**-88**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-5**	**-1.062**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-9**	**5.013**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02341**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.01461**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.03135**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-10**	**13.22**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**12.94**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-14**	**26.41**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-7.9**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**43.7**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.304**	**-125**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**17.51**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-27 (bg)**	**0.4499**	**82**	**74**	**Yes**	**19**	**26.32**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.6488**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-5**	**30.28**	**137**	**74**	**Yes**	**19**	**5.263**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-9**	**19.82**	**80**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-10**	**16.36**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**21.14**	**129**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-14**	**81.94**	**76**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-16**	**27.67**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**28.55**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-2**	**56.1**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.395**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**26.07**	**108**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**16.37**	**121**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-6.287**	**-102**	**-74**	**Yes**	**19**	**57.89**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-5**	**36.19**	**127**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-9**	**87.78**	**148**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-1**	**0.0172**	**76**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-10	0.07468	38	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-11	-0.03205	-51	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-12	0.02144	17	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-13	0.02241	21	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-14**	**0.2078**	**104**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.07797**	**124**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1243**	**90**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08488**	**78**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.05048**	**-71**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-2	0.001889	32	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-21	0.002128	5	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-23 (bg)	0	34	68	No	18	83.33	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-24 (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**99**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-26 (bg)	0	7	68	No	18	94.44	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-27 (bg)	0	21	68	No	18	88.89	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-28 (bg)	0	7	68	No	18	94.44	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-29 (bg)	0	11	68	No	18	94.44	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-5**	**0.03094**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.08416**	**-84**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-8	0.05165	28	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-9**	**0.2024**	**111**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-16.33**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**2.867**	**75**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-12	2.844	69	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-13**	**6.611**	**93**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**17.34**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**4.579**	**103**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.345**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**9.432**	**117**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-18	-0.8245	-18	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-2**	**13.77**	**100**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-21	0.4469	19	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.384**	**-107**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.704**	**153**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-26 (bg)	-0.3246	-39	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-27 (bg)	0.04491	25	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1803**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1907**	**-103**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-3	-3.793	-39	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-5**	**7.139**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-6	3.117	59	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-7	-0.7706	-4	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-8	2.659	57	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-9**	**18.09**	**102**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-1	-0.1215	-6	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-10	0.1169	8	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-11	-0.6636	-52	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-12	-0.4994	-34	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8313**	**-80**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-15	-0.1127	-18	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-16	-0.4083	-52	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-17	-1.015	-54	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-18	0.4917	72	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-2	-0.3644	-38	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-21	0.2131	17	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.07045**	**-88**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-24 (bg)	0.01314	1	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-25	-0.77	-41	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-26 (bg)	-0.02146	-12	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-27 (bg)	0.0869	63	74	No	19	5.263	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-28 (bg)	-0.06692	-57	-74	No	19	10.53	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-29 (bg)	-0.2286	-70	-74	No	19	10.53	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-3	-0.2765	-45	-74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-31	0.05755	53	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-5**	**-1.062**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-6	2.111	68	74	No	19	0	n/a	n/a	0.01	NP

Trend Test - All Results

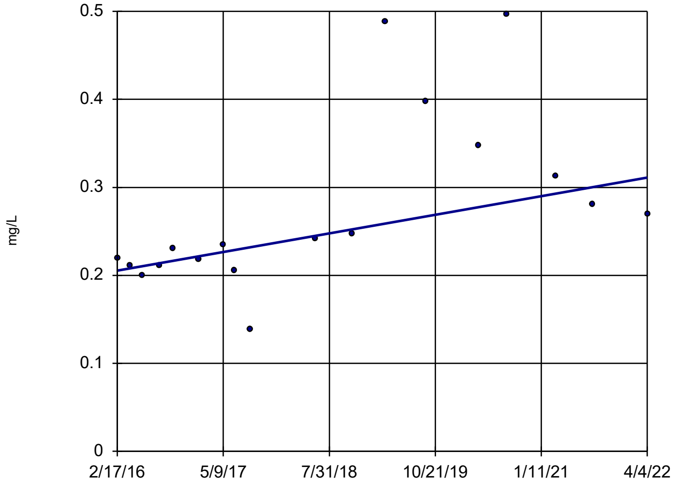
Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/1/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	GC-AP-MW-7	6.316	71	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-8	2.111	18	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-9**	**5.013**	**139**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-10	0.00487	33	74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02341**	**99**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.01461**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.03135**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-23 (bg)	0.002137	37	74	No	19	5.263	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-24 (bg)	0	60	74	No	19	63.16	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-26 (bg)	0	3	53	No	15	46.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-27 (bg)	0	17	68	No	18	94.44	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-28 (bg)	0	11	68	No	18	88.89	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-29 (bg)	0	33	74	No	19	89.47	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-5	0.002335	23	74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-6	0.003724	31	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-1	20.65	51	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-10**	**13.22**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**12.94**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-12	1.353	5	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-13	11.74	46	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-14**	**26.41**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-7.9**	**-83**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**43.7**	**81**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-21	-6.219	-67	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.304**	**-125**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**17.51**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-26 (bg)	-1.736	-63	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-27 (bg)**	**0.4499**	**82**	**74**	**Yes**	**19**	**26.32**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.6488**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-29 (bg)	0	26	74	No	19	52.63	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-5**	**30.28**	**137**	**74**	**Yes**	**19**	**5.263**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-6	11.48	61	74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-7	-1.965	-6	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-9**	**19.82**	**80**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-1	18.43	20	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-10**	**16.36**	**114**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**21.14**	**129**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-12	10.43	45	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-13	18.79	60	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-14**	**81.94**	**76**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-15	7.03	36	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-16**	**27.67**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**28.55**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-18	-10.17	-43	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-2**	**56.1**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-21	-2.005	-5	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.395**	**-96**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**26.07**	**108**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**16.37**	**121**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-26 (bg)	-3.514	-53	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-27 (bg)	0.7289	46	74	No	19	26.32	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-28 (bg)	-2.224	-69	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-6.287**	**-102**	**-74**	**Yes**	**19**	**57.89**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-3	-5.087	-58	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-5**	**36.19**	**127**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-6	21.04	60	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-7	3.847	12	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-8	10.43	27	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-9**	**87.78**	**148**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-1



n = 18

Slope = 0.0172
units per year.

Mann-Kendall
statistic = 76
critical = 68

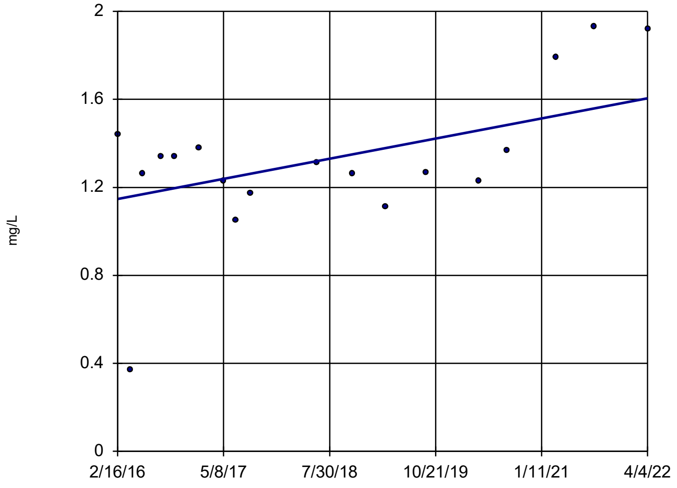
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 6/1/2022 1:08 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 18

Slope = 0.07468
units per year.

Mann-Kendall
statistic = 38
critical = 68

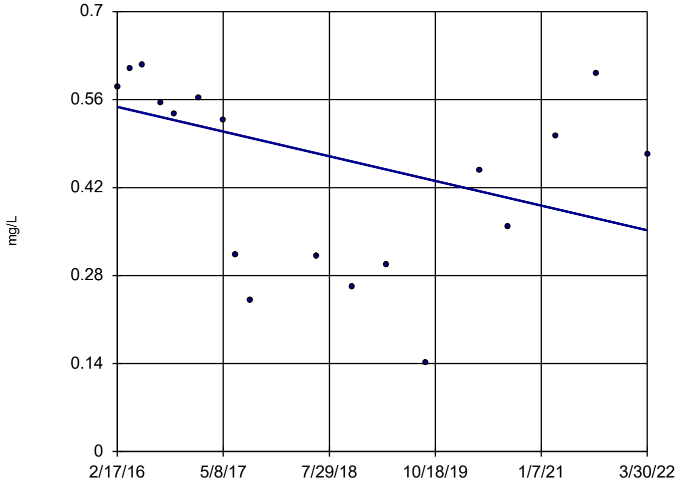
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 6/1/2022 1:08 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 18

Slope = -0.03205
units per year.

Mann-Kendall
statistic = -51
critical = -68

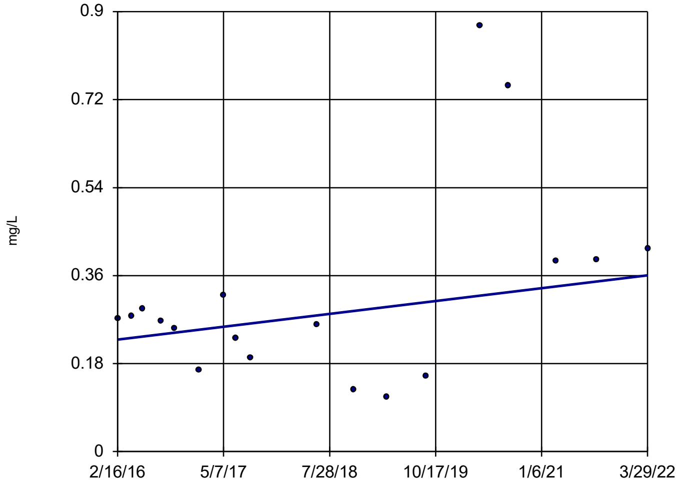
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 6/1/2022 1:08 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 18

Slope = 0.02144
units per year.

Mann-Kendall
statistic = 17
critical = 68

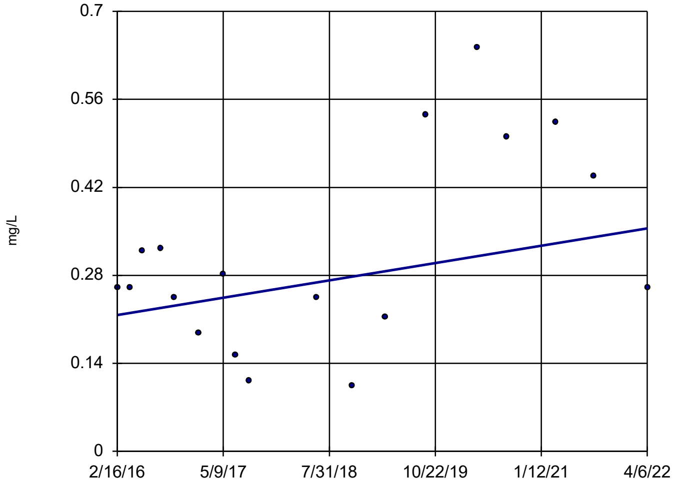
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 6/1/2022 1:08 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-13



n = 18

Slope = 0.02241 units per year.

Mann-Kendall statistic = 21 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

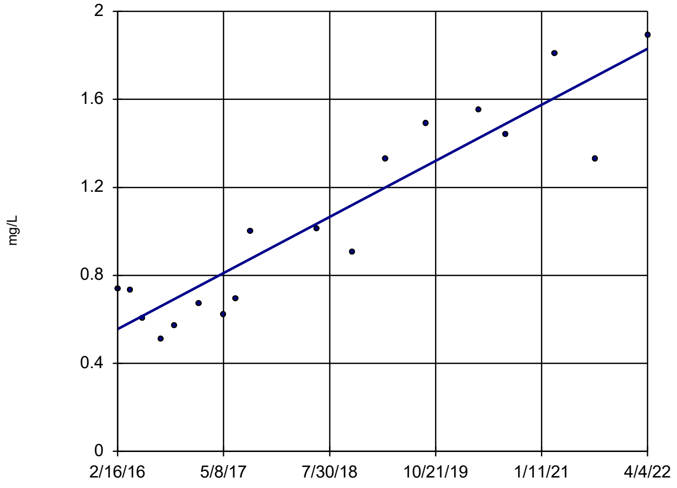
Constituent: Boron Analysis Run 6/1/2022 1:08 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 18

Slope = 0.2078 units per year.

Mann-Kendall statistic = 104 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

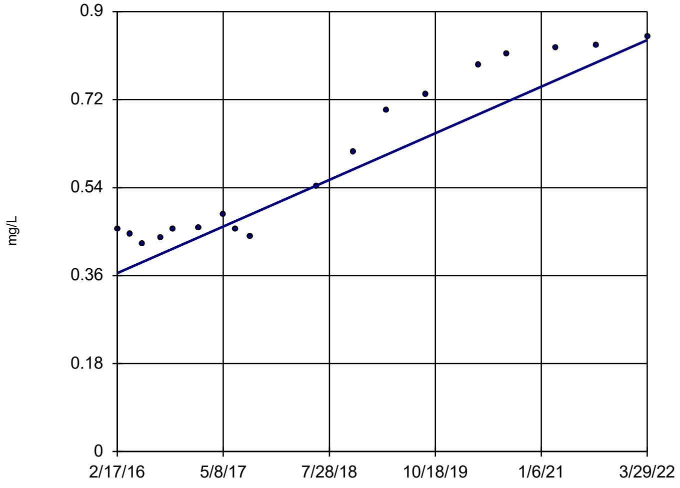
Constituent: Boron Analysis Run 6/1/2022 1:08 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-15



n = 18

Slope = 0.07797 units per year.

Mann-Kendall statistic = 124 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

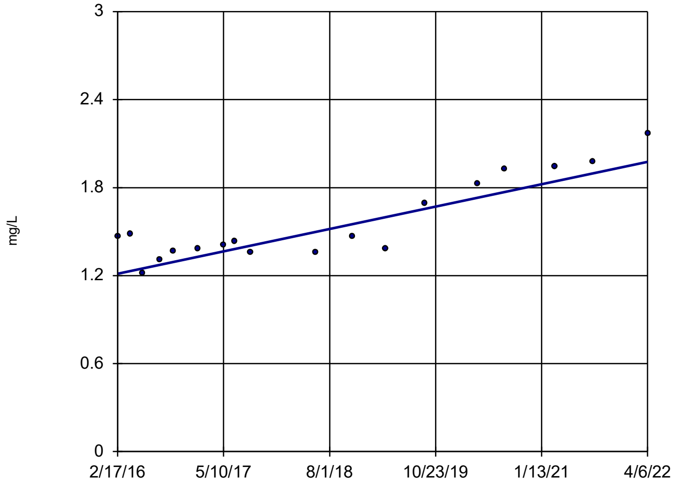
Constituent: Boron Analysis Run 6/1/2022 1:08 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-16



n = 18

Slope = 0.1243 units per year.

Mann-Kendall statistic = 90 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

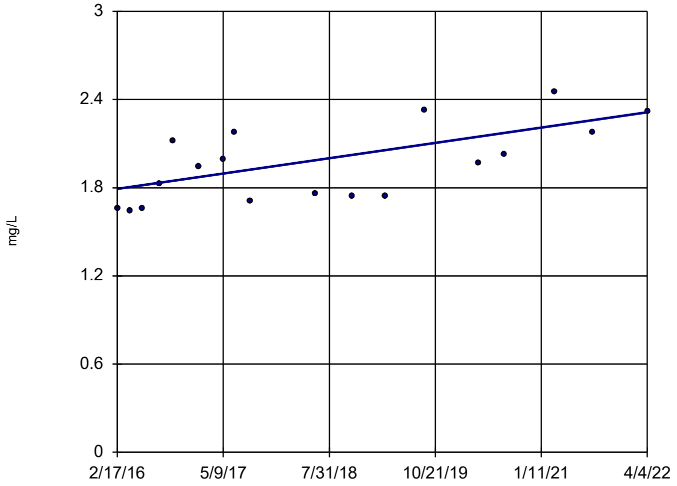
Constituent: Boron Analysis Run 6/1/2022 1:08 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-17



n = 18

Slope = 0.08488 units per year.

Mann-Kendall statistic = 78 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

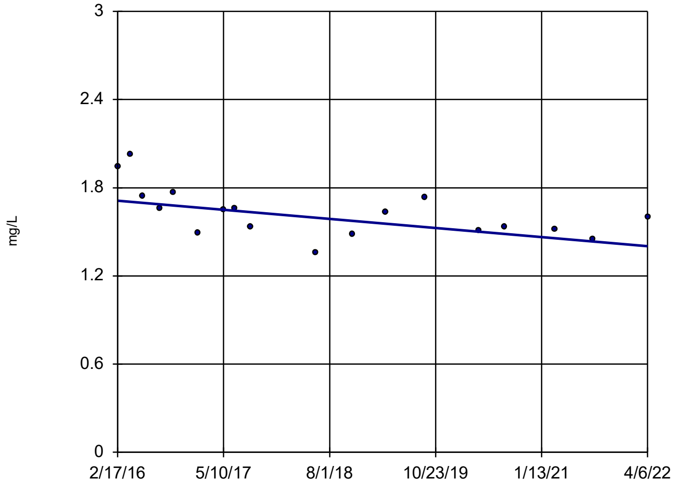
Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-18



n = 18

Slope = -0.05048 units per year.

Mann-Kendall statistic = -71 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

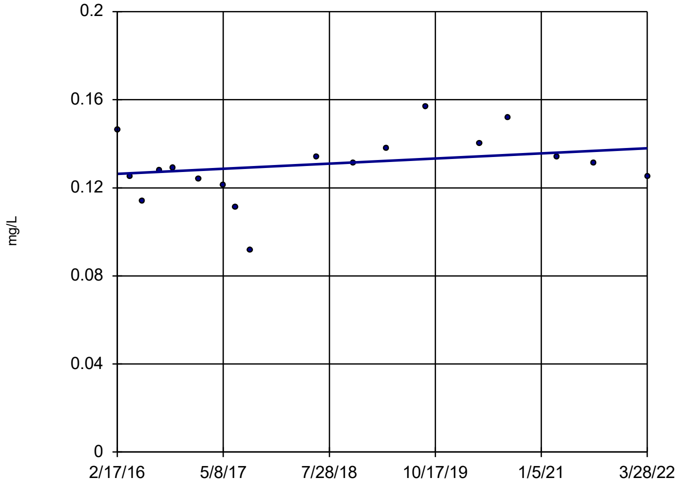
Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 18

Slope = 0.001889 units per year.

Mann-Kendall statistic = 32 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

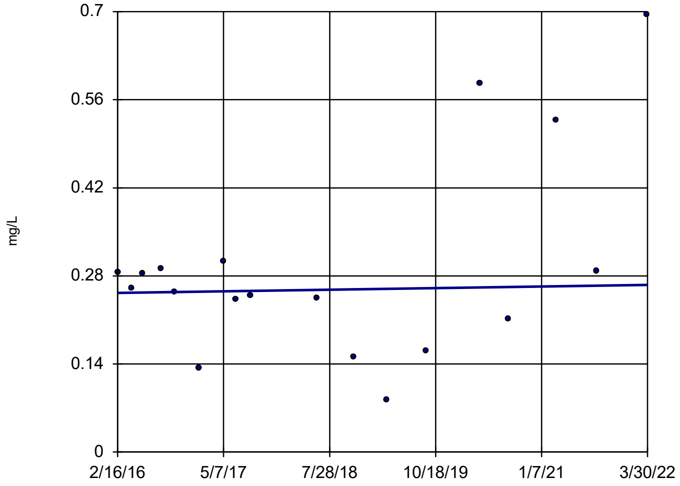
Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 18

Slope = 0.002128 units per year.

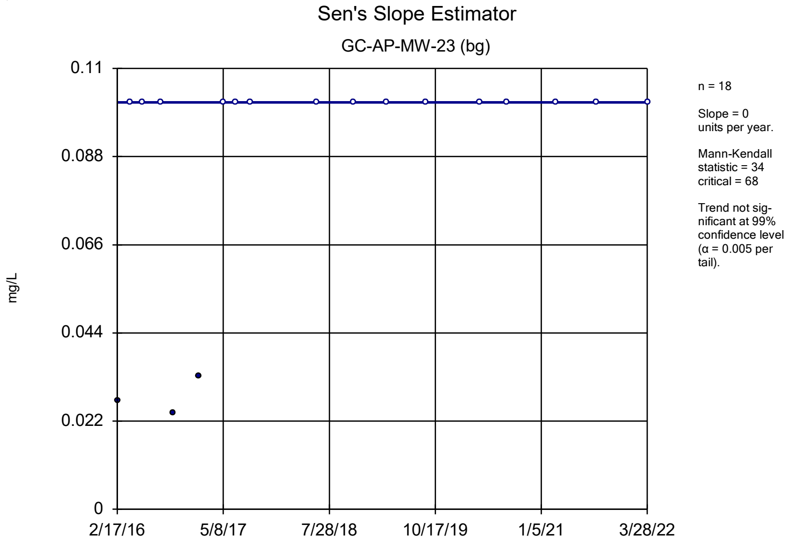
Mann-Kendall statistic = 5 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 18

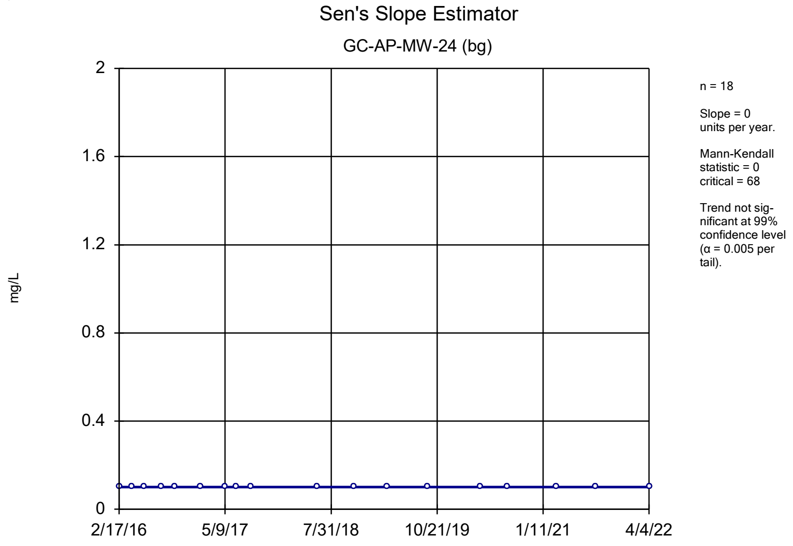
Slope = 0
units per year.

Mann-Kendall
statistic = 34
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 18

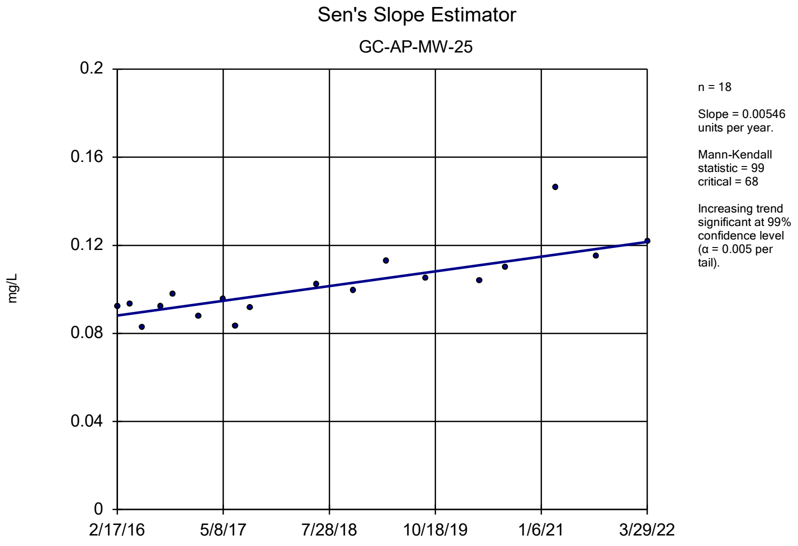
Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 18

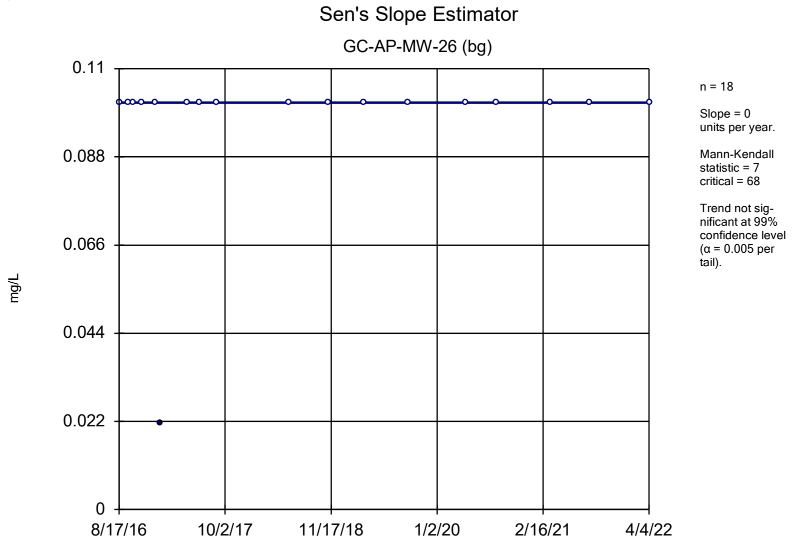
Slope = 0.00546
units per year.

Mann-Kendall
statistic = 99
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 18

Slope = 0
units per year.

Mann-Kendall
statistic = 7
critical = 68

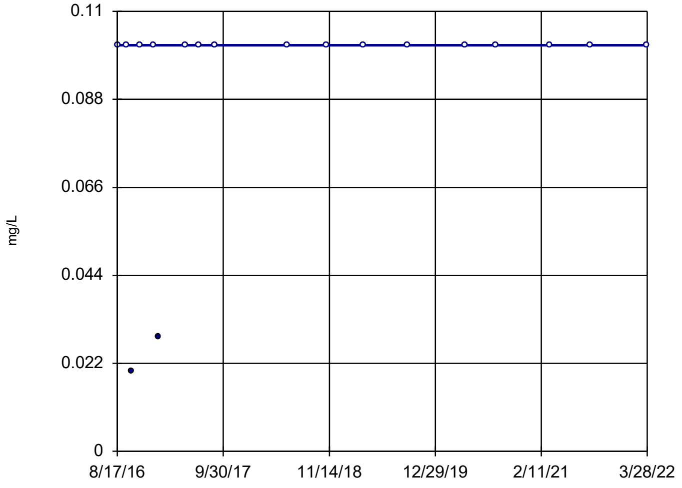
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 18

Slope = 0
units per year.

Mann-Kendall
statistic = 21
critical = 68

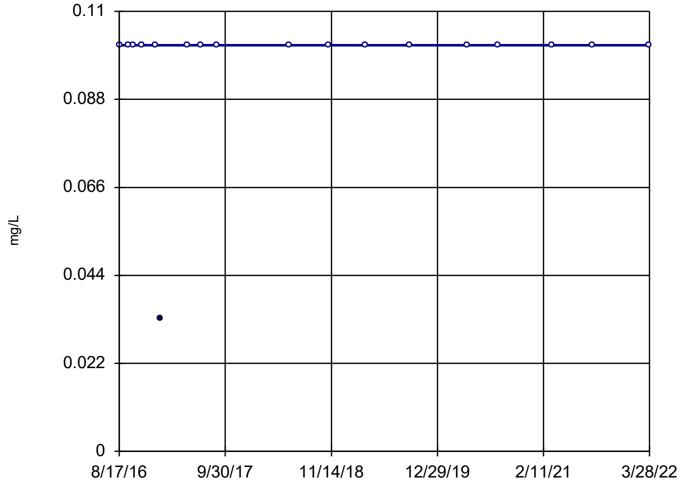
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 18

Slope = 0
units per year.

Mann-Kendall
statistic = 7
critical = 68

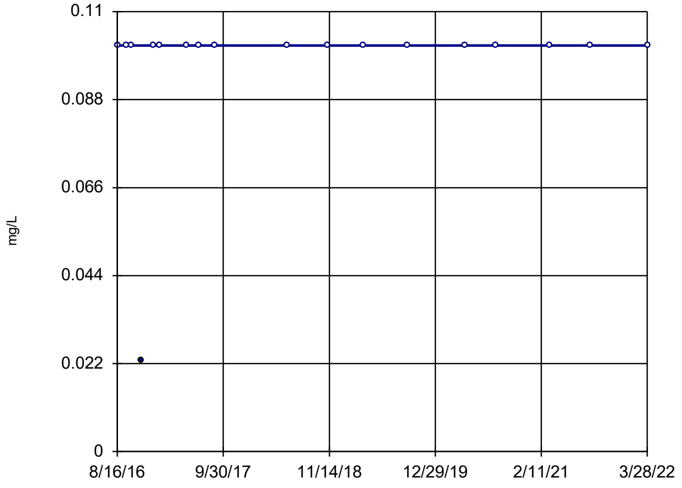
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 18

Slope = 0
units per year.

Mann-Kendall
statistic = 11
critical = 68

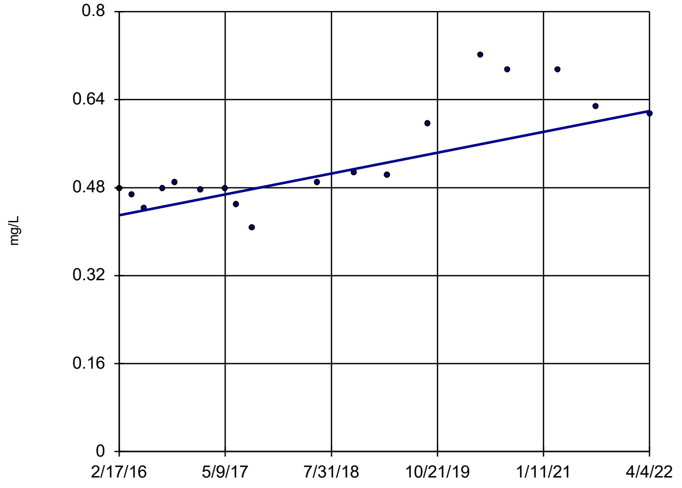
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 18

Slope = 0.03094
units per year.

Mann-Kendall
statistic = 86
critical = 68

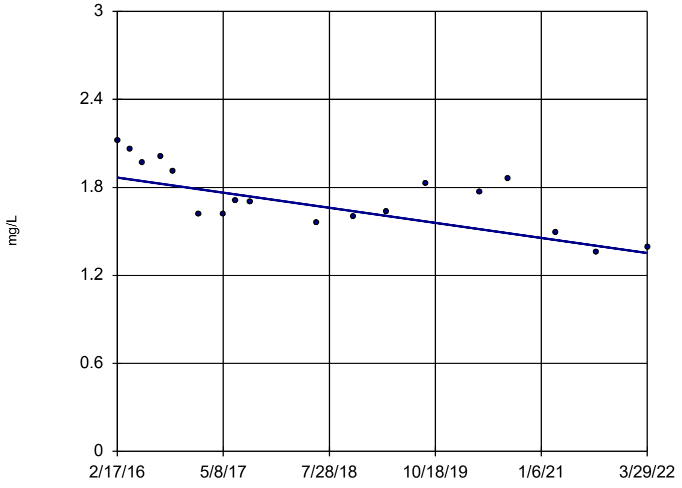
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-6



n = 18

Slope = -0.08416
units per year.

Mann-Kendall
statistic = -84
critical = -68

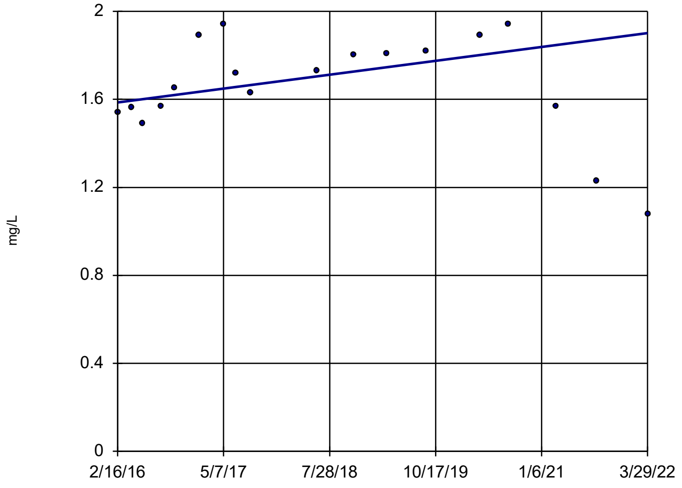
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-8



n = 18

Slope = 0.05165
units per year.

Mann-Kendall
statistic = 28
critical = 68

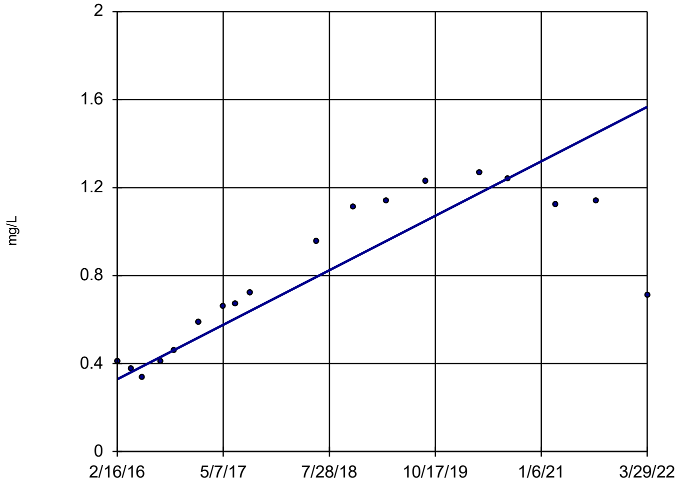
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-9



n = 18

Slope = 0.2024
units per year.

Mann-Kendall
statistic = 111
critical = 68

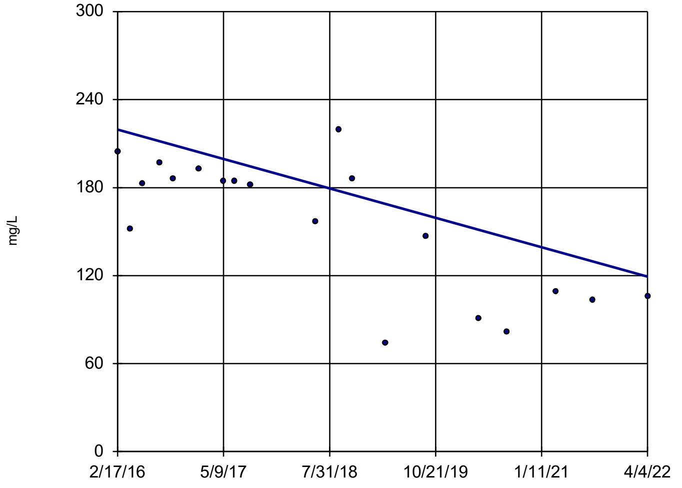
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-1



n = 19

Slope = -16.33
units per year.

Mann-Kendall
statistic = -83
critical = -74

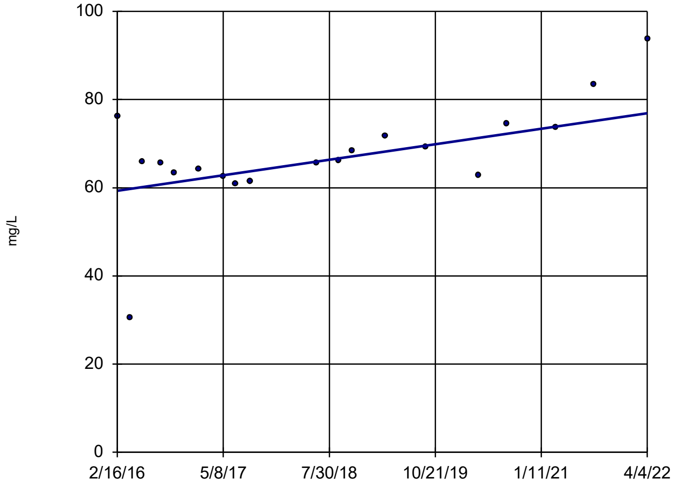
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 19

Slope = 2.867
units per year.

Mann-Kendall
statistic = 75
critical = 74

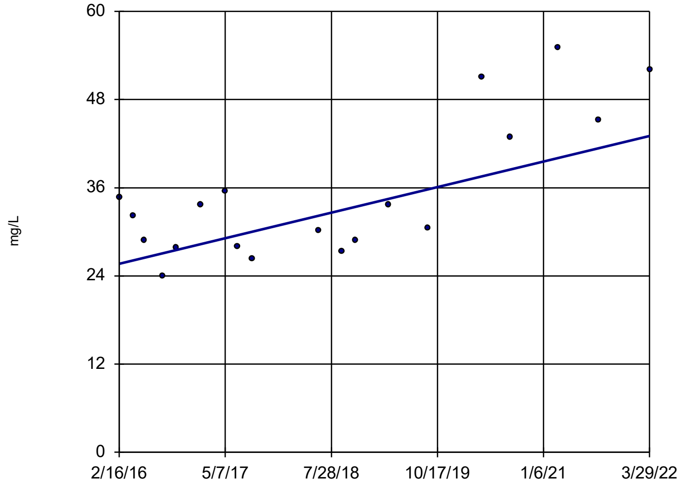
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 19

Slope = 2.844
units per year.

Mann-Kendall
statistic = 69
critical = 74

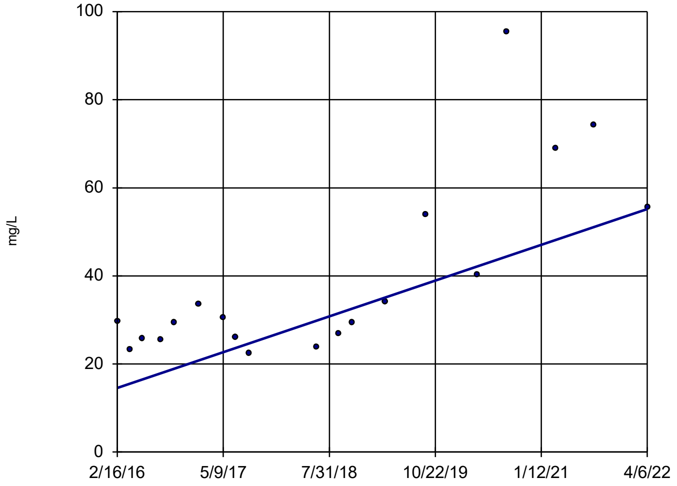
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-13



n = 19

Slope = 6.611
units per year.

Mann-Kendall
statistic = 93
critical = 74

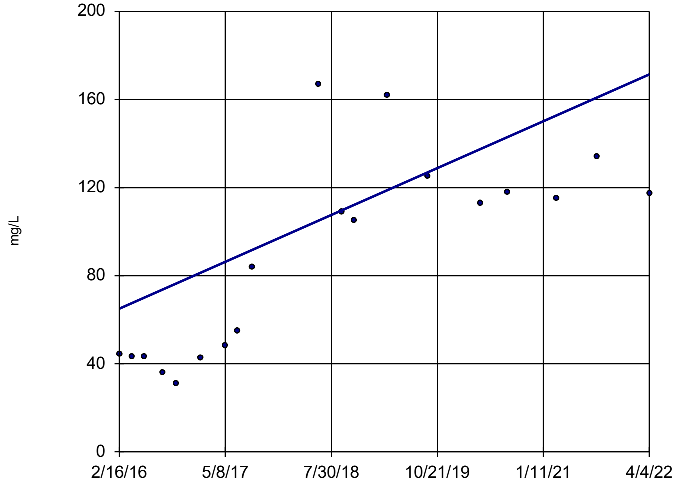
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 19

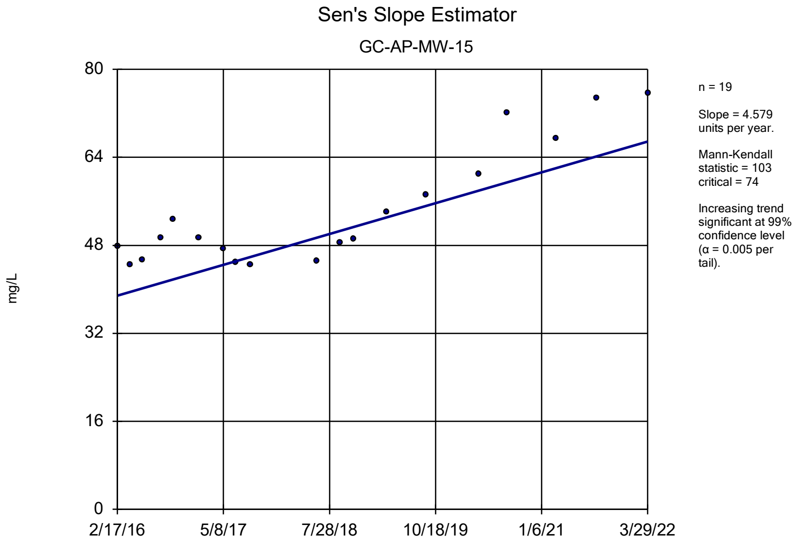
Slope = 17.34
units per year.

Mann-Kendall
statistic = 99
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

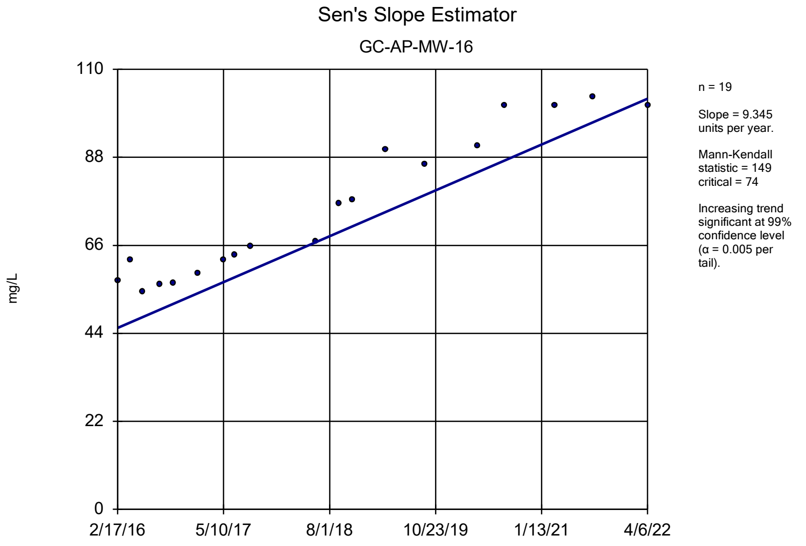
Slope = 4.579 units per year.

Mann-Kendall statistic = 103 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

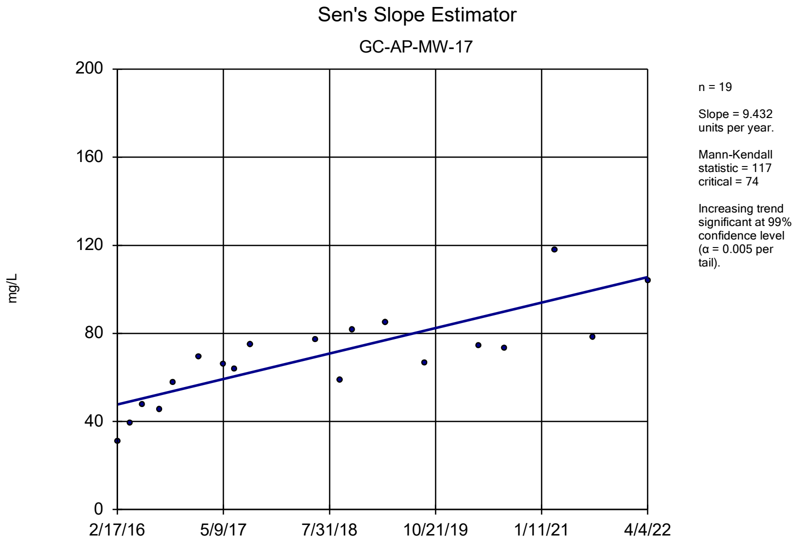
Slope = 9.345 units per year.

Mann-Kendall statistic = 149 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

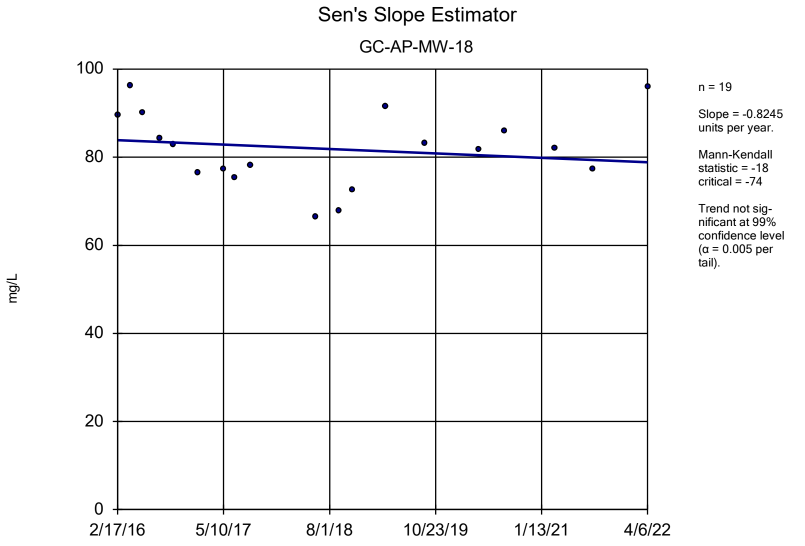
Slope = 9.432 units per year.

Mann-Kendall statistic = 117 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

Slope = -0.8245 units per year.

Mann-Kendall statistic = -18 critical = -74

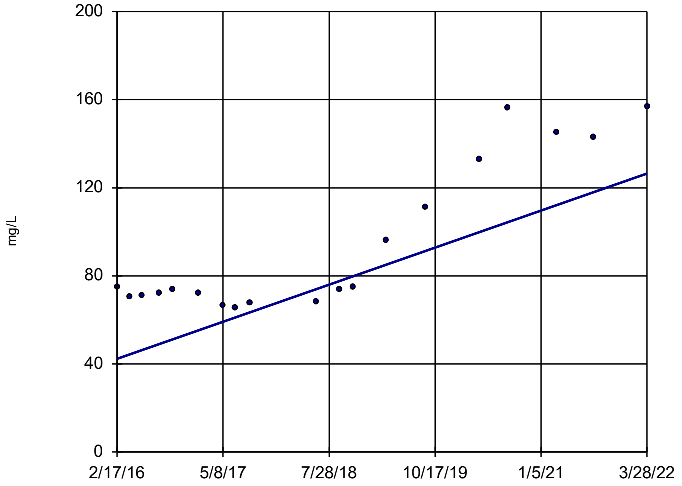
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 19

Slope = 13.77 units per year.

Mann-Kendall statistic = 100 critical = 74

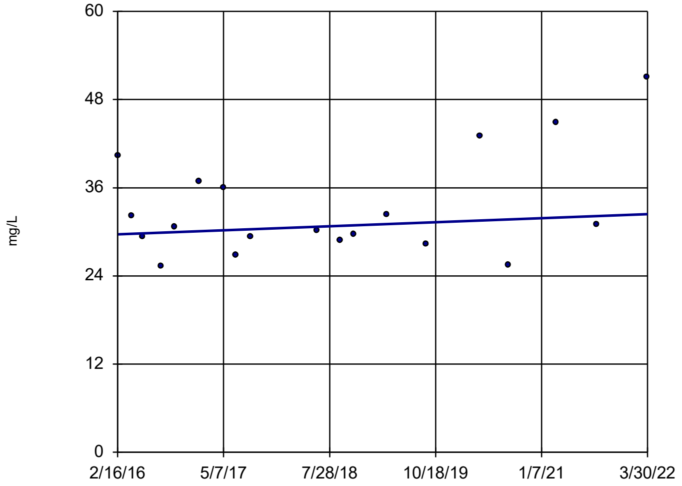
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 19

Slope = 0.4469 units per year.

Mann-Kendall statistic = 19 critical = 74

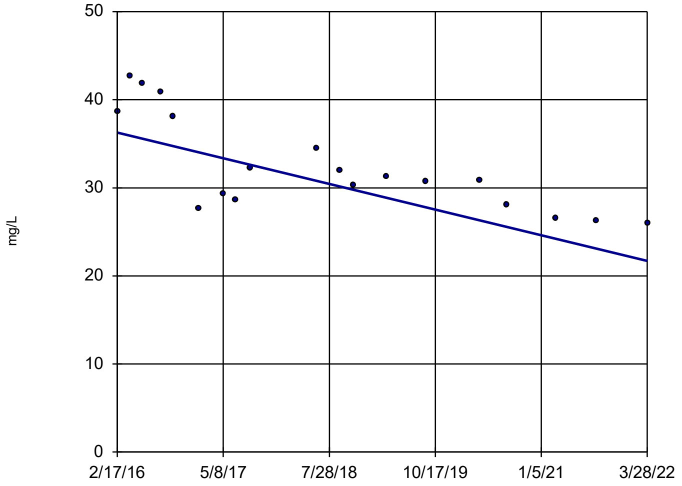
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 19

Slope = -2.384 units per year.

Mann-Kendall statistic = -107 critical = -74

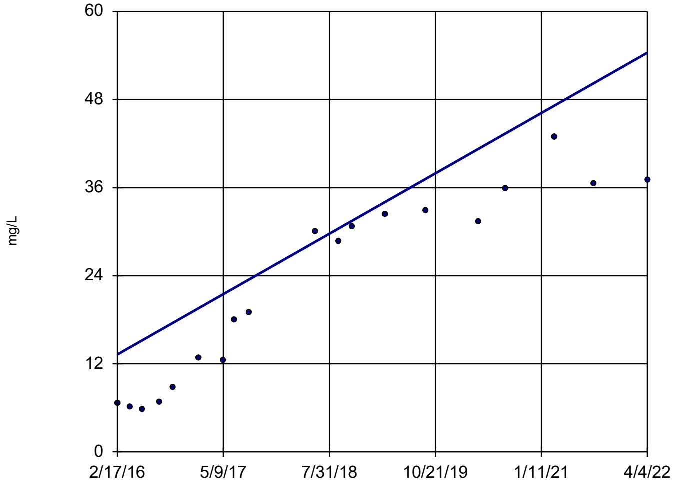
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 19

Slope = 6.704 units per year.

Mann-Kendall statistic = 153 critical = 74

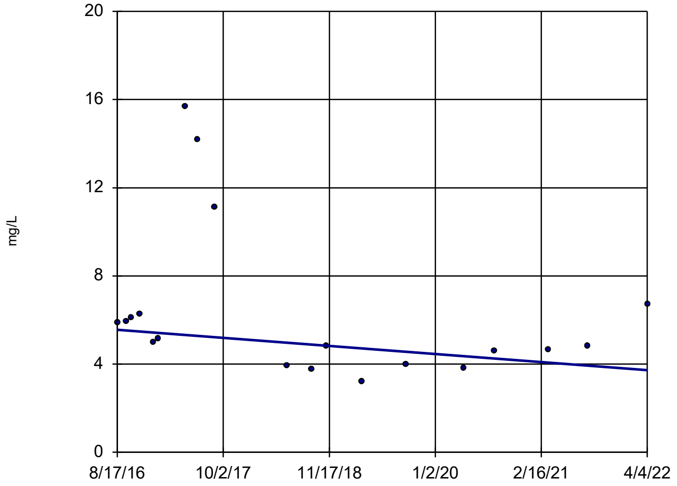
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 19

Slope = -0.3246 units per year.

Mann-Kendall statistic = -39 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

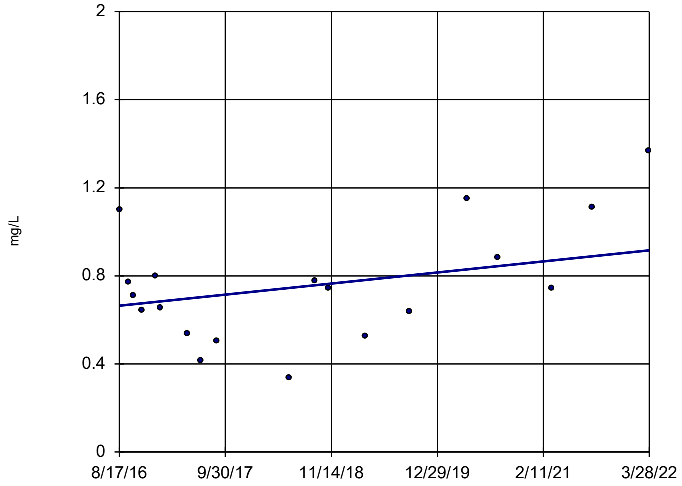
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 19

Slope = 0.04491 units per year.

Mann-Kendall statistic = 25 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

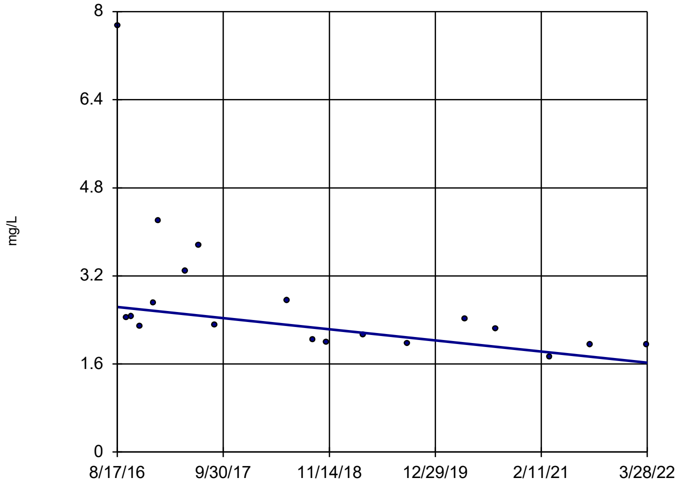
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 19

Slope = -0.1803 units per year.

Mann-Kendall statistic = -96 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

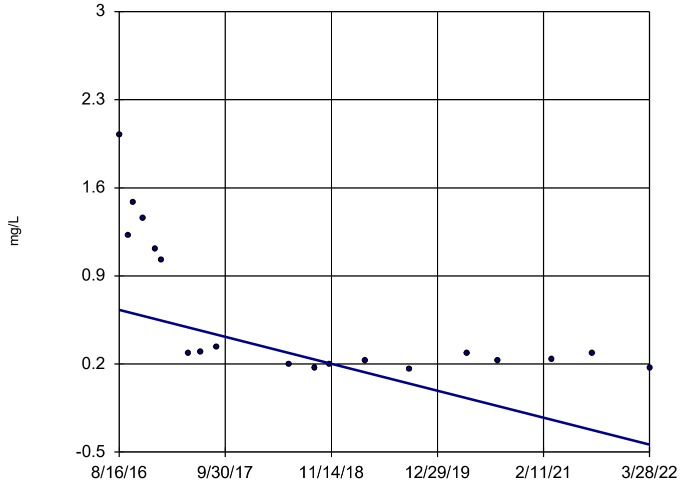
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 19

Slope = -0.1907 units per year.

Mann-Kendall statistic = -103 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

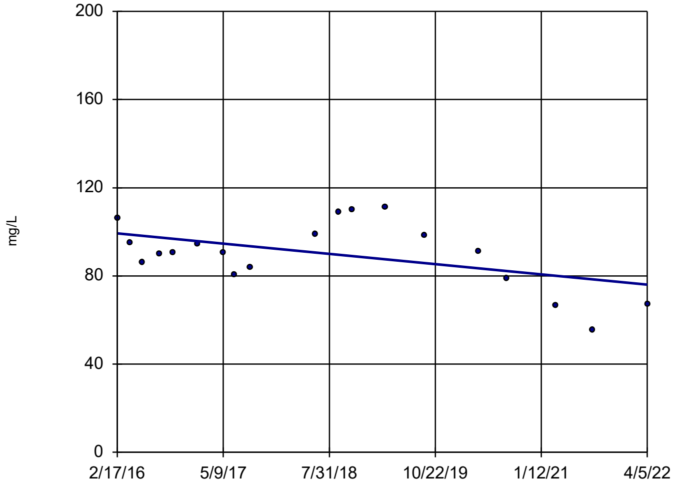
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-3



n = 19

Slope = -3.793
units per year.

Mann-Kendall
statistic = -39
critical = -74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

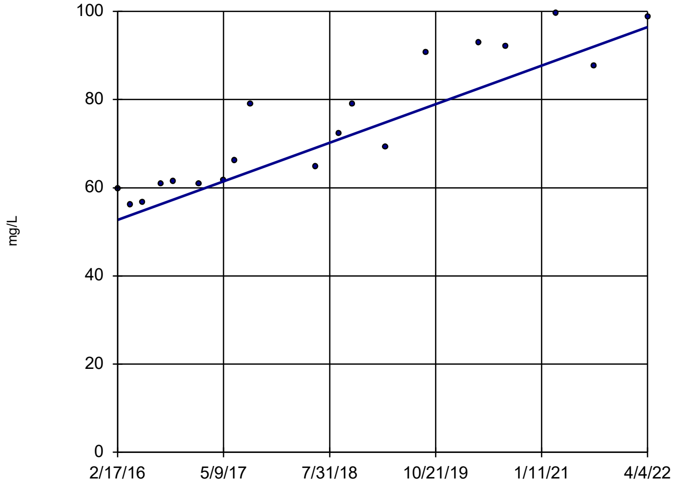
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 19

Slope = 7.139
units per year.

Mann-Kendall
statistic = 139
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

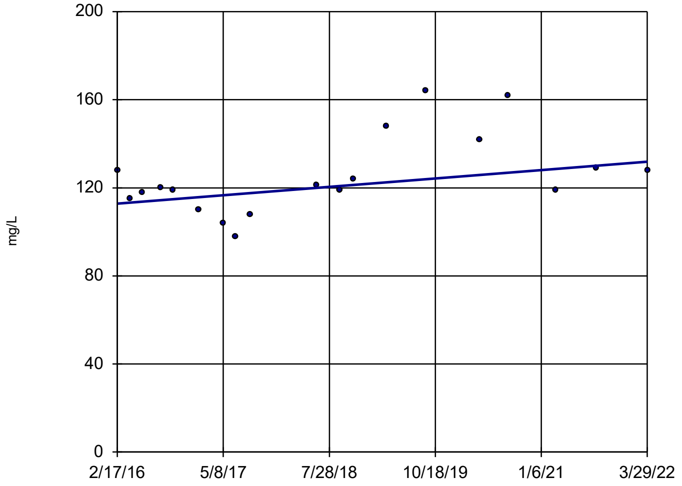
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-6



n = 19

Slope = 3.117
units per year.

Mann-Kendall
statistic = 59
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

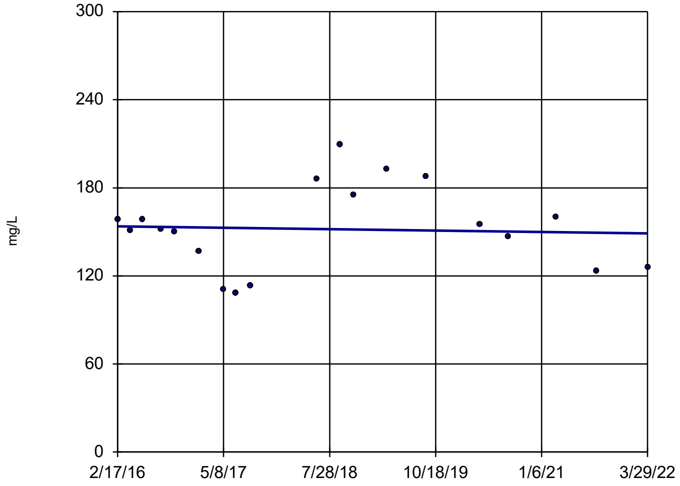
Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-7



n = 19

Slope = -0.7706
units per year.

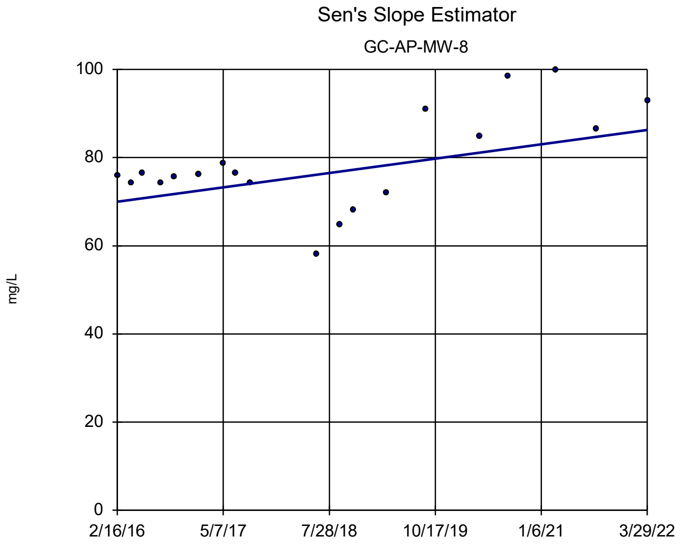
Mann-Kendall
statistic = -4
critical = -74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-8

n = 19

Slope = 2.659 units per year.

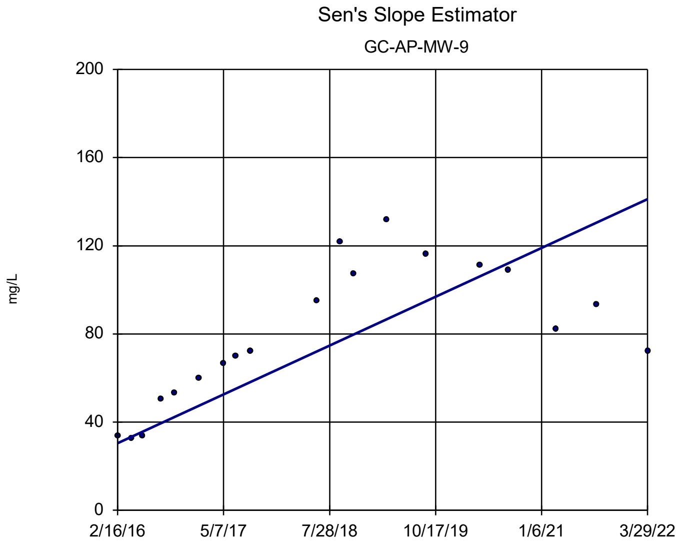
Mann-Kendall statistic = 57 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-9

n = 19

Slope = 18.09 units per year.

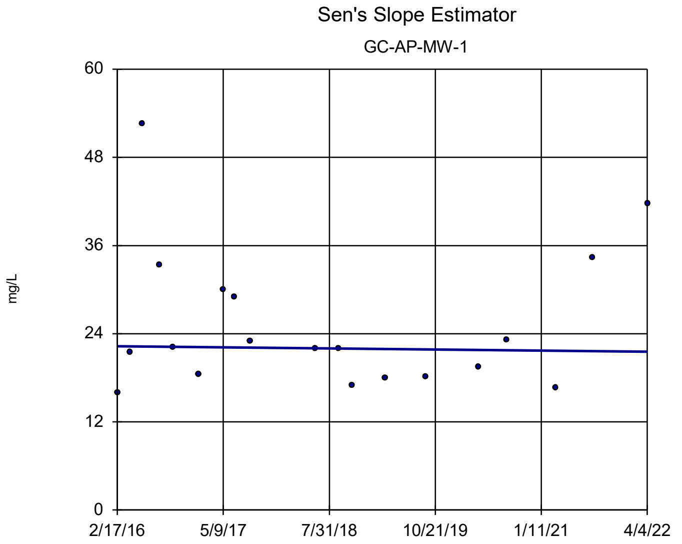
Mann-Kendall statistic = 102 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-1

n = 19

Slope = -0.1215 units per year.

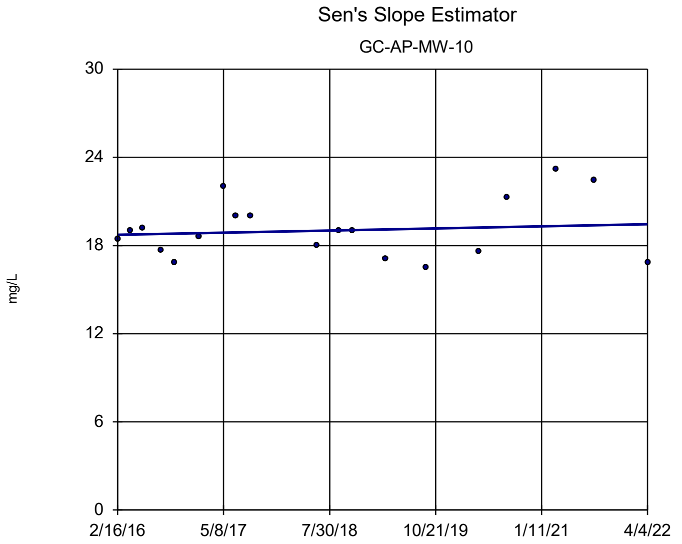
Mann-Kendall statistic = -6 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-10

n = 19

Slope = 0.1169 units per year.

Mann-Kendall statistic = 8 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

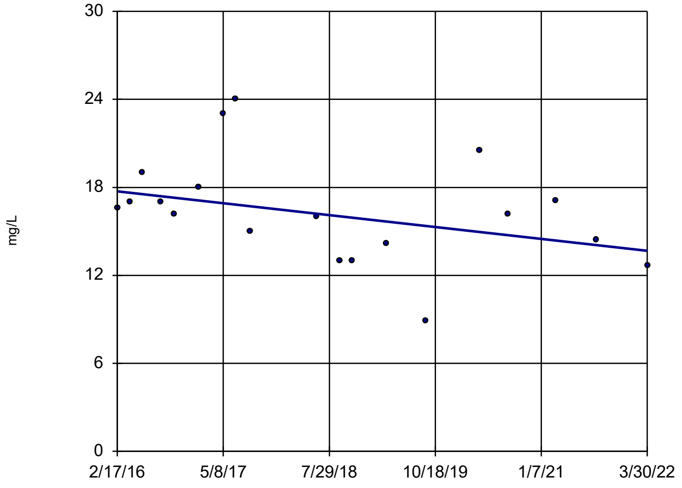
Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 19

Slope = -0.6636
units per year.

Mann-Kendall
statistic = -52
critical = -74

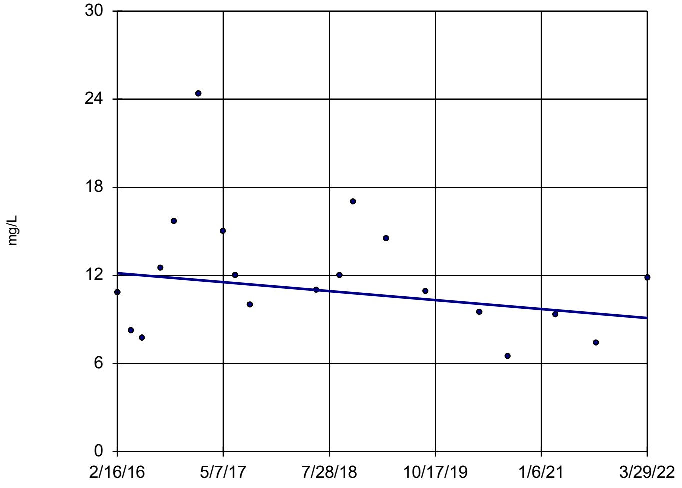
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 19

Slope = -0.4994
units per year.

Mann-Kendall
statistic = -34
critical = -74

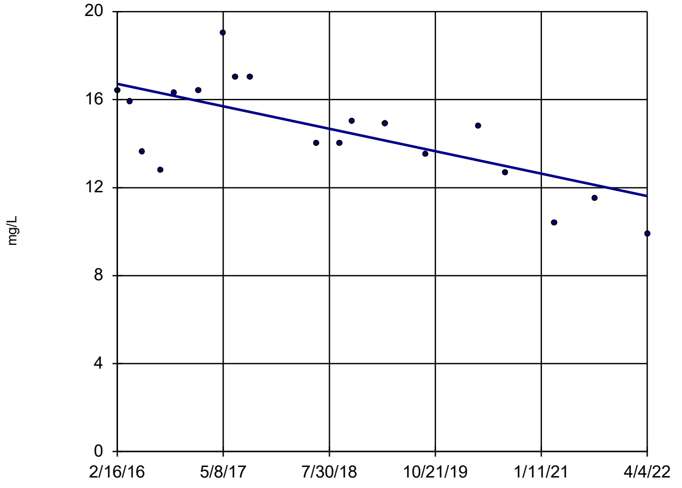
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 19

Slope = -0.8313
units per year.

Mann-Kendall
statistic = -80
critical = -74

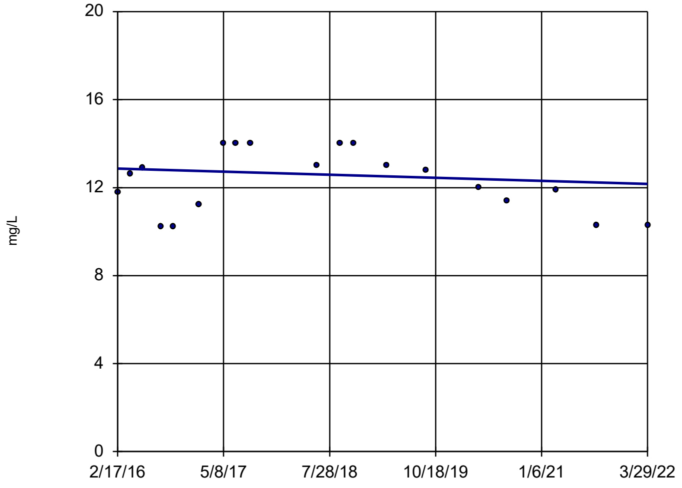
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-15



n = 19

Slope = -0.1127
units per year.

Mann-Kendall
statistic = -18
critical = -74

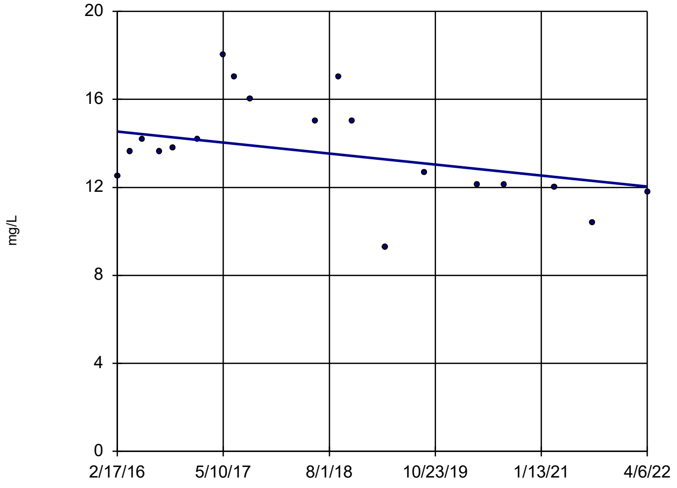
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-16



n = 19

Slope = -0.4083 units per year.

Mann-Kendall statistic = -52 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

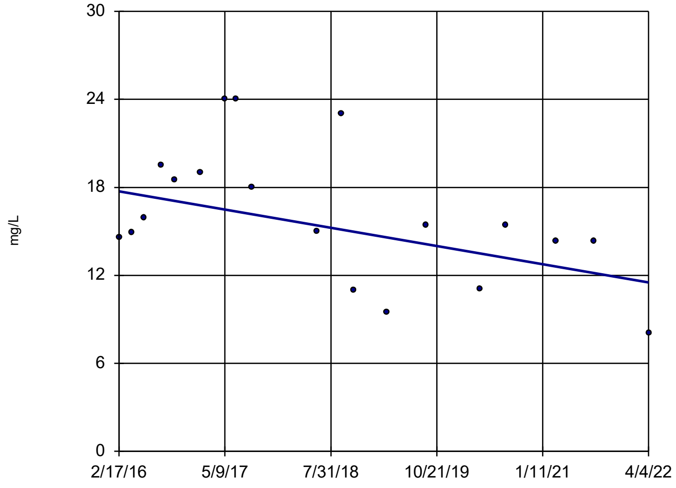
Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-17



n = 19

Slope = -1.015 units per year.

Mann-Kendall statistic = -54 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

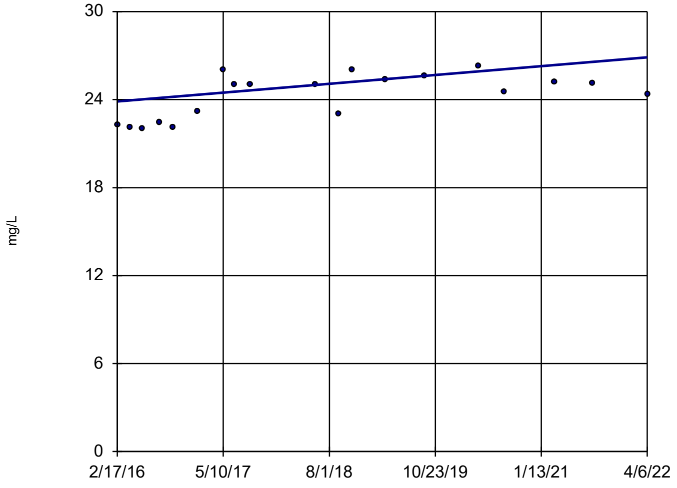
Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-18



n = 19

Slope = 0.4917 units per year.

Mann-Kendall statistic = 72 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

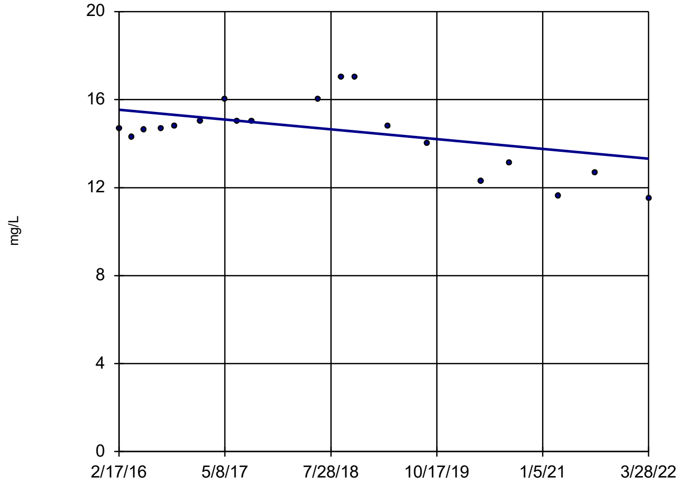
Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 19

Slope = -0.3644 units per year.

Mann-Kendall statistic = -38 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

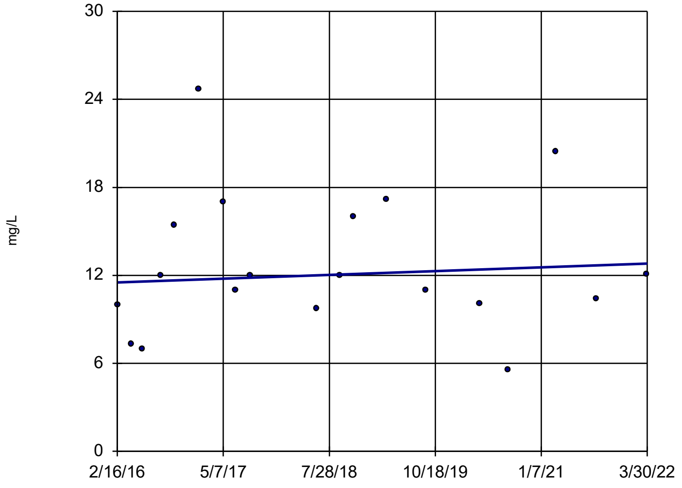
Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 19

Slope = 0.2131
units per year.

Mann-Kendall
statistic = 17
critical = 74

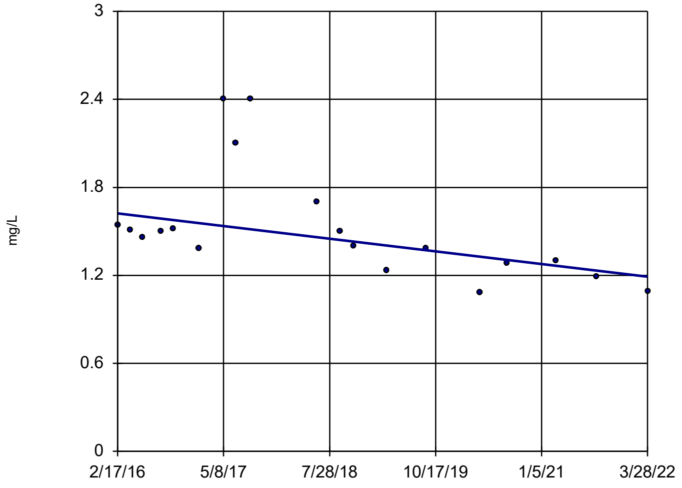
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 19

Slope = -0.07045
units per year.

Mann-Kendall
statistic = -88
critical = -74

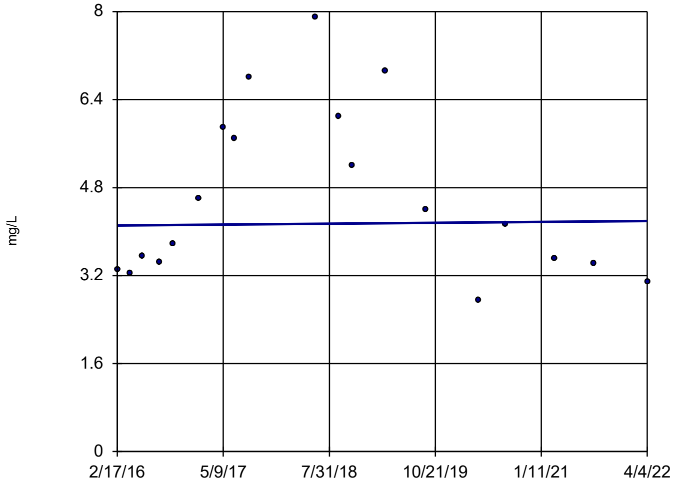
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 19

Slope = 0.01314
units per year.

Mann-Kendall
statistic = 1
critical = 74

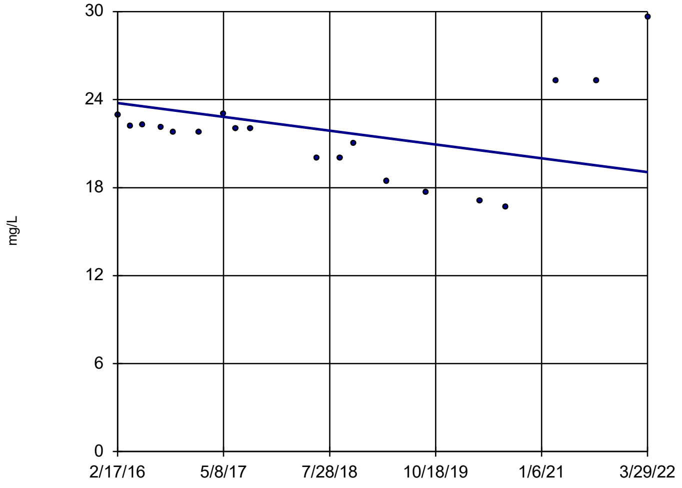
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-25



n = 19

Slope = -0.77
units per year.

Mann-Kendall
statistic = -41
critical = -74

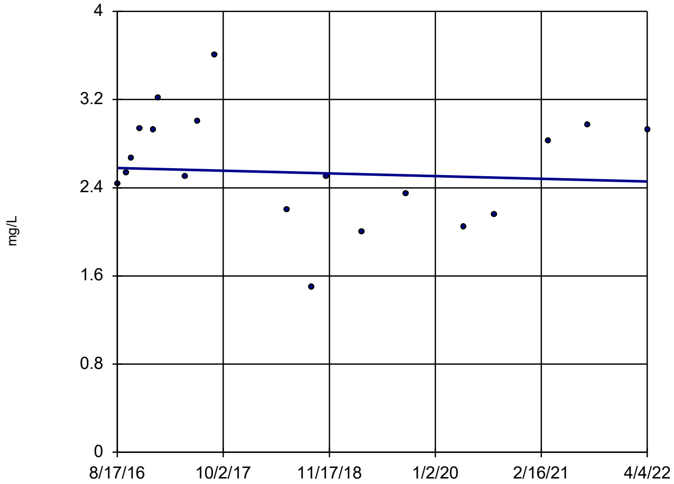
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 19

Slope = -0.02146
units per year.

Mann-Kendall
statistic = -12
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

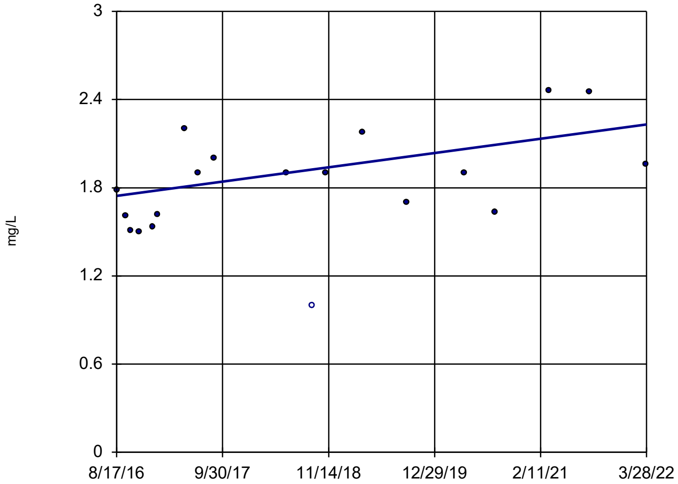
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 19

Slope = 0.0869
units per year.

Mann-Kendall
statistic = 63
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

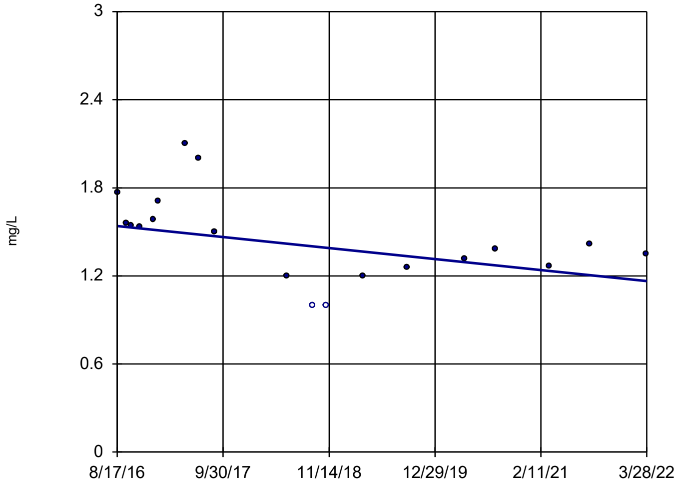
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 19

Slope = -0.06692
units per year.

Mann-Kendall
statistic = -57
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

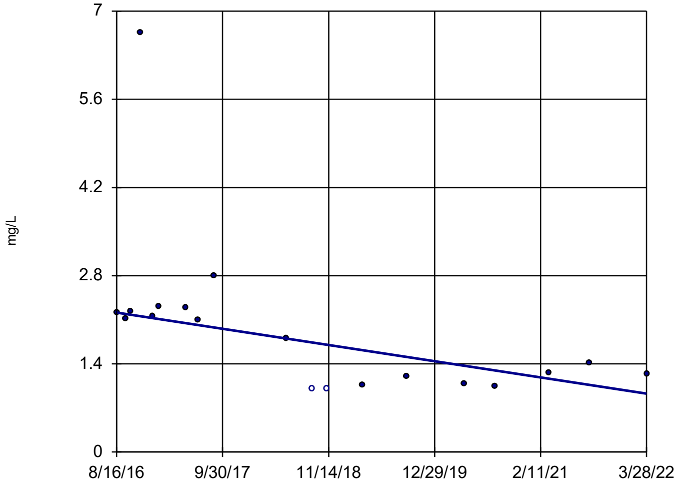
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 19

Slope = -0.2286
units per year.

Mann-Kendall
statistic = -70
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

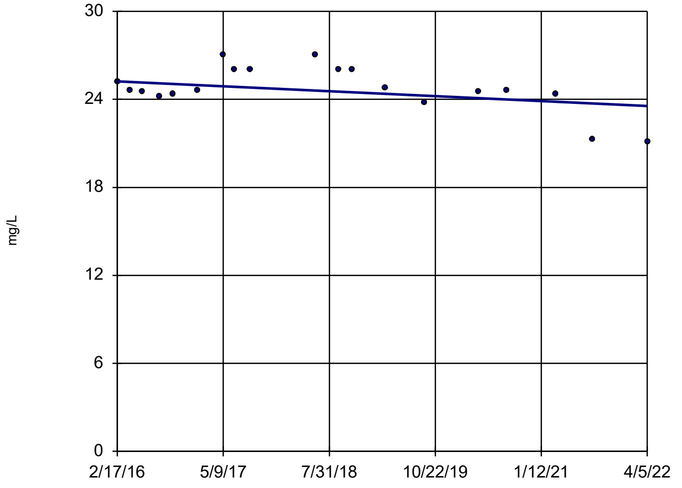
Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-3



n = 19

Slope = -0.2765 units per year.

Mann-Kendall statistic = -45 critical = -74

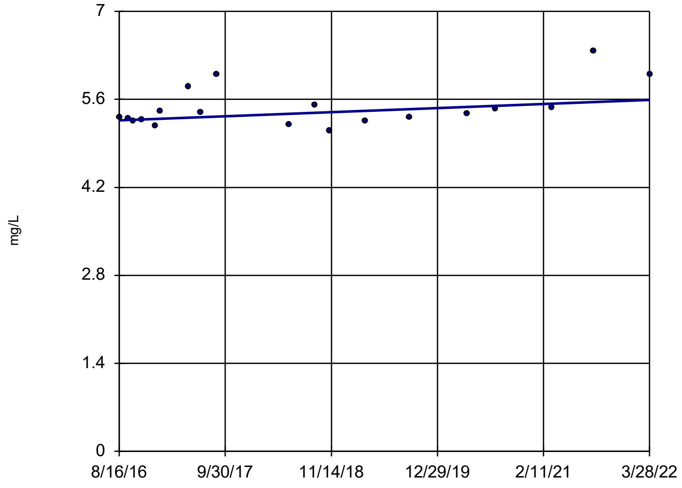
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-31



n = 19

Slope = 0.05755 units per year.

Mann-Kendall statistic = 53 critical = 74

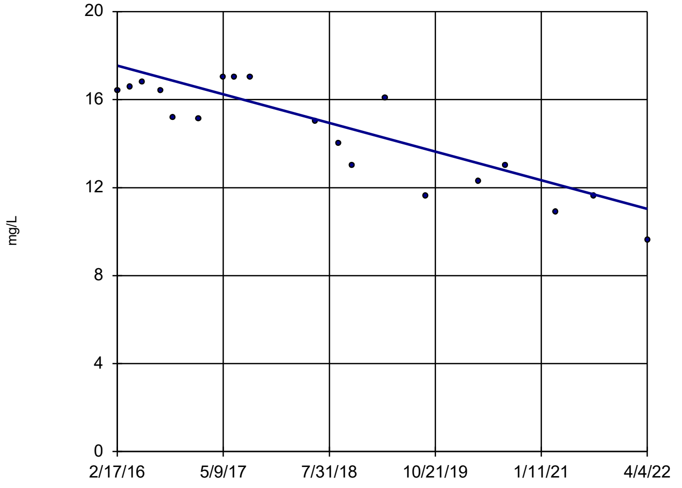
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 19

Slope = -1.062 units per year.

Mann-Kendall statistic = -105 critical = -74

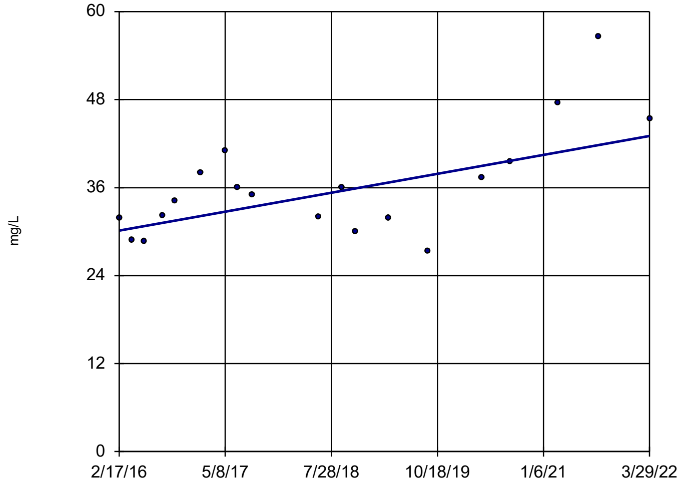
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-6



n = 19

Slope = 2.111 units per year.

Mann-Kendall statistic = 68 critical = 74

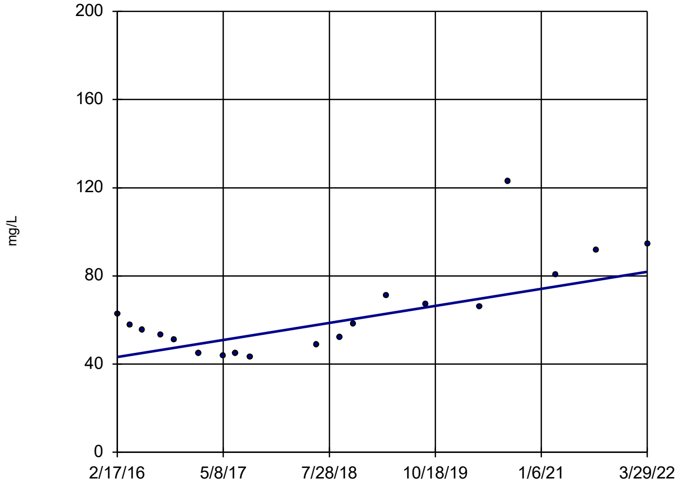
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-7



n = 19

Slope = 6.316
units per year.

Mann-Kendall
statistic = 71
critical = 74

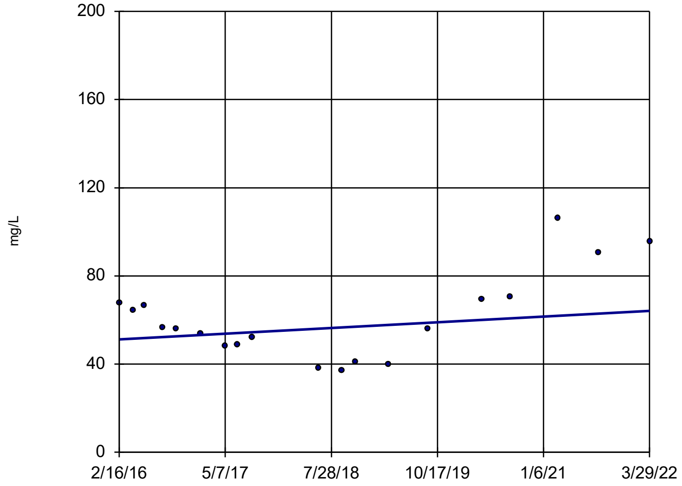
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-8



n = 19

Slope = 2.111
units per year.

Mann-Kendall
statistic = 18
critical = 74

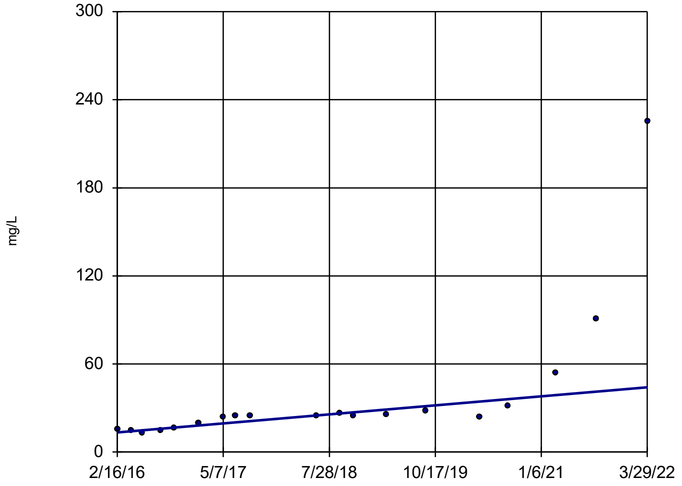
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-9



n = 19

Slope = 5.013
units per year.

Mann-Kendall
statistic = 139
critical = 74

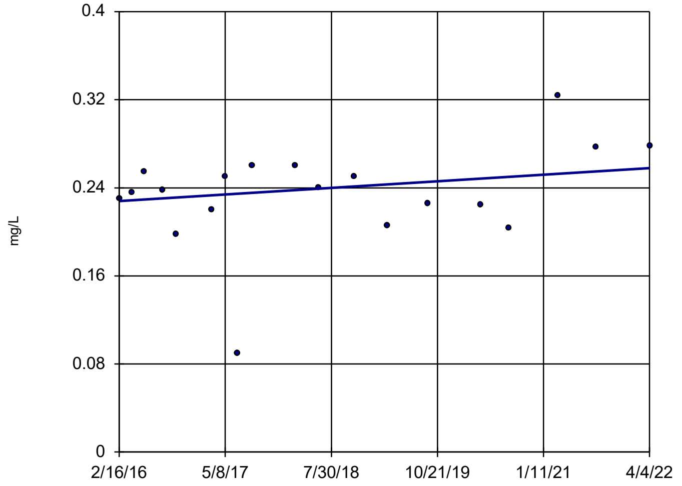
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 19

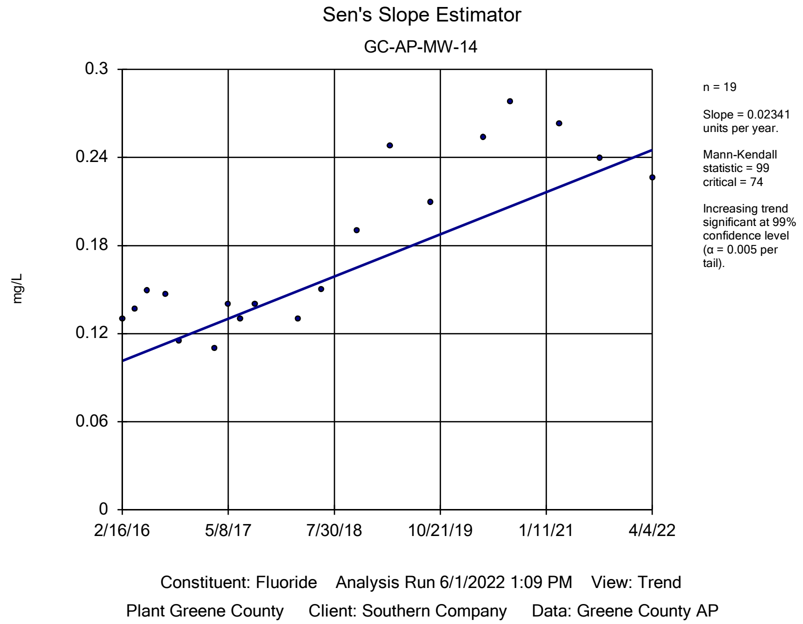
Slope = 0.00487
units per year.

Mann-Kendall
statistic = 33
critical = 74

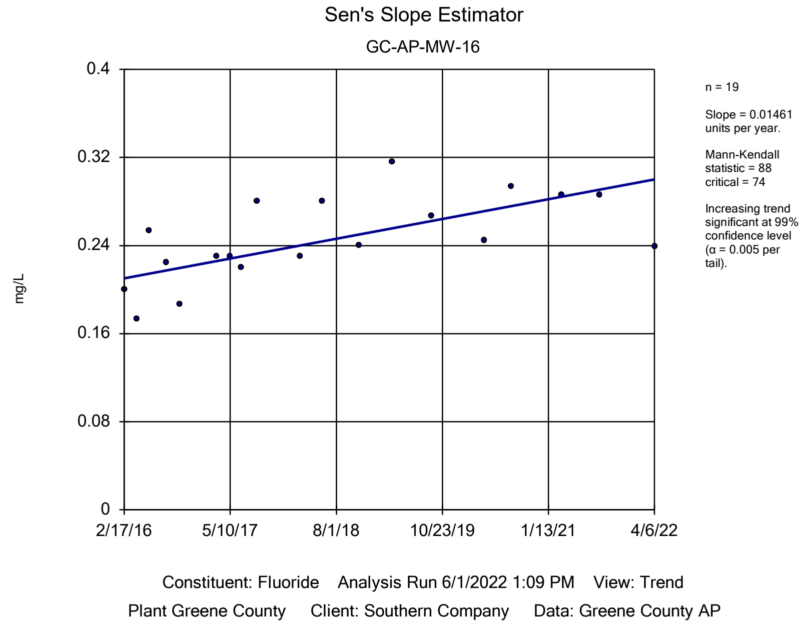
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride   Analysis Run 6/1/2022 1:09 PM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

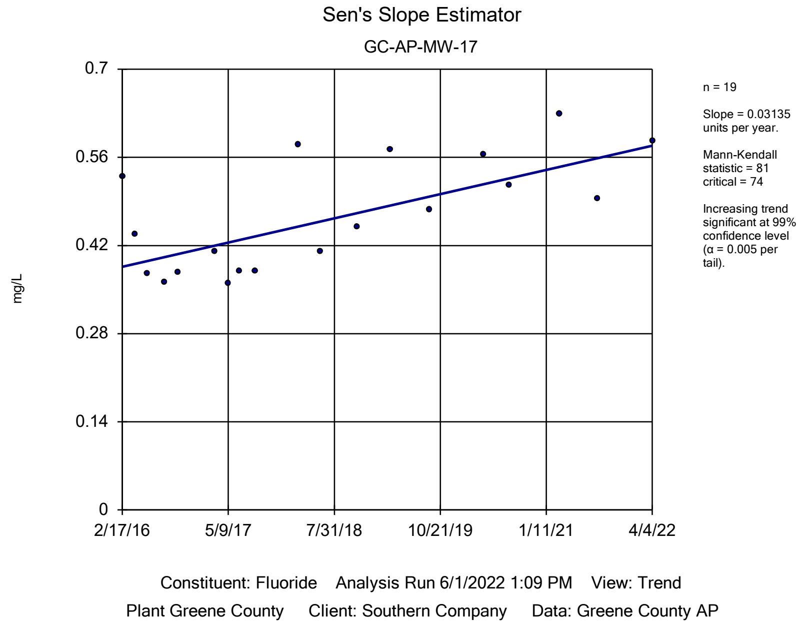
Sanitas™ v.9.6.34 . UG



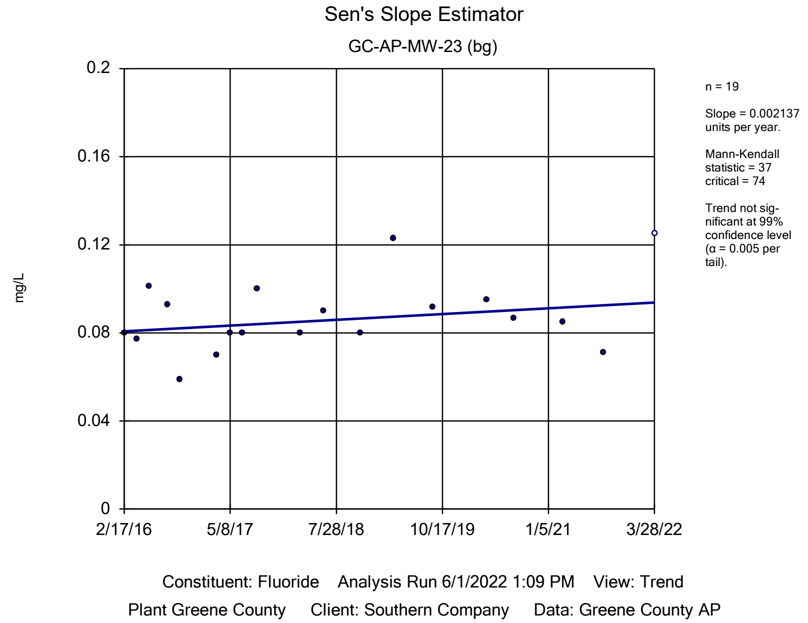
Sanitas™ v.9.6.34 . UG



Sanitas™ v.9.6.34 . UG



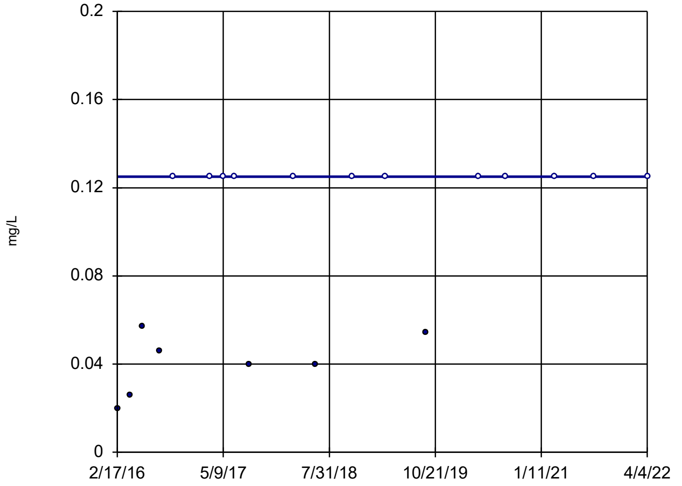
Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 60
critical = 74

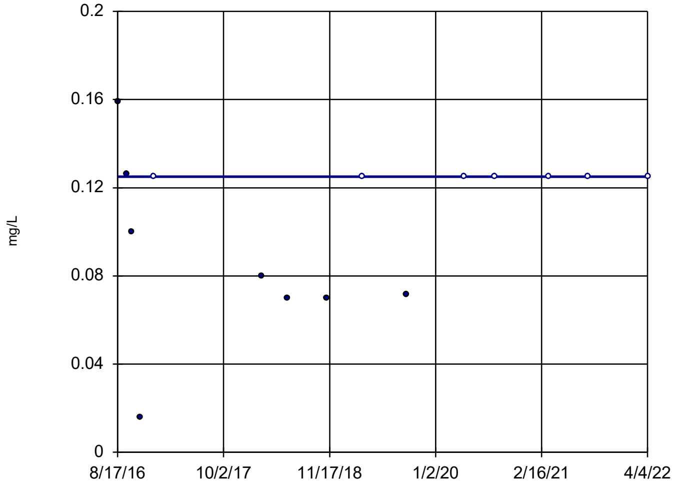
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 15

Slope = 0
units per year.

Mann-Kendall
statistic = 3
critical = 53

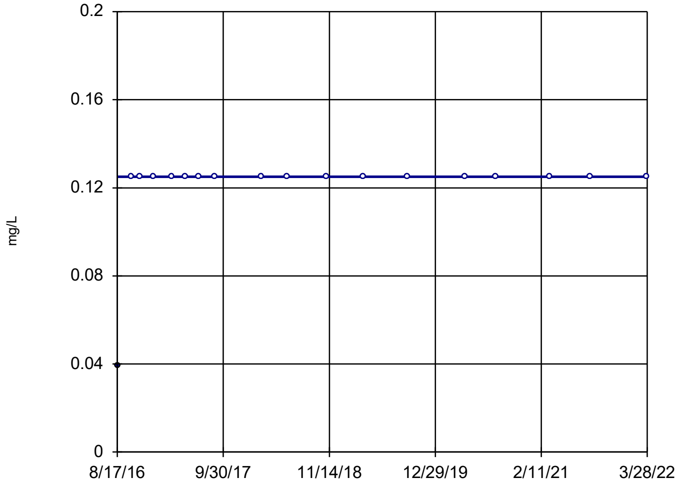
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 18

Slope = 0
units per year.

Mann-Kendall
statistic = 17
critical = 68

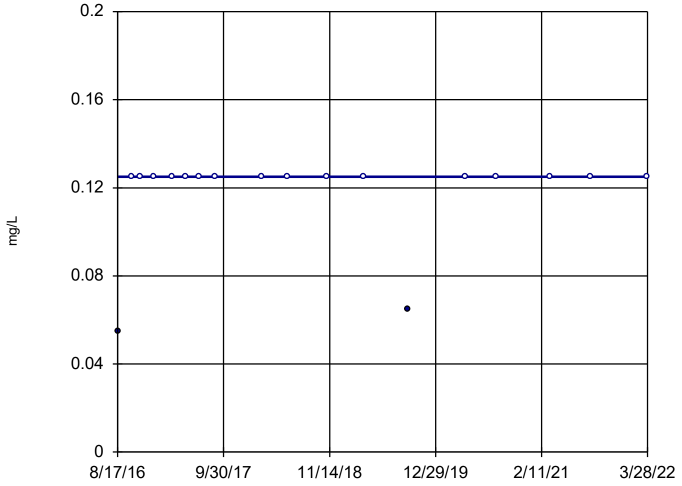
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 18

Slope = 0
units per year.

Mann-Kendall
statistic = 11
critical = 68

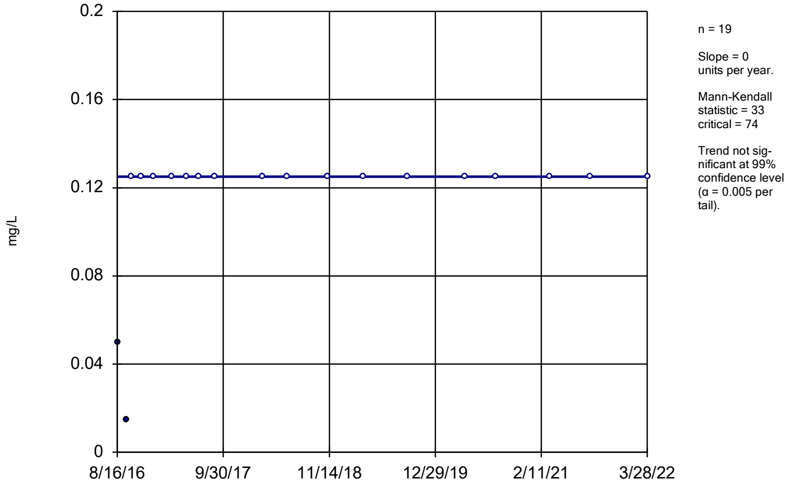
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)

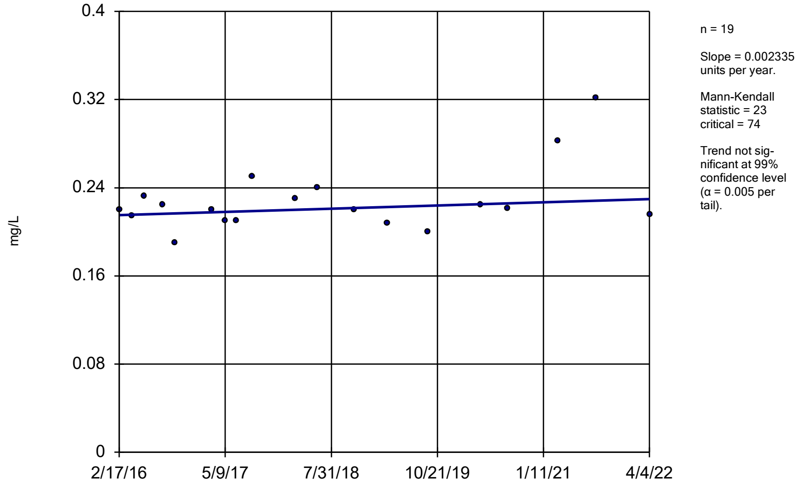


Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-5

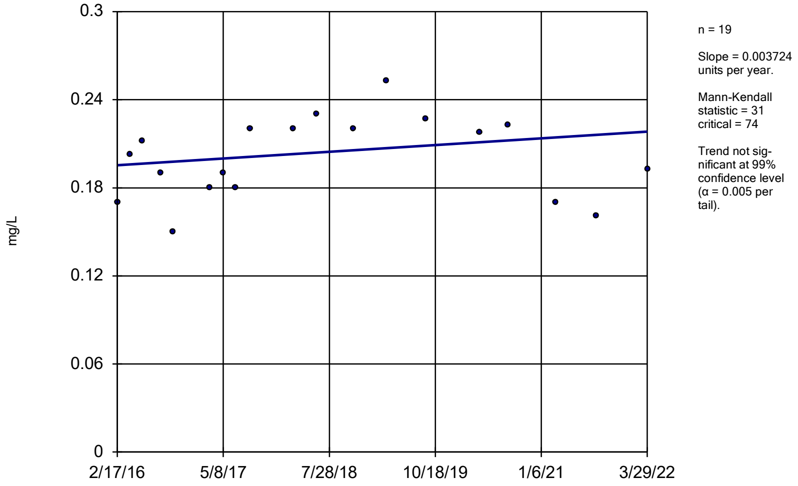


Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-6

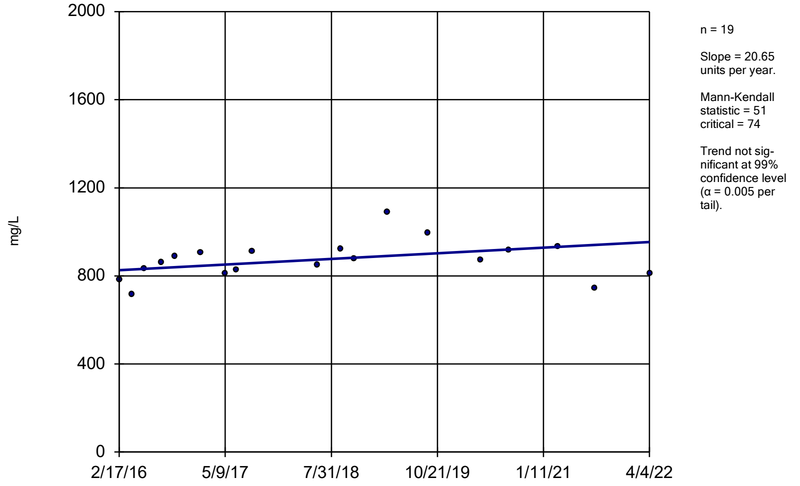


Constituent: Fluoride Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-1

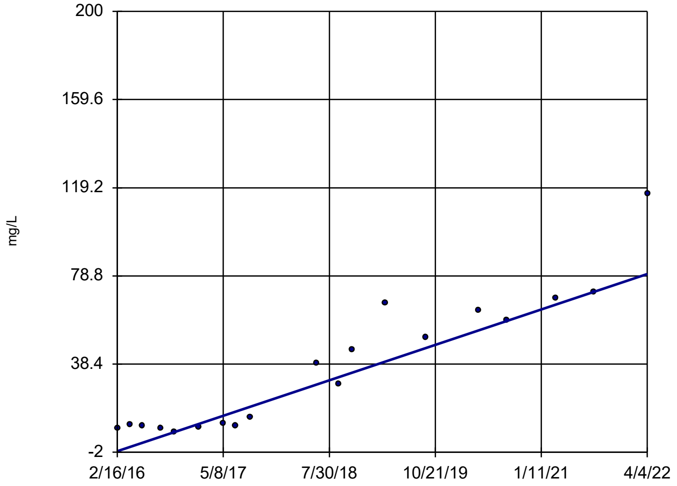


Constituent: Sulfate Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 19

Slope = 13.22
units per year.

Mann-Kendall
statistic = 137
critical = 74

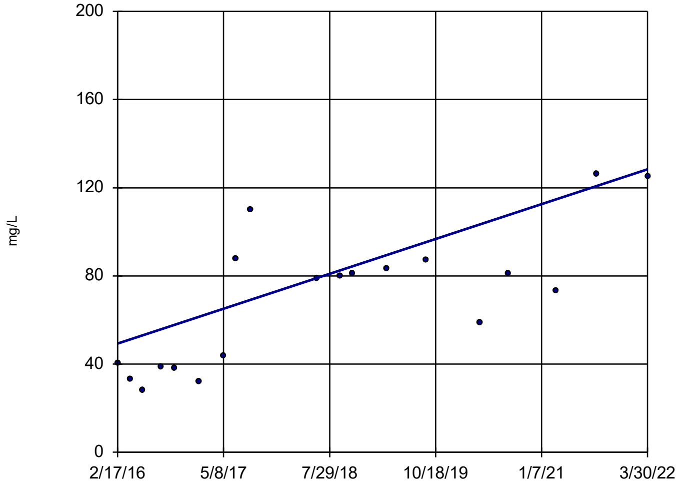
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 19

Slope = 12.94
units per year.

Mann-Kendall
statistic = 91
critical = 74

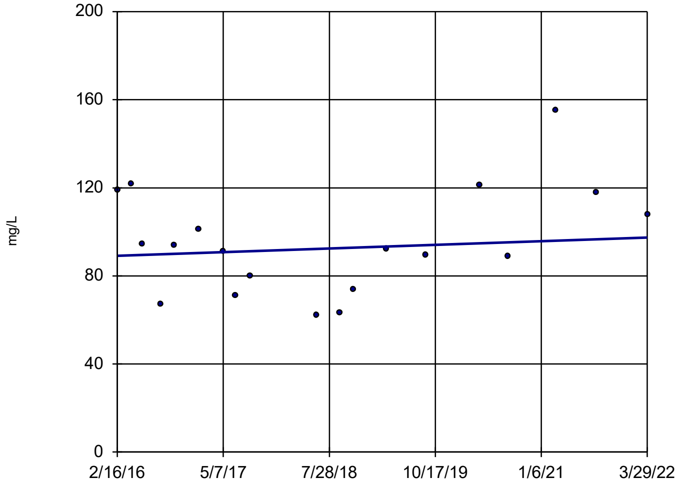
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 19

Slope = 1.353
units per year.

Mann-Kendall
statistic = 5
critical = 74

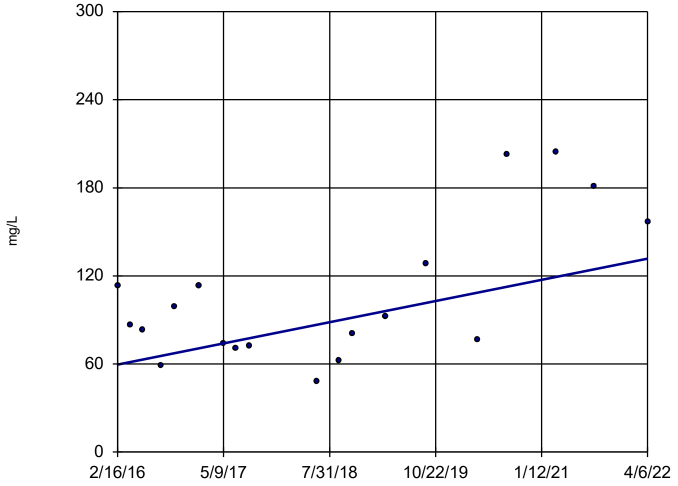
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-13



n = 19

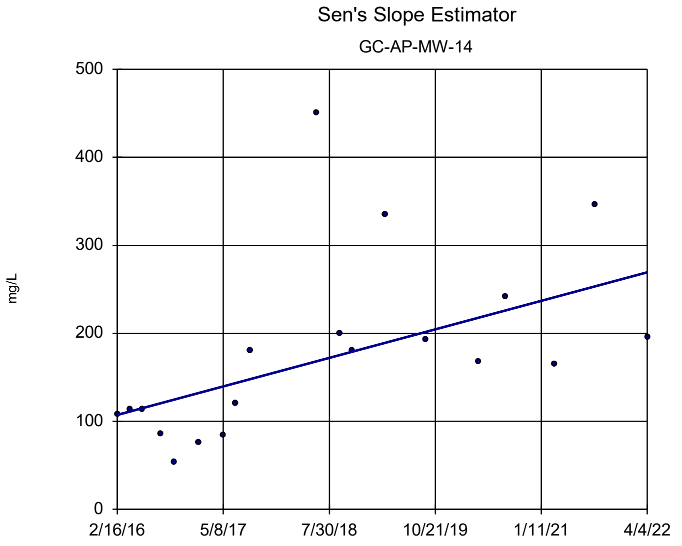
Slope = 11.74
units per year.

Mann-Kendall
statistic = 46
critical = 74

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:09 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

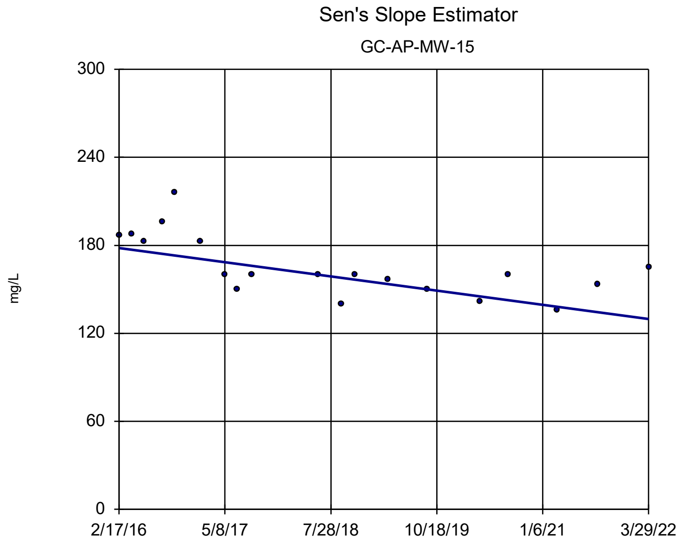
Slope = 26.41
units per year.

Mann-Kendall
statistic = 81
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

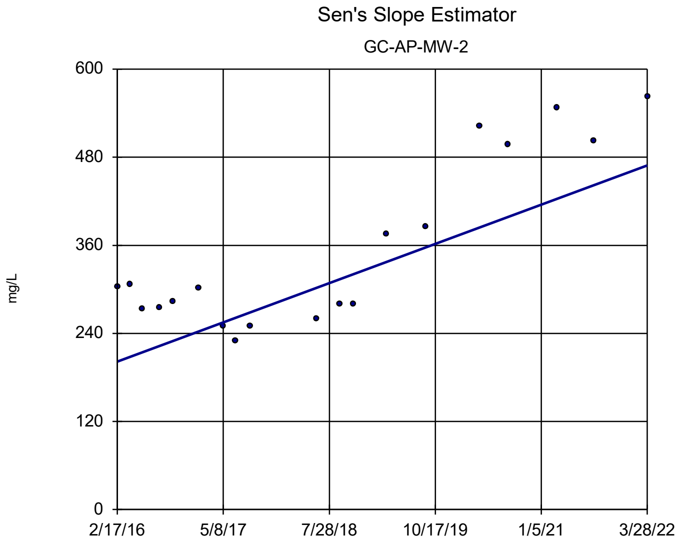
Slope = -7.9
units per year.

Mann-Kendall
statistic = -83
critical = -74

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

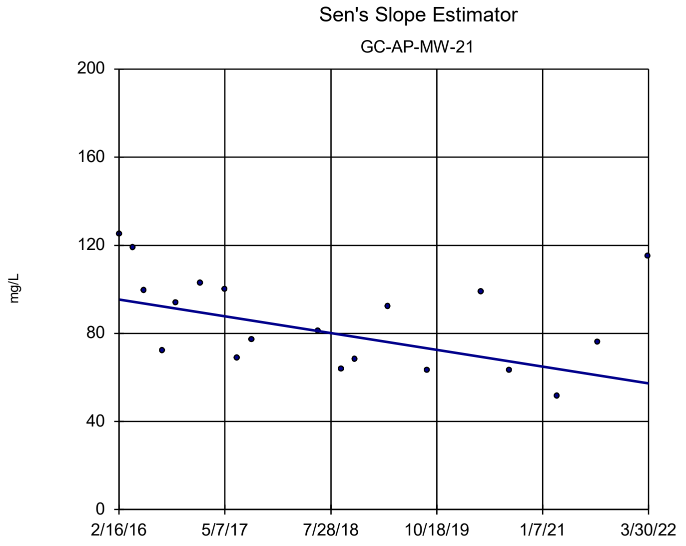
Slope = 43.7
units per year.

Mann-Kendall
statistic = 81
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

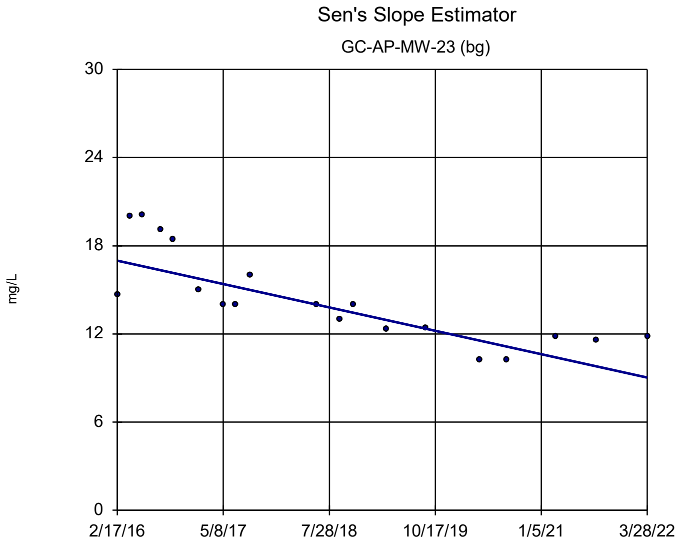
Slope = -6.219
units per year.

Mann-Kendall
statistic = -67
critical = -74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

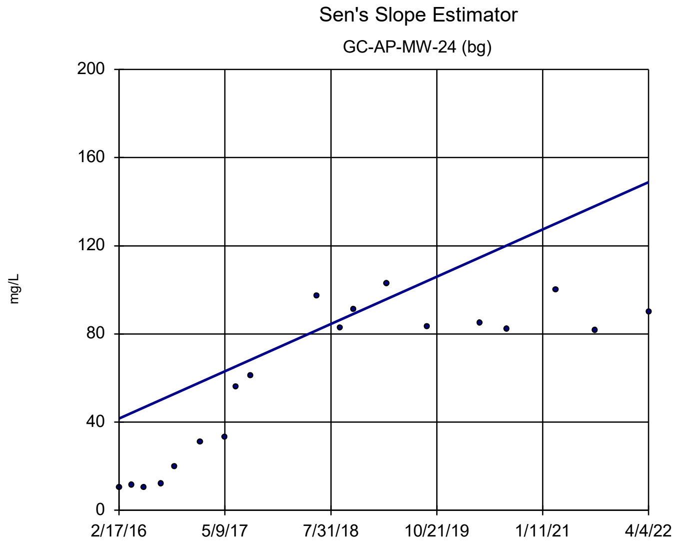
Slope = -1.304
units per year.

Mann-Kendall
statistic = -125
critical = -74

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

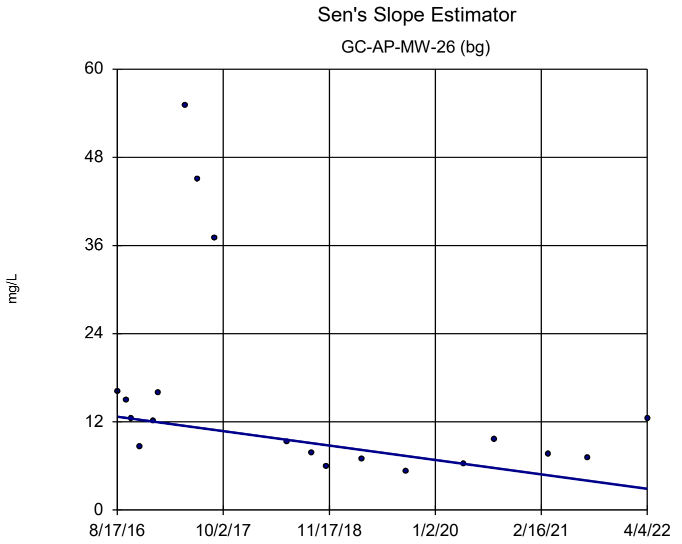
Slope = 17.51
units per year.

Mann-Kendall
statistic = 114
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

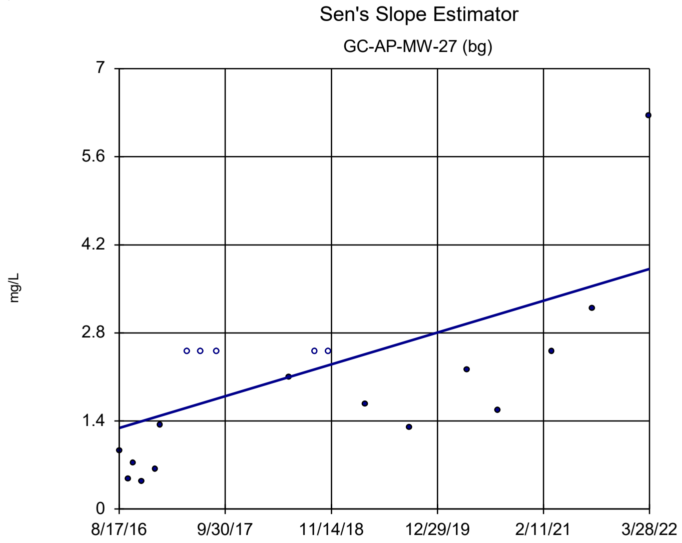
Slope = -1.736
units per year.

Mann-Kendall
statistic = -63
critical = -74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 19

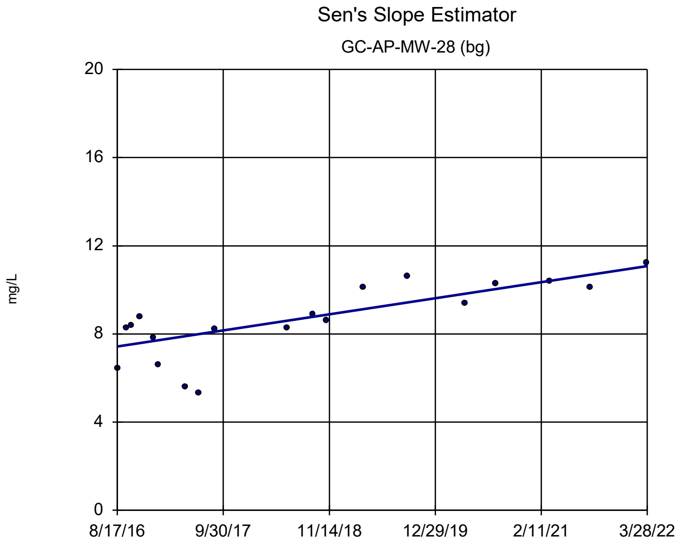
Slope = 0.4499
units per year.

Mann-Kendall
statistic = 82
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

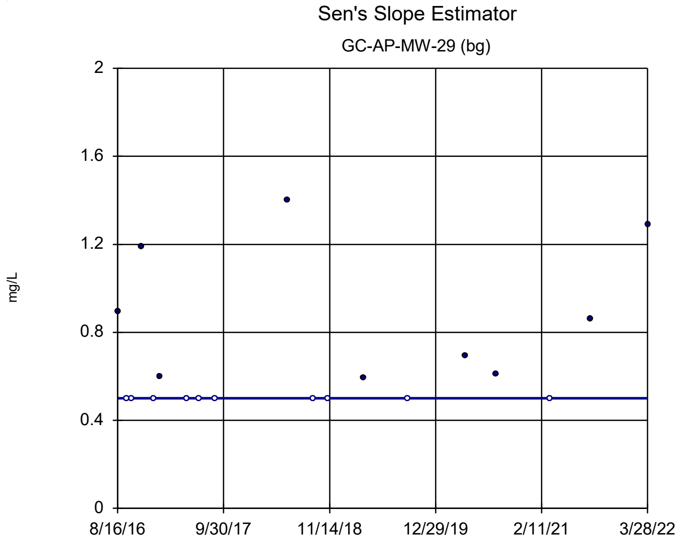
Slope = 0.6488
units per year.

Mann-Kendall
statistic = 101
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 19

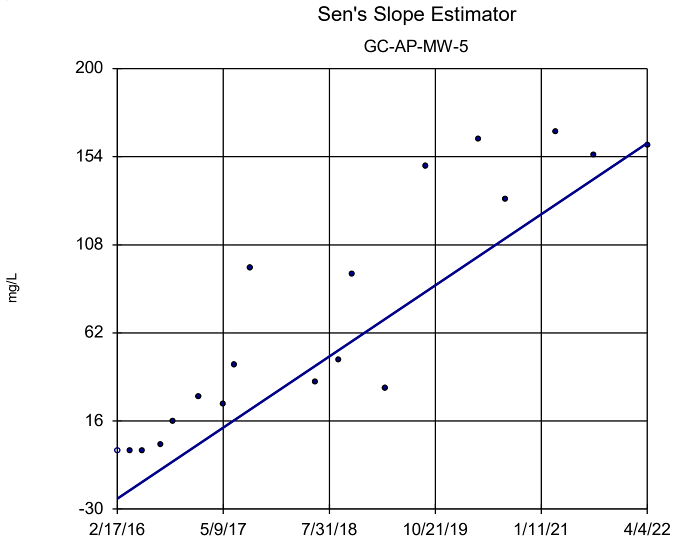
Slope = 0
units per year.

Mann-Kendall
statistic = 26
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 19

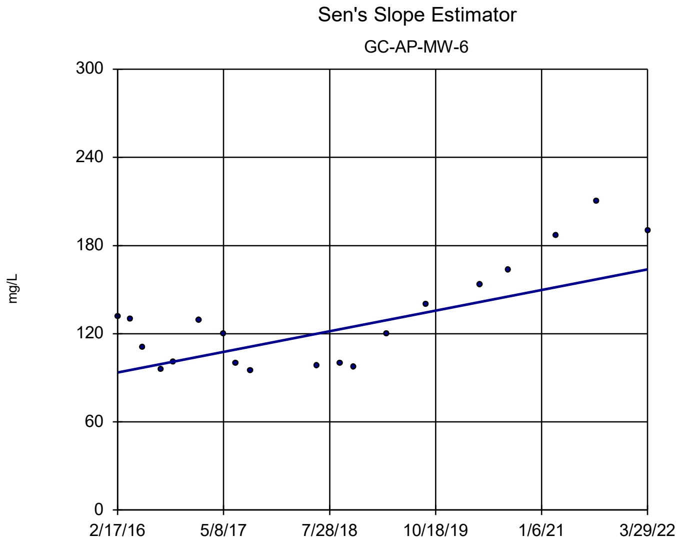
Slope = 30.28
units per year.

Mann-Kendall
statistic = 137
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

Slope = 11.48
units per year.

Mann-Kendall
statistic = 61
critical = 74

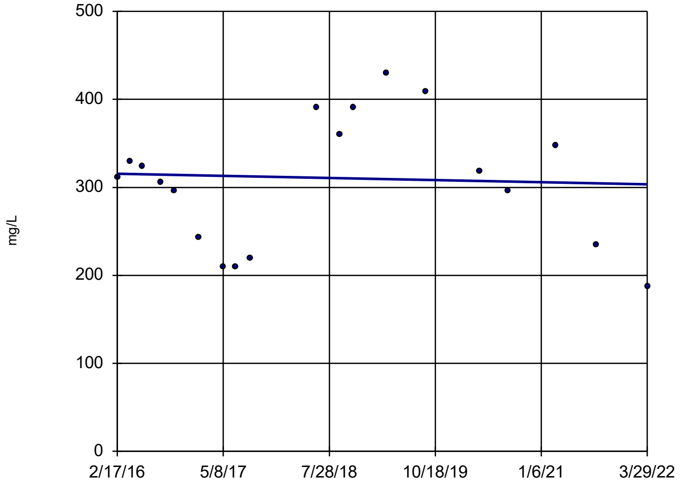
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-7



n = 19

Slope = -1.965 units per year.

Mann-Kendall statistic = -6 critical = -74

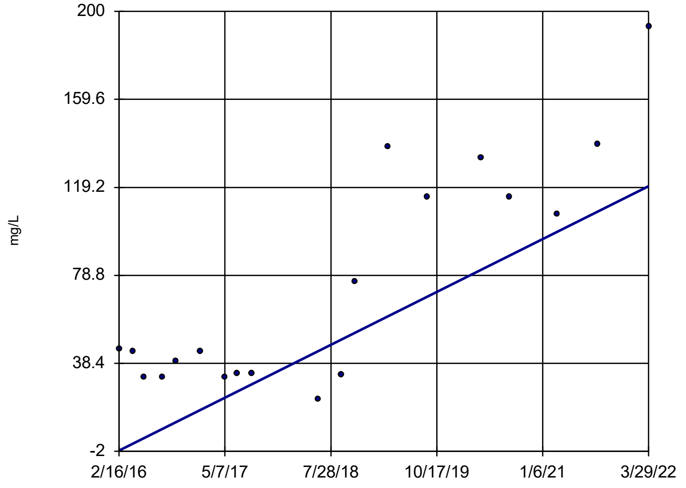
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-9



n = 19

Slope = 19.82 units per year.

Mann-Kendall statistic = 80 critical = 74

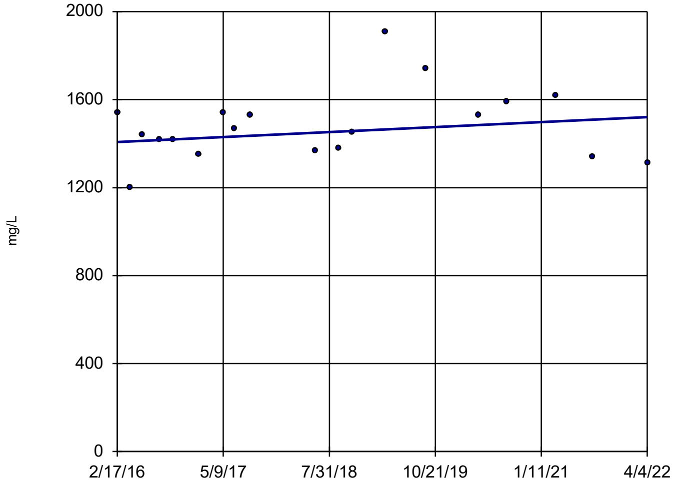
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-1



n = 19

Slope = 18.43 units per year.

Mann-Kendall statistic = 20 critical = 74

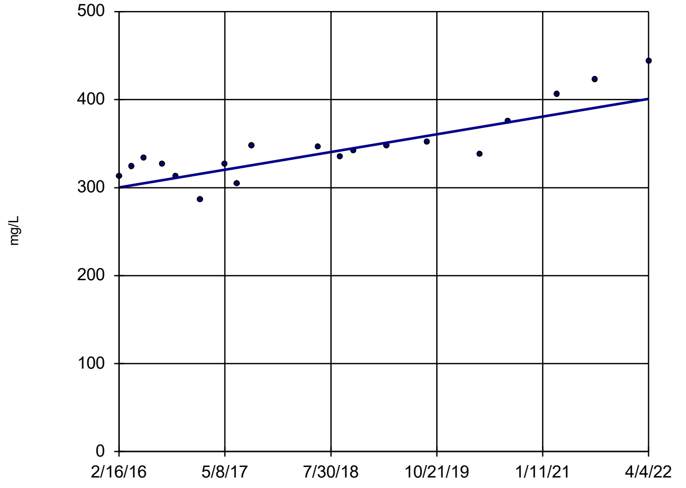
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 19

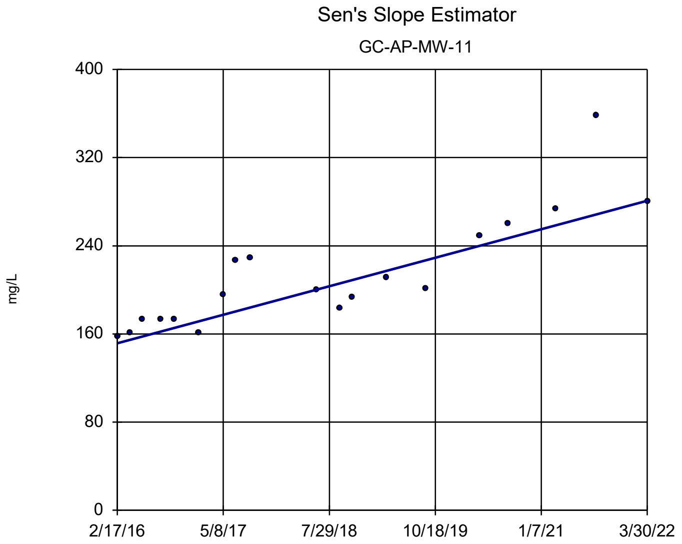
Slope = 16.36 units per year.

Mann-Kendall statistic = 114 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

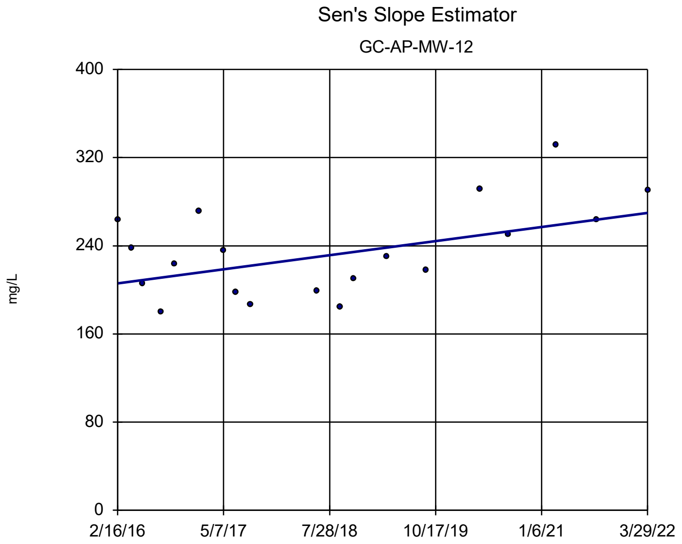
Slope = 21.14
units per year.

Mann-Kendall
statistic = 129
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

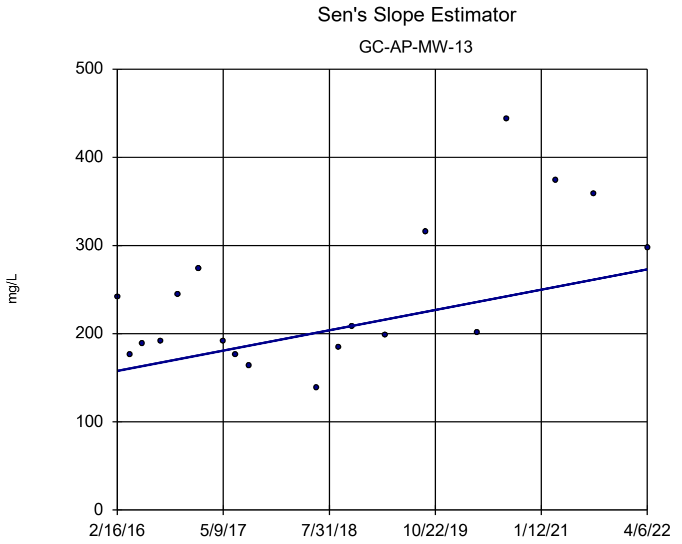
Slope = 10.43
units per year.

Mann-Kendall
statistic = 45
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

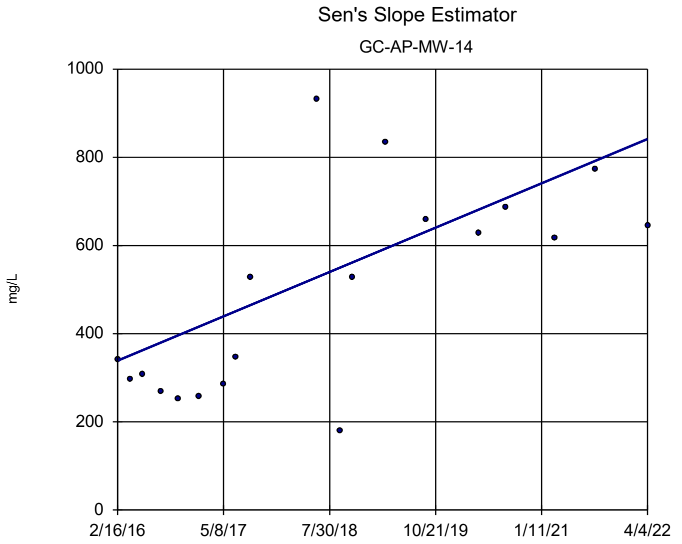
Slope = 18.79
units per year.

Mann-Kendall
statistic = 60
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

Slope = 81.94
units per year.

Mann-Kendall
statistic = 76
critical = 74

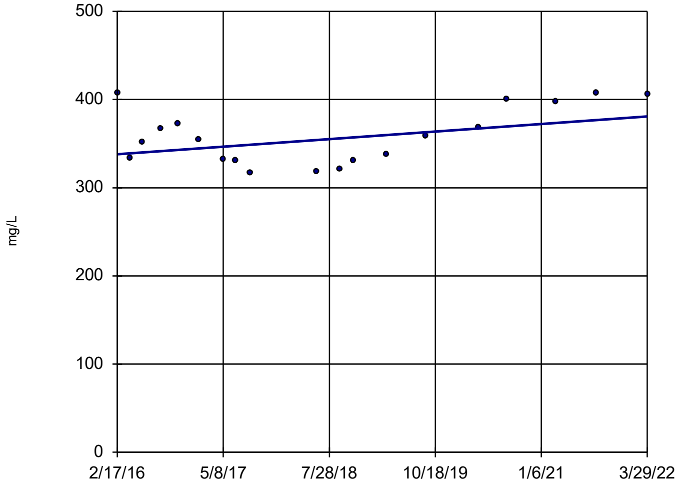
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-15



n = 19

Slope = 7.03 units per year.

Mann-Kendall statistic = 36 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

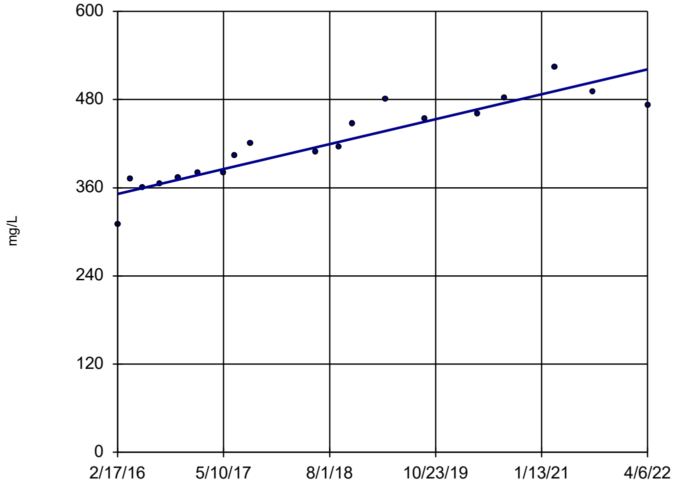
Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-16



n = 19

Slope = 27.67 units per year.

Mann-Kendall statistic = 149 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

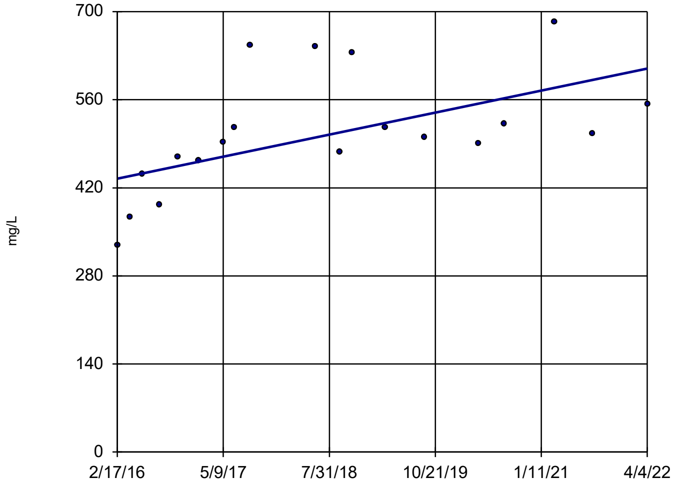
Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-17



n = 19

Slope = 28.55 units per year.

Mann-Kendall statistic = 94 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

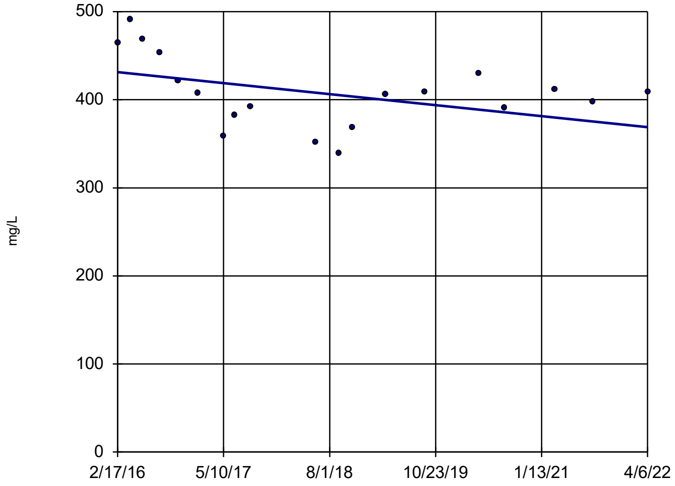
Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-18



n = 19

Slope = -10.17 units per year.

Mann-Kendall statistic = -43 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

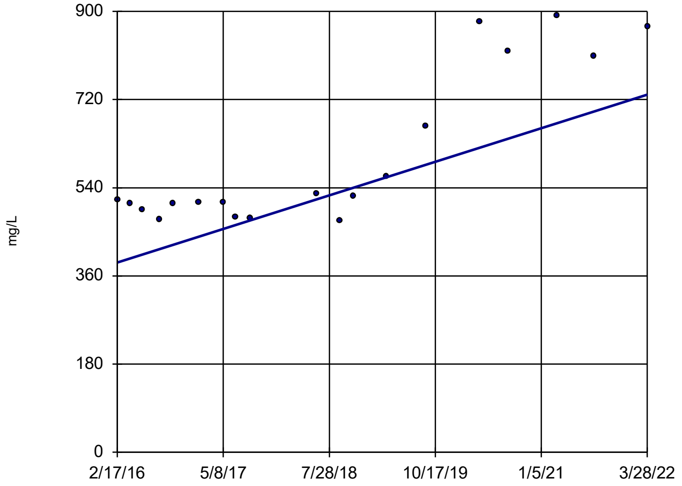
Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 19

Slope = 56.1
units per year.

Mann-Kendall
statistic = 91
critical = 74

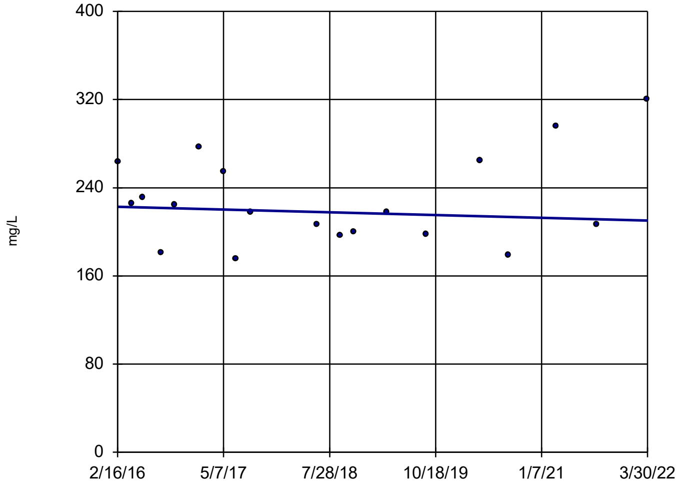
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 19

Slope = -2.005
units per year.

Mann-Kendall
statistic = -5
critical = -74

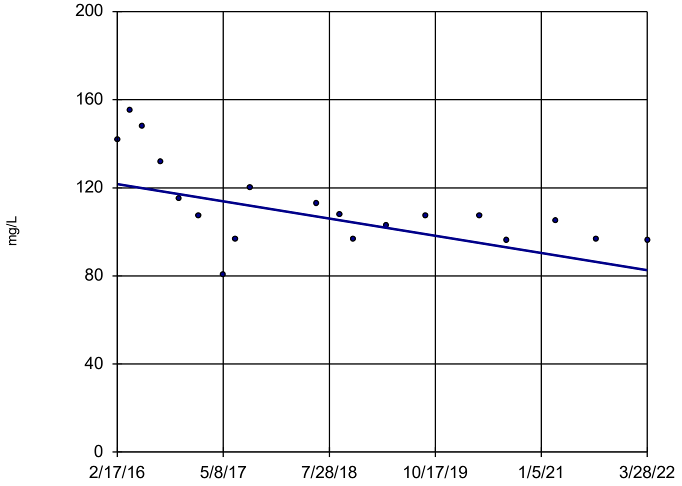
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 19

Slope = -6.395
units per year.

Mann-Kendall
statistic = -96
critical = -74

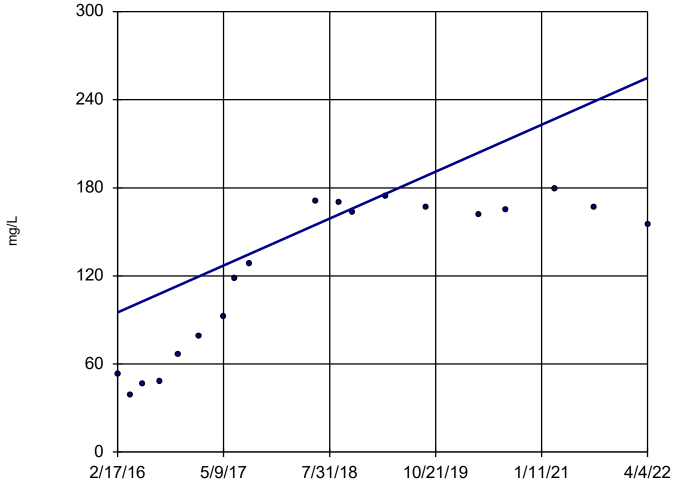
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 19

Slope = 26.07
units per year.

Mann-Kendall
statistic = 108
critical = 74

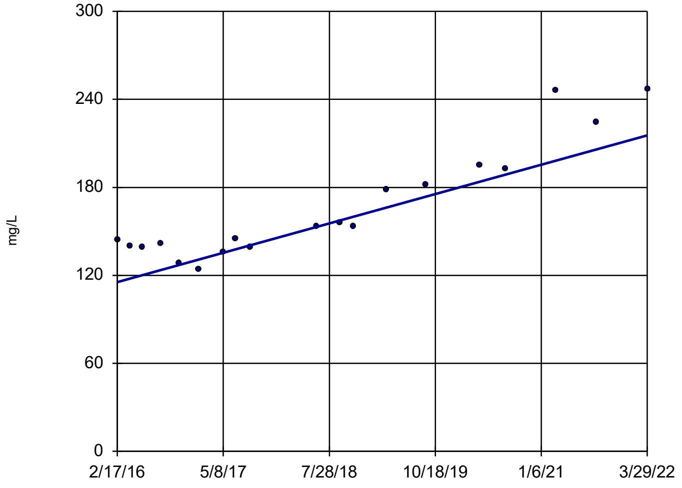
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-25



n = 19

Slope = 16.37
units per year.

Mann-Kendall
statistic = 121
critical = 74

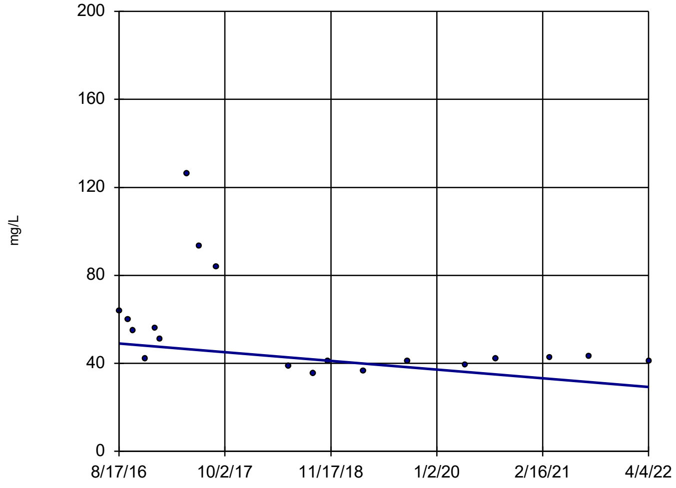
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 19

Slope = -3.514
units per year.

Mann-Kendall
statistic = -53
critical = -74

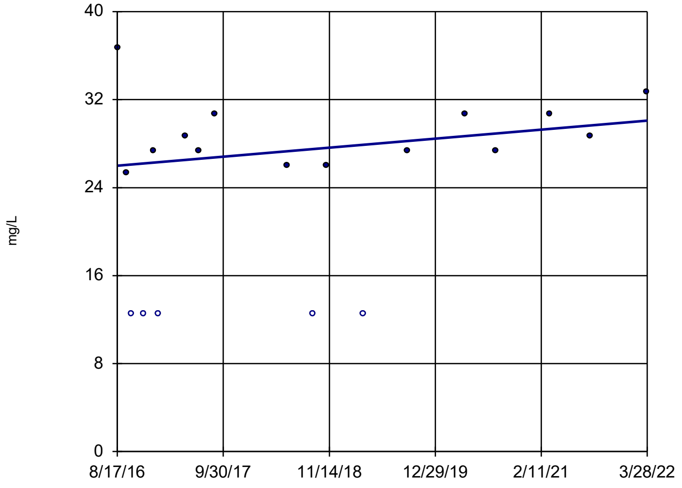
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 19

Slope = 0.7289
units per year.

Mann-Kendall
statistic = 46
critical = 74

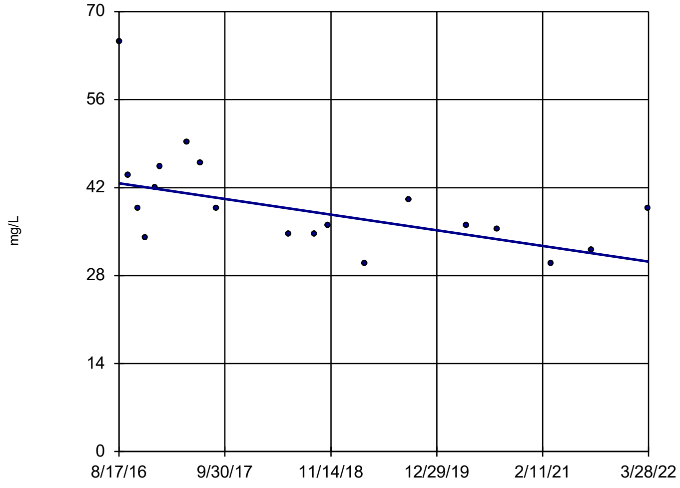
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 19

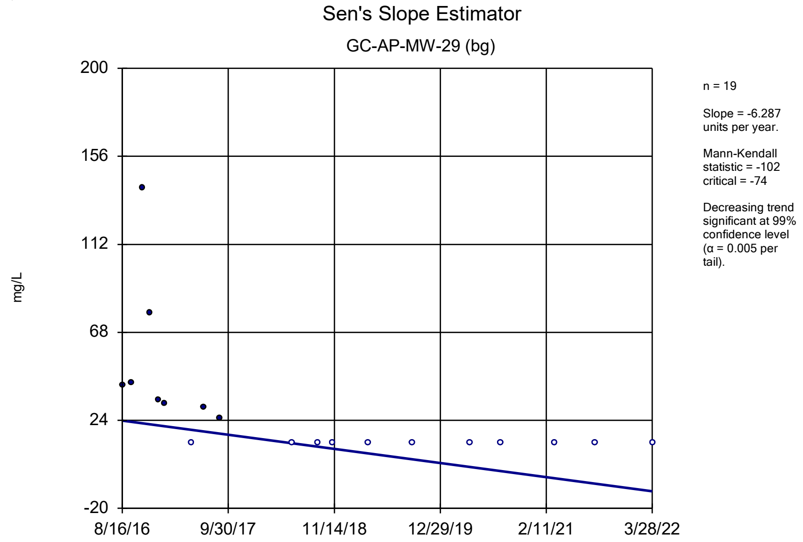
Slope = -2.224
units per year.

Mann-Kendall
statistic = -69
critical = -74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG
Hollow symbols indicate censored values.



n = 19

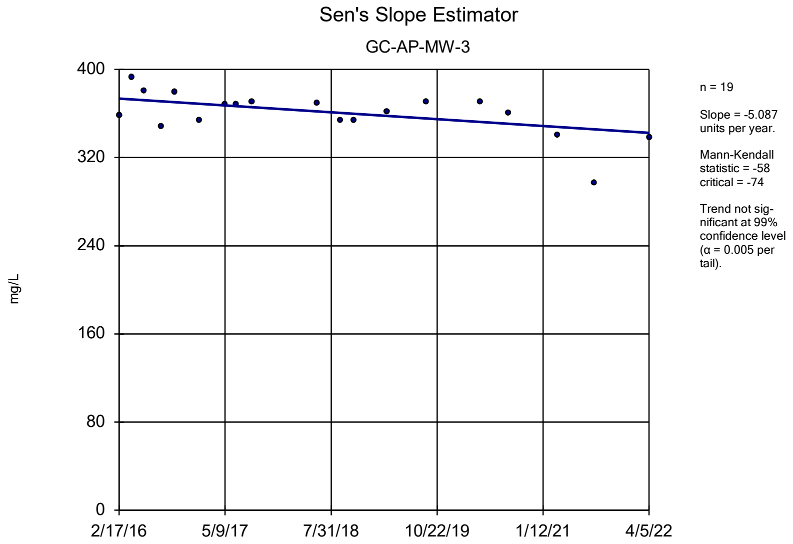
Slope = -6.287
units per year.

Mann-Kendall
statistic = -102
critical = -74

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

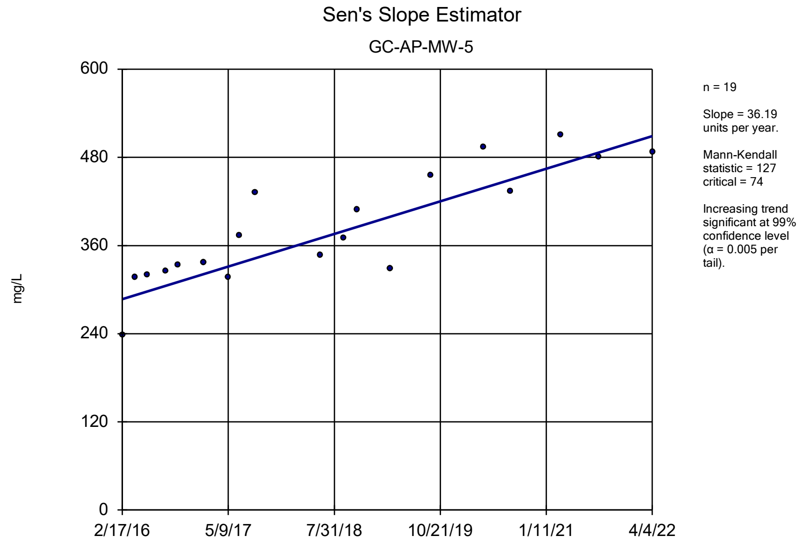
Slope = -5.087
units per year.

Mann-Kendall
statistic = -58
critical = -74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

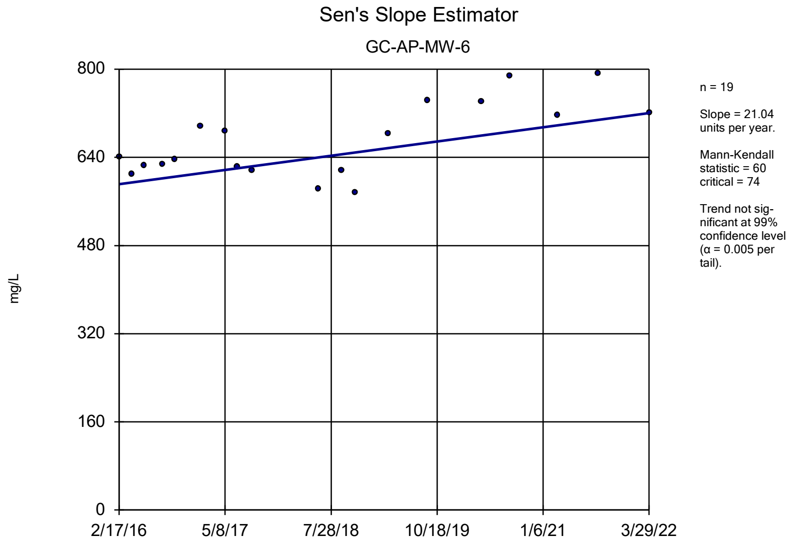
Slope = 36.19
units per year.

Mann-Kendall
statistic = 127
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG



n = 19

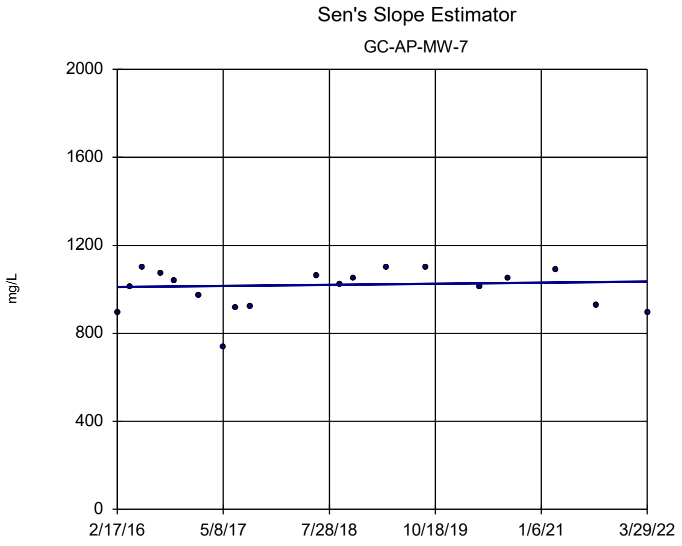
Slope = 21.04
units per year.

Mann-Kendall
statistic = 60
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 6/1/2022 1:10 PM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-7

n = 19

Slope = 3.847
units per year.

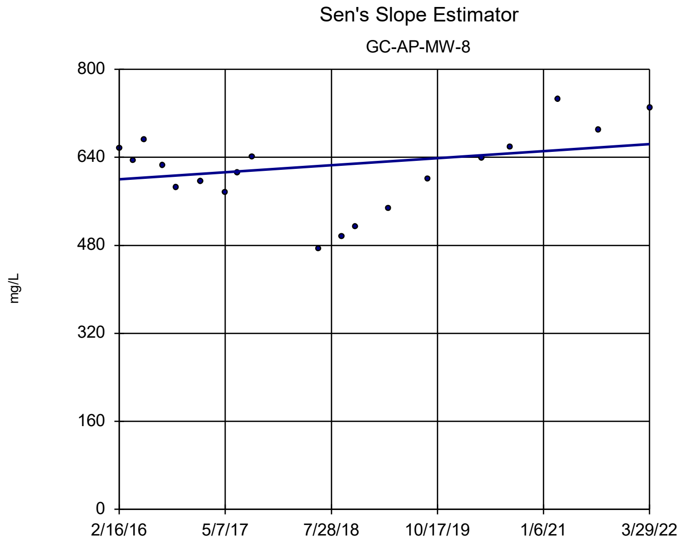
Mann-Kendall
statistic = 12
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS   Analysis Run 6/1/2022 1:10 PM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-8

n = 19

Slope = 10.43
units per year.

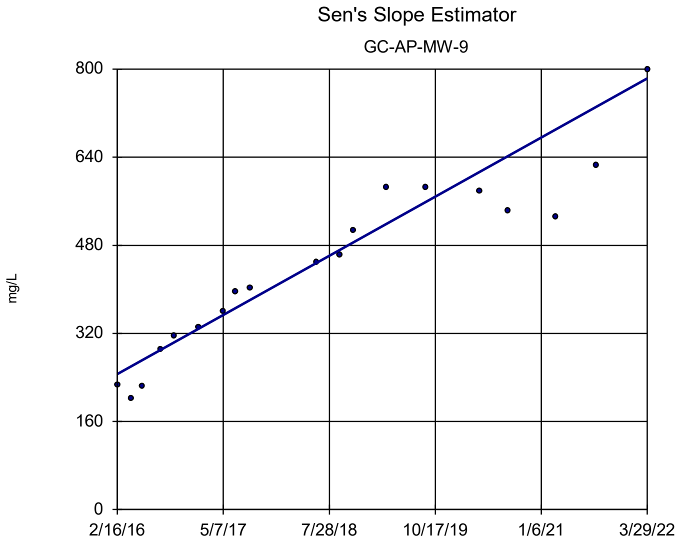
Mann-Kendall
statistic = 27
critical = 74

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS   Analysis Run 6/1/2022 1:10 PM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG


Sen's Slope Estimator

GC-AP-MW-9

n = 19

Slope = 87.78
units per year.

Mann-Kendall
statistic = 148
critical = 74

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS   Analysis Run 6/1/2022 1:10 PM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Greene County Client: Southern Company Data: Greene County AP Printed 11/18/2021, 6:28 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00137	119	n/a	n/a	91.6	n/a	n/a	0.002234	NP Inter(NDs)
Arsenic (mg/L)	0.0044	119	n/a	n/a	83.19	n/a	n/a	0.002234	NP Inter(NDs)
Barium (mg/L)	0.347	119	n/a	n/a	0	n/a	n/a	0.002234	NP Inter(normality)
Beryllium (mg/L)	0.00226	119	n/a	n/a	86.55	n/a	n/a	0.002234	NP Inter(NDs)
Cadmium (mg/L)	0.000912	119	n/a	n/a	74.79	n/a	n/a	0.002234	NP Inter(normality)
Chromium (mg/L)	0.01	119	n/a	n/a	88.24	n/a	n/a	0.002234	NP Inter(NDs)
Cobalt (mg/L)	0.0167	119	n/a	n/a	57.98	n/a	n/a	0.002234	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	3.88	119	n/a	n/a	3.361	n/a	n/a	0.002234	NP Inter(normality)
Fluoride (mg/L)	0.159	120	n/a	n/a	67.5	n/a	n/a	0.002122	NP Inter(normality)
Lead (mg/L)	0.0002	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)
Lithium (mg/L)	0.02	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Mercury (mg/L)	0.0005	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Molybdenum (mg/L)	0.00308	119	n/a	n/a	97.48	n/a	n/a	0.002234	NP Inter(NDs)
Selenium (mg/L)	0.0072	119	n/a	n/a	89.92	n/a	n/a	0.002234	NP Inter(NDs)
Thallium (mg/L)	0.00039	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)

FIGURE G.

GREENE COUNTY ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00137	0.006
Arsenic	mg/L	0.0044	0.01
Barium	mg/L	0.347	2
Beryllium	mg/L	0.00226	0.004
Cadmium	mg/L	0.000912	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0167	0.0167
Combined Radium-226/228	pCi/L	3.88	5
Fluoride	mg/L	0.159	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00308	0.1
Selenium	mg/L	0.0072	0.05
Thallium	mg/L	0.00039	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

FIGURE H.

Confidence Interval Summary Table - Significant Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02595**	**0.0184**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01419**	**0.01173**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02872**	**0.02023**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1032**	**0.06832**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.8918**	**0.3339**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05079**	**0.04798**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4587**	**0.3915**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2714**	**0.1196**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04267**	**0.02178**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01958**	**0.01687**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-10**	**0.329**	**0.11**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1327**	**0.0719**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.1441**	**0.06377**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.4979**	**0.1204**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9722**	**0.5893**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6241**	**0.5512**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6624**	**0.5563**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3944**	**0.3251**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1376**	**0.1026**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GC-AP-MW-12	0.00121	0.00102	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-13	0.00341	0.00185	0.006	No	8	0	No	0.01	Param.
Antimony (mg/L)	GC-AP-MW-17	0.00102	0.000897	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-21	0.00102	0.000964	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-6	0.00141	0.00102	0.006	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-7	0.00102	0.00066	0.006	No	8	75	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02595**	**0.0184**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01419**	**0.01173**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-11	0.005879	0.001998	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-12	0.000251	0.0002	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-13	0.004863	0.001584	0.01	No	8	0	sqrt(x)	0.01	Param.
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02872**	**0.02023**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-15	0.00046	0.0002	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1032**	**0.06832**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.8918**	**0.3339**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05079**	**0.04798**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-2	0.01567	0.003015	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-21	0.000216	0.00014	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-25	0.00033	0.0002	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-3	0.01105	0.006592	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-31	0.0002	0.000111	0.01	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GC-AP-MW-32	0.0002	0.000142	0.01	No	8	75	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-33	0.0002	0.00015	0.01	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4587**	**0.3915**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-6	0.000303	0.00013	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-7	0.0002	0.00008	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-8	0.00027	0.00015	0.01	No	8	62.5	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-9	0.01092	0.007675	0.01	No	8	0	x^4	0.01	Param.
Barium (mg/L)	GC-AP-MW-1	0.03052	0.02016	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-10	0.2676	0.1709	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-11	0.09464	0.05316	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-12	0.03552	0.02178	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-13	0.2005	0.06695	2	No	8	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GC-AP-MW-14	0.1149	0.066	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-15	0.03905	0.02942	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-16	0.1042	0.06739	2	No	8	0	x^2	0.01	Param.
Barium (mg/L)	GC-AP-MW-17	0.3297	0.229	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-18	0.1086	0.07623	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-2	0.03604	0.02986	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-21	0.1024	0.04561	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-25	0.1084	0.07735	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-3	0.1527	0.09772	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-31	0.0321	0.02377	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-32	0.0764	0.0123	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-33	0.0995	0.02902	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-5	0.323	0.131	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-6	0.07849	0.05964	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-7	0.08588	0.07039	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-8	0.1335	0.09094	2	No	8	0	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-9	0.1886	0.1436	2	No	8	0	No	0.01	Param.
Cadmium (mg/L)	GC-AP-MW-11	0.000347	0.0002	0.005	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-13	0.0002	0.00008	0.005	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-15	0.00046	0.00012	0.005	No	8	62.5	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-2	0.0002	0.00012	0.005	No	8	75	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-21	0.0002	0.00007	0.005	No	8	75	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-25	0.0002	0.00007	0.005	No	8	75	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-6	0.00278	0.00018	0.005	No	8	62.5	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-8	0.000241	0.0002	0.005	No	8	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GC-AP-MW-1	0.00102	0.00034	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-10	0.00102	0.000357	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-11	0.00102	0.00023	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-12	0.00102	0.000224	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-13	0.00102	0.00026	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-14	0.00102	0.00023	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-15	0.00102	0.00027	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-16	0.00102	0.00034	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-17	0.00102	0.000216	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-18	0.00102	0.00023	0.1	No	8	62.5	No	0.004	NP (normality)

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GC-AP-MW-2	0.00267	0.0003	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-21	0.00102	0.00022	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-25	0.00102	0.00028	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-3	0.00102	0.00032	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-31	0.00102	0.00039	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-32	0.00102	0.00038	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-33	0.00102	0.00044	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-5	0.00102	0.00025	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-6	0.00102	0.00026	0.1	No	8	75	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-7	0.00102	0.00024	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-8	0.00102	0.00027	0.1	No	8	62.5	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-9	0.00102	0.00027	0.1	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2714**	**0.1196**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-10	0.04203	0.014	0.0167	No	8	0	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-11	0.03895	0.01457	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-12	0.00118	0.0002	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-13	0.00126	0.00007	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04267**	**0.02178**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01958**	**0.01687**	**0.0167**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-16	0.01672	0.01423	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-17	0.0321	0.0109	0.0167	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-18	0.01792	0.01573	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-2	0.02973	0.01292	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-21	0.00284	0.0002	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-25	0.01322	0.009578	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-3	0.00463	0.0002	0.0167	No	8	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-31	0.000624	0.0002	0.0167	No	8	62.5	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-32	0.00105	0.0002	0.0167	No	8	75	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-33	0.00099	0.0002	0.0167	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GC-AP-MW-5	0.008915	0.005452	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-6	0.003646	0.002109	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-7	0.003817	0.001626	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-8	0.01065	0.005562	0.0167	No	8	0	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-9	0.02726	0.01437	0.0167	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-1	1.479	0.8662	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-10	1.647	0.7269	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-11	0.6939	0.4979	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-12	1.043	0.0003309	5	No	8	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-13	0.5627	0.3043	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-14	1.374	0.7391	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-15	0.7216	0.248	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-16	1.288	0.4672	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-17	2.248	1.082	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-18	1.552	0.8931	5	No	8	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-2	1.383	0.4359	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-21	0.7428	0.04578	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-25	0.7915	0.1545	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-3	1.317	0.6006	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-31	0.7125	0.1816	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-32	1.976	-0.3098	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-33	2.296	0.7576	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-5	2.033	1.13	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-6	1.244	0.5642	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-7	1.129	0.512	5	No	8	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-8	1.446	0.3853	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-9	1.653	1.047	5	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-1	0.1819	0.08232	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-10	0.2932	0.204	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-11	0.1802	0.08211	4	No	8	12.5	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-12	0.2389	0.1444	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-13	0.1287	0.06755	4	No	8	12.5	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-14	0.2691	0.2077	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-15	0.1502	0.1104	4	No	8	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-16	0.3018	0.2416	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-17	0.6008	0.4711	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-18	0.2075	0.1534	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-2	0.1577	0.06995	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-21	0.2197	0.09989	4	No	8	12.5	No	0.01	Param.

Confidence Interval Summary Table - All Results

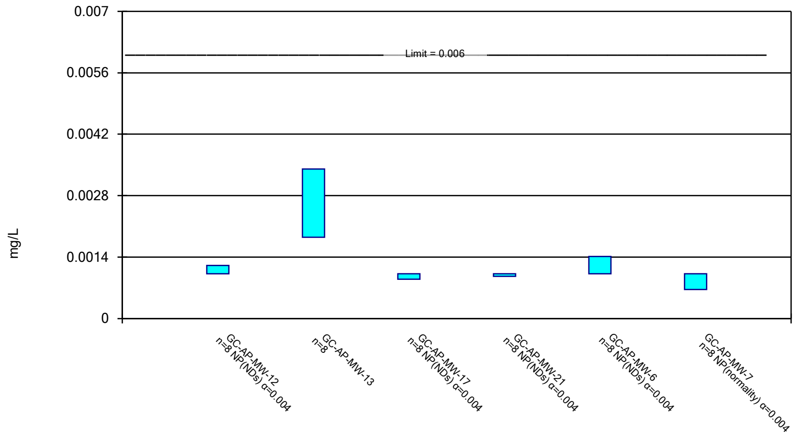
Plant Greene County Client: Southern Company Data: Greene County AP Printed 6/10/2022, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-25	0.104	0.0625	4	No	8	62.5	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-3	0.1914	0.1013	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-32	0.0625	0.0518	4	No	8	87.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-33	0.08	0.0625	4	No	8	87.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-5	0.322	0.2	4	No	8	0	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-6	0.241	0.1753	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-7	0.1058	0.08642	4	No	8	0	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-8	0.162	0.108	4	No	8	0	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-9	0.2172	0.1159	4	No	8	12.5	No	0.01	Param.
Lead (mg/L)	GC-AP-MW-16	0.0002	0.00009	0.015	No	8	62.5	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-2	0.000736	0.0002	0.015	No	8	62.5	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-25	0.0002	0.0000884	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-31	0.0002	0.00015	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-32	0.0002	0.000121	0.015	No	8	75	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-33	0.0002	0.00015	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-9	0.0002	0.0000784	0.015	No	8	87.5	No	0.004	NP (NDs)
Lithium (mg/L)	**GC-AP-MW-10**	**0.329**	**0.11**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1327**	**0.0719**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.1441**	**0.06377**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.4979**	**0.1204**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9722**	**0.5893**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6241**	**0.5512**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6624**	**0.5563**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3944**	**0.3251**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1376**	**0.1026**	**0.04**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GC-AP-MW-6	0.03337	0.008532	0.04	No	8	12.5	sqrt(x)	0.01	Param.
Lithium (mg/L)	GC-AP-MW-8	0.07163	0.01377	0.04	No	8	0	No	0.01	Param.
Lithium (mg/L)	GC-AP-MW-9	0.1005	0.0254	0.04	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-1	0.0002	0.000117	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-10	0.0132	0.00747	0.1	No	8	0	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-11	0.01754	0.006512	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-12	0.1169	0.05569	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-13	0.08885	0.01377	0.1	No	8	0	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-14	0.01812	0.01196	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-16	0.0002	0.000113	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-17	0.06869	0.04624	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-18	0.0004	0.0002	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-2	0.0002	0.0000804	0.1	No	8	75	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-21	0.06508	0.01395	0.1	No	8	0	x^2	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-25	0.0002	0.0000843	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-31	0.0002	0.0000741	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-5	0.003495	0.002752	0.1	No	8	0	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-6	0.0024	0.0002	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-7	0.0002	0.00013	0.1	No	8	62.5	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-8	0.0002	0.0000812	0.1	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-1	0.00221	0.00102	0.05	No	8	62.5	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-12	0.00281	0.00102	0.05	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-13	0.02915	0.001838	0.05	No	8	25	No	0.01	Param.
Selenium (mg/L)	GC-AP-MW-2	0.00102	0.00054	0.05	No	8	75	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-3	0.00102	0.00074	0.05	No	8	62.5	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-32	0.00102	0.00059	0.05	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-33	0.00102	0.00071	0.05	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	GC-AP-MW-1	0.0002	0.000107	0.002	No	8	62.5	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-11	0.0002	0.00007	0.002	No	8	62.5	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-13	0.001712	0.0002843	0.002	No	8	0	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-15	0.0002	0.0000878	0.002	No	8	75	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-16	0.0003935	0.0003285	0.002	No	8	0	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-2	0.0002	0.000101	0.002	No	8	62.5	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-21	0.0002	0.000106	0.002	No	8	75	No	0.004	NP (normality)

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



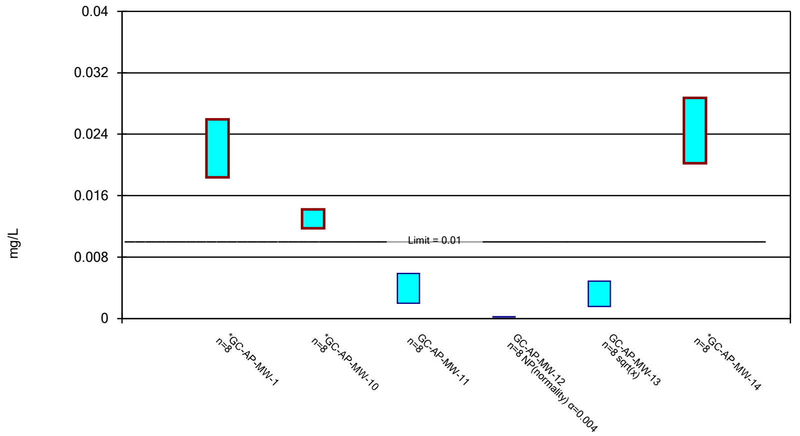
Constituent: Antimony   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



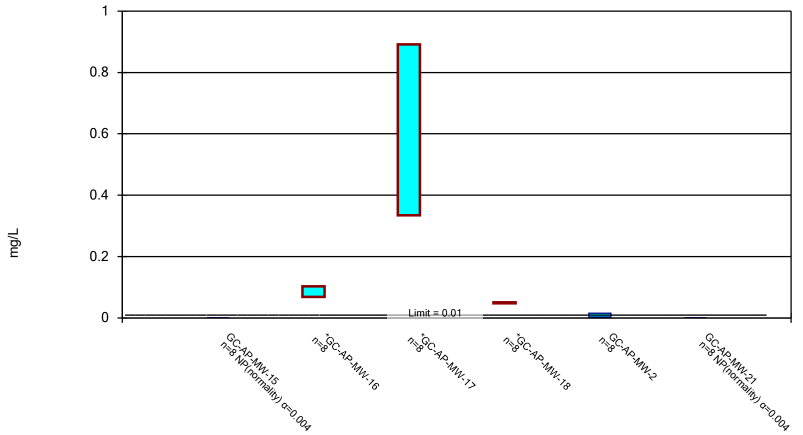
Constituent: Arsenic   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



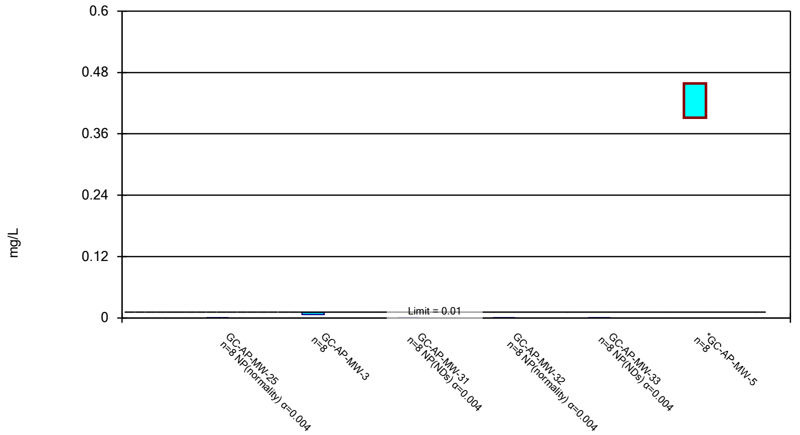
Constituent: Arsenic   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



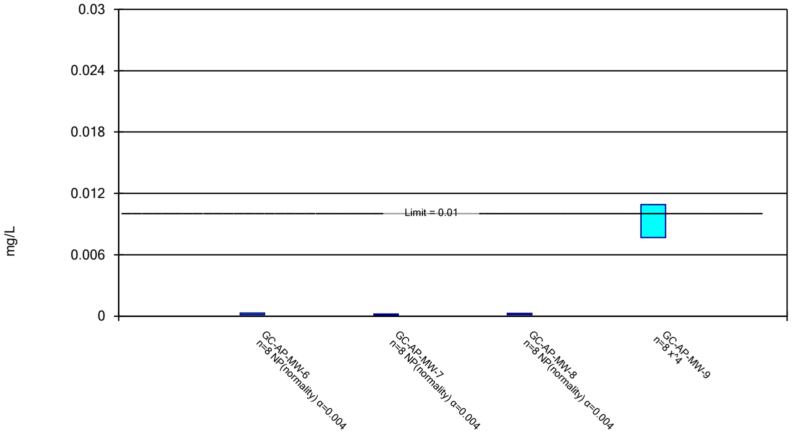
Constituent: Arsenic   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

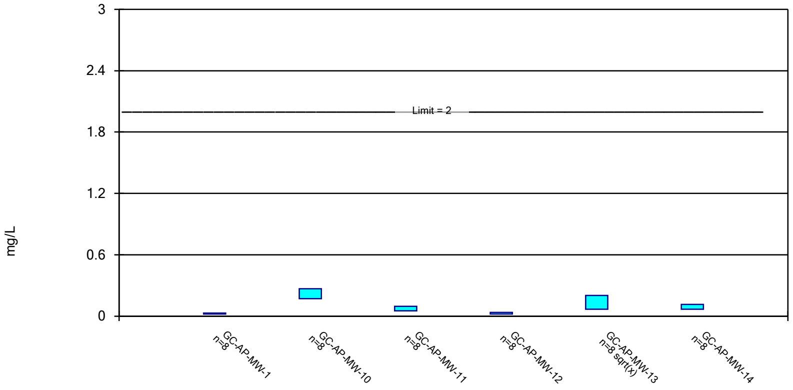


Constituent: Arsenic Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

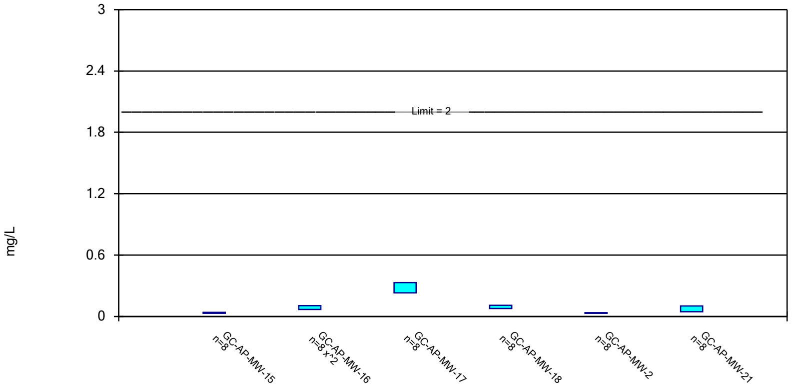


Constituent: Barium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

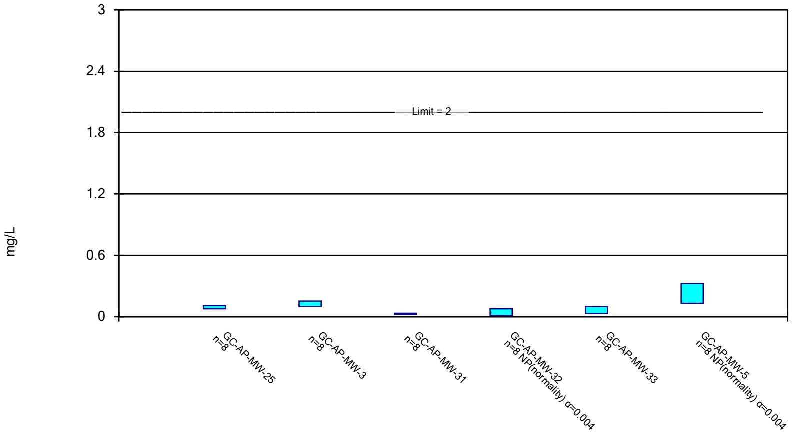


Constituent: Barium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

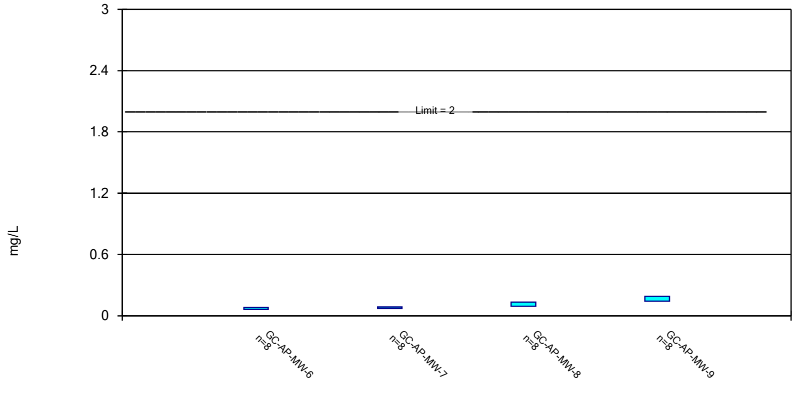


Constituent: Barium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



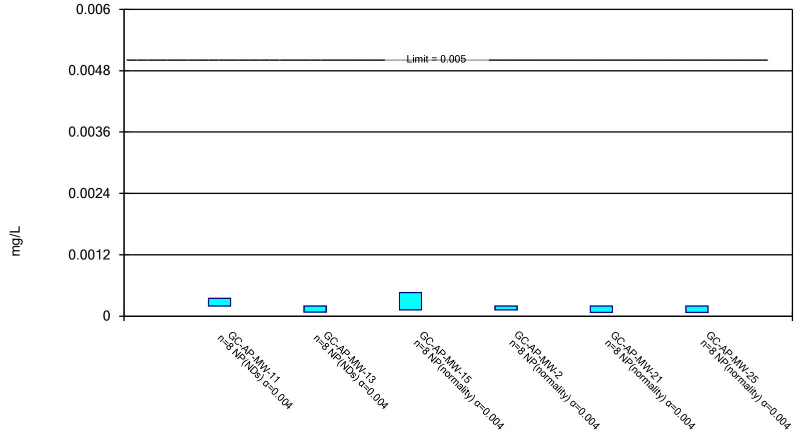
Constituent: Barium Analysis Run 6/10/2022 1:03 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



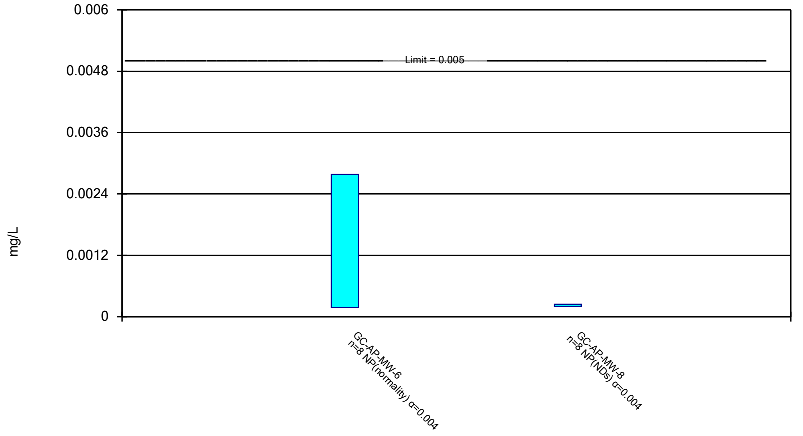
Constituent: Cadmium Analysis Run 6/10/2022 1:03 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



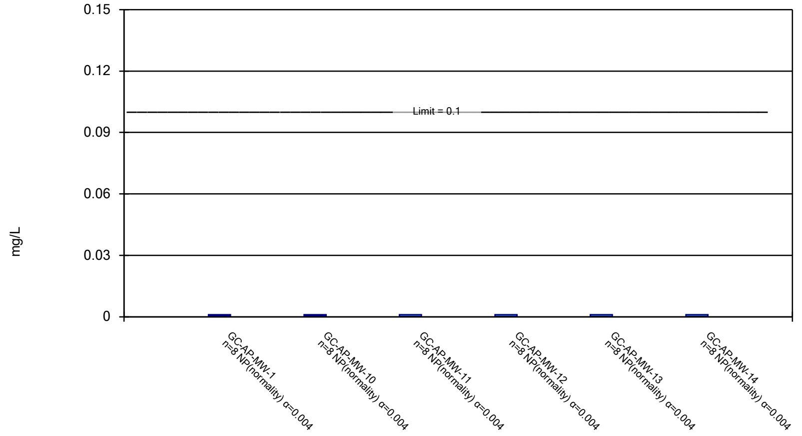
Constituent: Cadmium Analysis Run 6/10/2022 1:03 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



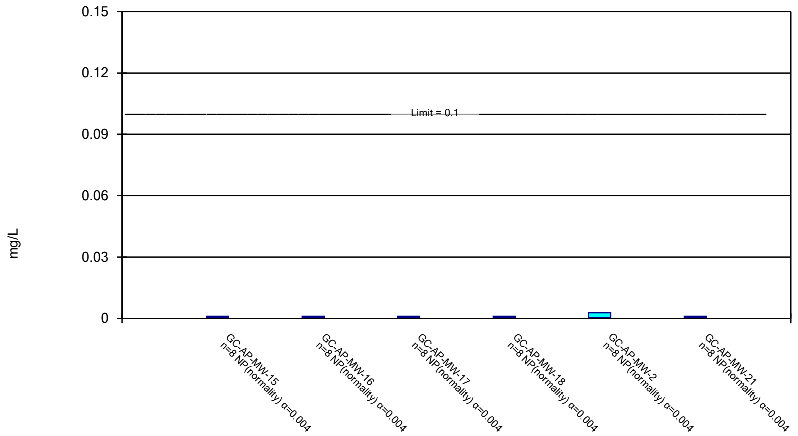
Constituent: Chromium Analysis Run 6/10/2022 1:03 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

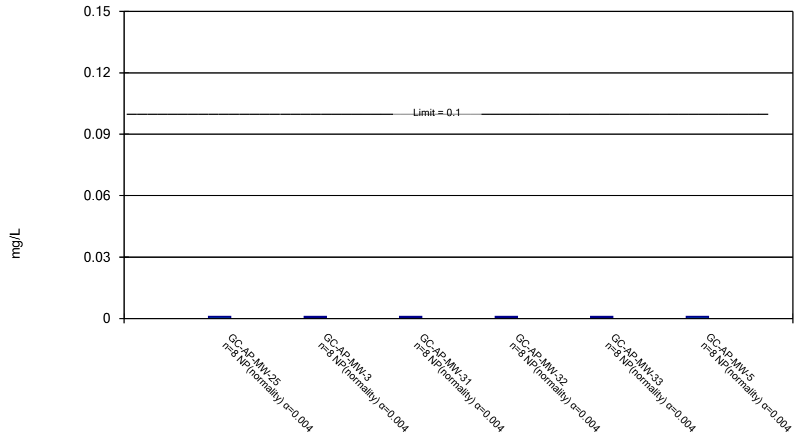


Constituent: Chromium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

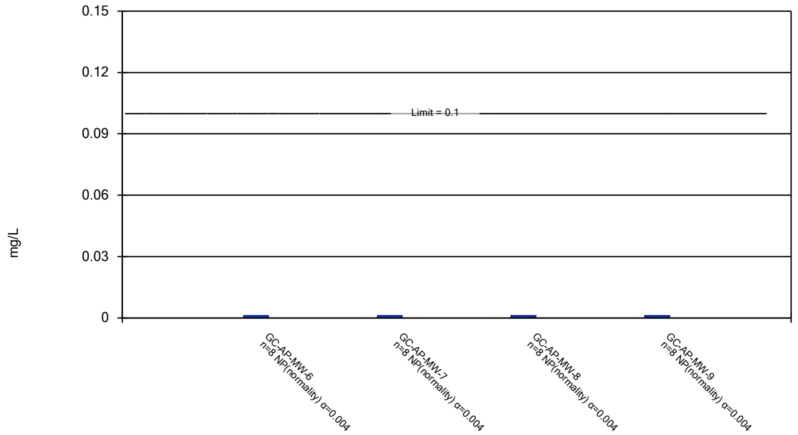


Constituent: Chromium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

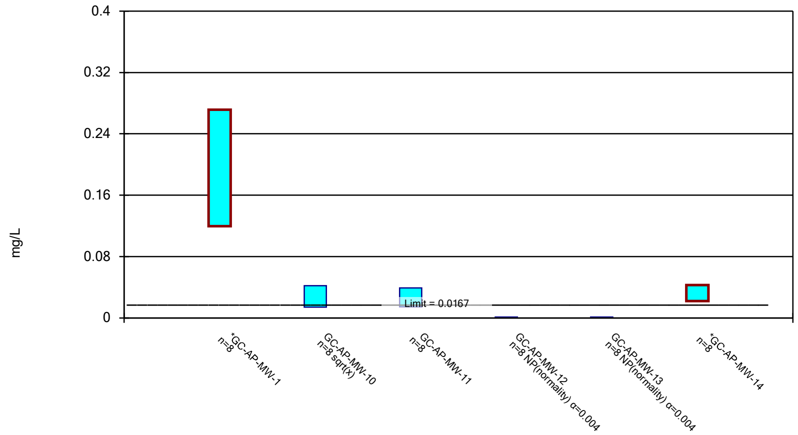


Constituent: Chromium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

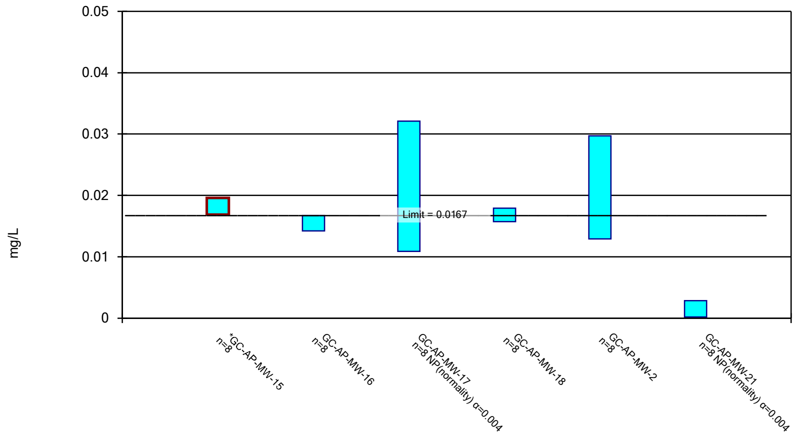


Constituent: Cobalt Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

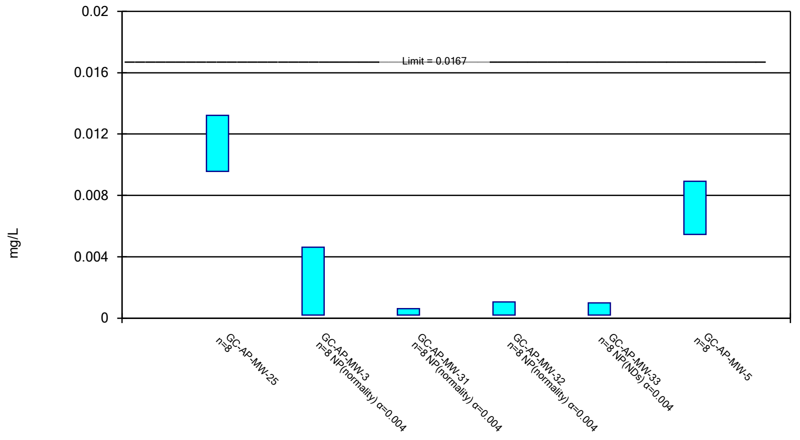


Constituent: Cobalt Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

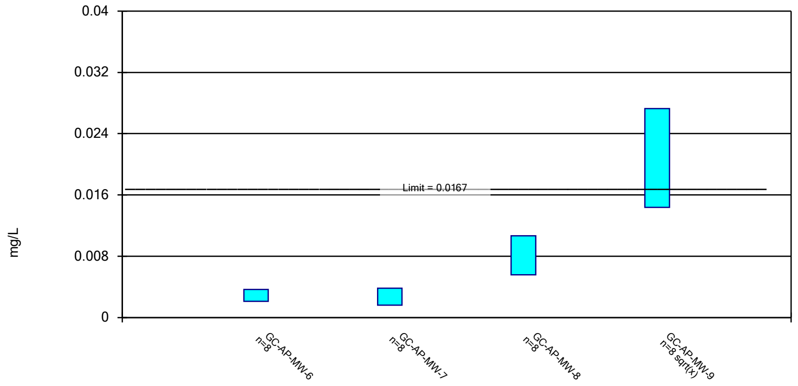


Constituent: Cobalt Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

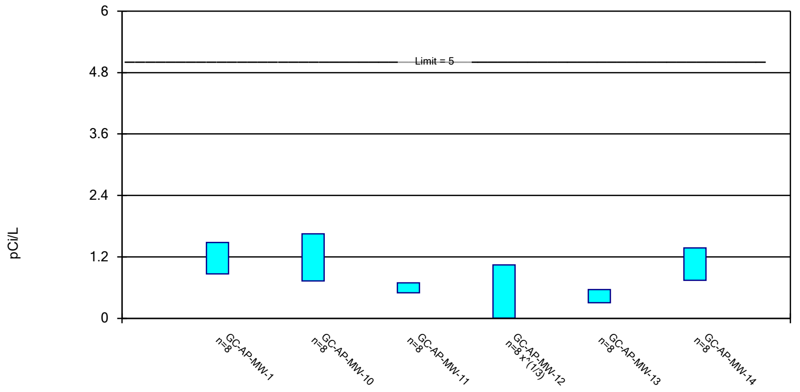


Constituent: Cobalt Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

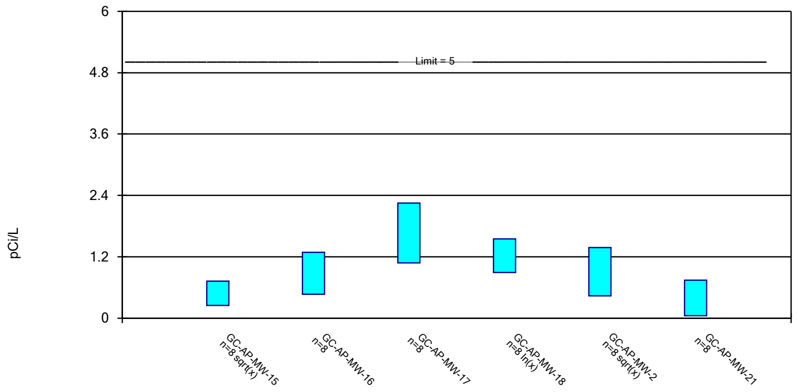


Constituent: Combined Radium 226 + 228 Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded.   Per-well alpha = 0.01.   Normality Test: Shapiro Wilk, alpha based on n.

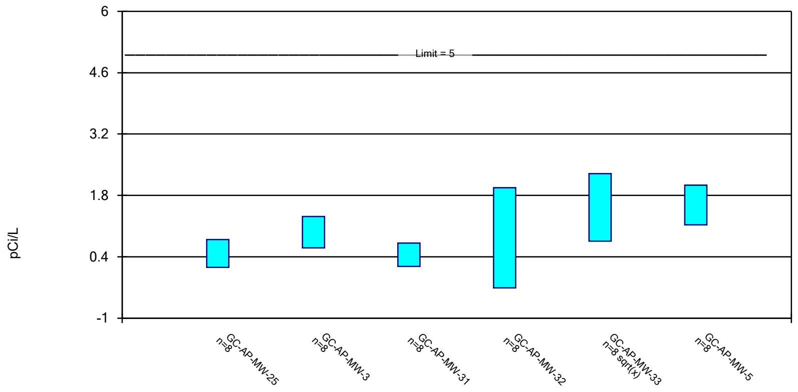


Constituent: Combined Radium 226 + 228   Analysis Run 6/10/2022 1:03 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded.   Per-well alpha = 0.01.   Normality Test: Shapiro Wilk, alpha based on n.

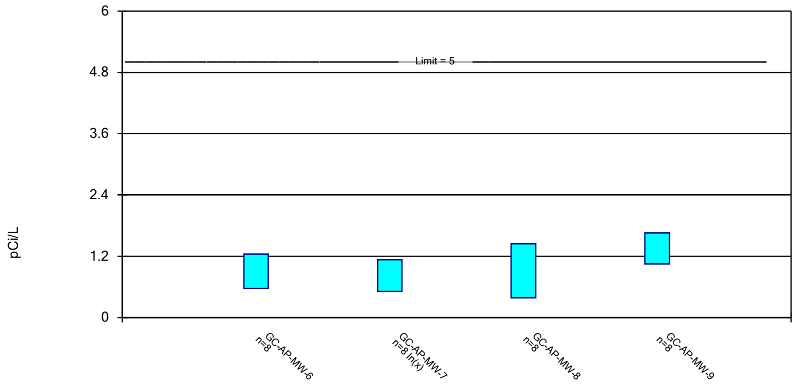


Constituent: Combined Radium 226 + 228   Analysis Run 6/10/2022 1:03 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded.   Per-well alpha = 0.01.   Normality Test: Shapiro Wilk, alpha based on n.

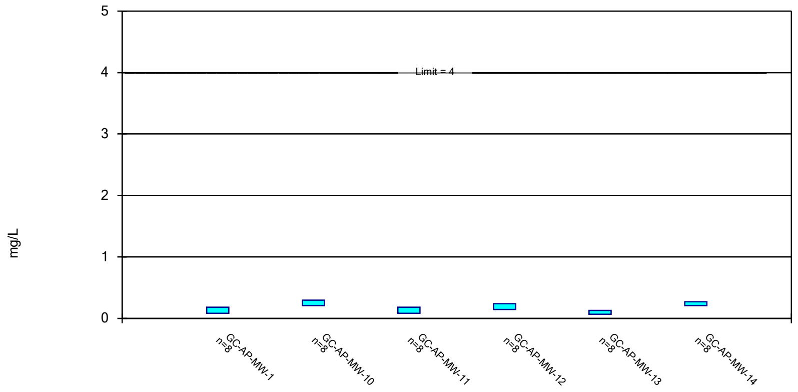


Constituent: Combined Radium 226 + 228   Analysis Run 6/10/2022 1:03 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded.   Per-well alpha = 0.01.   Normality Test: Shapiro Wilk, alpha based on n.

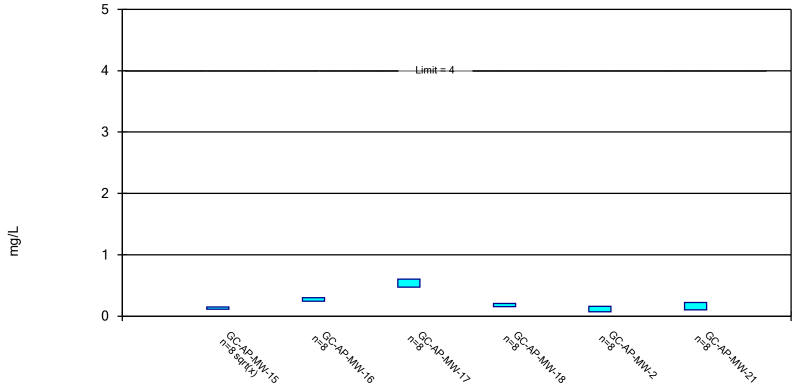


Constituent: Fluoride   Analysis Run 6/10/2022 1:03 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



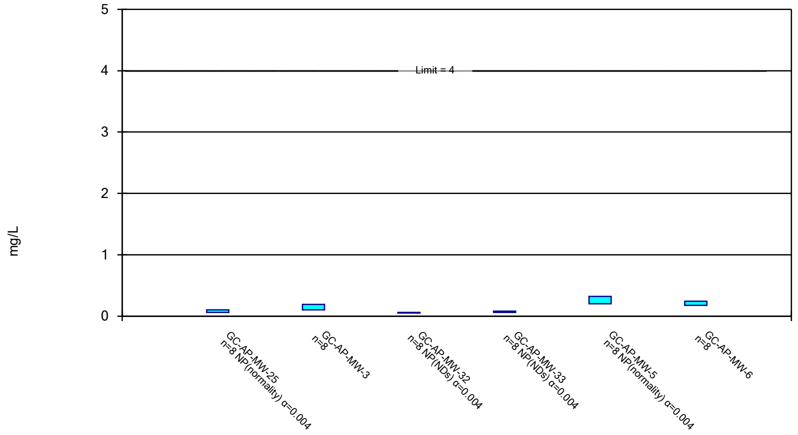
Constituent: Fluoride   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



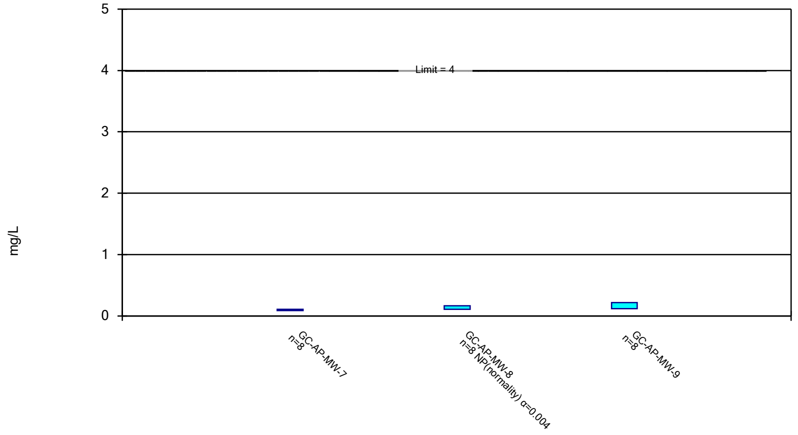
Constituent: Fluoride   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



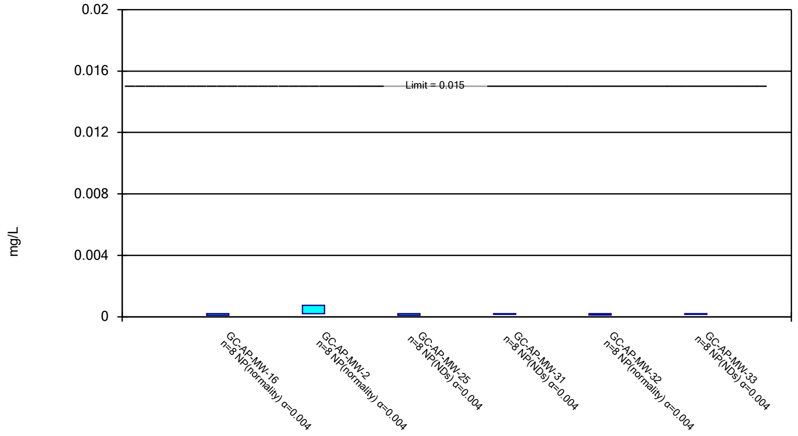
Constituent: Fluoride   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



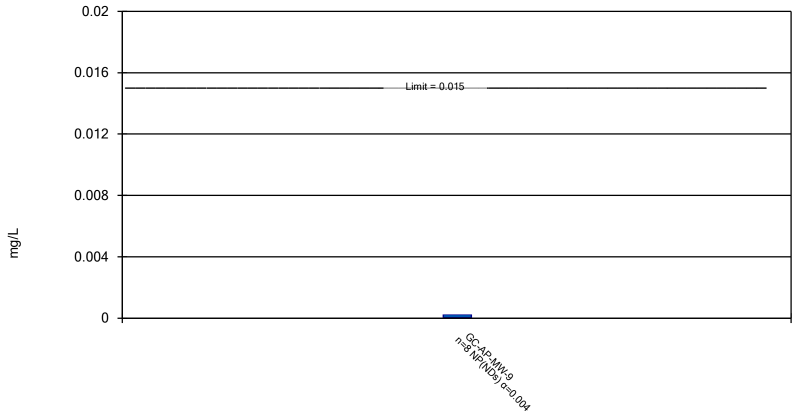
Constituent: Lead   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

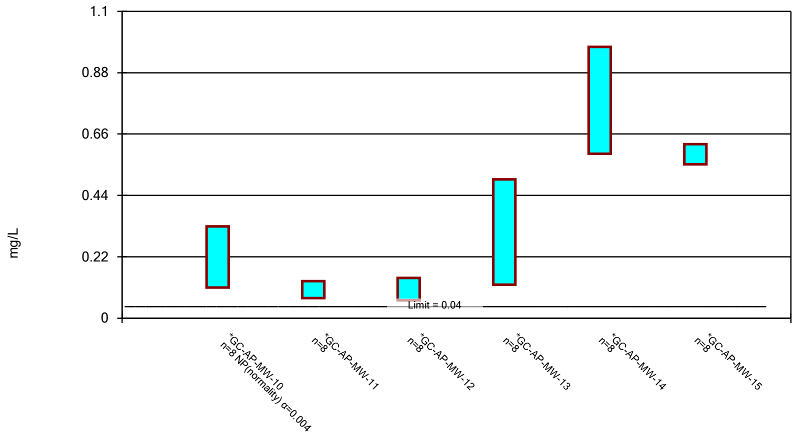


Constituent: Lead Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

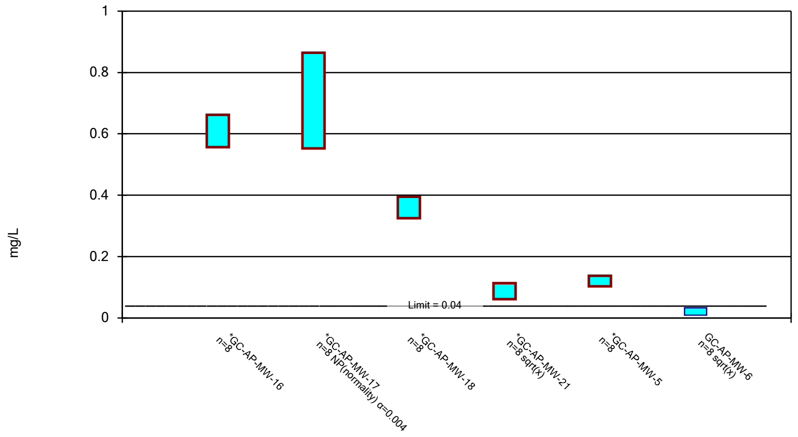


Constituent: Lithium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

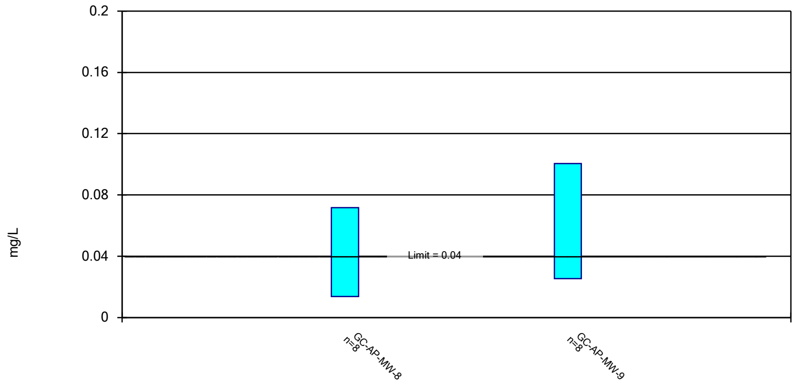


Constituent: Lithium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

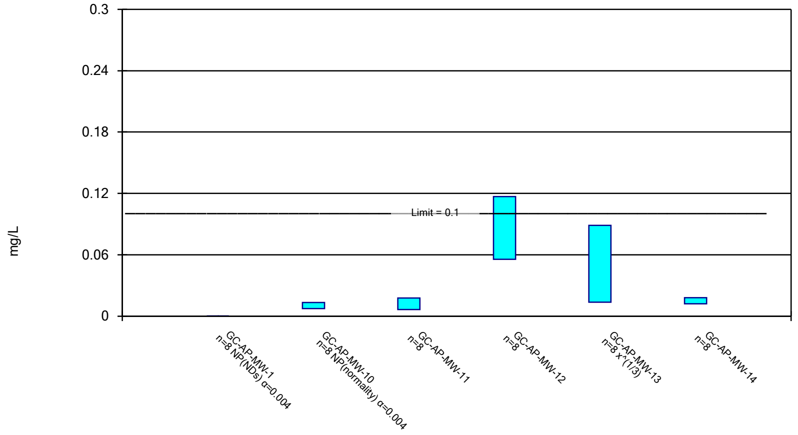


Constituent: Lithium Analysis Run 6/10/2022 1:03 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



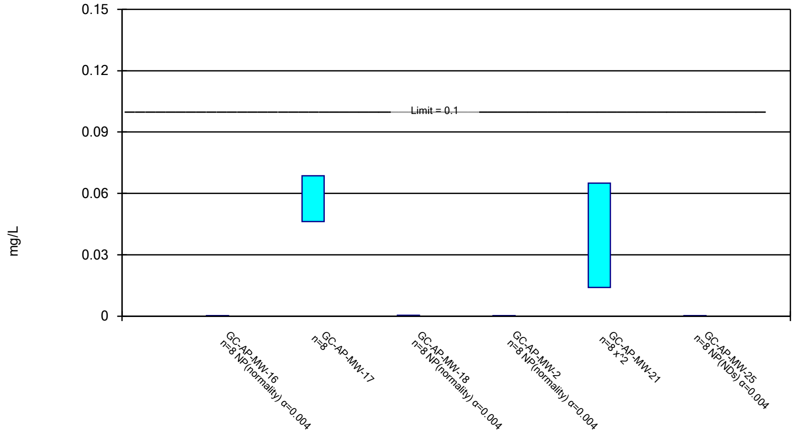
Constituent: Molybdenum   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



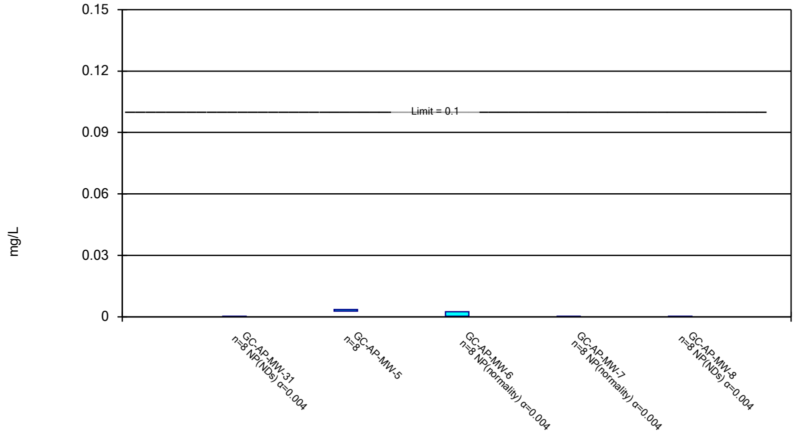
Constituent: Molybdenum   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



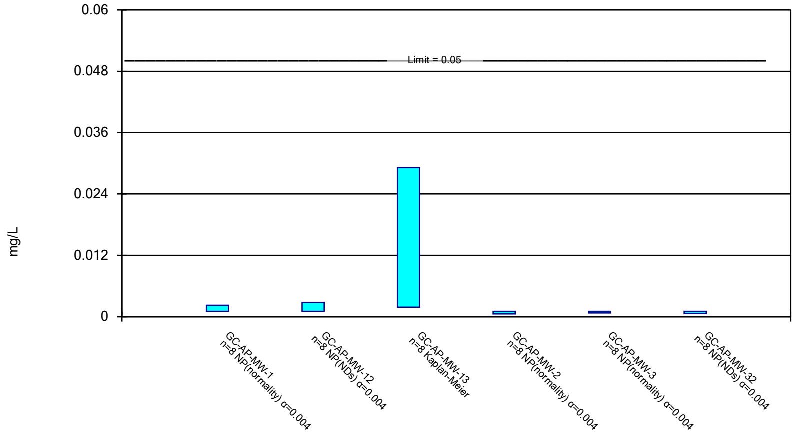
Constituent: Molybdenum   Analysis Run 6/10/2022 1:03 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



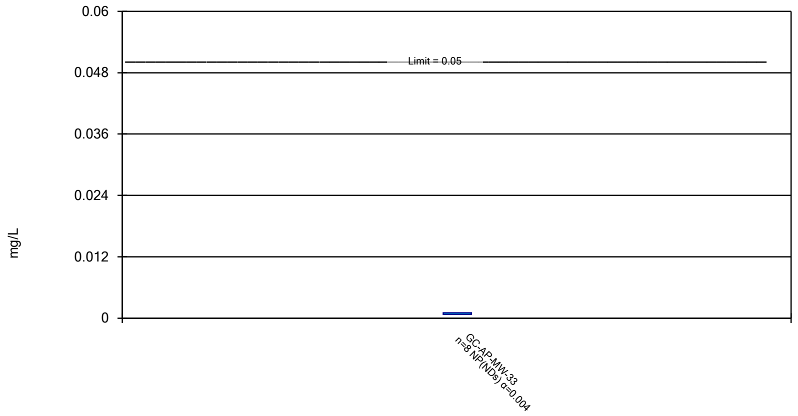
Constituent: Selenium   Analysis Run 6/10/2022 1:04 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

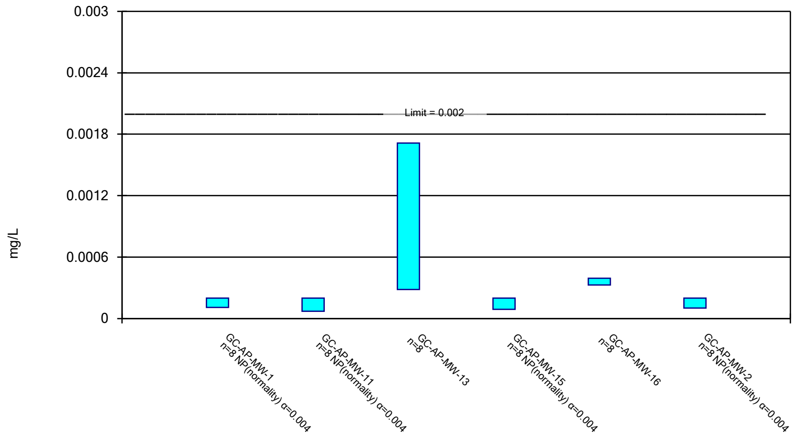


Constituent: Selenium   Analysis Run 6/10/2022 1:04 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

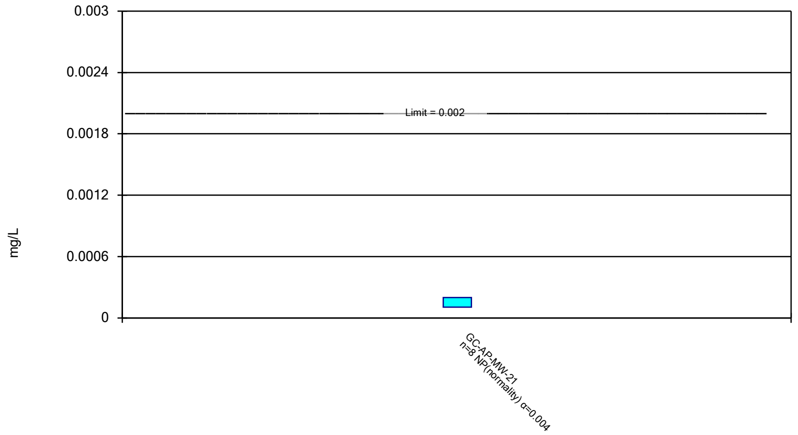


Constituent: Thallium   Analysis Run 6/10/2022 1:04 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.34 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium   Analysis Run 6/10/2022 1:04 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 6/10/2022 1:05 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-17	GC-AP-MW-21	GC-AP-MW-6	GC-AP-MW-7
11/5/2018	<0.00102	0.00275 (J)		<0.00102		
11/6/2018			<0.00102			
11/7/2018					<0.00102	<0.00102
3/26/2019	0.00121 (J)	0.00219 (J)	0.000897 (J)	0.000964 (J)	0.00141 (J)	<0.00102
9/9/2019			<0.00102			
9/10/2019	<0.00102			<0.00102	<0.00102	<0.00102
9/11/2019		0.00261 (J)				
4/20/2020		0.00338				
4/21/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/11/2020			<0.00102			
8/18/2020	<0.00102	0.00388		<0.00102		
8/19/2020					<0.00102	<0.00102
3/9/2021			<0.00102		<0.00102	<0.00102
3/10/2021	<0.00102			<0.00102		
3/15/2021		0.0016				
8/17/2021			<0.00102			
8/24/2021					<0.00102	0.00075 (J)
8/25/2021	<0.00102	0.00263		<0.00102		
3/29/2022	<0.00102				<0.00102	0.00066 (J)
3/30/2022				<0.00102		
4/4/2022			<0.00102			
4/6/2022		0.002				
Mean	0.001044	0.00263	0.001005	0.001013	0.001069	0.0009412
Std. Dev.	6.718E-05	0.0007359	4.349E-05	1.98E-05	0.0001379	0.0001478
Upper Lim.	0.00121	0.00341	0.00102	0.00102	0.00141	0.00102
Lower Lim.	0.00102	0.00185	0.000897	0.000964	0.00102	0.00066

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 1:05 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			0.00195 (J)	<0.0002	0.00497 (J)	
11/6/2018	0.0189					
11/7/2018		0.0152				0.0289
3/26/2019				<0.0002	0.00251 (J)	
3/27/2019	0.0267	0.014	0.00573			0.0264
9/10/2019	0.0226	0.0132	0.00378 (J)	<0.0002		0.0263
9/11/2019					0.00664	
4/20/2020					0.00181 (J)	
4/21/2020	0.0219			<0.0002		0.0178
4/22/2020		0.0121	0.00616			
8/11/2020						0.0207
8/17/2020	0.0265					
8/18/2020		0.0121	0.00457 (J)	<0.0002	0.00176 (J)	
3/9/2021						0.0292
3/10/2021			0.00317	0.000251		
3/15/2021		0.0125			0.00207	
3/16/2021	0.0238					
8/17/2021	0.0206					
8/24/2021		0.0129				
8/25/2021			0.00518	0.00023	0.00302	0.0224
3/29/2022				0.00023		
3/30/2022			0.00097			
4/4/2022	0.0164	0.0117				0.0241
4/6/2022					0.00261	
Mean	0.02218	0.01296	0.003939	0.0002139	0.003174	0.02448
Std. Dev.	0.003558	0.001161	0.001831	2.022E-05	0.001736	0.004003
Upper Lim.	0.02595	0.01419	0.005879	0.000251	0.004863	0.02872
Lower Lim.	0.0184	0.01173	0.001998	0.0002	0.001584	0.02023

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21
11/5/2018						<0.0002
11/6/2018	<0.0002	0.0701	0.299	0.0509	0.0085	
3/26/2019	<0.0002	0.0952	0.32	0.0477		<0.0002
3/27/2019					0.0101	
9/9/2019			0.356	0.0498	0.022	
9/10/2019	<0.0002	0.0786				<0.0002
4/20/2020	<0.0002	0.105				
4/21/2020			0.689	0.0478	0.013	<0.0002
8/11/2020		0.0698	0.581			
8/12/2020	<0.0002			0.0485		
8/17/2020					0.00768	
8/18/2020						<0.0002
3/9/2021		0.113	0.86	0.0505		
3/10/2021	0.000349					0.000216
3/16/2021					0.0045	
8/17/2021		0.0765	0.937	0.0509	0.00514	
8/25/2021	0.00046					0.00014 (J)
3/28/2022					0.00381	
3/29/2022	0.00032					
3/30/2022						0.00017 (J)
4/4/2022			0.861			
4/6/2022		0.078		0.049		
Mean	0.0002661	0.08578	0.6129	0.04939	0.009341	0.0001907
Std. Dev.	9.944E-05	0.01647	0.2632	0.001325	0.005968	2.412E-05
Upper Lim.	0.00046	0.1032	0.8918	0.05079	0.01567	0.000216
Lower Lim.	0.0002	0.06832	0.3339	0.04798	0.003015	0.00014

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5
11/5/2018				<0.0002		
11/6/2018	<0.0002	0.00685	<0.0002		<0.0002	0.432
3/27/2019	<0.0002	0.00596	<0.0002	<0.0002	<0.0002	0.455
9/9/2019		0.00806				
9/10/2019	<0.0002					
9/11/2019			<0.0002	<0.0002	<0.0002	0.406
4/20/2020		0.00751				
4/21/2020						0.42
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	
8/11/2020	<0.0002		<0.0002			
8/12/2020				<0.0002	<0.0002	0.415
8/17/2020		0.00909				
3/10/2021	0.00033					
3/15/2021			0.000111 (J)	0.000142 (J)	<0.0002	
3/16/2021		0.0112				0.473
8/17/2021		0.0119				
8/23/2021			<0.0002	0.00019 (J)	<0.0002	0.368
8/24/2021	0.00028					
3/28/2022			<0.0002	<0.0002	0.00015 (J)	
3/29/2022	0.00026					
4/4/2022						0.432
4/5/2022		0.01				
Mean	0.0002337	0.008821	0.0001889	0.0001915	0.0001937	0.4251
Std. Dev.	5.041E-05	0.002103	3.147E-05	2.03E-05	1.768E-05	0.03171
Upper Lim.	0.00033	0.01105	0.0002	0.0002	0.0002	0.4587
Lower Lim.	0.0002	0.006592	0.000111	0.000142	0.00015	0.3915

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	<0.0002	<0.0002	<0.0002	0.0098
3/26/2019	<0.0002	<0.0002	<0.0002	0.00969
9/10/2019	<0.0002	<0.0002	<0.0002	0.0108
4/21/2020	<0.0002	<0.0002	<0.0002	0.0102
8/18/2020				0.0108
8/19/2020	<0.0002	<0.0002	<0.0002	
3/9/2021	0.000303	0.00015 (J)	0.000248	0.0105
8/24/2021	0.00028	0.0001 (J)	0.00027	0.00695
3/29/2022	0.00013 (J)	8E-05 (J)	0.00015 (J)	0.00316
Mean	0.0002141	0.0001662	0.0002085	0.008988
Std. Dev.	5.387E-05	5.041E-05	3.611E-05	0.002662
Upper Lim.	0.000303	0.0002	0.00027	0.01092
Lower Lim.	0.00013	8E-05	0.00015	0.007675

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			0.0588	0.0255	0.113	
11/6/2018	0.0348					
11/7/2018		0.171				0.0575
3/26/2019				0.0218	0.109	
3/27/2019	0.0286	0.167	0.0678			0.0768
9/10/2019	0.0283	0.199	0.0651	0.0233		0.0685
9/11/2019					0.275	
4/20/2020					0.104	
4/21/2020	0.0206			0.0325		0.102
4/22/2020		0.186	0.0967			
8/11/2020						0.0806
8/17/2020	0.0218					
8/18/2020		0.223	0.0866	0.021	0.199	
3/9/2021						0.125
3/10/2021			0.0637	0.0373		
3/15/2021		0.261			0.0699	
3/16/2021	0.024					
8/17/2021	0.0211					
8/24/2021		0.287				
8/25/2021			0.104	0.0323	0.114	0.11
3/29/2022				0.0355		
3/30/2022			0.0485			
4/4/2022	0.0235	0.26				0.103
4/6/2022					0.0701	
Mean	0.02534	0.2193	0.0739	0.02865	0.1318	0.09043
Std. Dev.	0.004885	0.04564	0.01956	0.006479	0.07033	0.02305
Upper Lim.	0.03052	0.2676	0.09464	0.03552	0.2005	0.1149
Lower Lim.	0.02016	0.1709	0.05316	0.02178	0.06695	0.066

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21
11/5/2018						0.0509
11/6/2018	0.0271	0.0574	0.202	0.109	0.0286	
3/26/2019	0.0282	0.0626	0.242	0.117		0.047
3/27/2019					0.0311	
9/9/2019			0.319	0.101	0.035	
9/10/2019	0.0348	0.0754				0.0568
4/20/2020	0.0338	0.0921				
4/21/2020			0.306	0.0926	0.0335	0.0763
8/11/2020		0.0948	0.29			
8/12/2020	0.0352			0.0815		
8/17/2020					0.0376	
8/18/2020						0.0517
3/9/2021		0.102	0.352	0.0849		
3/10/2021	0.0365					0.111
3/16/2021					0.033	
8/17/2021		0.101	0.254	0.0763	0.0347	
8/25/2021	0.0402					0.0865
3/28/2022					0.0301	
3/29/2022	0.0381					
3/30/2022						0.112
4/4/2022			0.27			
4/6/2022		0.103		0.0769		
Mean	0.03424	0.08604	0.2794	0.0924	0.03295	0.07403
Std. Dev.	0.004542	0.01837	0.04748	0.01526	0.002919	0.02681
Upper Lim.	0.03905	0.1042	0.3297	0.1086	0.03604	0.1024
Lower Lim.	0.02942	0.06739	0.229	0.07623	0.02986	0.04561

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5
11/5/2018				0.0123		
11/6/2018	0.0807	0.0936	0.0211		0.0726	0.306
3/27/2019	0.0901	0.0951	0.025	0.0134	0.0912	0.251
9/9/2019		0.111				
9/10/2019	0.101					
9/11/2019			0.0267	0.0147	0.0824	0.323
4/20/2020		0.109				
4/21/2020						0.138
4/22/2020	0.11		0.0285	0.0133	0.102	
8/11/2020	0.111		0.0264			
8/12/2020				0.0127	0.0601	0.134
8/17/2020		0.139				
3/10/2021	0.0797					
3/15/2021			0.0316	0.0692	0.0144	
3/16/2021		0.159				0.143
8/17/2021		0.15				
8/23/2021			0.0317	0.0764	0.0141	0.139
8/24/2021	0.0988					
3/28/2022			0.0325	0.0132	0.0773	
3/29/2022	0.0717					
4/4/2022						0.131
4/5/2022		0.145				
Mean	0.09288	0.1252	0.02794	0.02815	0.06426	0.1956
Std. Dev.	0.01464	0.02594	0.003928	0.02763	0.03325	0.08345
Upper Lim.	0.1084	0.1527	0.0321	0.0764	0.0995	0.323
Lower Lim.	0.07735	0.09772	0.02377	0.0123	0.02902	0.131

Confidence Interval

Constituent: Barium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	0.0527	0.0739	0.0855	0.141
3/26/2019	0.0682	0.0796	0.0911	0.175
9/10/2019	0.0789	0.0887	0.11	0.206
4/21/2020	0.0728	0.0762	0.116	0.175
8/18/2020				0.165
8/19/2020	0.0784	0.0816	0.119	
3/9/2021	0.0664	0.083	0.15	0.16
8/24/2021	0.0737	0.0782	0.122	0.168
3/29/2022	0.0614	0.0639	0.104	0.139
Mean	0.06906	0.07814	0.1122	0.1661
Std. Dev.	0.008894	0.007307	0.02006	0.02124
Upper Lim.	0.07849	0.08588	0.1335	0.1886
Lower Lim.	0.05964	0.07039	0.09094	0.1436

Confidence Interval

Constituent: Cadmium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-13	GC-AP-MW-15	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25
11/5/2018	<0.0002	<0.0002			<0.0002	
11/6/2018			<0.0002	<0.0002		<0.0002
3/26/2019		<0.0002	<0.0002		<0.0002	
3/27/2019	<0.0002			<0.0002		<0.0002
9/9/2019				<0.0002		
9/10/2019	<0.0002		<0.0002		<0.0002	<0.0002
9/11/2019		<0.0002				
4/20/2020		<0.0002	<0.0002			
4/21/2020				<0.0002	<0.0002	
4/22/2020	<0.0002					<0.0002
8/11/2020						<0.0002
8/12/2020			<0.0002			
8/17/2020				<0.0002		
8/18/2020	<0.0002	<0.0002			<0.0002	
3/10/2021	0.000347		0.00012 (J)		7.02E-05 (J)	<0.0002
3/15/2021		<0.0002				
3/16/2021				0.00013 (J)		
8/17/2021				<0.0002		
8/24/2021						9E-05 (J)
8/25/2021	<0.0002	<0.0002	0.00014 (J)		<0.0002	
3/28/2022				0.00012 (J)		
3/29/2022			0.00046			7E-05 (J)
3/30/2022	<0.0002				7E-05 (J)	
4/6/2022		8E-05 (J)				
Mean	0.0002184	0.000185	0.000215	0.0001812	0.0001675	0.00017
Std. Dev.	5.197E-05	4.243E-05	0.0001041	3.482E-05	6.013E-05	5.581E-05
Upper Lim.	0.000347	0.0002	0.00046	0.0002	0.0002	0.0002
Lower Lim.	0.0002	8E-05	0.00012	0.00012	7E-05	7E-05

Confidence Interval

Constituent: Cadmium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-8
11/7/2018	<0.0002	<0.0002
3/26/2019	<0.0002	<0.0002
9/10/2019	<0.0002	<0.0002
4/21/2020	<0.0002	<0.0002
8/19/2020	<0.0002	<0.0002
3/9/2021	0.00278	0.000241
8/24/2021	0.00018 (J)	<0.0002
3/29/2022	0.0005	<0.0002
Mean	0.0005575	0.0002051
Std. Dev.	0.0009043	1.45E-05
Upper Lim.	0.00278	0.000241
Lower Lim.	0.00018	0.0002

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			<0.00102	<0.00102	<0.00102	
11/6/2018	<0.00102					
11/7/2018		<0.00102				<0.00102
3/26/2019				<0.00102	<0.00102	
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
9/11/2019					<0.00102	
4/20/2020					<0.00102	
4/21/2020	<0.00102			<0.00102		<0.00102
4/22/2020		<0.00102	<0.00102			
8/11/2020						<0.00102
8/17/2020	<0.00102					
8/18/2020		<0.00102	<0.00102	<0.00102	<0.00102	
3/9/2021						0.000357 (J)
3/10/2021			<0.00102	0.000224 (J)		
3/15/2021		0.000357 (J)			0.000311 (J)	
3/16/2021	0.000341 (J)					
8/17/2021	0.00034 (J)					
8/24/2021		0.00036 (J)				
8/25/2021			0.00027 (J)	0.00035 (J)	0.00026 (J)	0.00023 (J)
3/29/2022				0.00043 (J)		
3/30/2022			0.00023 (J)			
4/4/2022	0.00045 (J)	<0.00102				0.00025 (J)
4/6/2022					0.0003 (J)	
Mean	0.0007789	0.0008546	0.0008275	0.000763	0.0007464	0.0007421
Std. Dev.	0.0003345	0.0003062	0.0003566	0.000359	0.0003779	0.0003852
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102
Lower Lim.	0.00034	0.000357	0.00023	0.000224	0.00026	0.00023

Confidence Interval

Constituent: Chromium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21
11/5/2018						<0.00102
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
3/26/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/27/2019					<0.00102	
9/9/2019			<0.00102	<0.00102	<0.00102	
9/10/2019	<0.00102	<0.00102				<0.00102
4/20/2020	<0.00102	<0.00102				
4/21/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/11/2020		<0.00102	<0.00102			
8/12/2020	<0.00102			<0.00102		
8/17/2020					<0.00102	
8/18/2020						<0.00102
3/9/2021		0.000444 (J)	0.000216 (J)	0.000346 (J)		
3/10/2021	0.000301 (J)					0.000333 (J)
3/16/2021					0.0004 (J)	
8/17/2021		0.0004 (J)	0.00022 (J)	0.00023 (J)	0.00267	
8/25/2021	0.00027 (J)					0.00027 (J)
3/28/2022					0.0003 (J)	
3/29/2022	<0.00102					
3/30/2022						0.00022 (J)
4/4/2022			0.00022 (J)			
4/6/2022		0.00034 (J)		0.00031 (J)		
Mean	0.0008364	0.0007855	0.0007195	0.0007482	0.001059	0.0007404
Std. Dev.	0.0003401	0.0003248	0.0004147	0.0003764	0.0007185	0.0003871
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00267	0.00102
Lower Lim.	0.00027	0.00034	0.000216	0.00023	0.0003	0.00022

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5
11/5/2018				<0.00102		
11/6/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/9/2019		<0.00102				
9/10/2019	<0.00102					
9/11/2019			<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020		<0.00102				
4/21/2020						<0.00102
4/22/2020	<0.00102		<0.00102	<0.00102	<0.00102	
8/11/2020	<0.00102		<0.00102			
8/12/2020				<0.00102	<0.00102	<0.00102
8/17/2020		<0.00102				
3/10/2021	0.0003 (J)					
3/15/2021			0.000468 (J)	0.000431 (J)	0.000679 (J)	
3/16/2021		0.000347 (J)				0.000285 (J)
8/17/2021		0.00032 (J)				
8/23/2021			0.00042 (J)	0.00038 (J)	0.0005 (J)	0.00027 (J)
8/24/2021	0.00028 (J)					
3/28/2022			0.00039 (J)	0.00042 (J)	0.00044 (J)	
3/29/2022	0.00041 (J)					
4/4/2022						0.00025 (J)
4/5/2022		0.00039 (J)				
Mean	0.0007612	0.0007696	0.0007972	0.0007914	0.0008399	0.0007381
Std. Dev.	0.0003591	0.0003461	0.0003081	0.0003159	0.0002573	0.0003891
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102
Lower Lim.	0.00028	0.00032	0.00039	0.00038	0.00044	0.00025

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	<0.00102	<0.00102	<0.00102	<0.00102
3/26/2019	<0.00102	<0.00102	<0.00102	<0.00102
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102
8/18/2020				<0.00102
8/19/2020	<0.00102	<0.00102	<0.00102	
3/9/2021	0.000347 (J)	0.000351 (J)	0.000346 (J)	0.000381 (J)
8/24/2021	0.00026 (J)	0.00036 (J)	0.00031 (J)	0.0003 (J)
3/29/2022	<0.00102	0.00024 (J)	0.00027 (J)	0.00027 (J)
Mean	0.0008409	0.0007564	0.0007532	0.0007564
Std. Dev.	0.0003325	0.0003656	0.0003687	0.0003651
Upper Lim.	0.00102	0.00102	0.00102	0.00102
Lower Lim.	0.00026	0.00024	0.00027	0.00027

Confidence Interval

Constituent: Cobalt (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			0.0171	<0.0002	<0.0002	
11/6/2018	0.0898					
11/7/2018		0.015				0.0124
3/26/2019				<0.0002	<0.0002	
3/27/2019	0.176	0.014	0.0292			0.0303
9/10/2019	0.104	0.0191	0.02	<0.0002		0.0278
9/11/2019					<0.0002	
4/20/2020					<0.0002	
4/21/2020	0.206			<0.0002		0.0339
4/22/2020		0.0233	0.0319			
8/11/2020						0.0373
8/17/2020	0.195					
8/18/2020		0.0287	0.0298	<0.0002	<0.0002	
3/9/2021						0.0302
3/10/2021			0.0197	0.00118		
3/15/2021		0.0475			0.000312	
3/16/2021	0.257					
8/17/2021	0.24					
8/24/2021		0.0514				
8/25/2021			0.0507	0.00094	7E-05 (J)	0.0436
3/29/2022				0.00088		
3/30/2022			0.0157			
4/4/2022	0.296	0.0218				0.0423
4/6/2022					0.00126	
Mean	0.1955	0.0276	0.02676	0.0005	0.0003302	0.03223
Std. Dev.	0.07161	0.0143	0.0115	0.0004226	0.0003812	0.009855
Upper Lim.	0.2714	0.04203	0.03895	0.00118	0.00126	0.04267
Lower Lim.	0.1196	0.014	0.01457	0.0002	7E-05	0.02178

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21
11/5/2018						<0.0002
11/6/2018	0.0158	0.0141	0.0321	0.0158	0.0101	
3/26/2019	0.0184	0.0177	0.0192	0.0161		<0.0002
3/27/2019					0.0131	
9/9/2019			0.0121	0.0174	0.0154	
9/10/2019	0.0201	0.0162				<0.0002
4/20/2020	0.0189	0.0146				
4/21/2020			0.0158	0.0173	0.0194	<0.0002
8/11/2020		0.0148	0.0122			
8/12/2020	0.0184			0.0152		
8/17/2020					0.0249	
8/18/2020						<0.0002
3/9/2021		0.0162	0.0151	0.017		
3/10/2021	0.0189					0.00204
3/16/2021					0.0272	
8/17/2021		0.0155	0.0109	0.0175	0.0296	
8/25/2021	0.0181					0.00147
3/28/2022					0.0309	
3/29/2022	0.0172					
3/30/2022						0.00284
4/4/2022			0.0115			
4/6/2022		0.0147		0.0183		
Mean	0.01823	0.01548	0.01611	0.01683	0.02133	0.0009187
Std. Dev.	0.001278	0.001178	0.007032	0.001031	0.007927	0.001058
Upper Lim.	0.01958	0.01672	0.0321	0.01792	0.02973	0.00284
Lower Lim.	0.01687	0.01423	0.0109	0.01573	0.01292	0.0002

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5
11/5/2018				<0.0002		
11/6/2018	0.00791	0.00439 (J)	<0.0002		<0.0002	0.00545
3/27/2019	0.0114	0.00463 (J)	<0.0002	<0.0002	<0.0002	0.00614
9/9/2019		0.00413 (J)				
9/10/2019	0.0127					
9/11/2019			<0.0002	<0.0002	<0.0002	0.00767
4/20/2020		0.00396 (J)				
4/21/2020						0.00601
4/22/2020	0.0133		<0.0002	<0.0002	<0.0002	
8/11/2020	0.0126		<0.0002			
8/12/2020				<0.0002	<0.0002	0.00678
8/17/2020		<0.0002				
3/10/2021	0.0115					
3/15/2021			0.000624	0.000908	<0.0002	
3/16/2021		0.00076				0.00857
8/17/2021		0.00039				
8/23/2021			0.0006	0.00105	<0.0002	0.00645
8/24/2021	0.0117					
3/28/2022			0.00061	<0.0002	0.00099	
3/29/2022	0.0101					
4/4/2022						0.0104
4/5/2022		0.00083				
Mean	0.0114	0.002411	0.0003542	0.0003947	0.0002987	0.007184
Std. Dev.	0.00172	0.002014	0.000213	0.0003626	0.0002793	0.001633
Upper Lim.	0.01322	0.00463	0.000624	0.00105	0.00099	0.008915
Lower Lim.	0.009578	0.0002	0.0002	0.0002	0.0002	0.005452

Confidence Interval

Constituent: Cobalt (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	0.00258 (J)	0.00277 (J)	0.00651	0.0145
3/26/2019	0.00223 (J)	0.0024 (J)	0.00445 (J)	0.0167
9/10/2019	0.00306 (J)	0.0034 (J)	0.0108	0.0177
4/21/2020	0.00228 (J)	0.00206 (J)	0.0111	0.0166
8/18/2020				0.0164
8/19/2020	0.00278 (J)	0.0046 (J)	0.00975	
3/9/2021	0.00367	0.00181	0.00707	0.0247
8/24/2021	0.00419	0.00333	0.00898	0.0323
3/29/2022	0.00223	0.0014	0.00619	0.0267
Mean	0.002878	0.002721	0.008106	0.0207
Std. Dev.	0.0007248	0.001034	0.002401	0.006384
Upper Lim.	0.003646	0.003817	0.01065	0.02726
Lower Lim.	0.002109	0.001626	0.005562	0.01437

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			0.682	0.048 (U)	0.441 (U)	
11/6/2018	0.938					
11/7/2018		0.568				0.888
3/26/2019				0.381	0.471	
3/27/2019	1.17	0.988	0.564			1.1
9/10/2019	1.39	1.1	0.57	0.434 (U)		0.852
9/11/2019					0.557 (U)	
4/20/2020					0.256 (U)	
4/21/2020	0.712			-0.0655 (U)		0.653
4/22/2020		1.11	0.502 (U)			
8/11/2020						1.64
8/17/2020	1.46					
8/18/2020		1.08	0.457 (U)	0.135 (U)	0.568 (U)	
3/9/2021						1.28 (U)
3/10/2021			0.666 (U)	0.481 (U)		
3/15/2021		1.12 (U)			0.537 (U)	
3/16/2021	1.45					
8/17/2021	1.36					
8/24/2021		1.45				
8/25/2021			0.729 (U)	0.113 (U)	0.3 (U)	1.01
3/29/2022				1.37		
3/30/2022			0.597 (U)			
4/4/2022	0.899	2.08				1.03
4/6/2022					0.338 (U)	
Mean	1.172	1.187	0.5959	0.3621	0.4335	1.057
Std. Dev.	0.2888	0.4341	0.09246	0.4521	0.1219	0.2996
Upper Lim.	1.479	1.647	0.6939	1.043	0.5627	1.374
Lower Lim.	0.8662	0.7269	0.4979	0.0003309	0.3043	0.7391

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21
11/5/2018						0.637
11/6/2018	0.391 (U)	0.661	1.05	0.913	0.803	
3/26/2019	0.535	1.18	1.57	1.35		0.405
3/27/2019					0.77	
9/9/2019			1.29	1.08	0.3 (U)	
9/10/2019	0.3 (U)	0.516 (U)				0.0889 (U)
4/20/2020	0.693	0.493 (U)				
4/21/2020			0.859	0.888	0.663 (U)	0.271 (U)
8/11/2020		1.48	2.14			
8/12/2020	0.983			1.17		
8/17/2020					0.817	
8/18/2020						-0.0105 (U)
3/9/2021		1.2 (U)	2.27	1.11 (U)		
3/10/2021	0.335 (U)					0.418 (U)
3/16/2021					1.05 (U)	
8/17/2021		0.49 (U)	1.97	2.04	2.01	
8/25/2021	0.314 (U)					0.305 (U)
3/28/2022					0.745 (U)	
3/29/2022	0.273 (U)					
3/30/2022						1.04
4/4/2022			2.17			
4/6/2022		1 (U)		1.18 (U)		
Mean	0.478	0.8775	1.665	1.216	0.8948	0.3943
Std. Dev.	0.2487	0.3871	0.55	0.3644	0.4968	0.3288
Upper Lim.	0.7216	1.288	2.248	1.552	1.383	0.7428
Lower Lim.	0.248	0.4672	1.082	0.8931	0.4359	0.04578

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5
11/5/2018				0.0946 (U)		
11/6/2018	0.0751 (U)	1.27	0.566 (U)		1.55	1.72
3/27/2019	0.309 (U)	1.47	0.29 (U)	0.5	1.83	1.56
9/9/2019		1.12				
9/10/2019	0.578					
9/11/2019			0.28 (U)	-0.464 (U)	1.02	1.46
4/20/2020		0.899				
4/21/2020						0.882
4/22/2020	0.218 (U)		0.0983 (U)	0.474 (U)	1.08	
8/11/2020	0.511 (U)		0.767			
8/12/2020				3.18	3.41	2.08
8/17/2020		0.738				
3/10/2021	1.03 (U)					
3/15/2021			0.817 (U)	1.11 (U)	0.771 (U)	
3/16/2021		0.553 (U)				1.71
8/17/2021		1.09				
8/23/2021			0.345 (U)	1.09	1.01 (U)	2.11
8/24/2021	0.693 (U)					
3/28/2022			0.413 (U)	0.682 (U)	1.36	
3/29/2022	0.37 (U)					
4/4/2022						1.13
4/5/2022		0.532 (U)				
Mean	0.473	0.959	0.447	0.8333	1.504	1.582
Std. Dev.	0.3005	0.3382	0.2505	1.078	0.8415	0.4263
Upper Lim.	0.7915	1.317	0.7125	1.976	2.296	2.033
Lower Lim.	0.1545	0.6006	0.1816	-0.3098	0.7576	1.13

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	1.39	1.51	0.34 (U)	0.82
3/26/2019	0.904	0.841	0.507	1.49
9/10/2019	1.14	0.569 (U)	0.898	1.75
4/21/2020	0.679 (U)	0.549 (U)	1.09	1.31
8/18/2020				1.59
8/19/2020	0.96	1.04	0.6 (U)	
3/9/2021	1.12 (U)	0.545 (U)	1.6	1.16 (U)
8/24/2021	0.645 (U)	0.865 (U)	1.67	1.43
3/29/2022	0.394 (U)	0.575 (U)	0.621 (U)	1.25
Mean	0.904	0.8118	0.9158	1.35
Std. Dev.	0.3206	0.3377	0.5004	0.2859
Upper Lim.	1.244	1.129	1.446	1.653
Lower Lim.	0.5642	0.512	0.3853	1.047

Confidence Interval

Constituent: Fluoride (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			0.15	0.2	0.15	
11/6/2018	0.04 (J)					
11/7/2018		0.25				0.19
3/26/2019				0.196	0.0775 (J)	
3/27/2019	0.192	0.206	0.104			0.248
9/10/2019	0.179	0.226	0.191	0.26		0.209
9/11/2019					0.118	
4/20/2020					0.0844 (J)	
4/21/2020	0.12			0.198		0.254
4/22/2020		0.224	0.167			
8/11/2020						0.278
8/17/2020	0.115					
8/18/2020		0.203	0.165	0.223	0.108	
3/9/2021						0.263
3/10/2021			0.0749 (J)	0.161		
3/15/2021		0.324			0.0737 (J)	
3/16/2021	0.129					
8/17/2021	0.158					
8/24/2021		0.277				
8/25/2021			0.135	0.188	0.111	0.239
3/29/2022				0.107 (J)		
3/30/2022			<0.125			
4/4/2022	0.124 (D)	0.2785 (D)				0.226 (D)
4/6/2022					<0.125	
Mean	0.1321	0.2486	0.1312	0.1916	0.09814	0.2384
Std. Dev.	0.04699	0.04208	0.04629	0.04456	0.02886	0.02896
Upper Lim.	0.1819	0.2932	0.1802	0.2389	0.1287	0.2691
Lower Lim.	0.08232	0.204	0.08211	0.1444	0.06755	0.2077

Confidence Interval

Constituent: Fluoride (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21
11/5/2018						0.22
11/6/2018	0.12	0.24	0.45	0.17	0.07 (J)	
3/26/2019	0.113	0.316	0.573	0.192		0.219
3/27/2019					0.089 (J)	
9/9/2019			0.477	0.157	0.163	
9/10/2019	0.122	0.267				0.194
4/20/2020	0.14	0.245				
4/21/2020			0.565	0.171	0.126	0.173
8/11/2020		0.294	0.515			
8/12/2020	0.147			0.198		
8/17/2020					0.0753 (J)	
8/18/2020						0.18
3/9/2021		0.286	0.628	0.205		
3/10/2021	0.115					0.113
3/16/2021					0.185	
8/17/2021		0.286	0.494	0.212	0.0974 (J)	
8/25/2021	0.167					0.117
3/28/2022					0.105 (J)	
3/29/2022	0.117 (J)					
3/30/2022						<0.125
4/4/2022			0.5855 (D)			
4/6/2022		0.2395 (D)		0.1385 (D)		
Mean	0.1301	0.2717	0.5359	0.1804	0.1138	0.1598
Std. Dev.	0.01929	0.0284	0.06119	0.02549	0.04141	0.05653
Upper Lim.	0.1502	0.3018	0.6008	0.2075	0.1577	0.2197
Lower Lim.	0.1104	0.2416	0.4711	0.1534	0.06995	0.09989

Confidence Interval

Constituent: Fluoride (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-3	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5	GC-AP-MW-6
11/5/2018			<0.125			
11/6/2018	<0.125	0.1		0.08 (J)	0.22	
11/7/2018						0.22
3/26/2019						0.253
3/27/2019	<0.125	0.13	<0.125	<0.125	0.208	
9/9/2019		0.121				
9/10/2019	<0.125					0.227
9/11/2019			0.0518 (J)	<0.125	0.2	
4/20/2020		0.112				
4/21/2020					0.224	0.218
4/22/2020	<0.125		<0.125	<0.125		
8/11/2020	<0.125					
8/12/2020			<0.125	<0.125	0.221	
8/17/2020		0.148				
8/19/2020						0.223
3/9/2021						0.17
3/10/2021	0.104					
3/15/2021			<0.125	<0.125		
3/16/2021		0.23			0.282	
8/17/2021		0.184				
8/23/2021			<0.125	<0.125	0.322	
8/24/2021	0.0914 (J)					0.161
3/28/2022			<0.125	<0.125		
3/29/2022	0.0724 (J)					0.193
4/4/2022					0.216	
4/5/2022		0.146 (D)				
Mean	0.07254	0.1464	0.06116	0.06469	0.2366	0.2081
Std. Dev.	0.01625	0.04252	0.003783	0.006187	0.04245	0.03101
Upper Lim.	0.104	0.1914	0.0625	0.08	0.322	0.241
Lower Lim.	0.0625	0.1013	0.0518	0.0625	0.2	0.1753

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	0.08 (J)	0.11	0.2
3/26/2019	0.106	0.162	0.223
9/10/2019	0.086 (J)	0.113	0.178
4/21/2020	0.0951 (J)	0.114	0.181
8/18/2020			0.177
8/19/2020	0.103	0.116	
3/9/2021	0.0949 (J)	0.109	0.147
8/24/2021	0.1	0.141	0.164
3/29/2022	0.104 (J)	0.108 (J)	<0.125
Mean	0.09613	0.1216	0.1666
Std. Dev.	0.009157	0.01946	0.04776
Upper Lim.	0.1058	0.162	0.2172
Lower Lim.	0.08642	0.108	0.1159

Confidence Interval

Constituent: Lead (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-25	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
11/5/2018					<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002					
3/27/2019		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/9/2019		<0.0002				
9/10/2019	<0.0002		<0.0002			
9/11/2019				<0.0002	<0.0002	<0.0002
4/20/2020	<0.0002					
4/21/2020		<0.0002				
4/22/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/11/2020	<0.0002		<0.0002	<0.0002		
8/12/2020					<0.0002	<0.0002
8/17/2020		<0.0002				
3/9/2021	0.000109 (J)					
3/10/2021			8.84E-05 (J)			
3/15/2021				<0.0002	0.000121 (J)	<0.0002
3/16/2021		0.000736				
8/17/2021	0.00011 (J)	0.00059				
8/23/2021				<0.0002	0.00015 (J)	<0.0002
8/24/2021			<0.0002			
3/28/2022		0.00066		0.00015 (J)	<0.0002	0.00015 (J)
3/29/2022			<0.0002			
4/6/2022	9E-05 (J)					
Mean	0.0001636	0.0003732	0.000186	0.0001937	0.0001839	0.0001937
Std. Dev.	5.056E-05	0.0002423	3.946E-05	1.768E-05	3.085E-05	1.768E-05
Upper Lim.	0.0002	0.000736	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9E-05	0.0002	8.84E-05	0.00015	0.000121	0.00015

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9
11/7/2018	<0.0002
3/26/2019	<0.0002
9/10/2019	<0.0002
4/21/2020	<0.0002
8/18/2020	<0.0002
3/9/2021	7.84E-05 (J)
8/24/2021	<0.0002
3/29/2022	<0.0002
Mean	0.0001848
Std. Dev.	4.299E-05
Upper Lim.	0.0002
Lower Lim.	7.84E-05

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
11/5/2018		0.0641	0.0912	0.0914		
11/6/2018						0.547
11/7/2018	0.11				0.604	
3/26/2019			0.0532	0.123		0.57
3/27/2019	0.115	0.119			1.11	
9/10/2019	0.112	0.124	0.0598		0.765	0.6
9/11/2019				0.246		
4/20/2020				0.201		0.604
4/21/2020			0.166		0.672	
4/22/2020	0.123	0.126				
8/11/2020					0.712	
8/12/2020						0.594
8/18/2020	0.124	0.109	0.0892	0.42		
3/9/2021					0.791	
3/10/2021		0.0826	0.125			0.63
3/15/2021	0.155			0.308		
8/24/2021	0.198					
8/25/2021		0.132	0.117	0.5	0.985	0.622
3/29/2022			0.13			0.534
3/30/2022		0.0615				
4/4/2022	0.329				0.607	
4/6/2022				0.584		
Mean	0.1583	0.1023	0.1039	0.3092	0.7808	0.5876
Std. Dev.	0.07512	0.02866	0.03789	0.1781	0.1807	0.03438
Upper Lim.	0.329	0.1327	0.1441	0.4979	0.9722	0.6241
Lower Lim.	0.11	0.0719	0.06377	0.1204	0.5893	0.5512

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-21	GC-AP-MW-5	GC-AP-MW-6
11/5/2018				0.0902		
11/6/2018	0.54	0.583	0.369		0.116	
11/7/2018						0.0141 (J)
3/26/2019	0.558	0.595	0.378	0.0531		0.0192 (J)
3/27/2019					0.0988	
9/9/2019		0.571	0.408			
9/10/2019	0.581			0.0862		0.0267
9/11/2019					0.117	
4/20/2020	0.62					
4/21/2020		0.629	0.386	0.0782	0.13	0.0518
8/11/2020	0.599	0.552				
8/12/2020			0.326		0.132	
8/18/2020				0.0718		
8/19/2020						0.0197 (J)
3/9/2021	0.692	0.864	0.364			0.013 (J)
3/10/2021				0.146		
3/16/2021					0.149	
8/17/2021	0.647	0.585	0.335			
8/23/2021					0.116	
8/24/2021						0.00951 (J)
8/25/2021				0.0872		
3/29/2022						<0.02
3/30/2022				0.082		
4/4/2022		0.647			0.102	
4/6/2022	0.638		0.312			
Mean	0.6094	0.6283	0.3598	0.08684	0.1201	0.0205
Std. Dev.	0.05006	0.1	0.0327	0.02666	0.01647	0.01388
Upper Lim.	0.6624	0.864	0.3944	0.1137	0.1376	0.03337
Lower Lim.	0.5563	0.552	0.3251	0.06087	0.1026	0.008532

Confidence Interval

Constituent: Lithium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-8	GC-AP-MW-9
11/7/2018	0.0371	0.0616
3/26/2019	0.0537	0.0931
9/10/2019	0.0928	0.128
4/21/2020	0.0582	0.0693
8/18/2020		0.0591
8/19/2020	0.0511	
3/9/2021	0.0249	0.0417
8/24/2021	0.0155 (J)	0.0383
3/29/2022	0.00828 (J)	0.0126 (J)
Mean	0.0427	0.06296
Std. Dev.	0.02729	0.03544
Upper Lim.	0.07163	0.1005
Lower Lim.	0.01377	0.0254

Confidence Interval

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14
11/5/2018			0.00944 (J)	0.0906	0.044	
11/6/2018	<0.0002					
11/7/2018		0.00748 (J)				0.0155
3/26/2019				0.11	0.0262	
3/27/2019	<0.0002	0.00778 (J)	0.0151			0.0167
9/10/2019	<0.0002	0.00757 (J)	0.0205	0.134		0.0125
9/11/2019					0.0226	
4/20/2020					0.0924	
4/21/2020	<0.0002			0.0947		0.0141
4/22/2020		0.00747 (J)	0.0147			
8/11/2020						0.0117
8/17/2020	<0.0002					
8/18/2020		0.00808 (J)	0.0146	0.0938	0.145	
3/9/2021						0.0205
3/10/2021			0.00701	0.0611		
3/15/2021		0.0103			0.0146	
3/16/2021	0.000117 (J)					
8/17/2021	<0.0002					
8/24/2021		0.0132				
8/25/2021			0.0106	0.0547	0.0319	0.0127
3/29/2022				0.0514		
3/30/2022			0.00425			
4/4/2022	<0.0002	0.0117				0.0166
4/6/2022					0.0201	
Mean	0.0001896	0.009198	0.01203	0.08629	0.0496	0.01504
Std. Dev.	2.934E-05	0.002247	0.005201	0.02887	0.04575	0.002908
Upper Lim.	0.0002	0.0132	0.01754	0.1169	0.08885	0.01812
Lower Lim.	0.000117	0.00747	0.006512	0.05569	0.01377	0.01196

Confidence Interval

Constituent: Molybdenum (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25
11/5/2018					0.0548	
11/6/2018	<0.0002	0.0418	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	0.062	<0.0002		0.071	
3/27/2019				<0.0002		<0.0002
9/9/2019		0.0681	<0.0002	<0.0002		
9/10/2019	<0.0002				0.0609	<0.0002
4/20/2020	<0.0002					
4/21/2020		0.0694	<0.0002	<0.0002	0.0562	
4/22/2020						<0.0002
8/11/2020	<0.0002	0.0506				<0.0002
8/12/2020			<0.0002			
8/17/2020				<0.0002		
8/18/2020					0.0505	
3/9/2021	0.000113 (J)	0.067	0.000362			
3/10/2021					0.0123	8.43E-05 (J)
3/16/2021				8.04E-05 (J)		
8/17/2021	0.00014 (J)	0.0468	0.0004	0.00017 (J)		
8/24/2021						<0.0002
8/25/2021					0.00789	
3/28/2022				<0.0002		
3/29/2022						<0.0002
3/30/2022					0.00682	
4/4/2022		0.054				
4/6/2022	0.00015 (J)		0.00032			
Mean	0.0001754	0.05746	0.0002602	0.0001813	0.04005	0.0001855
Std. Dev.	3.549E-05	0.01059	8.586E-05	4.21E-05	0.02643	4.091E-05
Upper Lim.	0.0002	0.06869	0.0004	0.0002	0.06508	0.0002
Lower Lim.	0.000113	0.04624	0.0002	8.04E-05	0.01395	8.43E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
11/6/2018	<0.0002	0.00318 (J)			
11/7/2018			<0.0002	<0.0002	<0.0002
3/26/2019			<0.0002	<0.0002	<0.0002
3/27/2019	<0.0002	0.00284 (J)			
9/10/2019			<0.0002	<0.0002	<0.0002
9/11/2019	<0.0002	0.00328 (J)			
4/21/2020		0.00255 (J)	<0.0002	<0.0002	<0.0002
4/22/2020	<0.0002				
8/11/2020	<0.0002				
8/12/2020		0.00292 (J)			
8/19/2020			<0.0002	<0.0002	<0.0002
3/9/2021			0.0024	0.000156 (J)	8.12E-05 (J)
3/15/2021	7.41E-05 (J)				
3/16/2021		0.00358			
8/23/2021	<0.0002	0.0031			
8/24/2021			0.00211	0.00013 (J)	<0.0002
3/28/2022	<0.0002				
3/29/2022			0.00142	0.00016 (J)	<0.0002
4/4/2022		0.00354			
Mean	0.0001843	0.003124	0.0008662	0.0001807	0.0001851
Std. Dev.	4.451E-05	0.0003507	0.0009581	2.796E-05	4.2E-05
Upper Lim.	0.0002	0.003495	0.0024	0.0002	0.0002
Lower Lim.	7.41E-05	0.002752	0.0002	0.00013	8.12E-05

Confidence Interval

Constituent: Selenium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-2	GC-AP-MW-3	GC-AP-MW-32
11/5/2018		<0.00102	<0.00102			<0.00102
11/6/2018	<0.00102			<0.00102	<0.00102	
3/26/2019		<0.00102	0.0239			
3/27/2019	<0.00102			<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102	<0.00102	
9/10/2019	<0.00102	<0.00102				
9/11/2019			<0.00102			<0.00102
4/20/2020			0.0125		<0.00102	
4/21/2020	<0.00102	<0.00102		<0.00102		
4/22/2020						<0.00102
8/12/2020						<0.00102
8/17/2020	<0.00102			<0.00102	<0.00102	
8/18/2020		<0.00102	0.00416 (J)			
3/10/2021		<0.00102				
3/15/2021			0.0175			<0.00102
3/16/2021	0.00163			<0.00102	0.000959 (J)	
8/17/2021	0.00209			0.00054 (J)	0.00097 (J)	
8/23/2021						0.00059 (J)
8/25/2021		0.00281	0.00826			
3/28/2022				0.00058 (J)		<0.00102
3/29/2022		<0.00102				
4/4/2022	0.00221					
4/5/2022					0.00074 (J)	
4/6/2022			0.111 (o)			
5/17/2022			0.0452 (R)			
Mean	0.001379	0.001244	0.01419	0.000905	0.0009711	0.0009662
Std. Dev.	0.0005215	0.0006329	0.01489	0.0002132	9.674E-05	0.000152
Upper Lim.	0.00221	0.00281	0.02915	0.00102	0.00102	0.00102
Lower Lim.	0.00102	0.00102	0.001838	0.00054	0.00074	0.00059

Confidence Interval

Constituent: Selenium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-33
11/6/2018	<0.00102
3/27/2019	<0.00102
9/11/2019	<0.00102
4/22/2020	<0.00102
8/12/2020	<0.00102
3/15/2021	<0.00102
8/23/2021	<0.00102
3/28/2022	0.00071 (J)
Mean	0.0009812
Std. Dev.	0.0001096
Upper Lim.	0.00102
Lower Lim.	0.00071

Confidence Interval

Constituent: Thallium (mg/L)   Analysis Run 6/10/2022 1:06 PM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-11	GC-AP-MW-13	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-2
11/5/2018		<0.0002	0.000623 (J)			
11/6/2018	<0.0002			<0.0002	0.000354 (J)	<0.0002
3/26/2019			0.000215 (J)	<0.0002	0.00041 (J)	
3/27/2019	<0.0002	<0.0002				<0.0002
9/9/2019						<0.0002
9/10/2019	<0.0002	<0.0002		<0.0002	0.000396 (J)	
9/11/2019			0.00214			
4/20/2020			0.000433 (J)	<0.0002	0.00032 (J)	
4/21/2020	<0.0002					<0.0002
4/22/2020		<0.0002				
8/11/2020					0.000329 (J)	
8/12/2020				<0.0002		
8/17/2020	<0.0002					<0.0002
8/18/2020		<0.0002	0.00114			
3/9/2021					0.000369	
3/10/2021		8.7E-05 (J)		8.78E-05 (J)		
3/15/2021			0.000506			
3/16/2021	0.000107 (J)					0.000101 (J)
8/17/2021	0.00012 (J)				0.00036	0.00013 (J)
8/25/2021		9E-05 (J)	0.00124	<0.0002		
3/28/2022						0.00015 (J)
3/29/2022				0.00012 (J)		
3/30/2022		7E-05 (J)				
4/4/2022	0.00016 (J)					
4/6/2022			0.00169		0.00035	
Mean	0.0001734	0.0001559	0.0009984	0.000176	0.000361	0.0001726
Std. Dev.	3.96E-05	6.117E-05	0.0006737	4.531E-05	3.063E-05	4.001E-05
Upper Lim.	0.0002	0.0002	0.001712	0.0002	0.0003935	0.0002
Lower Lim.	0.000107	7E-05	0.0002843	8.78E-05	0.0003285	0.000101

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 6/10/2022 1:06 PM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21
11/5/2018	<0.0002
3/26/2019	<0.0002
9/10/2019	<0.0002
4/21/2020	<0.0002
8/18/2020	<0.0002
3/10/2021	0.000106 (J)
8/25/2021	<0.0002
3/30/2022	0.00011 (J)
Mean	0.000177
Std. Dev.	4.26E-05
Upper Lim.	0.0002
Lower Lim.	0.000106

GROUNDWATER STATS
CONSULTING

December 13, 2022

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Greene County Ash Pond
2nd Semi-Annual Event - October 2022

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the October 2022 2nd semi-annual sample event for Alabama Power Company's Plant Greene County Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at this site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GC-AP-MW-23, GC-AP-MW-24, GC-AP-MW-26, GC-AP-MW-27, GC-AP-MW-28, GC-AP-MW-29, and GC-AP-MW-30

- **Downgradient wells:** GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-31, GC-AP-MW-32, and GC-AP-MW-33

- **Delineation wells:** GC-AP-PZ-4, GC-AP-MW-34HA, GC-AP-MW-35H, GC-AP-MW-36H, GC-AP-MW-37H, GC-AP-MW-38H, GC-AP-MW-39H, GC-AP-MW-40H, GC-AP-MW-41H, GC-AP-MW-42H, GC-AP-MW-43H, GC-AP-MW-44H, GC-AP-MW-45H, GC-AP-MW-46HO, GC-AP-MW-47HO, GC-AP-MW-48H, GC-AP-MW-49H, GC-AP-MW-50HO, GC-AP-MW-52HO, GC-AP-MW-53H, GC-AP-MW-54H, GC-AP-MW-55HO, GC-AP-MW-57H, GC-AP-MW-59HO, GC-AP-MW-60HO, GC-AP-MW-61HO, GC-AP-MW-62HO, GC-AP-MW-63HO, and GC-AP-MW-64HO

Note that delineation wells do not require statistics; therefore, data are plotted only on time series and box plots. Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, Ph.D. Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
Appendix IV (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility;

and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. The power curve provided in this report demonstrates that the selected statistical methods for Appendix III parameters complies with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples: 133
- # Constituents: 7
- # Downgradient wells: 22

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, interwell prediction limits were utilized in the analysis of this site.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false-positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half of the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summary

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate trends, as well as for outliers over the entire record. Interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, pH, sulfate, and TDS.

Proposed background data at upgradient wells were originally screened for outliers and trends in May 2019 for the constituents listed above. Both Tukey's Test and visual screening were used to identify potential outliers. When identified, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. Potential outliers that were identified by Tukey's test but were not greatly different from the rest of the data were not flagged. Also, outliers that are not identified as important by Tukey's test may be identified visually and flagged in the database for construction of more conservative (lower) statistical limits.

All flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of previously flagged values follows this letter.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells during the original screening for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, deselection of the earlier portion of data may be required prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Several statistically significant trends were noted in upgradient wells, and the results were submitted with the September 2019 background update. These trends required no adjustments, however, because the period of record was short and/or the magnitudes of the trends were low relative to the average concentrations in background.

One exception was upgradient well GC-AP-MW-24 which had statistically significantly increasing trends for calcium, sulfate, and TDS. However, the more recent reported observations for calcium and TDS were similar to those observed in upgradient well GC-AP-MW-23; therefore, no adjustments were required for these constituents. Additionally, no adjustment was required for sulfate since the statistical limit resulted in a nonparametric prediction limit which is constructed based on the highest report concentration among the upgradient wells. All data at upgradient wells are continually monitored, as mentioned earlier, and will be adjusted in future analyses as necessary. A summary of any adjusted records will accompany the report.

Evaluation of Appendix III Parameters – October 2022

Outlier Screening

Prior to performing prediction limits, background (upgradient) well data for Appendix III constituents were re-assessed for potential outliers and trends during this analysis. No new values were flagged and no adjustments were required to account for trending data. Values in background which have been previously flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for all Appendix III parameters (Figure D). Interwell prediction limits pool upgradient well data through October 2022 to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. When no resamples are collected, any initial exceedances are considered SSIs. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter (pages 12-16). Several exceedances for interwell prediction limits were identified.

Trend Tests – Prediction Limit Exceedances

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of natural variability in groundwater which may be unrelated to practices at the site. A summary of the trend test results follows this letter (pages 17-20). Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, and GC-AP-MW-25
- Calcium: GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17 and GC-AP-MW-24 (upgradient)
- Chloride: GC-AP-MW-7, GC-AP-MW-9, and GC-AP-MW-18
- Fluoride: GC-AP-MW-14, GC-AP-MW-16, and GC-AP-MW-17
- Sulfate: GC-AP-MW-24, GC-AP-MW-28 (both upgradient), GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, and GC-AP-MW-14
- TDS: GC-AP-MW-2, GC-AP-MW-5, GC-AP-MW-9, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-24 (upgradient), and GC-AP-MW-25

Decreasing:

- Boron: GC-AP-MW-6 and GC-AP-MW-18
- Calcium: GC-AP-MW-23, GC-AP-MW-28, GC-AP-MW-29, GC-AP-MW-30 (all upgradient),
  and GC-AP-MW-1
- Chloride: GC-AP-MW-5, GC-AP-MW-14, and GC-AP-MW-23 (upgradient)
- pH: GC-AP-MW-23, GC-AP-MW-24, GC-AP-MW-27, GC-AP-MW-28,
  GC-AP-MW-29, GC-AP-MW-30 (all upgradient)
- Sulfate: GC-AP-MW-23 (upgradient) and GC-AP-MW-15
- TDS: GC-AP-MW-23, GC-AP-MW-28 and GC-AP-MW-29 (all upgradient)

Evaluation of Appendix IV Parameters – October 2022

Data from all upgradient wells for Appendix IV parameters were reassessed for outliers during the previous analysis. No changes to previously flagged outliers were made. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) were updated during the 2021 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2023 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using upper tolerance limits (UTLs) constructed from pooled upgradient well data through August 2021 (Figure F). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed. A summary of the upper tolerance limits follows this letter (page 21).

Groundwater Protection Standards

These background limits are then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two is used as the GWPS (Figure G, page 22) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through October 2022 for each of the Appendix IV parameters (Figure H). These intervals were either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. Note that a resample was collected in May 2022 for selenium in downgradient well GC-AP-MW-13 due to the spurious result of 0.111 mg/L reported during the April 2022 sample event. The resample resulted in a reported measurement of 0.0452 mg/L. Therefore, the April 2022 concentration was flagged as an outlier and was not included in construction of the confidence interval.

As mentioned above, well/constituent pairs containing 100% non-detects in the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (pages 23-26). Exceedances were noted for the following well/constituent pairs:

- Arsenic: GC-AP-MW-1, GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, and GC-AP-MW-18
- Cobalt: GC-AP-MW-1, GC-AP-MW-14, and GC-AP-MW-15
- Lithium: GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, and GC-AP-MW-21

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Greene County Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

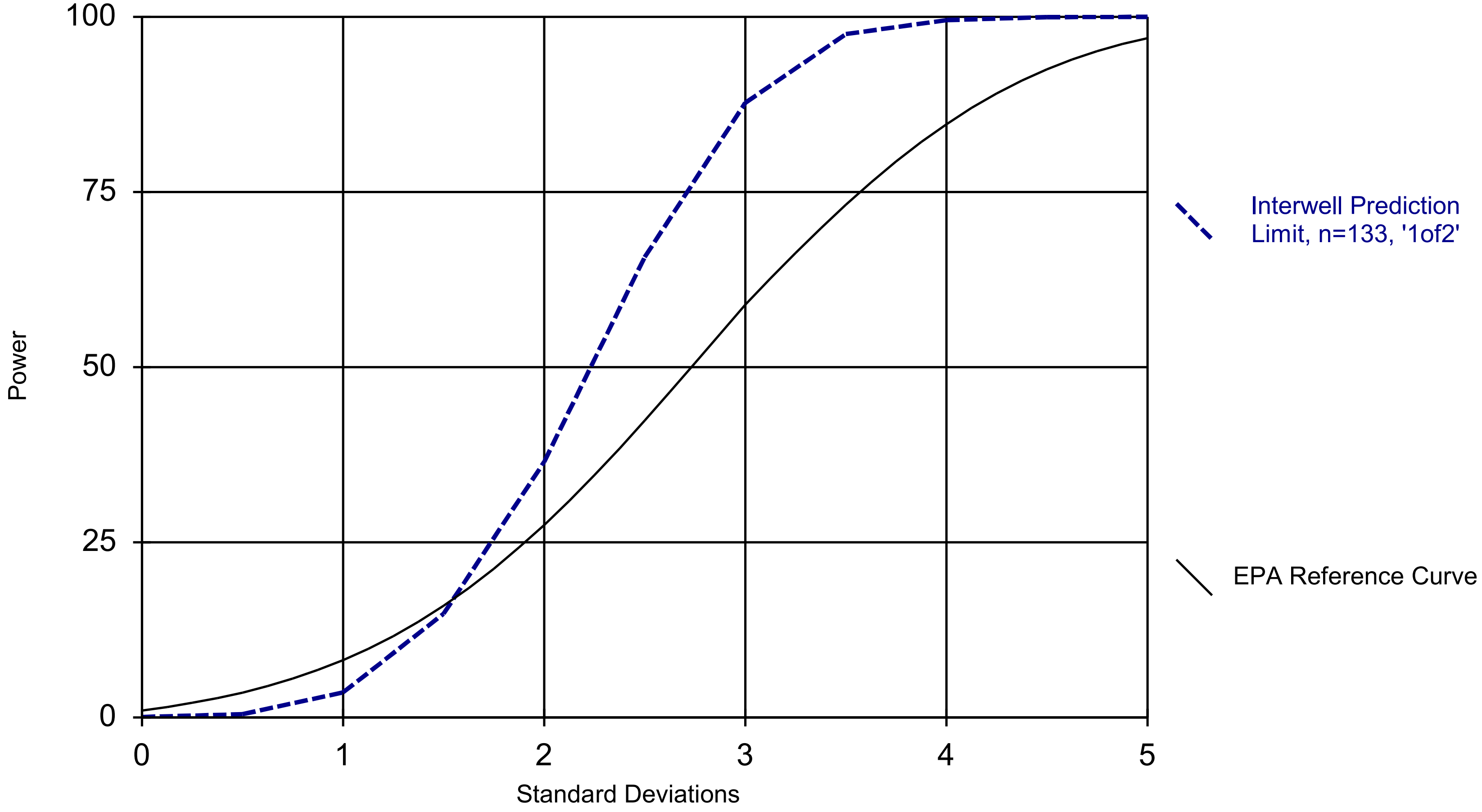
Easton Rayner
Groundwater Analyst

ACollins

Andrew Collins
Project Manager

Sanitas™ v.9.6.36 . UG

Power Curve



Kappa = 2.125, based on 22 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/9/2022 11:28 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

100% Non-Detects: Appendix IV Downgradient

Analysis Run 12/9/2022 11:13 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Antimony (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-18, GC-AP-MW-2, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-8, GC-AP-MW-9

Beryllium (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-2, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Cadmium (mg/L)
GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-7, GC-AP-MW-9

Fluoride (mg/L)
GC-AP-MW-33

Lead (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8

Lithium (mg/L)
GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-7

Mercury (mg/L)
GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-2, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Molybdenum (mg/L)
GC-AP-MW-15, GC-AP-MW-3, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-9

Selenium (mg/L)
GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-21, GC-AP-MW-25, GC-AP-MW-31, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Thallium (mg/L)
GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-25, GC-AP-MW-3, GC-AP-MW-31, GC-AP-MW-32, GC-AP-MW-33, GC-AP-MW-5, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW-9

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	10/5/2022	0.202	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	10/18/2022	2.13	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	10/17/2022	0.63	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	10/17/2022	0.272	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	10/17/2022	0.499	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	10/18/2022	1.91	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	10/18/2022	0.874	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	10/18/2022	2.14	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	10/18/2022	2.28	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	10/17/2022	1.46	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	10/5/2022	0.132	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	10/17/2022	0.59	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	10/18/2022	0.124	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	10/17/2022	0.599	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	10/18/2022	1.16	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	10/18/2022	0.815	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	10/18/2022	1.15	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	10/5/2022	113	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	10/18/2022	105	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-11	42.8	n/a	10/17/2022	60.6	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	10/17/2022	49.8	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	10/17/2022	158	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	10/18/2022	125	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	10/18/2022	89.4	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	10/18/2022	128	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	10/18/2022	150	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	10/17/2022	99.9	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	10/5/2022	179	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	10/17/2022	57	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	10/5/2022	54.5	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	10/17/2022	119	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	10/18/2022	159	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	10/18/2022	158	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	10/18/2022	93.8	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	10/18/2022	111	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.832	n/a	10/5/2022	7.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.832	n/a	10/18/2022	17.2	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.832	n/a	10/17/2022	22.4	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.832	n/a	10/17/2022	12.9	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-13	5.832	n/a	10/17/2022	12	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.832	n/a	10/18/2022	10.4	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.832	n/a	10/18/2022	8.54	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.832	n/a	10/18/2022	10.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.832	n/a	10/18/2022	10.7	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.832	n/a	10/17/2022	26	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.832	n/a	10/5/2022	12.3	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.832	n/a	10/17/2022	13	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.832	n/a	10/18/2022	32.3	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.832	n/a	10/5/2022	23.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.832	n/a	10/5/2022	7.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.832	n/a	10/17/2022	10.8	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.832	n/a	10/18/2022	45	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.832	n/a	10/18/2022	196	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.832	n/a	10/18/2022	96.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.832	n/a	10/18/2022	106	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	10/18/2022	0.248	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-12	0.159	n/a	10/17/2022	0.197	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-14	0.159	n/a	10/18/2022	0.211	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-16	0.159	n/a	10/18/2022	0.27	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-17	0.159	n/a	10/18/2022	0.544	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-18	0.159	n/a	10/17/2022	0.176	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-5	0.159	n/a	10/17/2022	0.192	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
pH (SU)	GC-AP-MW-12	6.8	3.78	10/17/2022	6.88	Yes	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-1	103	n/a	10/5/2022	737	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-10	103	n/a	10/18/2022	104	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-11	103	n/a	10/17/2022	144	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-13	103	n/a	10/17/2022	467	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-14	103	n/a	10/18/2022	185	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	GC-AP-MW-15	103	n/a	10/18/2022	152	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-2	103	n/a	10/5/2022	590	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-5	103	n/a	10/17/2022	154	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-6	103	n/a	10/18/2022	179	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-7	103	n/a	10/18/2022	256	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-9	103	n/a	10/18/2022	171	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-1	179	n/a	10/5/2022	1190	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-10	179	n/a	10/18/2022	449	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-11	179	n/a	10/17/2022	323	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-12	179	n/a	10/17/2022	243	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-13	179	n/a	10/17/2022	708	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-14	179	n/a	10/18/2022	662	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-15	179	n/a	10/18/2022	423	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-16	179	n/a	10/18/2022	486	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-17	179	n/a	10/18/2022	598	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-18	179	n/a	10/17/2022	382	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-2	179	n/a	10/5/2022	864	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-21	179	n/a	10/17/2022	311	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-25	179	n/a	10/18/2022	256	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-3	179	n/a	10/5/2022	319	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-5	179	n/a	10/17/2022	483	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-6	179	n/a	10/18/2022	752	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-7	179	n/a	10/18/2022	1040	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-8	179	n/a	10/18/2022	700	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-9	179	n/a	10/18/2022	692	Yes	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	10/5/2022	0.202	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	10/18/2022	2.13	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	10/17/2022	0.63	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	10/17/2022	0.272	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	10/17/2022	0.499	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	10/18/2022	1.91	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	10/18/2022	0.874	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	10/18/2022	2.14	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	10/18/2022	2.28	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	10/17/2022	1.46	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	10/5/2022	0.132	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	10/17/2022	0.59	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	10/18/2022	0.124	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-3	0.1015	n/a	10/5/2022	0.0404J	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-31	0.1015	n/a	10/5/2022	0.1015ND	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-32	0.1015	n/a	10/5/2022	0.1015ND	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-33	0.1015	n/a	10/5/2022	0.1015ND	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	10/17/2022	0.599	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	10/18/2022	1.16	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-7	0.1015	n/a	10/18/2022	0.0589J	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	10/18/2022	0.815	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	10/18/2022	1.15	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	10/5/2022	113	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	10/18/2022	105	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-11	42.8	n/a	10/17/2022	60.6	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	10/17/2022	49.8	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	10/17/2022	158	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	10/18/2022	125	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	10/18/2022	89.4	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	10/18/2022	128	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	10/18/2022	150	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	10/17/2022	99.9	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	10/5/2022	179	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	10/17/2022	57	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-25	42.8	n/a	10/18/2022	38.2	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	10/5/2022	54.5	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-31	42.8	n/a	10/5/2022	6.69	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-32	42.8	n/a	10/5/2022	9.18	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-33	42.8	n/a	10/5/2022	2.01	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	10/17/2022	119	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	10/18/2022	159	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	10/18/2022	158	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	10/18/2022	93.8	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	10/18/2022	111	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.832	n/a	10/5/2022	7.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.832	n/a	10/18/2022	17.2	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.832	n/a	10/17/2022	22.4	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.832	n/a	10/17/2022	12.9	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-13	5.832	n/a	10/17/2022	12	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.832	n/a	10/18/2022	10.4	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.832	n/a	10/18/2022	8.54	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.832	n/a	10/18/2022	10.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.832	n/a	10/18/2022	10.7	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.832	n/a	10/17/2022	26	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.832	n/a	10/5/2022	12.3	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.832	n/a	10/17/2022	13	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.832	n/a	10/18/2022	32.3	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.832	n/a	10/5/2022	23.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.832	n/a	10/5/2022	7.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-32	5.832	n/a	10/5/2022	4.04	No	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-33	5.832	n/a	10/5/2022	5.32	No	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.832	n/a	10/17/2022	10.8	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.832	n/a	10/18/2022	45	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.832	n/a	10/18/2022	196	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.832	n/a	10/18/2022	96.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.832	n/a	10/18/2022	106	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-1	0.159	n/a	10/5/2022	0.125	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	10/18/2022	0.248	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-11	0.159	n/a	10/17/2022	0.118J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-12**	**0.159**	**n/a**	**10/17/2022**	**0.197**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-13	0.159	n/a	10/17/2022	0.125ND	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-14**	**0.159**	**n/a**	**10/18/2022**	**0.211**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-15	0.159	n/a	10/18/2022	0.139	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-16**	**0.159**	**n/a**	**10/18/2022**	**0.27**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.159**	**n/a**	**10/18/2022**	**0.544**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-18**	**0.159**	**n/a**	**10/17/2022**	**0.176**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-2	0.159	n/a	10/5/2022	0.124J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-21	0.159	n/a	10/17/2022	0.0988J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-25	0.159	n/a	10/18/2022	0.0955J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-3	0.159	n/a	10/5/2022	0.12J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-31	0.159	n/a	10/5/2022	0.0671J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-32	0.159	n/a	10/5/2022	0.125ND	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-33	0.159	n/a	10/5/2022	0.125ND	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-5**	**0.159**	**n/a**	**10/17/2022**	**0.192**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-6	0.159	n/a	10/18/2022	0.154	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-7	0.159	n/a	10/18/2022	0.0649J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-8	0.159	n/a	10/18/2022	0.0981J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-9	0.159	n/a	10/18/2022	0.156	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
pH (SU)	GC-AP-MW-1	6.8	3.78	10/5/2022	5.59	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-10	6.8	3.78	10/18/2022	6.62	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-11	6.8	3.78	10/17/2022	6.28	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	**GC-AP-MW-12**	**6.8**	**3.78**	**10/17/2022**	**6.88**	**Yes**	**164**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001459**	**NP Inter (normality) 1 of 2**
pH (SU)	GC-AP-MW-13	6.8	3.78	10/17/2022	6.22	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-14	6.8	3.78	10/18/2022	6.46	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-15	6.8	3.78	10/18/2022	6.29	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-16	6.8	3.78	10/18/2022	6.53	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-17	6.8	3.78	10/18/2022	6.77	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-18	6.8	3.78	10/17/2022	6.49	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-2	6.8	3.78	10/5/2022	6.01	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-21	6.8	3.78	10/17/2022	6.21	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-25	6.8	3.78	10/18/2022	5.88	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-3	6.8	3.78	10/5/2022	5.89	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-31	6.8	3.78	10/5/2022	5.49	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-32	6.8	3.78	10/5/2022	5.84	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-33	6.8	3.78	10/5/2022	4.55	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-5	6.8	3.78	10/17/2022	6.71	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-6	6.8	3.78	10/18/2022	6.38	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-7	6.8	3.78	10/18/2022	6.37	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-8	6.8	3.78	10/18/2022	6.45	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-9	6.8	3.78	10/18/2022	6.27	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-1**	**103**	**n/a**	**10/5/2022**	**737**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-10**	**103**	**n/a**	**10/18/2022**	**104**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-11**	**103**	**n/a**	**10/17/2022**	**144**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-12	103	n/a	10/17/2022	96.2	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-13**	**103**	**n/a**	**10/17/2022**	**467**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-14**	**103**	**n/a**	**10/18/2022**	**185**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-15**	**103**	**n/a**	**10/18/2022**	**152**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-16	103	n/a	10/18/2022	42.4	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-17	103	n/a	10/18/2022	64.9	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-18	103	n/a	10/17/2022	23.3	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-2**	**103**	**n/a**	**10/5/2022**	**590**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-21	103	n/a	10/17/2022	103	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-25	103	n/a	10/18/2022	70.6	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-3	103	n/a	10/5/2022	5.11	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-31	103	n/a	10/5/2022	4.08	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-32	103	n/a	10/5/2022	2.71	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-33	103	n/a	10/5/2022	12.2	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**10/17/2022**	**154**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**10/18/2022**	**179**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**10/18/2022**	**256**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-8	103	n/a	10/18/2022	84.8	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**10/18/2022**	**171**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**10/5/2022**	**1190**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**10/18/2022**	**449**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**10/17/2022**	**323**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**10/17/2022**	**243**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**10/17/2022**	**708**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**10/18/2022**	**662**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**10/18/2022**	**423**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**10/18/2022**	**486**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**10/18/2022**	**598**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**10/17/2022**	**382**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**10/5/2022**	**864**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**10/17/2022**	**311**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**10/18/2022**	**256**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**10/5/2022**	**319**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GC-AP-MW-31	179	n/a	10/5/2022	40.7	No	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-32	179	n/a	10/5/2022	43.3	No	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-33	179	n/a	10/5/2022	62.7	No	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**10/17/2022**	**483**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**10/18/2022**	**752**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**10/18/2022**	**1040**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**10/18/2022**	**700**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**10/18/2022**	**692**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GC-AP-MW-14	0.206	122	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-15	0.0757	142	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-16	0.1293	106	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-17	0.08548	90	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-18	-0.04679	-85	-74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-25	0.00546	115	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-5	0.02723	94	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-6	-0.09777	-102	-74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-9	0.1767	123	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-1	-15.85	-90	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-10	3.46	94	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-11	4.667	150	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-12	3.12	82	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-13	7.712	112	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-14	16.15	111	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-15	5.214	122	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-16	9.582	168	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-17	10.46	136	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-2	14.94	119	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-23 (bg)	-2.362	-126	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-24 (bg)	6.327	160	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-28 (bg)	-0.1678	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-29 (bg)	-0.1732	-121	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-30 (bg)	-0.1071	-90	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-5	7.816	158	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-9	15.67	114	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-14	-0.8806	-96	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-18	0.4942	87	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-23 (bg)	-0.0804	-107	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-5	-1.011	-122	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-7	7.525	90	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-9	6.497	156	81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-14	0.02112	106	81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-16	0.0129	95	81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-17	0.0291	90	81	Yes	20	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-23 (bg)	-0.08277	-165	-98	Yes	23	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-24 (bg)	-0.05605	-125	-98	Yes	23	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-27 (bg)	-0.08876	-128	-98	Yes	23	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-28 (bg)	-0.1309	-129	-105	Yes	24	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-29 (bg)	-0.4524	-180	-105	Yes	24	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-30 (bg)	-0.1119	-164	-105	Yes	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-10	13.78	154	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-11	14.84	110	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-14	22.19	86	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-15	-6.528	-92	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-2	45.13	100	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-23 (bg)	-1.275	-144	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-24 (bg)	15.55	113	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-28 (bg)	0.5669	106	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-5	27.92	148	81	Yes	20	5	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-9	20.57	97	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-10	18.59	133	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-11	22.62	146	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-14	71.29	87	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-16	25.7	164	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-17	27.57	105	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-2	58.86	104	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-23 (bg)	-6.6	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-24 (bg)	23.79	107	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-25	17.86	140	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-28 (bg)	-2.253	-88	-81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-29 (bg)	-1.905	-110	-81	Yes	20	60	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-5	32.23	140	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-9	83.53	165	81	Yes	20	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.0138	62	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-10	0.1018	56	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-11	-0.02022	-33	-74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-12	0.01798	17	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-13	0.03214	31	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-14**	**0.206**	**122**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.0757**	**142**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1293**	**106**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08548**	**90**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.04679**	**-85**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-2	0.001404	36	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-21	0.01081	21	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-23 (bg)	0	37	74	No	19	84.21	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-24 (bg)	0	0	74	No	19	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**115**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-26 (bg)	0	8	74	No	19	94.74	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-27 (bg)	0	23	74	No	19	89.47	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-28 (bg)	0	8	74	No	19	94.74	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-29 (bg)	0	12	74	No	19	94.74	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-30 (bg)	0	0	74	No	19	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-5**	**0.02723**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.09777**	**-102**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-8	0.01402	10	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-9**	**0.1767**	**123**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-15.85**	**-90**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**3.46**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-11**	**4.667**	**150**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-12**	**3.12**	**82**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-13**	**7.712**	**112**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**16.15**	**111**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**5.214**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.582**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**10.46**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-18	0.05155	1	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-2**	**14.94**	**119**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-21	1.07	38	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.362**	**-126**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.327**	**160**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-26 (bg)	-0.2357	-26	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-27 (bg)	0.05223	36	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1678**	**-113**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1732**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-3	-4.786	-58	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-30 (bg)**	**-0.1071**	**-90**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-5**	**7.816**	**158**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-6	4.254	74	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-7	0	1	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-8	2.803	72	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-9**	**15.67**	**114**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-1	-0.9924	-25	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-10	0	-3	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-11	-0.4972	-37	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-12	-0.2997	-25	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-13	-0.6371	-41	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8806**	**-96**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-15	-0.2702	-37	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-16	-0.4752	-69	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-17	-1.028	-69	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-18**	**0.4942**	**87**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-2	-0.3859	-52	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-21	0.2201	24	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.0804**	**-107**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-24 (bg)	-0.03819	-14	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-25	-0.4577	-22	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-26 (bg)	-0.01424	-7	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-27 (bg)	0.08264	74	81	No	20	5	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-28 (bg)	-0.06416	-68	-81	No	20	10	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-29 (bg)	-0.2146	-81	-81	No	20	10	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	GC-AP-MW-3	-0.2928	-60	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-30 (bg)	0.3373	71	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-31	0.09504	72	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-5**	**-1.011**	**-122**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-6	2.1	81	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-7**	**7.525**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-8	3.973	35	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-9**	**6.497**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-10	0.004303	36	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-12	0.004453	36	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02112**	**106**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.0129**	**95**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.0291**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-18	0.004567	62	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-23 (bg)	-0.0006627	-13	-81	No	20	10	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-24 (bg)	0	67	81	No	20	65	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-26 (bg)	0	7	58	No	16	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-27 (bg)	0	18	74	No	19	94.74	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-28 (bg)	0	-3	-74	No	19	84.21	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-29 (bg)	0	35	81	No	20	90	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-30 (bg)	0	19	81	No	20	95	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-5	0.0002578	6	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-12	0.00648	25	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	**GC-AP-MW-23 (bg)**	**-0.08277**	**-165**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-24 (bg)**	**-0.05605**	**-125**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GC-AP-MW-26 (bg)	-0.09944	-88	-98	No	23	0	n/a	n/a	0.01	NP
pH (SU)	**GC-AP-MW-27 (bg)**	**-0.08876**	**-128**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-28 (bg)**	**-0.1309**	**-129**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-29 (bg)**	**-0.4524**	**-180**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-30 (bg)**	**-0.1119**	**-164**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-1	10.48	34	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-10**	**13.78**	**154**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**14.84**	**110**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-13	14.26	65	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-14**	**22.19**	**86**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-6.528**	**-92**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**45.13**	**100**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.275**	**-144**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**15.55**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-26 (bg)	-1.339	-57	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-27 (bg)	0.4243	74	81	No	20	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.5669**	**106**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-29 (bg)	0	7	81	No	20	50	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-30 (bg)	0	15	81	No	20	75	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-5**	**27.92**	**148**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-6	11.33	74	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-7	-4.017	-13	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-9**	**20.57**	**97**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-1	0	1	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-10**	**18.59**	**133**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**22.62**	**146**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-12	8.496	50	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-13	24.02	79	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-14**	**71.29**	**87**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-15	9.251	55	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-16**	**25.7**	**164**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**27.57**	**105**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-18	-9.61	-53	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-2**	**58.86**	**104**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-21	3.383	12	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.6**	**-113**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**23.79**	**107**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**17.86**	**140**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-26 (bg)	-2.73	-48	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-27 (bg)	0.3739	41	81	No	20	25	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-28 (bg)**	**-2.253**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-1.905**	**-110**	**-81**	**Yes**	**20**	**60**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-3	-6.092	-75	-81	No	20	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
TDS (mg/L)	GC-AP-MW-30 (bg)	0.4363	42	81	No	20	25	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-5**	**32.23**	**140**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-6	20.83	75	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-7	3.995	14	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-8	12.2	42	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-9**	**83.53**	**165**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits Summary Table

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 11/18/2021, 6:28 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00137	119	n/a	n/a	91.6	n/a	n/a	0.002234	NP Inter(NDs)
Arsenic (mg/L)	0.0044	119	n/a	n/a	83.19	n/a	n/a	0.002234	NP Inter(NDs)
Barium (mg/L)	0.347	119	n/a	n/a	0	n/a	n/a	0.002234	NP Inter(normality)
Beryllium (mg/L)	0.00226	119	n/a	n/a	86.55	n/a	n/a	0.002234	NP Inter(NDs)
Cadmium (mg/L)	0.000912	119	n/a	n/a	74.79	n/a	n/a	0.002234	NP Inter(normality)
Chromium (mg/L)	0.01	119	n/a	n/a	88.24	n/a	n/a	0.002234	NP Inter(NDs)
Cobalt (mg/L)	0.0167	119	n/a	n/a	57.98	n/a	n/a	0.002234	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	3.88	119	n/a	n/a	3.361	n/a	n/a	0.002234	NP Inter(normality)
Fluoride (mg/L)	0.159	120	n/a	n/a	67.5	n/a	n/a	0.002122	NP Inter(normality)
Lead (mg/L)	0.0002	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)
Lithium (mg/L)	0.02	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Mercury (mg/L)	0.0005	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Molybdenum (mg/L)	0.00308	119	n/a	n/a	97.48	n/a	n/a	0.002234	NP Inter(NDs)
Selenium (mg/L)	0.0072	119	n/a	n/a	89.92	n/a	n/a	0.002234	NP Inter(NDs)
Thallium (mg/L)	0.00039	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)

GREENE COUNTY ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00137	0.006
Arsenic	mg/L	0.0044	0.01
Barium	mg/L	0.347	2
Beryllium	mg/L	0.00226	0.004
Cadmium	mg/L	0.000912	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0167	0.0167
Combined Radium-226/228	pCi/L	3.88	5
Fluoride	mg/L	0.159	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00308	0.1
Selenium	mg/L	0.0072	0.05
Thallium	mg/L	0.00039	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2019.

Confidence Interval Summary Table - Significant Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 12/12/2022, 9:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02619**	**0.01724**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01337**	**0.01168**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02819**	**0.02026**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1034**	**0.06695**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.948**	**0.4273**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05036**	**0.04757**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4568**	**0.3769**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2737**	**0.1513**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04112**	**0.02895**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01949**	**0.01773**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-10**	**0.2516**	**0.1013**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1321**	**0.07965**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.148**	**0.06753**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.6216**	**0.1649**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9796**	**0.5504**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6237**	**0.5538**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6611**	**0.5712**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3909**	**0.3166**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1377**	**0.09605**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GC-AP-MW-12	0.00121	0.00102	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-13	0.003348	0.001725	0.006	No	8	0	None	No	0.01	Param.
Antimony (mg/L)	GC-AP-MW-17	0.00102	0.000897	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-21	0.00102	0.000964	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-6	0.00141	0.00102	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-7	0.00102	0.00066	0.006	No	8	75	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02619**	**0.01724**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01337**	**0.01168**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-11	0.005867	0.002151	0.01	No	8	0	None	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-12	0.005	0.00023	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-13	0.004592	0.001592	0.01	No	8	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02819**	**0.02026**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-15	0.005	0.00032	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1034**	**0.06695**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.948**	**0.4273**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05036**	**0.04757**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-2	0.01478	0.003086	0.01	No	8	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-21	0.005	0.00014	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-25	0.005	0.00026	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-3	0.01177	0.007138	0.01	No	8	0	None	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-31	0.0002	0.000111	0.01	No	8	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GC-AP-MW-32	0.0002	0.000142	0.01	No	8	75	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-33	0.0002	0.000081	0.01	No	8	75	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4568**	**0.3769**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-6	0.005	0.00013	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-7	0.005	0.00008	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-8	0.005	0.00015	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-9	0.01113	0.006448	0.01	No	8	0	None	x^2	0.01	Param.
Barium (mg/L)	GC-AP-MW-1	0.02747	0.02091	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-10	0.2734	0.1844	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-11	0.09467	0.0537	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-12	0.03597	0.02248	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-13	0.2013	0.06762	2	No	8	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GC-AP-MW-14	0.1163	0.07595	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-15	0.03908	0.03162	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-16	0.1042	0.08035	2	No	8	0	None	x^5	0.01	Param.
Barium (mg/L)	GC-AP-MW-17	0.3261	0.2454	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-18	0.1039	0.07118	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-2	0.03617	0.03118	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-21	0.104	0.05071	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-25	0.1088	0.07438	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-3	0.1549	0.1066	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-31	0.03181	0.02587	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-32	0.0764	0.0127	2	No	8	0	None	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-33	0.09858	0.02842	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-5	0.323	0.131	2	No	8	0	None	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-6	0.07745	0.06297	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-7	0.08718	0.07162	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-8	0.1331	0.09665	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-9	0.1884	0.1453	2	No	8	0	None	No	0.01	Param.
Cadmium (mg/L)	GC-AP-MW-1	0.0002	0.000092	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-11	0.000347	0.0002	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-13	0.0002	0.00008	0.005	No	8	75	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-15	0.001	0.00012	0.005	No	8	50	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-16	0.0002	0.000069	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-2	0.0002	0.00012	0.005	No	8	75	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-21	0.0002	0.00007	0.005	No	8	62.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-25	0.000203	0.00007	0.005	No	8	62.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-6	0.00278	0.00018	0.005	No	8	62.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-8	0.000241	0.0002	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GC-AP-MW-1	0.01	0.000287	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-10	0.00102	0.000217	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-11	0.001015	0.00023	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-12	0.01	0.000224	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-13	0.01	0.000237	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-14	0.00102	0.00023	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-15	0.00102	0.00027	0.1	No	8	75	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-16	0.01	0.000267	0.1	No	8	50	None	No	0.004	NP (normality)

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GC-AP-MW-17	0.01	0.000211	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-18	0.01	0.00023	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-2	0.01	0.000256	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-21	0.01	0.00022	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-25	0.00102	0.00028	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-3	0.01	0.000286	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-31	0.01	0.000268	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-32	0.01	0.000301	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-33	0.01	0.000311	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-5	0.01	0.00025	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-6	0.00102	0.000228	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-7	0.01	0.00024	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-8	0.01	0.000217	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-9	0.01	0.000238	0.1	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2737**	**0.1513**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-10	0.04225	0.0155	0.0167	No	8	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-11	0.03933	0.01632	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-12	0.005	0.00077	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-13	0.005	0.00007	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04112**	**0.02895**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01949**	**0.01773**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-16	0.01672	0.01428	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-17	0.01666	0.009877	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-18	0.0189	0.01582	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-2	0.03102	0.01643	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-21	0.00501	0.00147	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-25	0.01293	0.01038	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-3	0.004208	0.0003914	0.0167	No	8	12.5	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-31	0.005	0.0006	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-32	0.00105	0.0002	0.0167	No	8	75	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-33	0.00099	0.0002	0.0167	No	8	75	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-5	0.00879	0.005818	0.0167	No	8	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-6	0.003592	0.002134	0.0167	No	8	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-7	0.003852	0.00165	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-8	0.01065	0.005273	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-9	0.0323	0.0164	0.0167	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-1	1.486	0.9041	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-10	2.08	0.988	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-11	0.7105	0.3545	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-12	0.989	-0.02937	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-13	0.5689	0.3154	5	No	8	0	None	x^2	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-14	1.418	0.7862	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-15	0.7869	0.2439	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-16	1.294	0.4884	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-17	2.243	1.129	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-18	1.579	0.8481	5	No	8	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-2	1.672	0.3894	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-21	0.778	0.04437	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-25	0.8118	0.2697	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-3	1.23	0.5428	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-31	0.7828	0.179	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-32	3.18	-0.464	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-33	3.41	0.771	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-5	2.076	1.139	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-6	1.135	0.5803	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-7	1.19	0.545	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-8	1.445	0.4865	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-9	1.616	1.202	5	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-1	0.1728	0.1138	4	No	8	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-10	0.2929	0.2037	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-11	0.1757	0.07862	4	No	8	12.5	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-12	0.2384	0.1441	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-13	0.1139	0.07695	4	No	8	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-14	0.267	0.215	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-15	0.1527	0.1123	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-16	0.3024	0.2485	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-17	0.6011	0.4943	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-18	0.2079	0.1545	4	No	8	0	None	No	0.01	Param.

Confidence Interval Summary Table - All Results

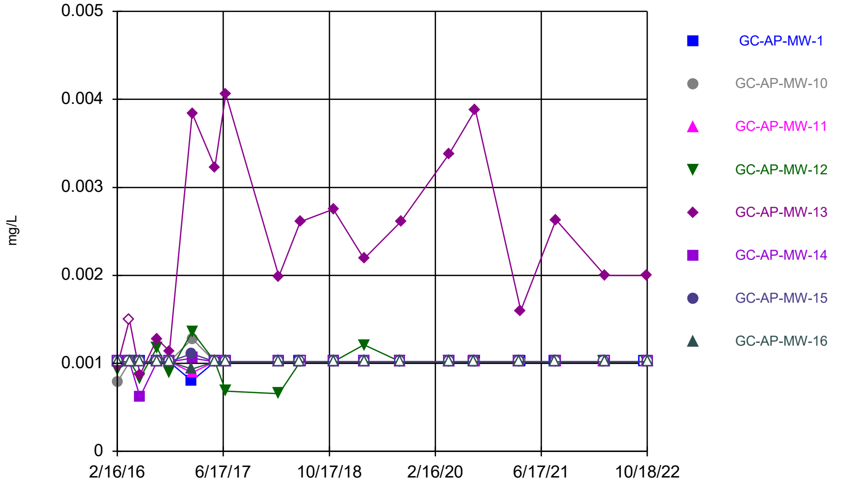
Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-2	0.1603	0.08089	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-21	0.2022	0.08712	4	No	8	12.5	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-25	0.09939	0.07765	4	No	8	50	Kaplan-Meier	x^6	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-3	0.1893	0.1096	4	No	8	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-31	0.125	0.0671	4	No	8	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-32	0.125	0.0518	4	No	8	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-5	0.322	0.192	4	No	8	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-6	0.2378	0.1619	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-7	0.1072	0.08118	4	No	8	0	None	x^2	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-8	0.1416	0.09911	4	No	8	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-9	0.2097	0.1125	4	No	8	12.5	None	No	0.01	Param.
Lead (mg/L)	GC-AP-MW-16	0.005	0.000089	0.015	No	8	50	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-2	0.005	0.000453	0.015	No	8	50	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-25	0.0002	0.0000884	0.015	No	8	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-31	0.0002	0.00015	0.015	No	8	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-32	0.0002	0.000121	0.015	No	8	75	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-33	0.0002	0.000115	0.015	No	8	75	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-9	0.0002	0.0000784	0.015	No	8	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	**GC-AP-MW-10**	**0.2516**	**0.1013**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1321**	**0.07965**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.148**	**0.06753**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.6216**	**0.1649**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9796**	**0.5504**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6237**	**0.5538**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6611**	**0.5712**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3909**	**0.3166**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1377**	**0.09605**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GC-AP-MW-6	0.03304	0.009978	0.04	No	8	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lithium (mg/L)	GC-AP-MW-8	0.07075	0.007866	0.04	No	8	12.5	None	No	0.01	Param.
Lithium (mg/L)	GC-AP-MW-9	0.09868	0.01657	0.04	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-1	0.0002	0.000117	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-10	0.0132	0.00747	0.1	No	8	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-11	0.01774	0.006928	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-12	0.1145	0.04966	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-13	0.145	0.0146	0.1	No	8	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-14	0.01865	0.01207	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-16	0.01	0.000113	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-17	0.06819	0.04911	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-18	0.01	0.000305	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-2	0.0002	0.0000804	0.1	No	8	75	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-21	0.071	0.00666	0.1	No	8	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-25	0.0002	0.0000843	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-31	0.0002	0.0000741	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-5	0.003467	0.002703	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-6	0.01	0.00142	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-7	0.01	0.00012	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-8	0.0002	0.0000812	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-1	0.01	0.000737	0.05	No	8	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-12	0.00281	0.00081	0.05	No	8	75	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-13	0.02857	0.004315	0.05	No	8	12.5	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	GC-AP-MW-2	0.00102	0.00054	0.05	No	8	75	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-3	0.01	0.000612	0.05	No	8	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-32	0.00102	0.00059	0.05	No	8	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-33	0.00102	0.00071	0.05	No	8	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	GC-AP-MW-1	0.001	0.000107	0.002	No	8	50	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-11	0.0002	0.00007	0.002	No	8	62.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-13	0.002073	0.0003626	0.002	No	8	0	None	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-15	0.0002	0.000084	0.002	No	8	62.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-16	0.0003925	0.0003252	0.002	No	8	0	None	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-2	0.001	0.000101	0.002	No	8	50	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-21	0.0002	0.000106	0.002	No	8	62.5	None	No	0.004	NP (normality)

FIGURE A.

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

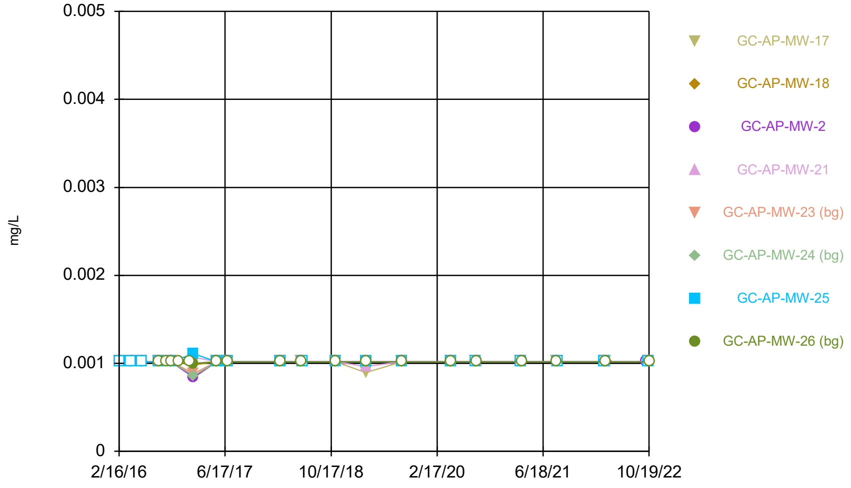
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

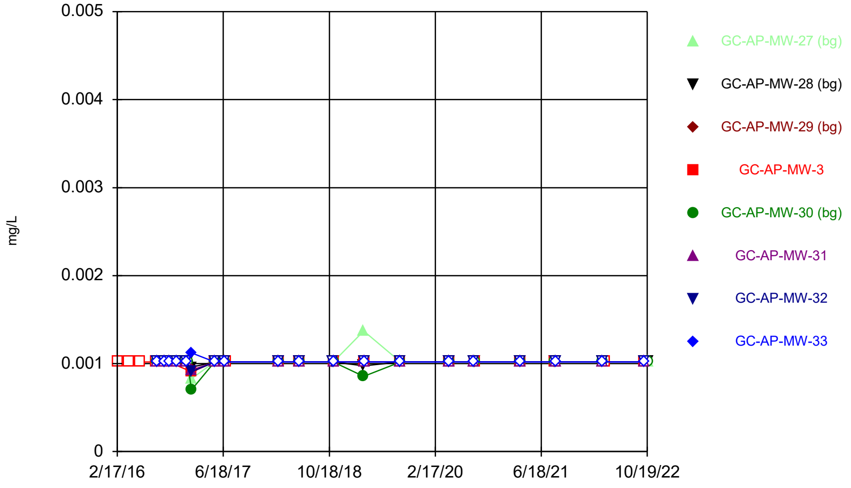
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

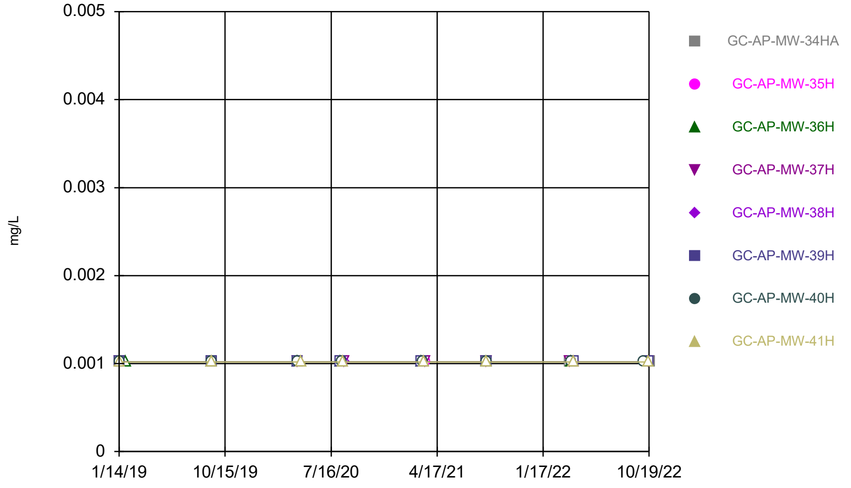
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

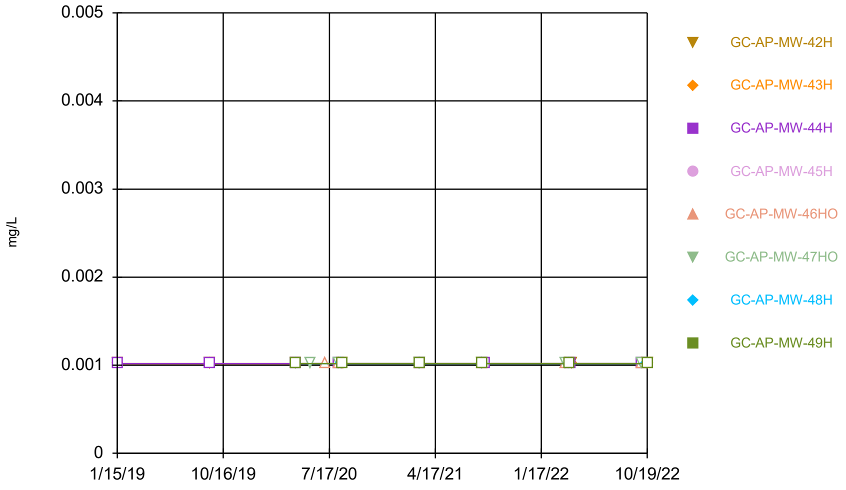
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

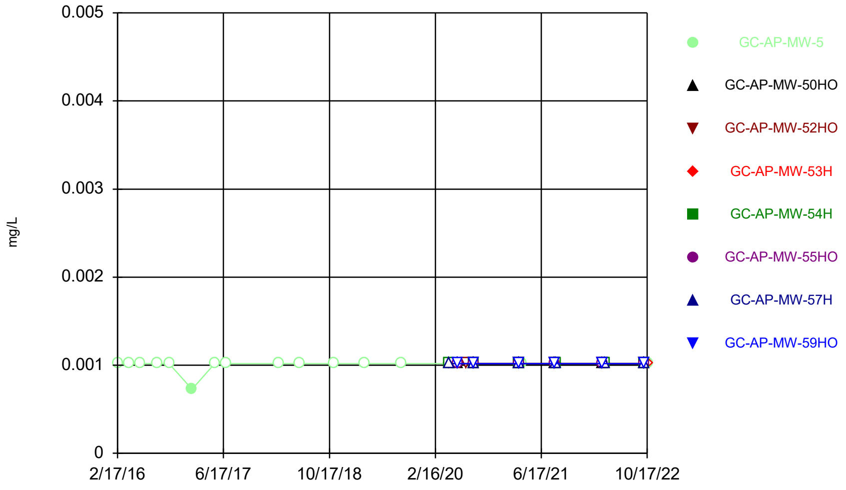
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

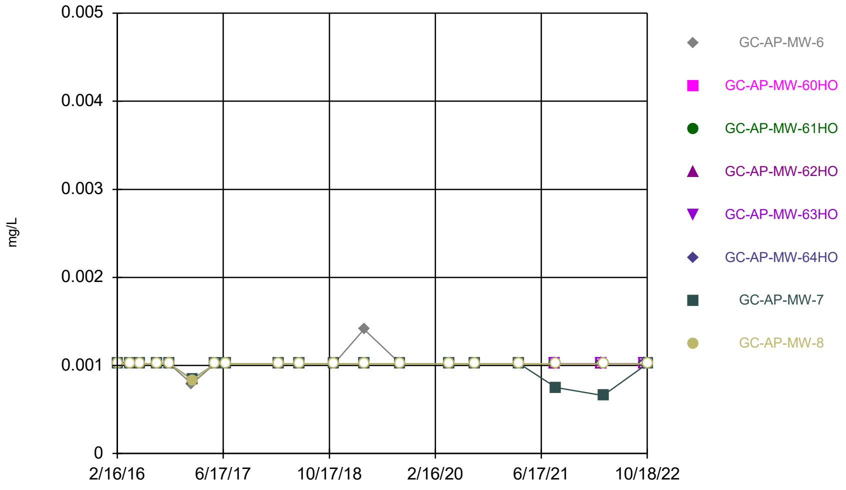
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

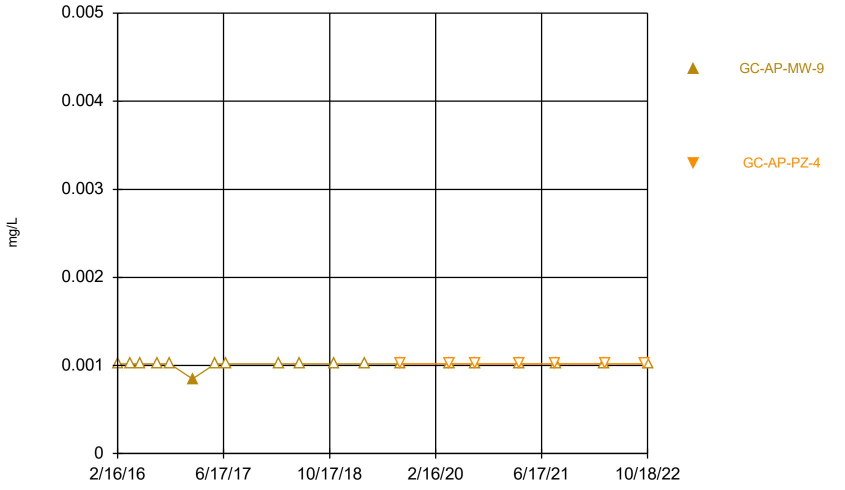
Time Series



Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

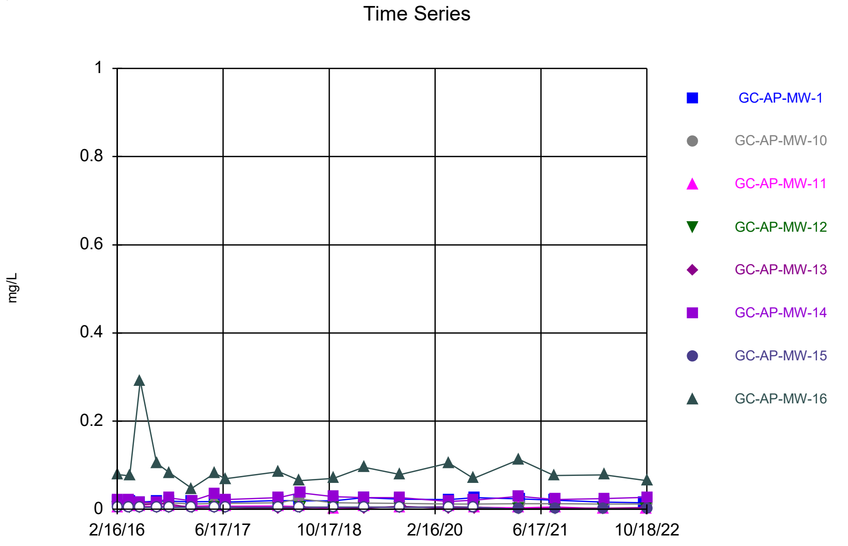
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



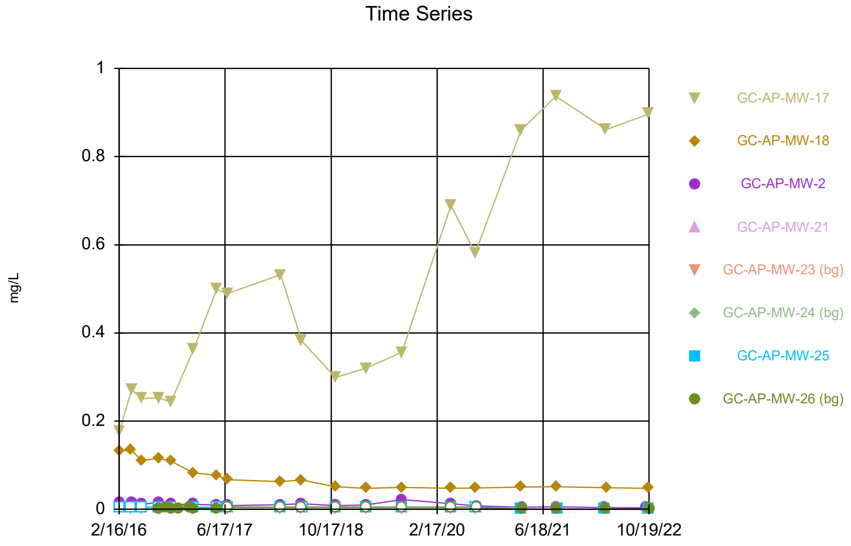
Constituent: Antimony Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



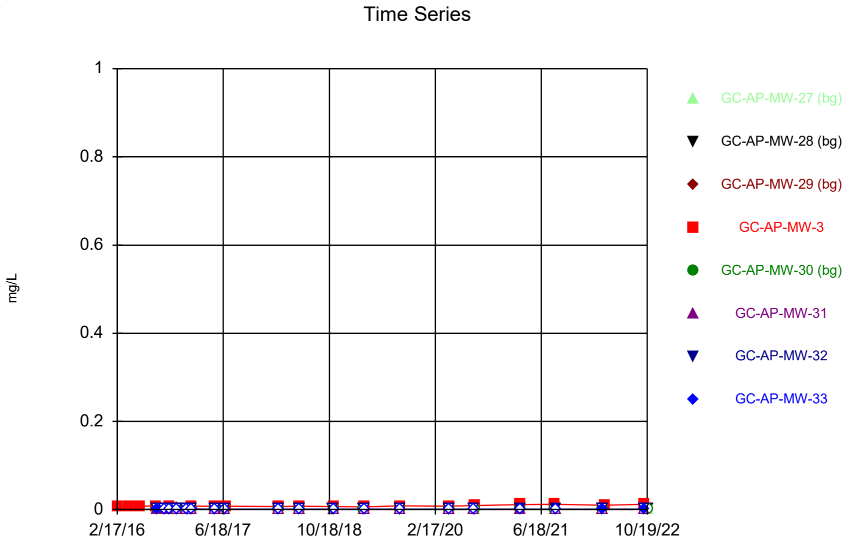
Constituent: Arsenic Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



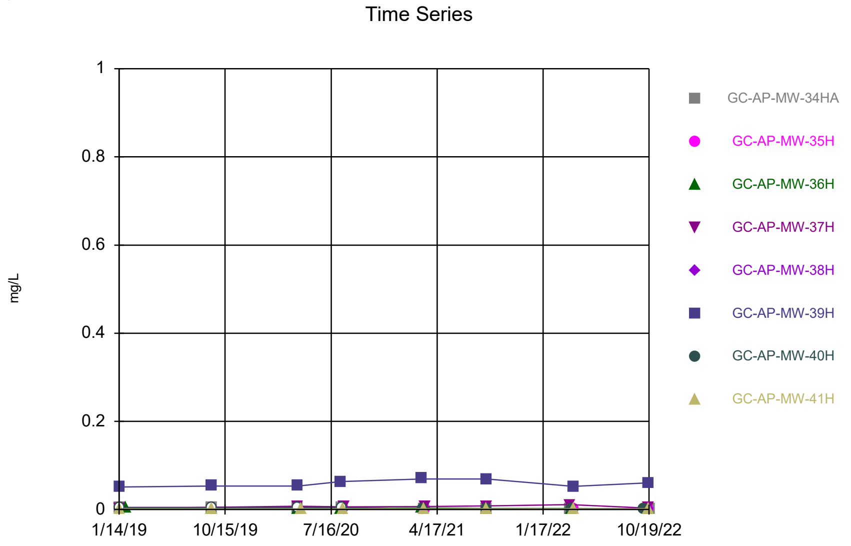
Constituent: Arsenic Analysis Run 12/9/2022 10:19 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Arsenic Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

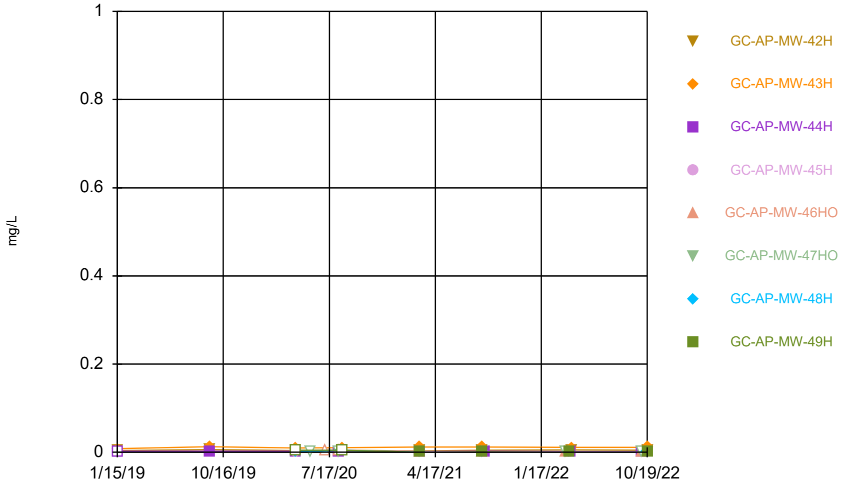
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Arsenic Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

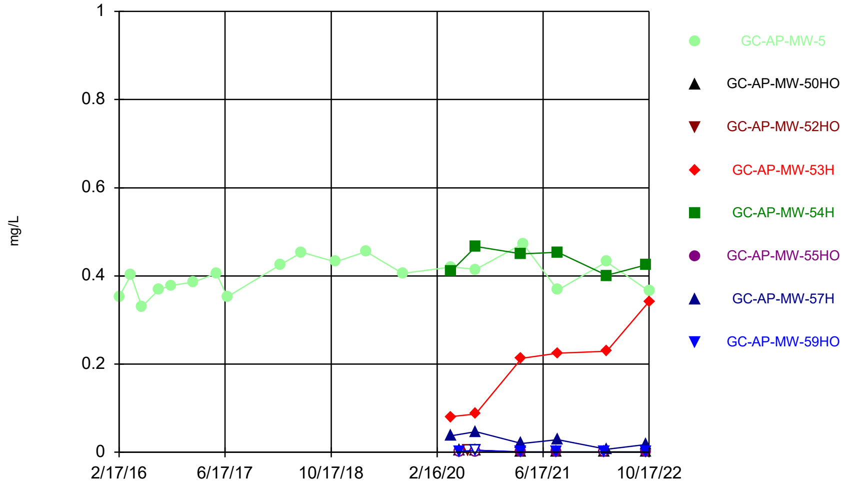
Time Series



Constituent: Arsenic Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

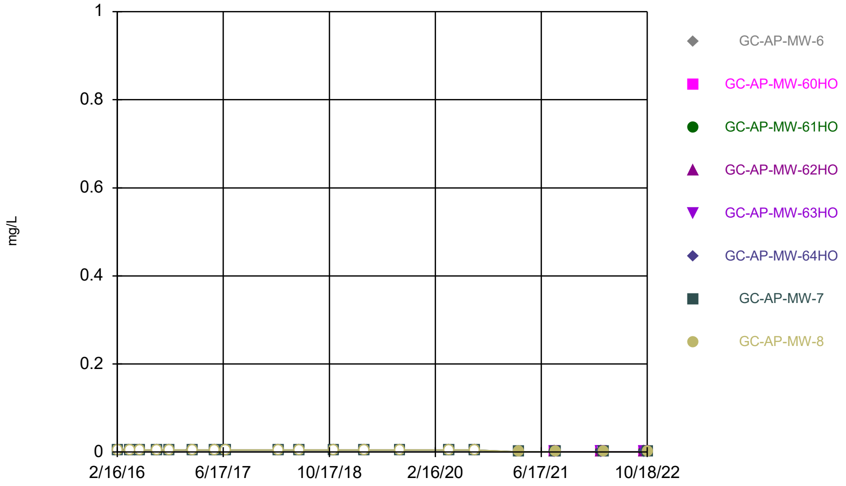
Time Series



Constituent: Arsenic Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

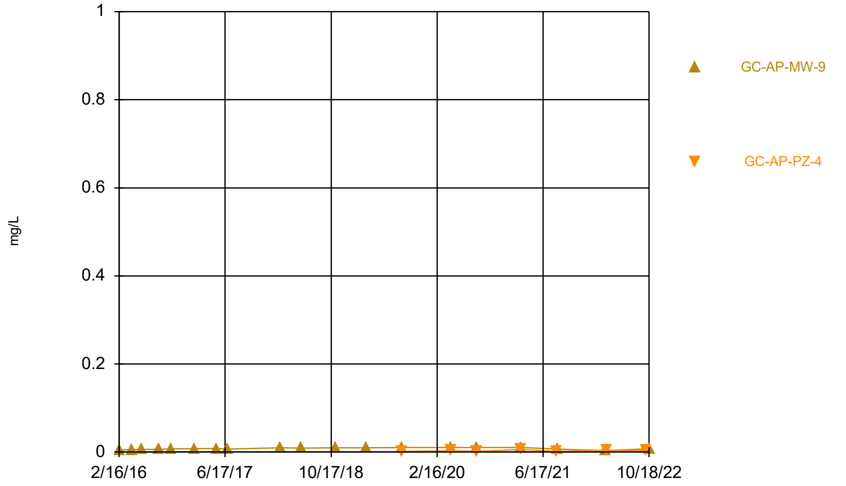
Time Series



Constituent: Arsenic Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

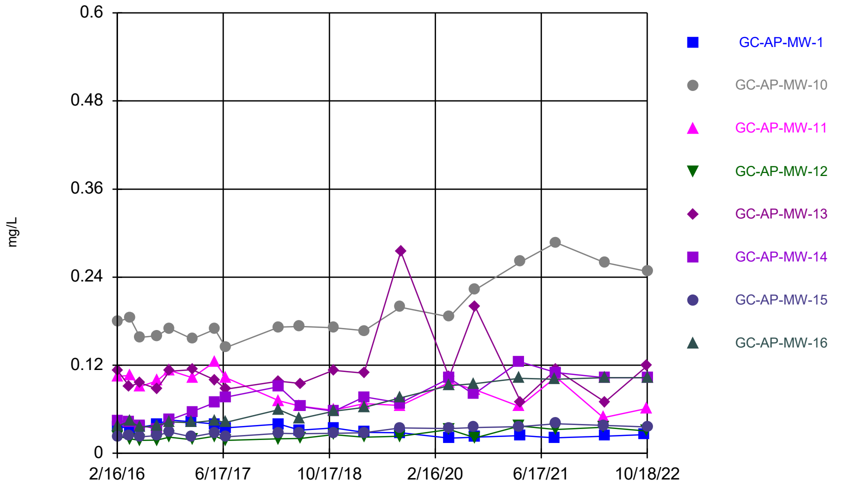
Time Series



Constituent: Arsenic Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

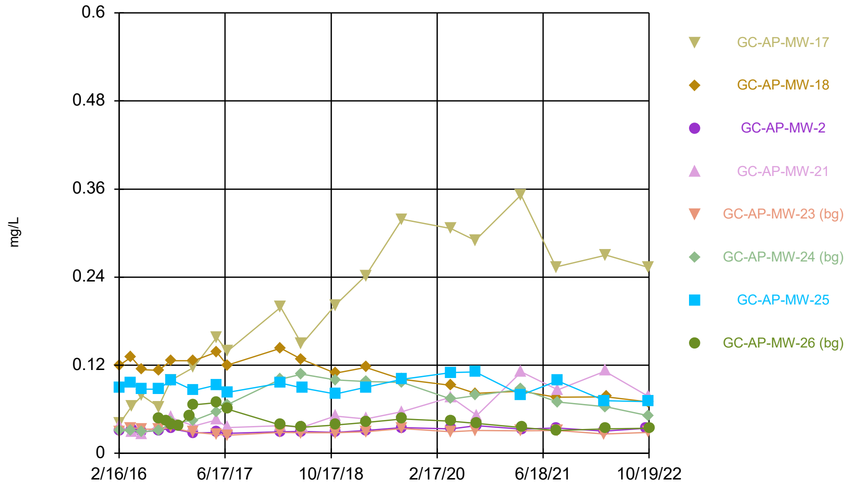
Time Series



Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

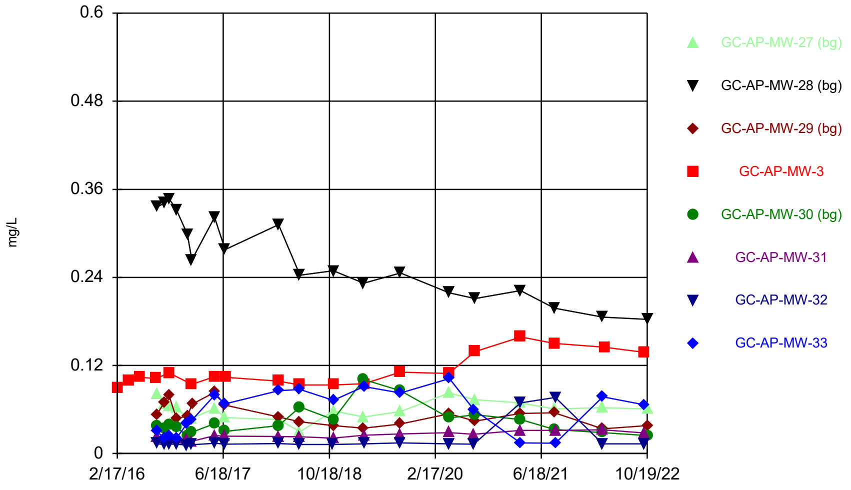
Time Series



Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

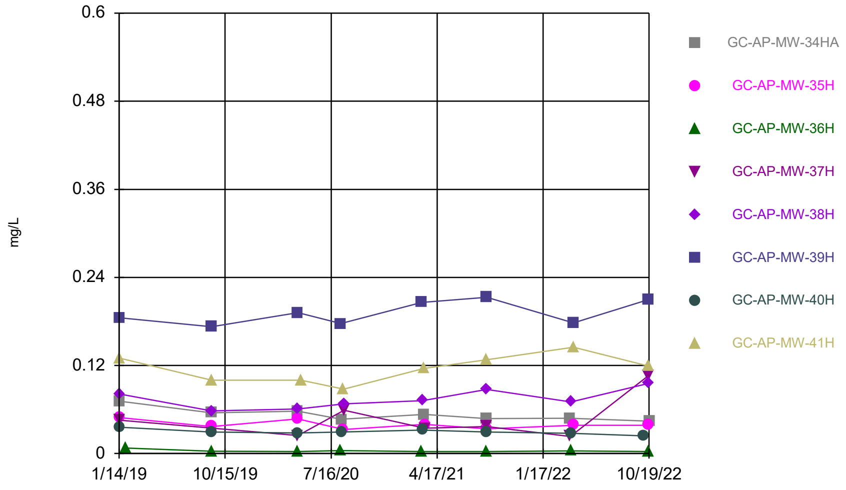
Time Series



Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

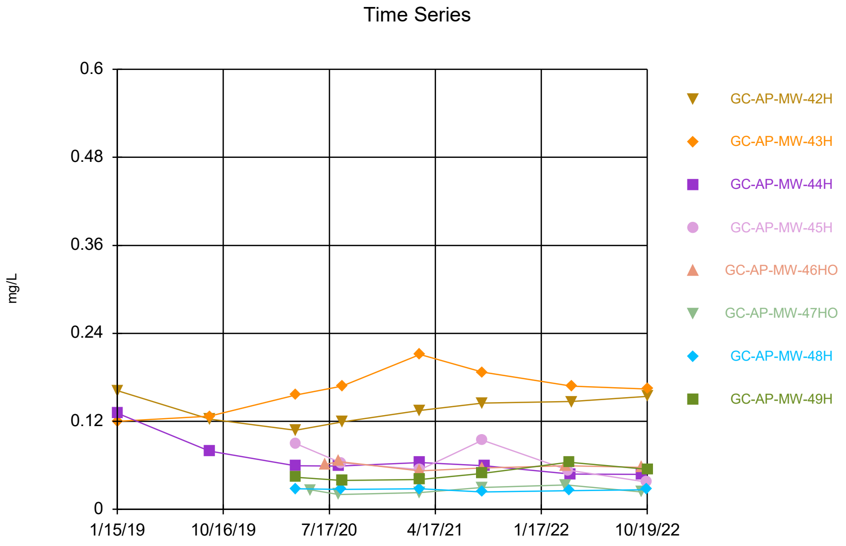
Sanitas™ v.9.6.36 . UG

Time Series



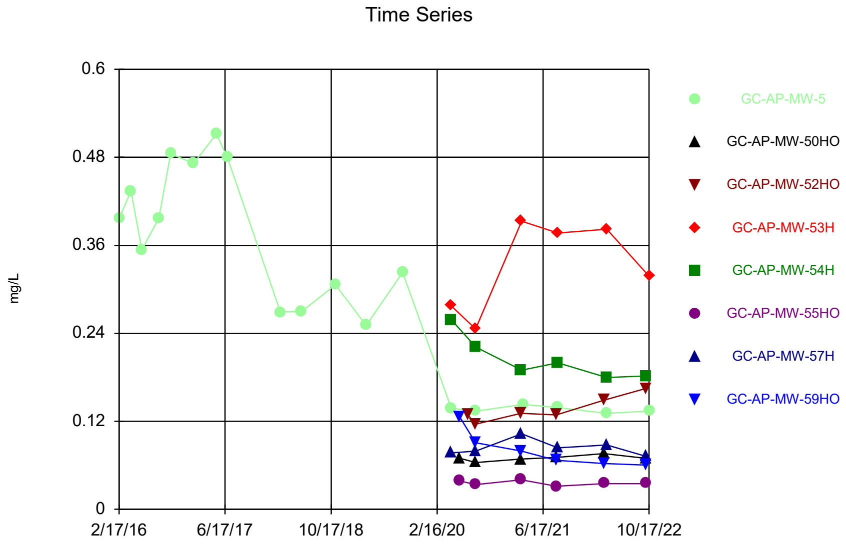
Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



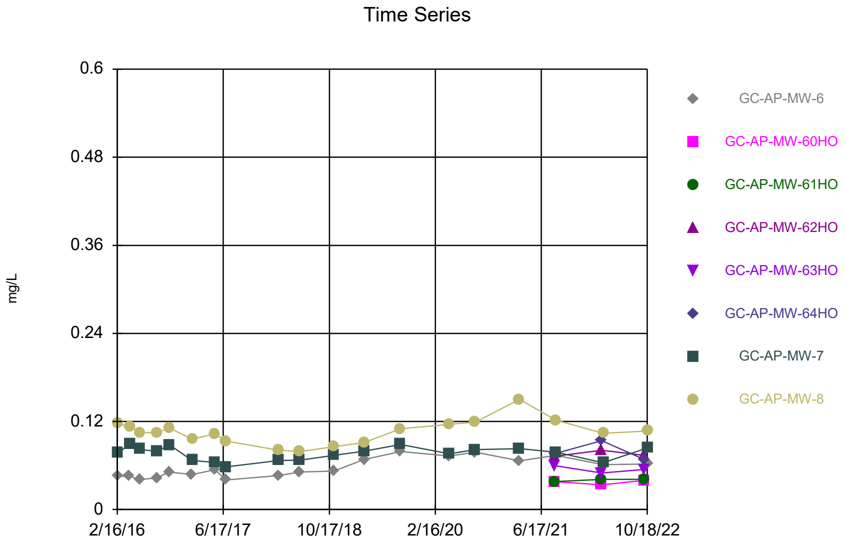
Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



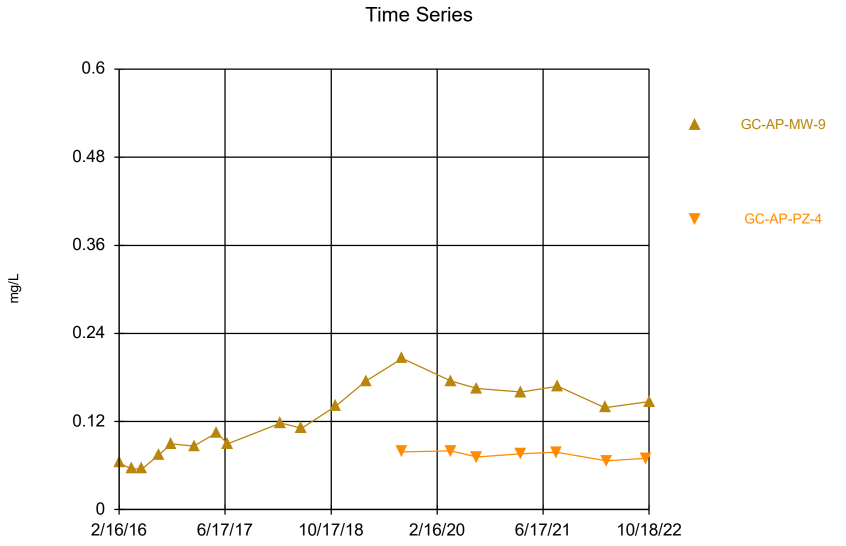
Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

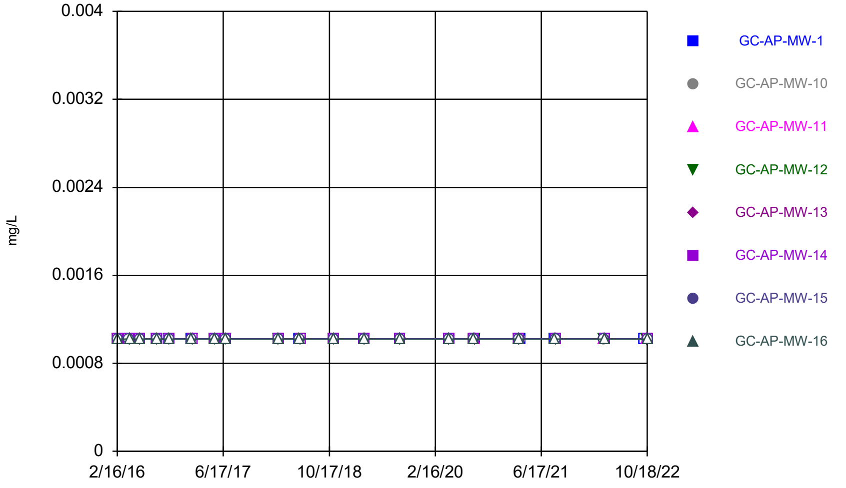
Sanitas™ v.9.6.36 . UG



Constituent: Barium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

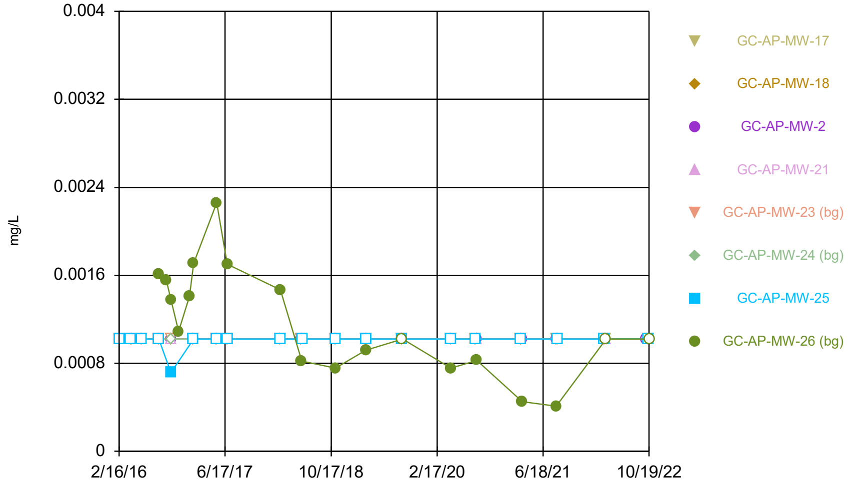
Time Series



Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

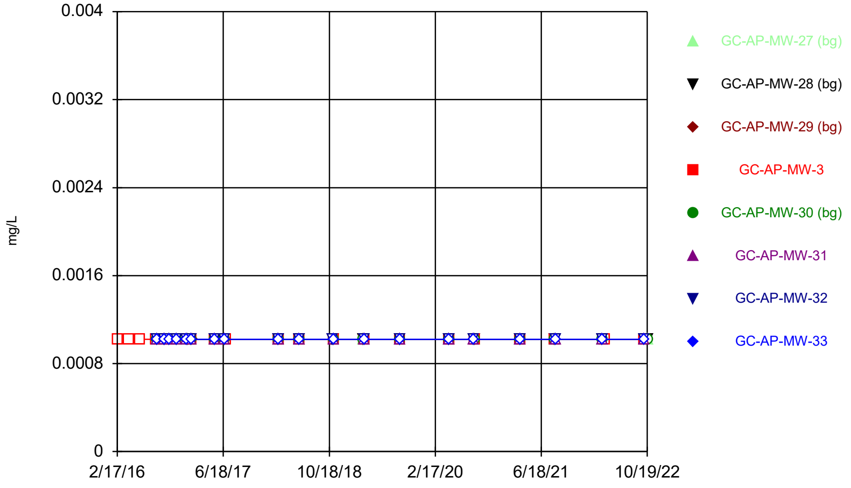
Time Series



Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

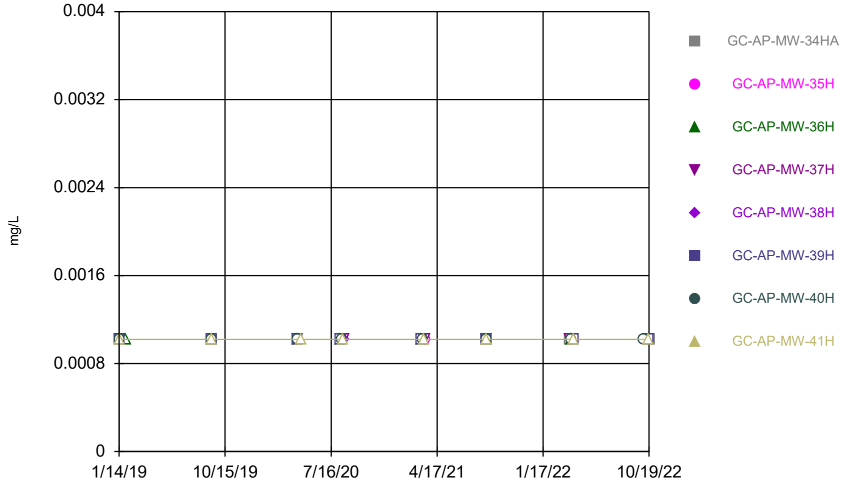
Time Series



Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

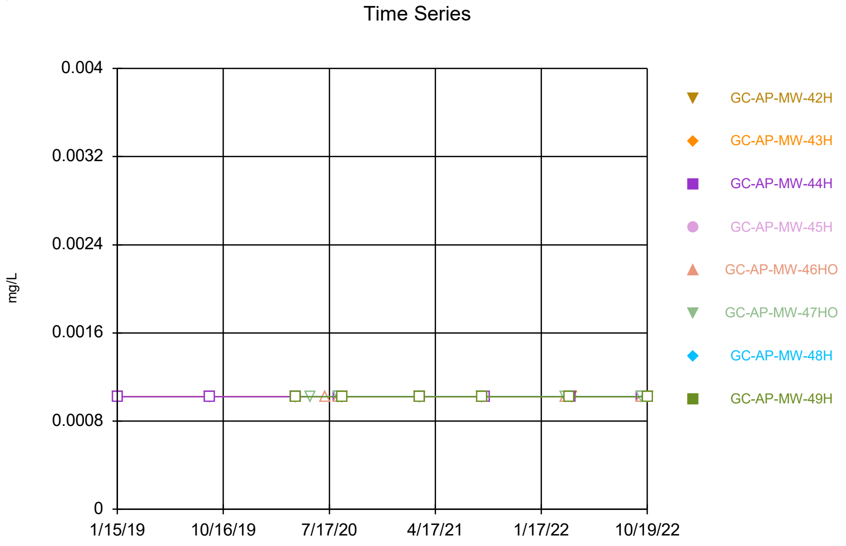
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



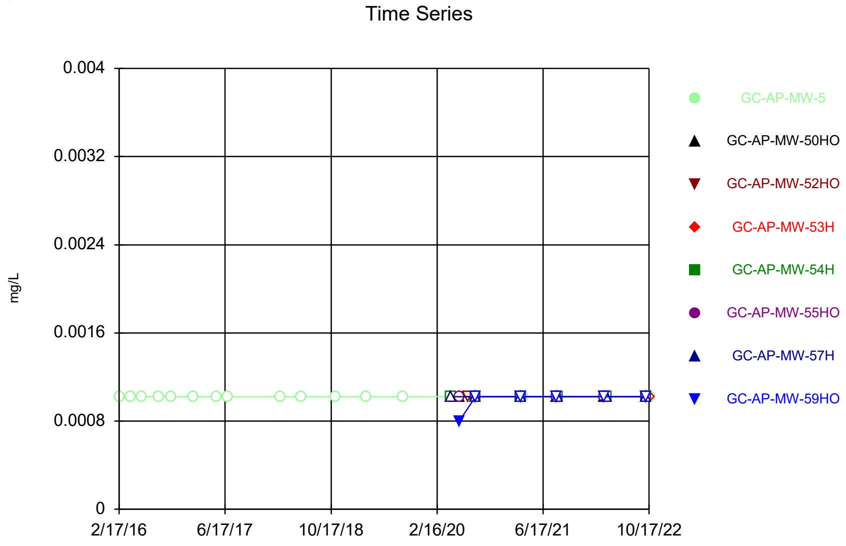
Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



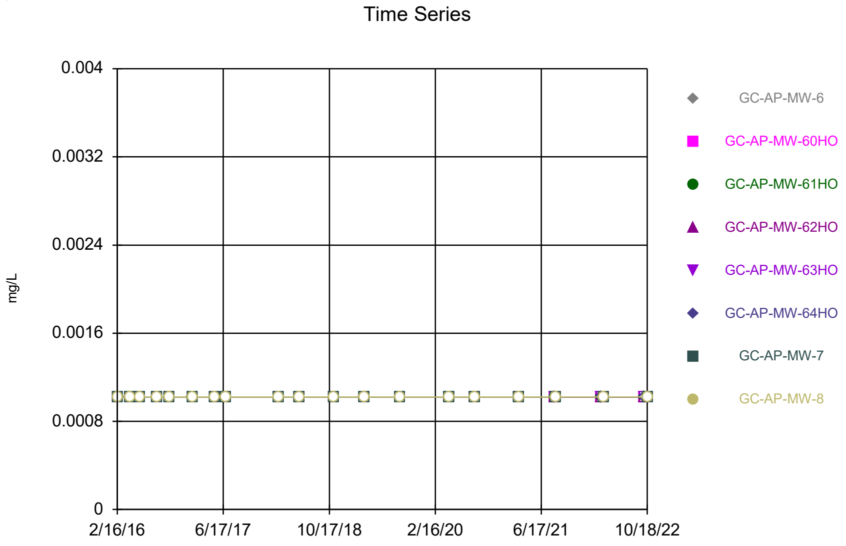
Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



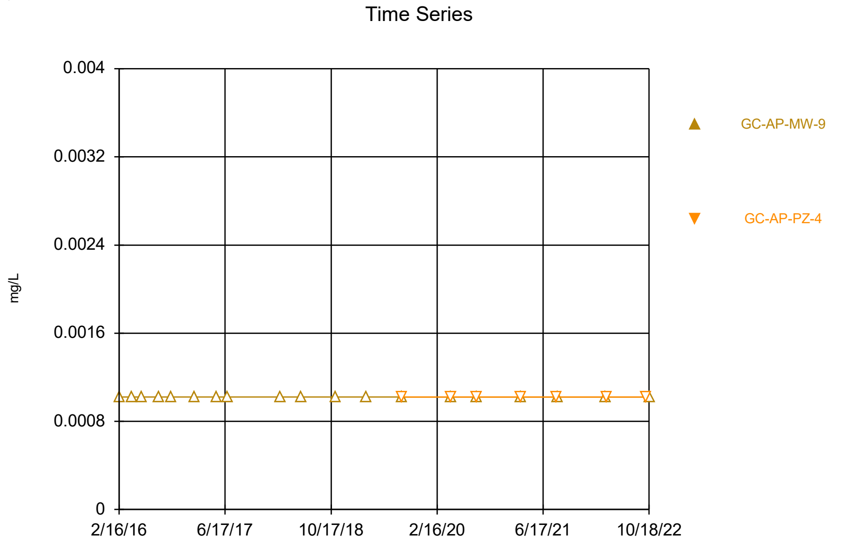
Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



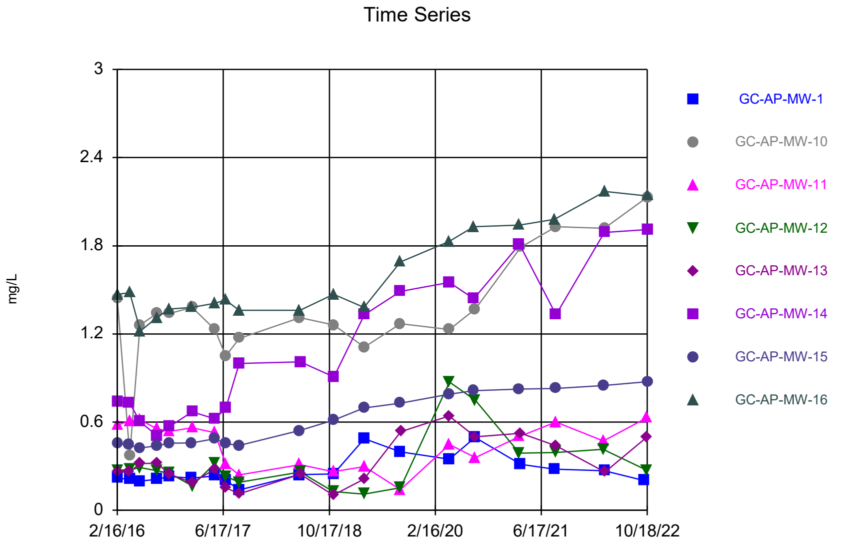
Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



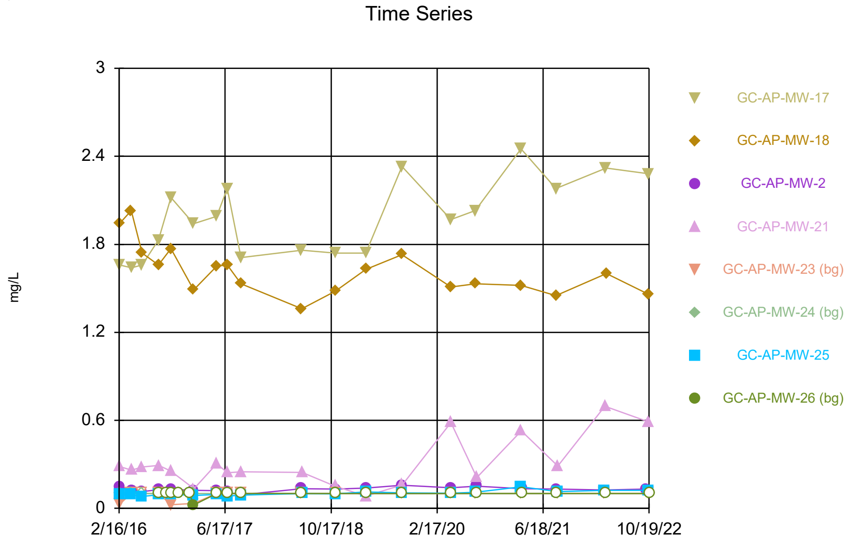
Constituent: Beryllium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



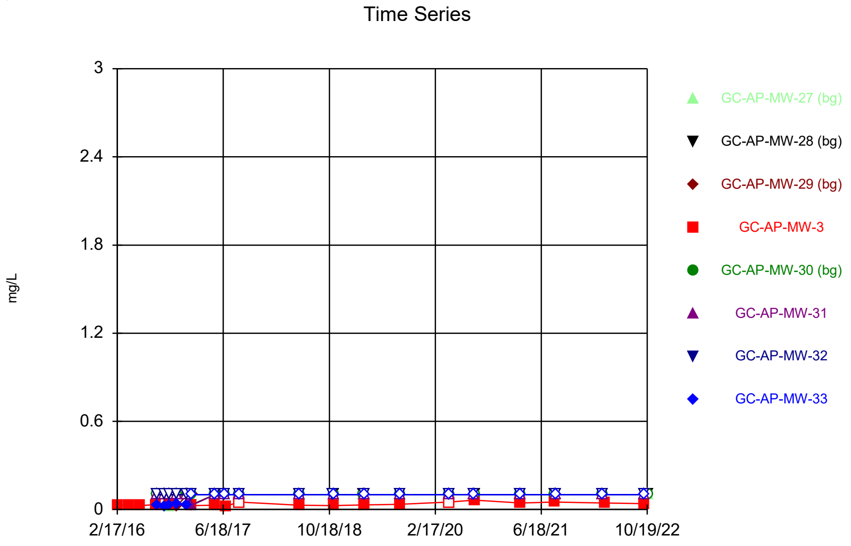
Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



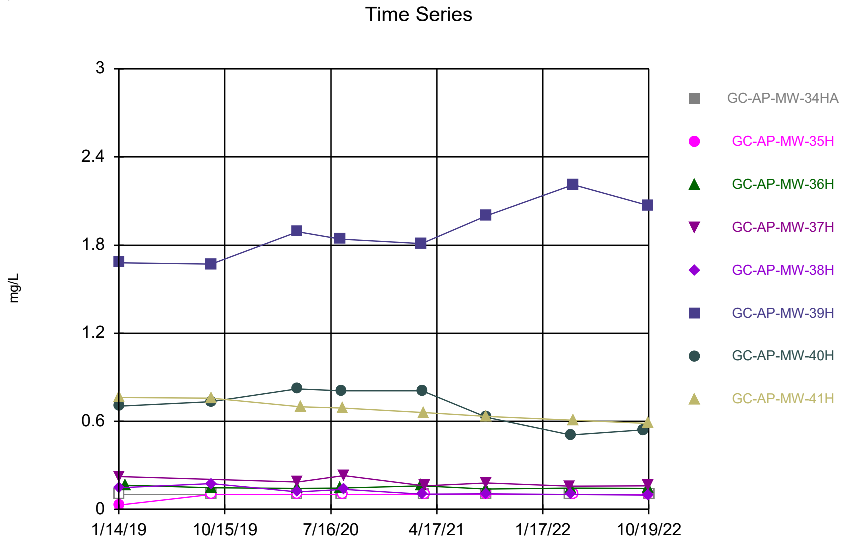
Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

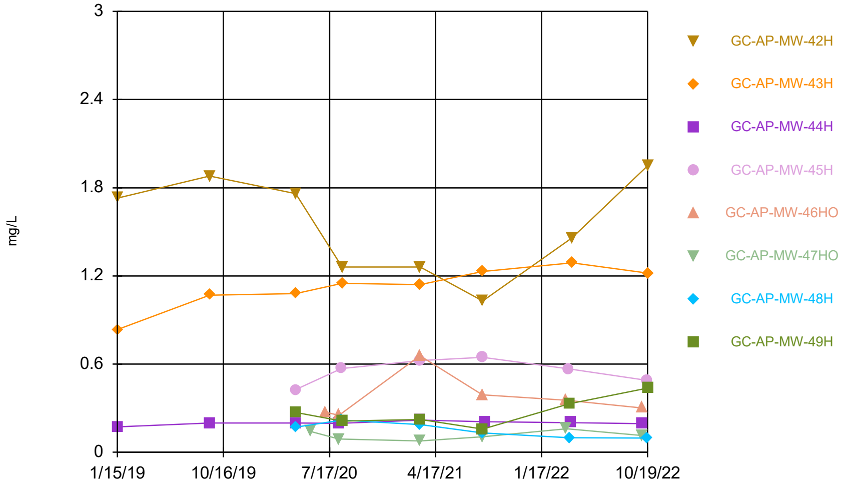
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

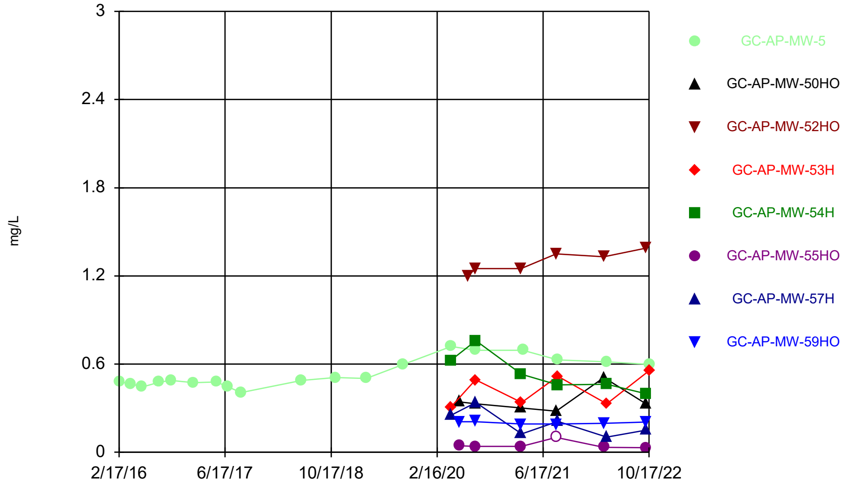
Time Series



Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

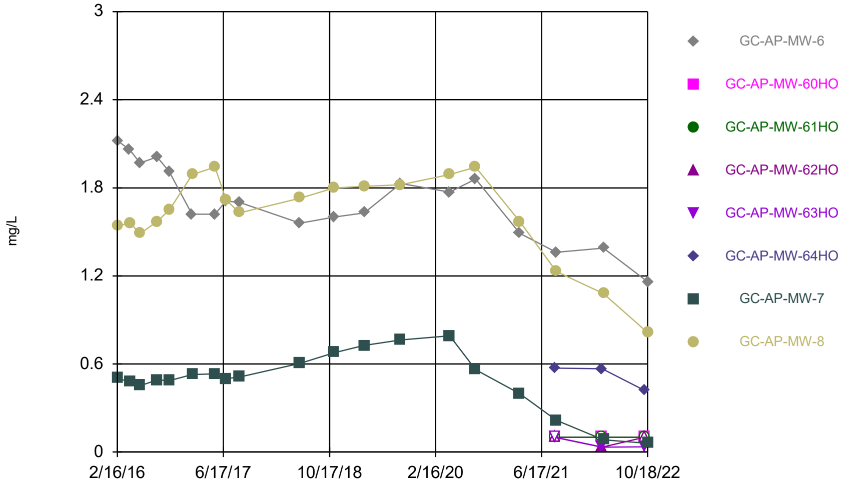
Time Series



Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

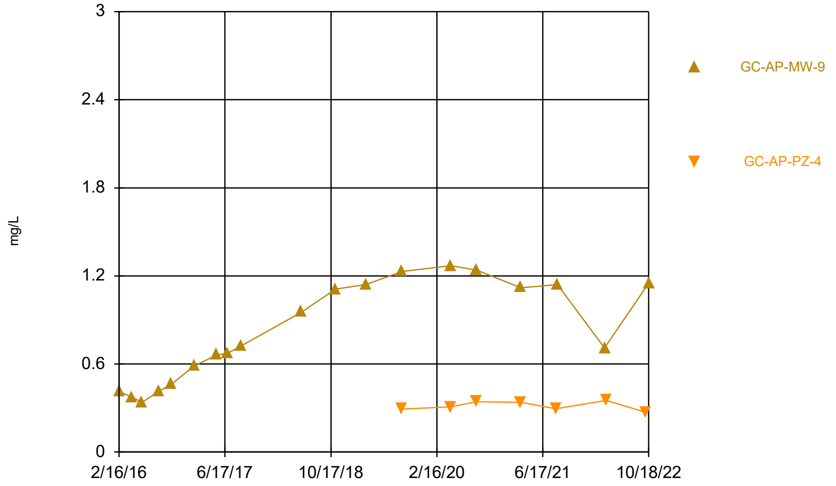
Time Series



Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

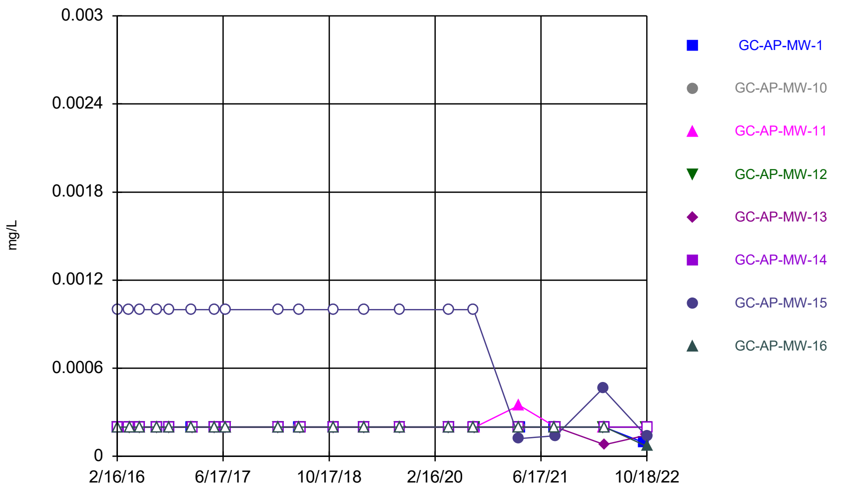
Time Series



Constituent: Boron Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

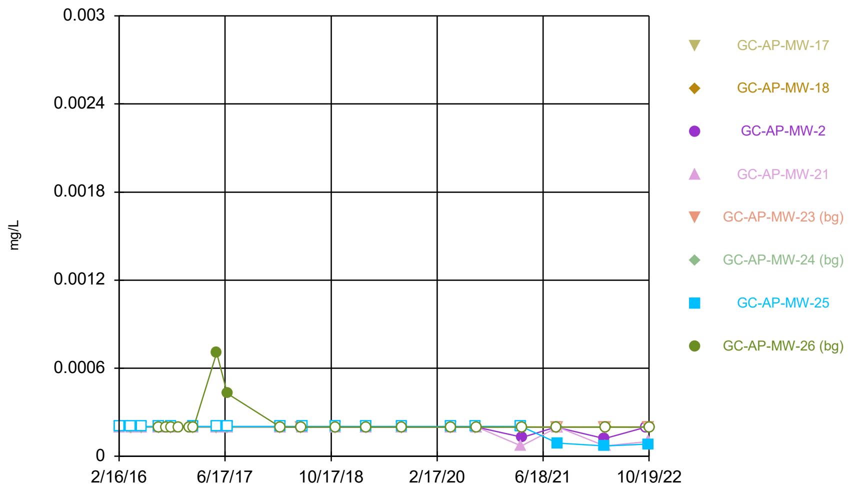
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

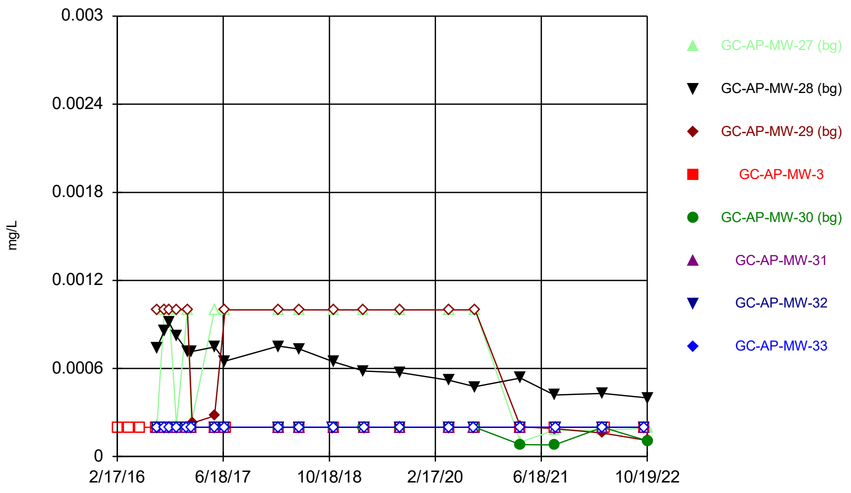
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

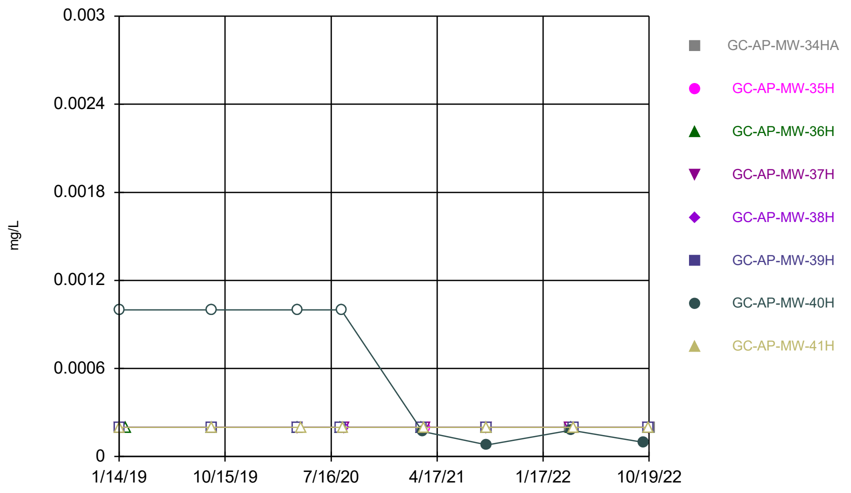
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

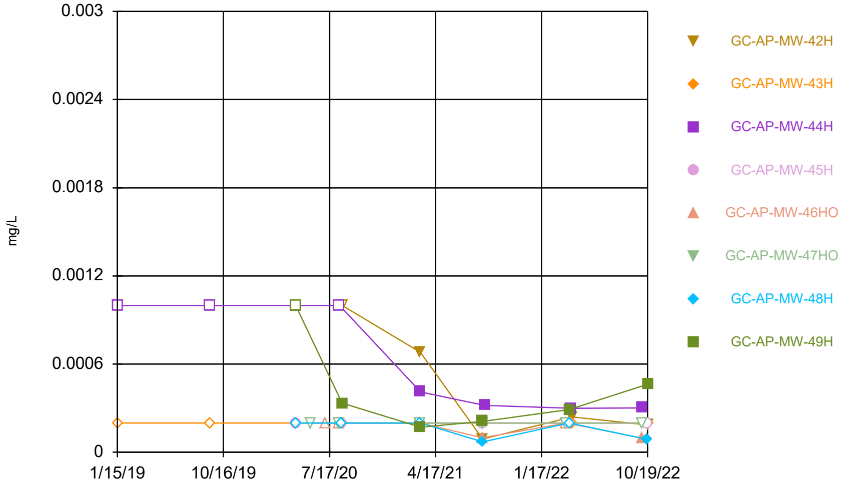
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

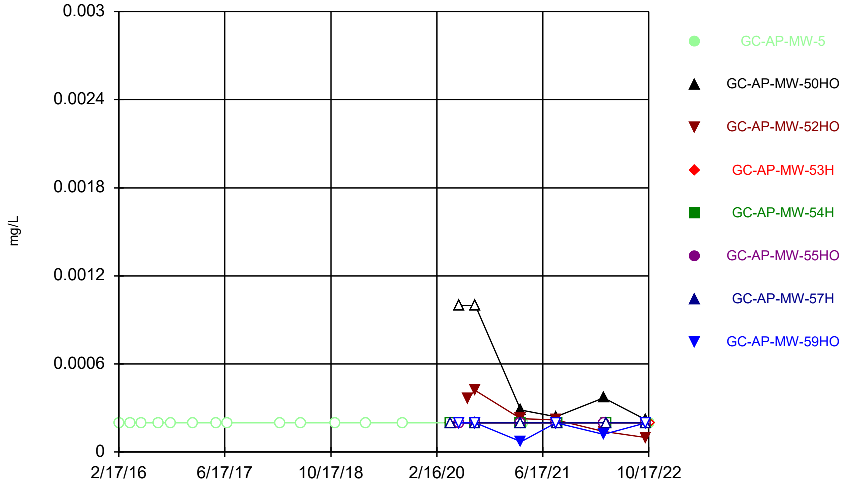
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

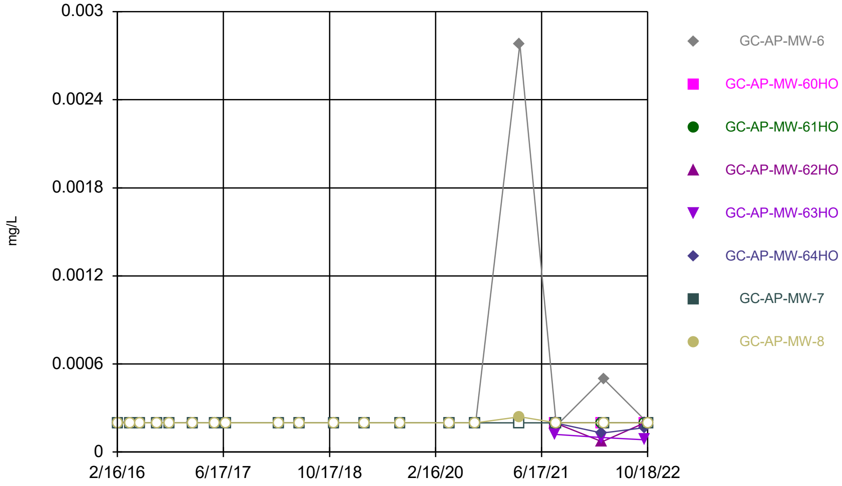
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

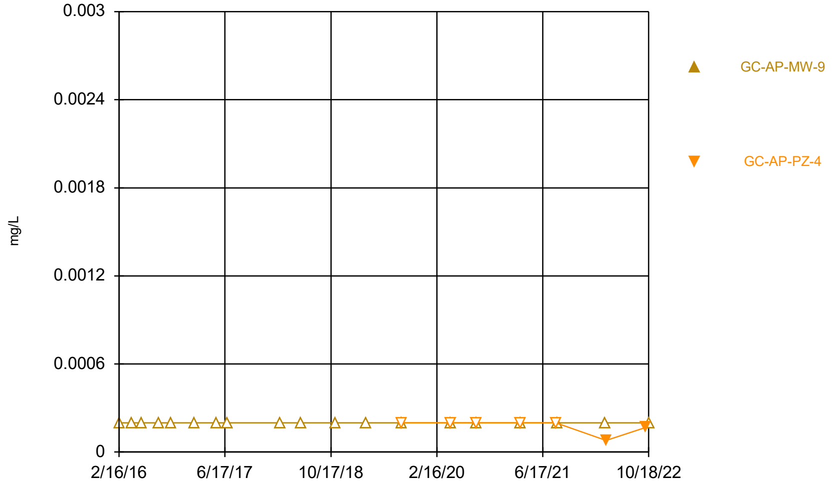
Time Series



Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

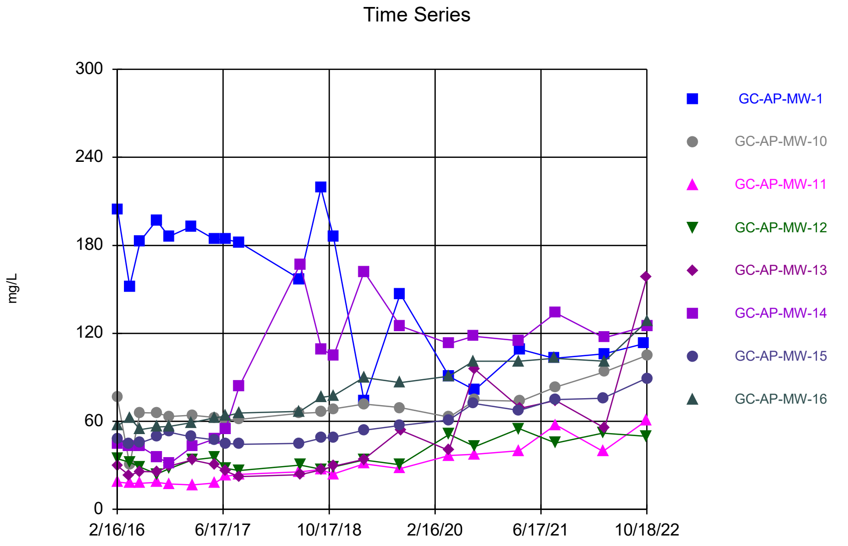
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



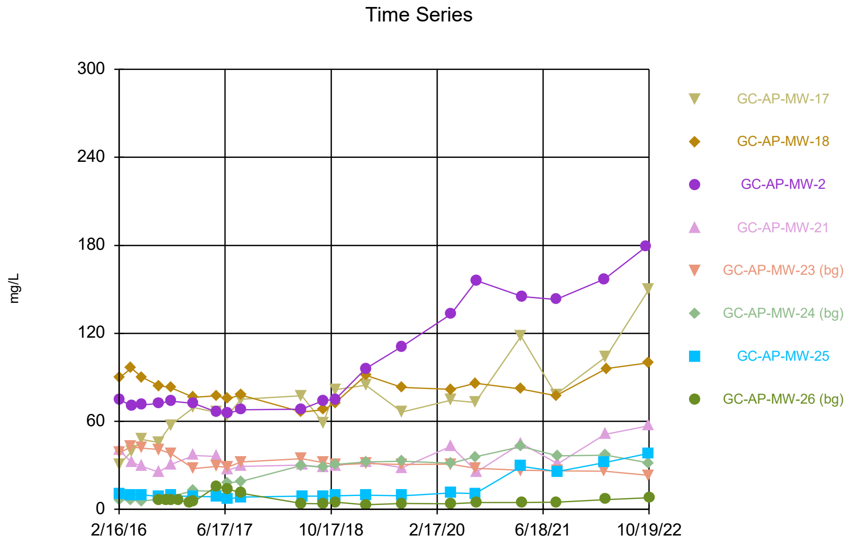
Constituent: Cadmium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



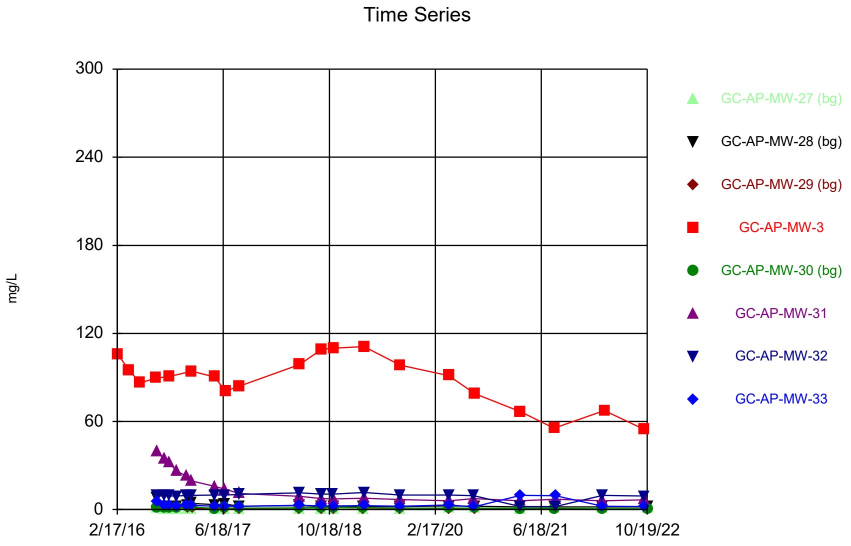
Constituent: Calcium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



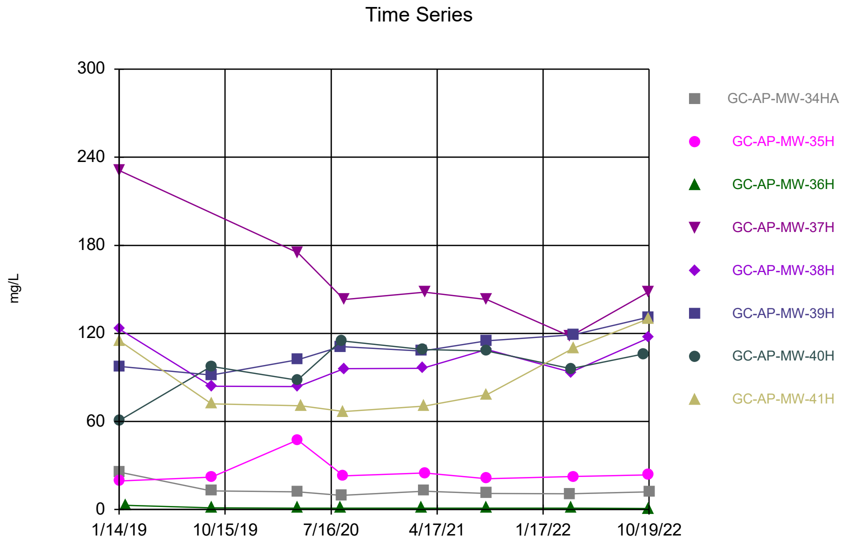
Constituent: Calcium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



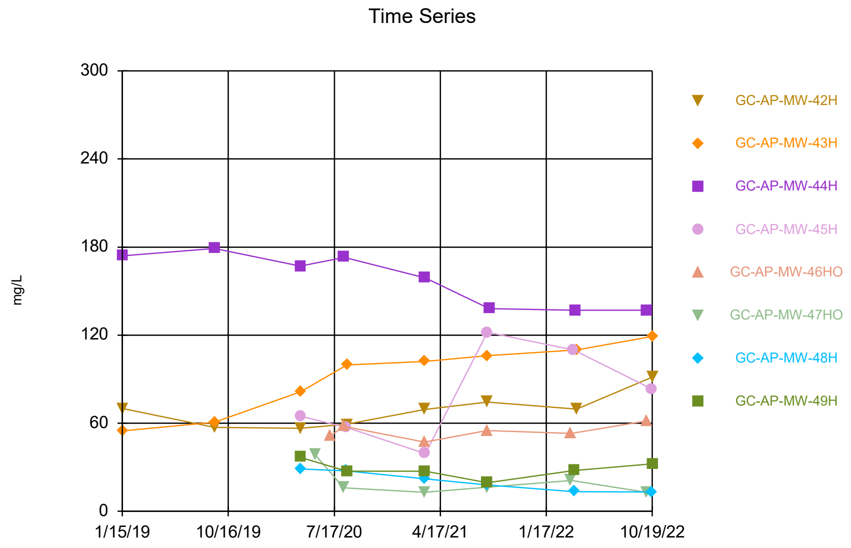
Constituent: Calcium Analysis Run 12/9/2022 10:20 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



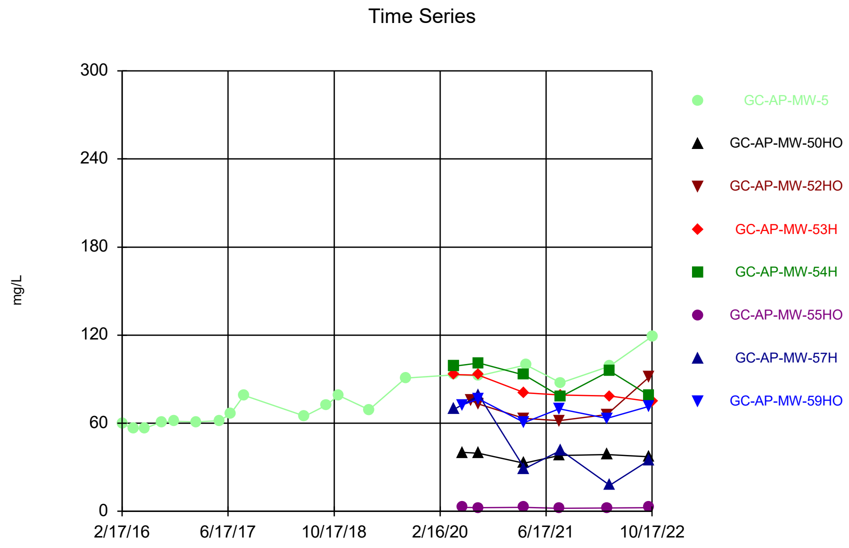
Constituent: Calcium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



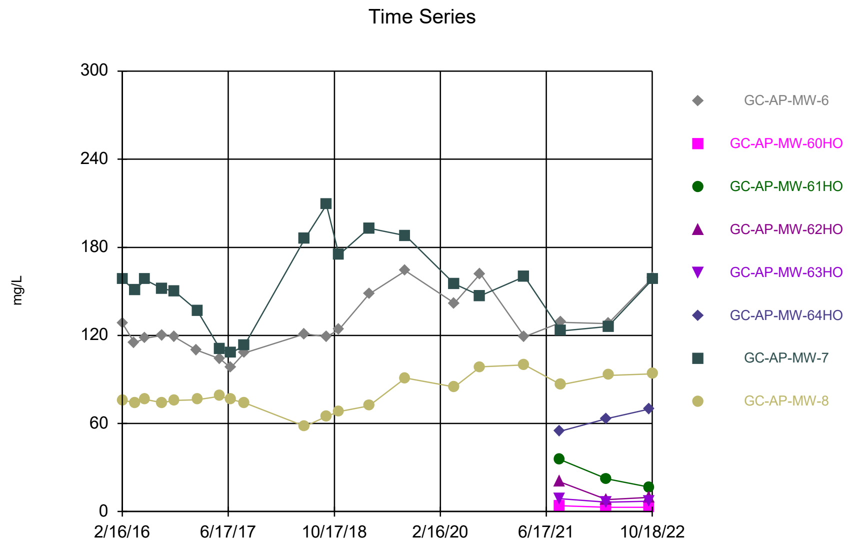
Constituent: Calcium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



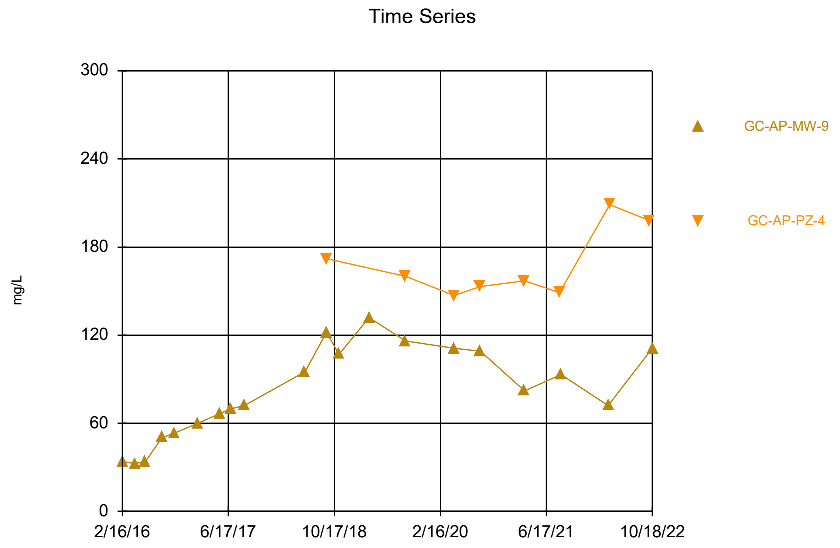
Constituent: Calcium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Calcium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

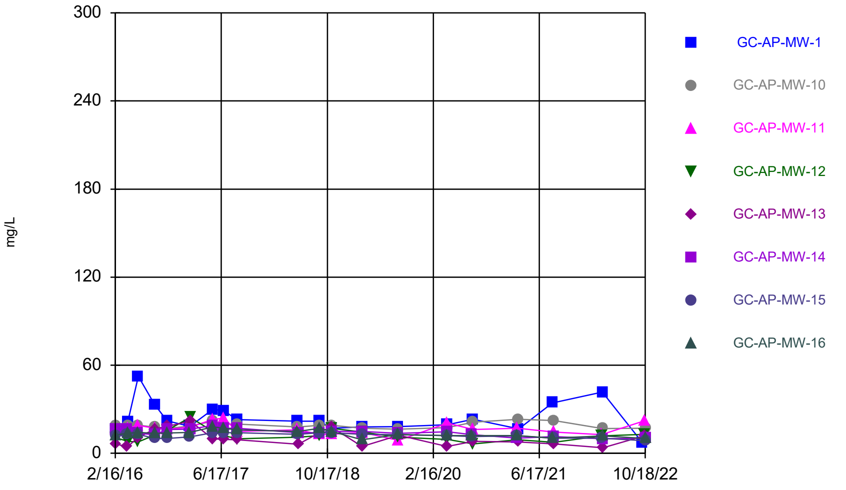
Sanitas™ v.9.6.36 . UG



Constituent: Calcium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

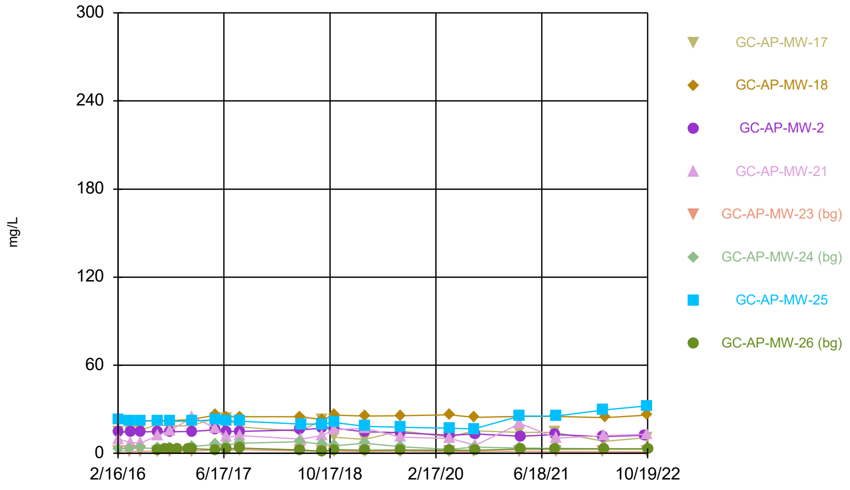
Time Series



Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

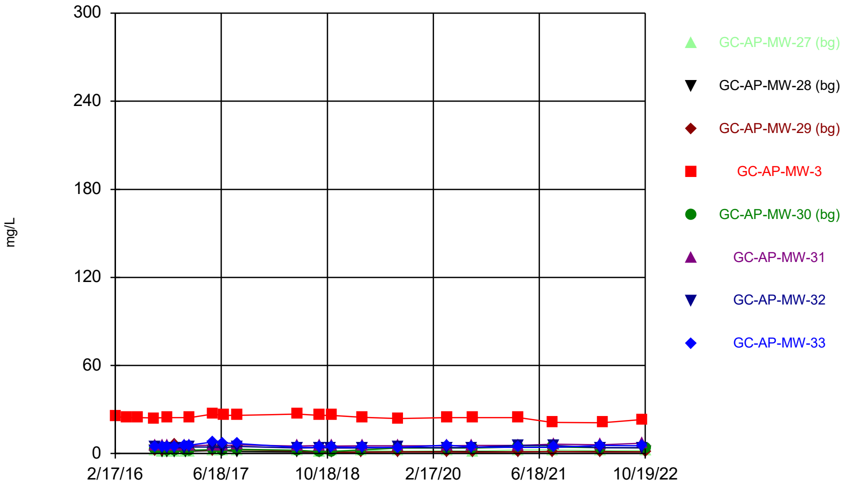
Time Series



Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

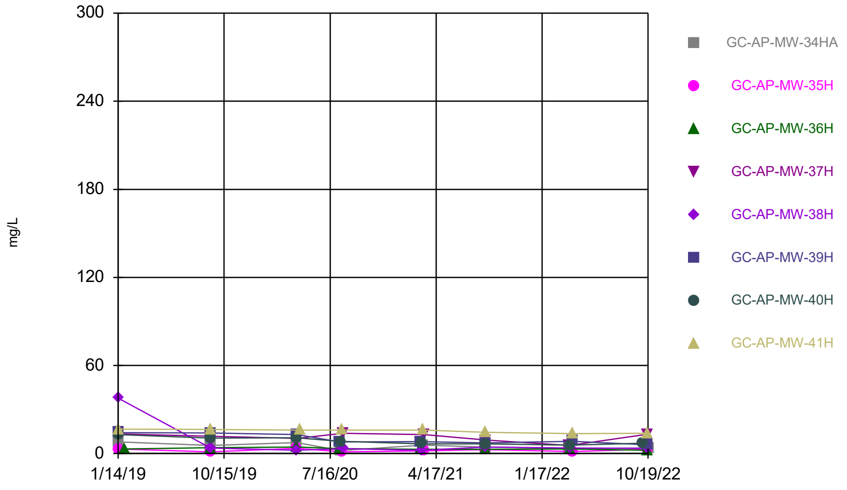
Time Series



Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

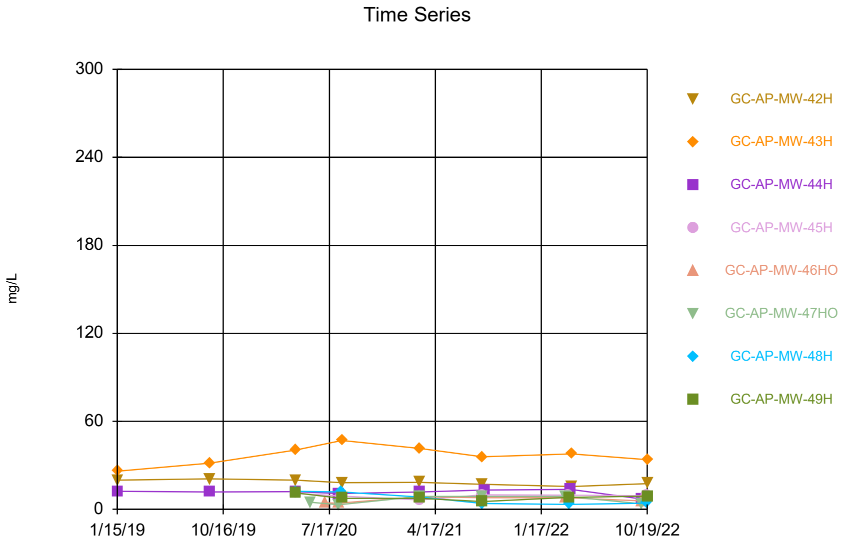
Sanitas™ v.9.6.36 . UG

Time Series



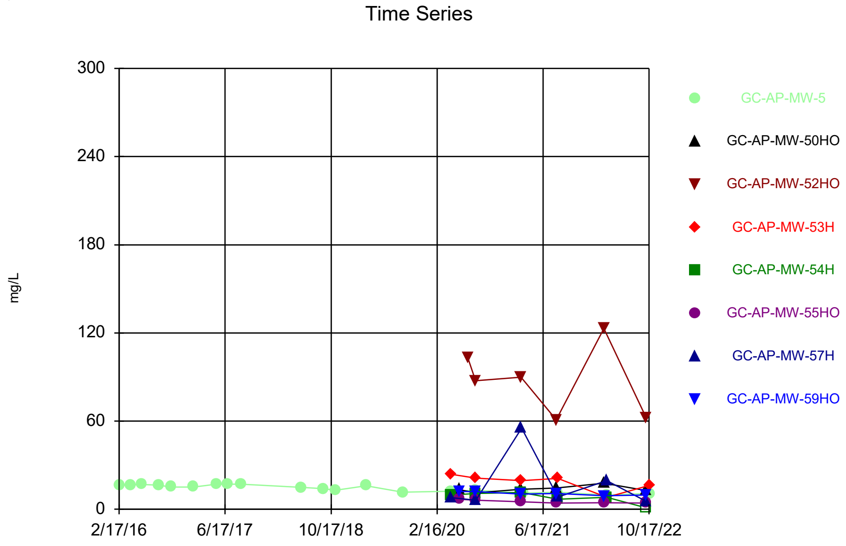
Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



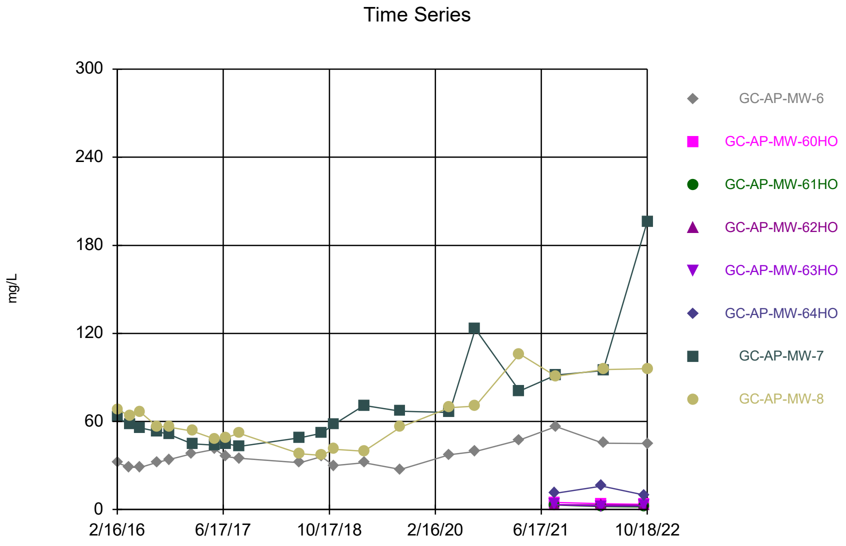
Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



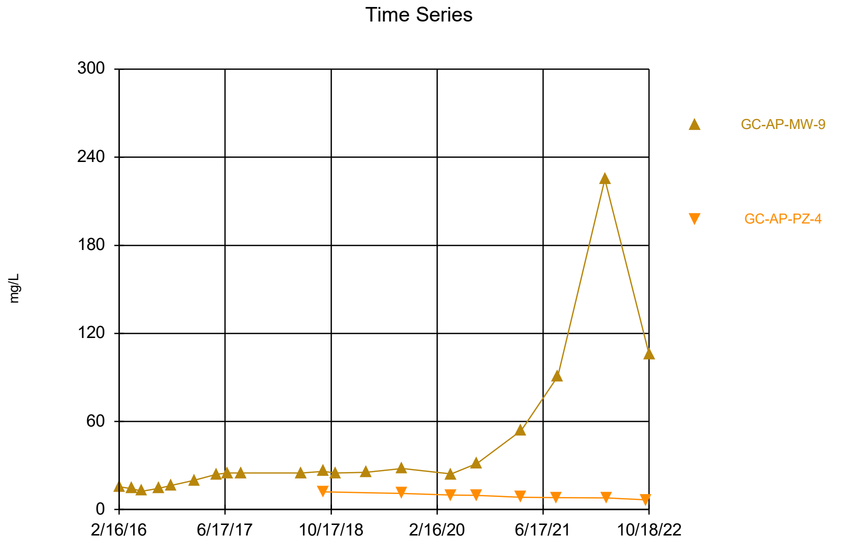
Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

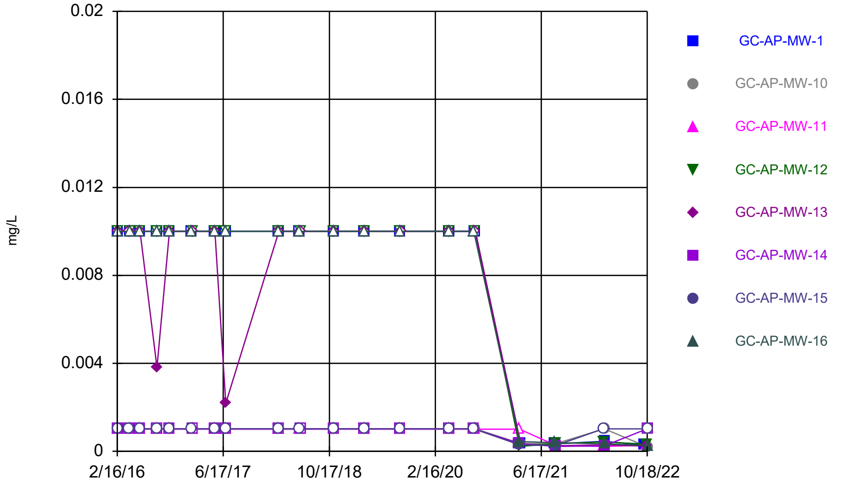
Sanitas™ v.9.6.36 . UG



Constituent: Chloride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

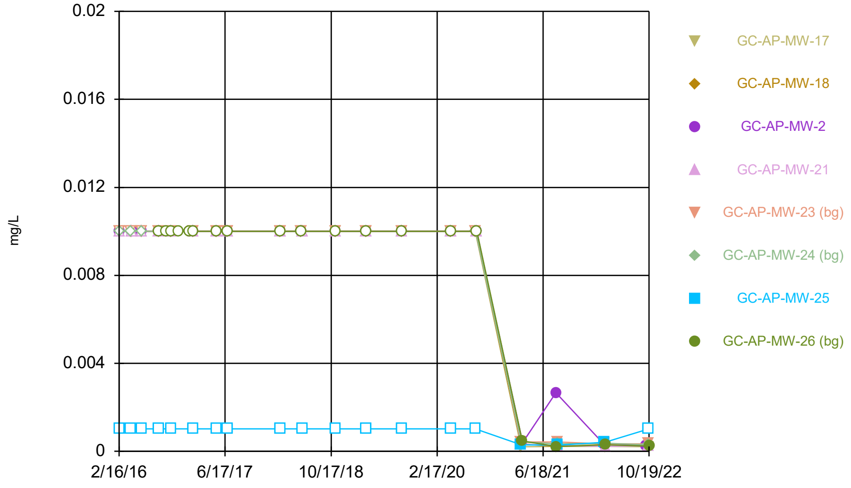
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

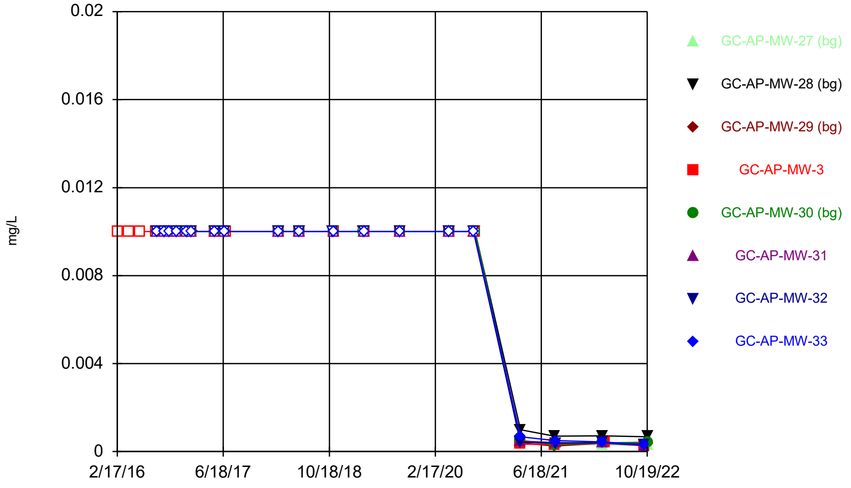
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

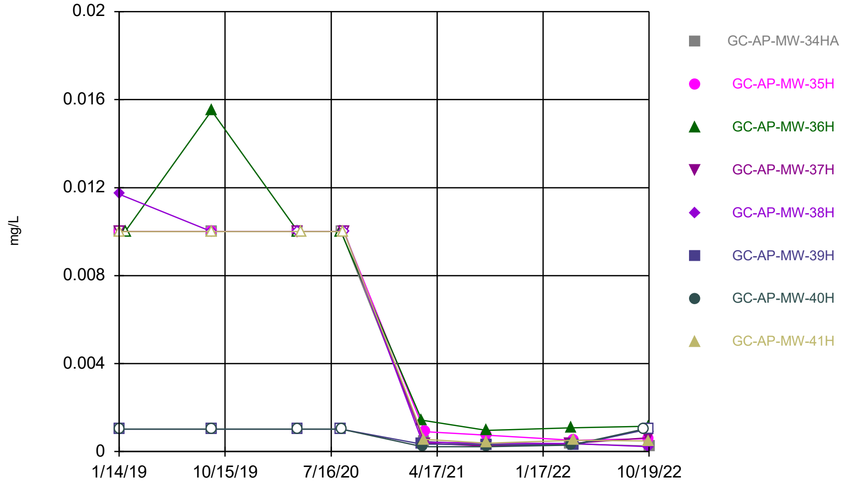
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

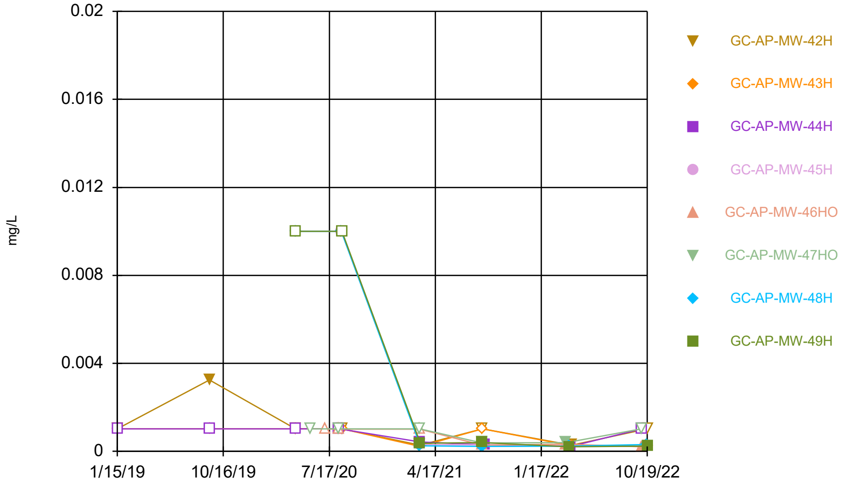
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

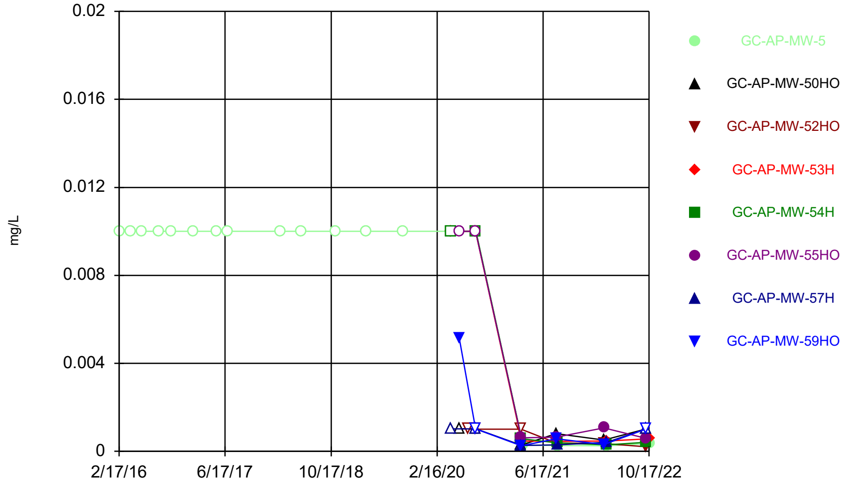
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

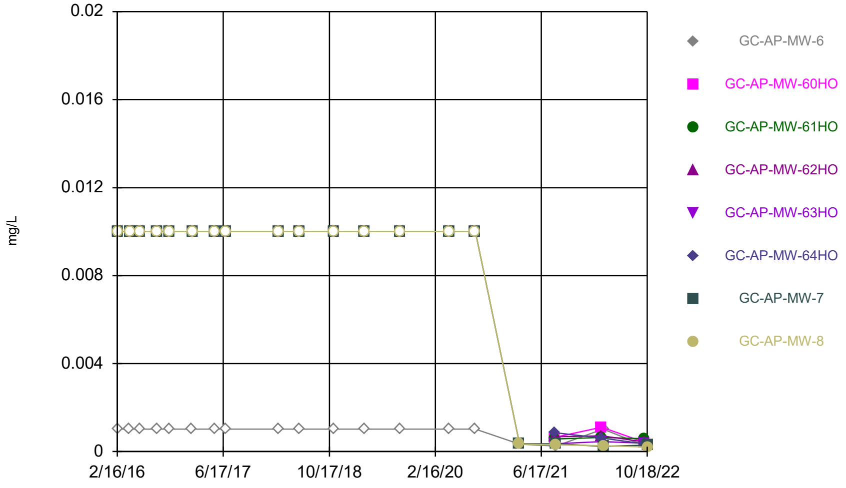
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

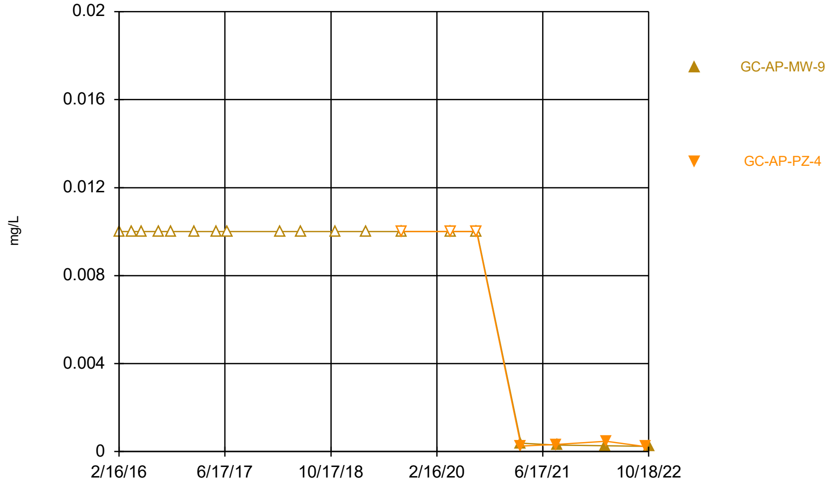
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

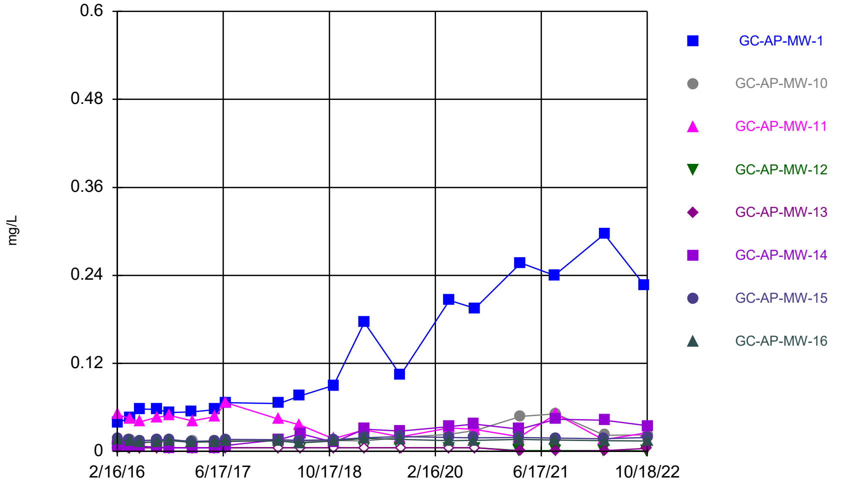
Time Series



Constituent: Chromium Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

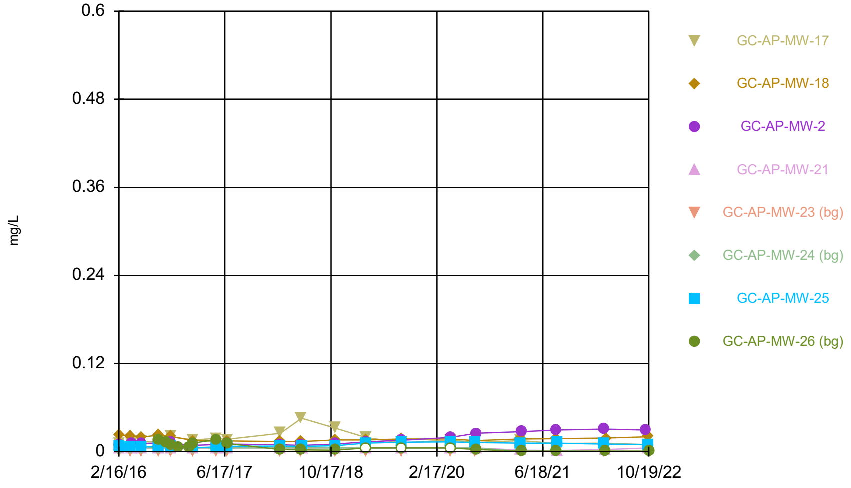
Time Series



Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

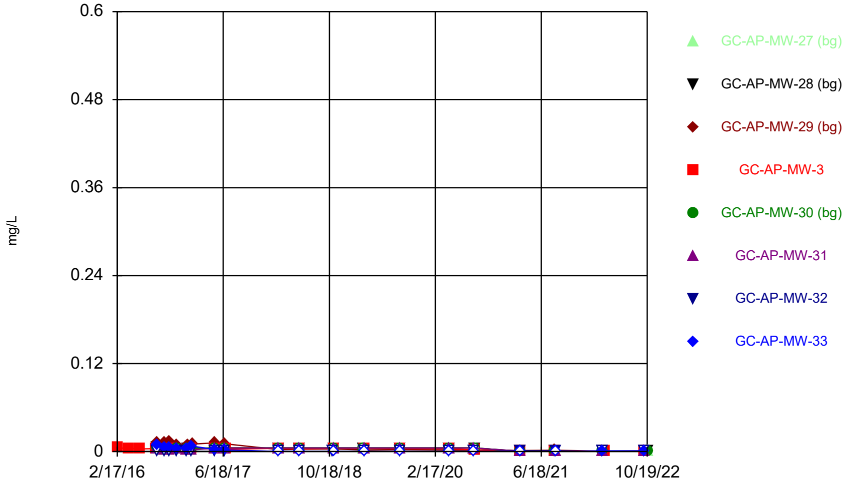
Time Series



Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

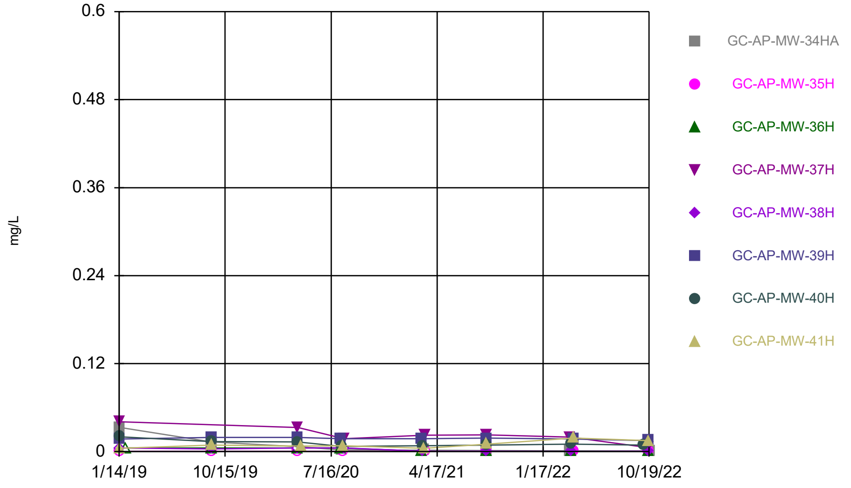
Time Series



Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

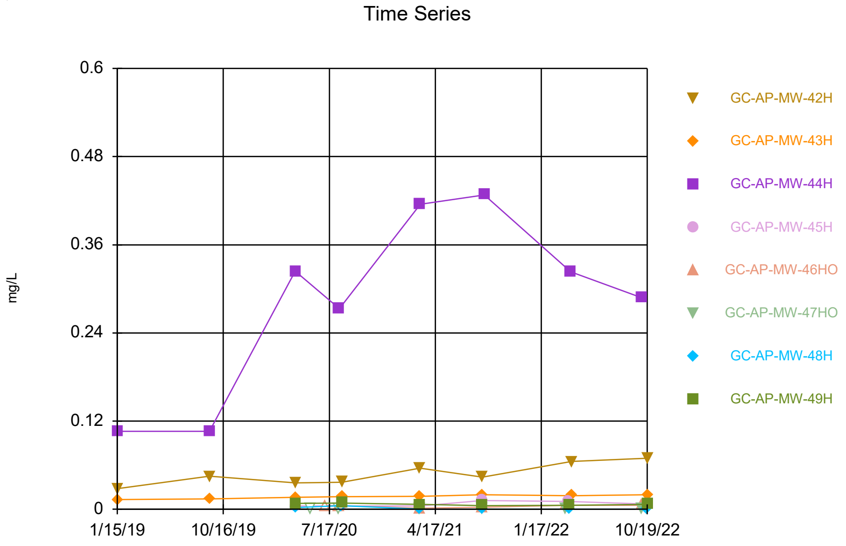
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



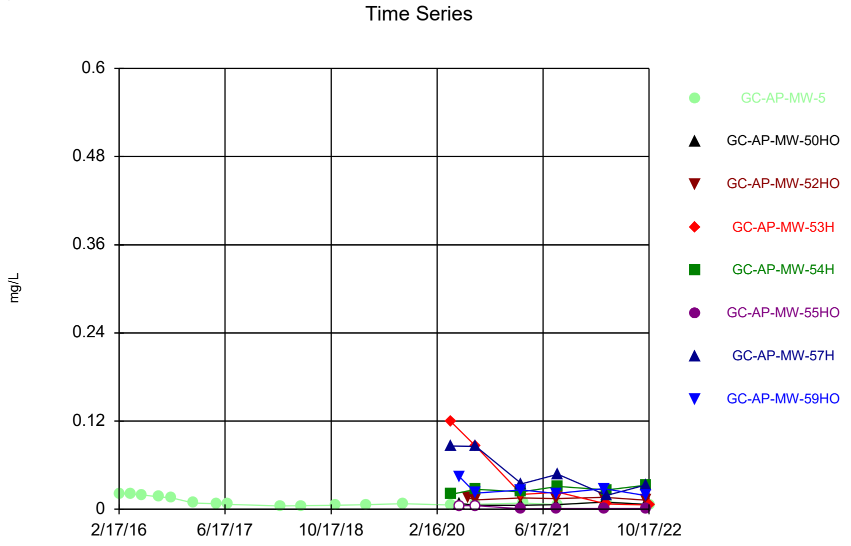
Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



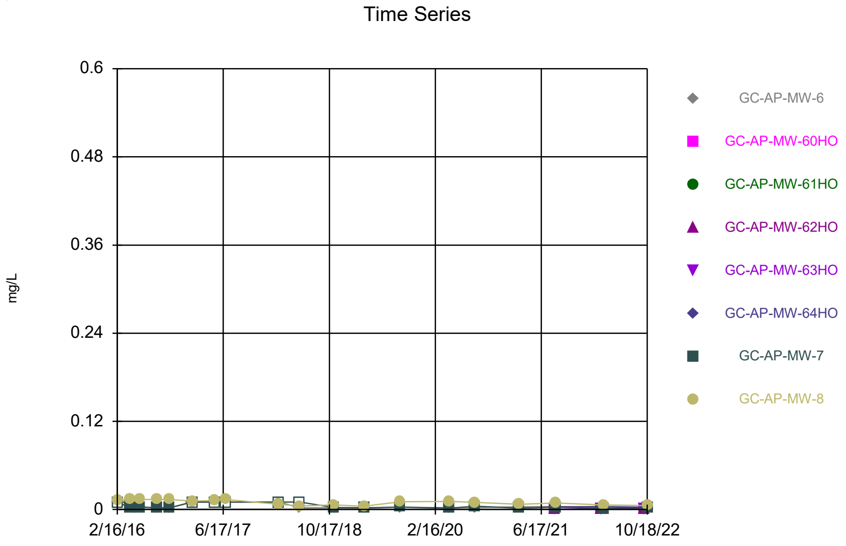
Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



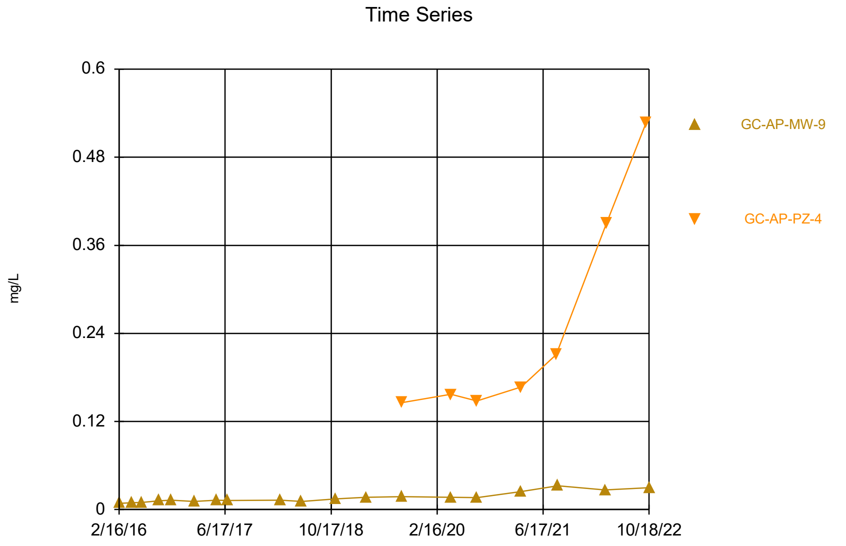
Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

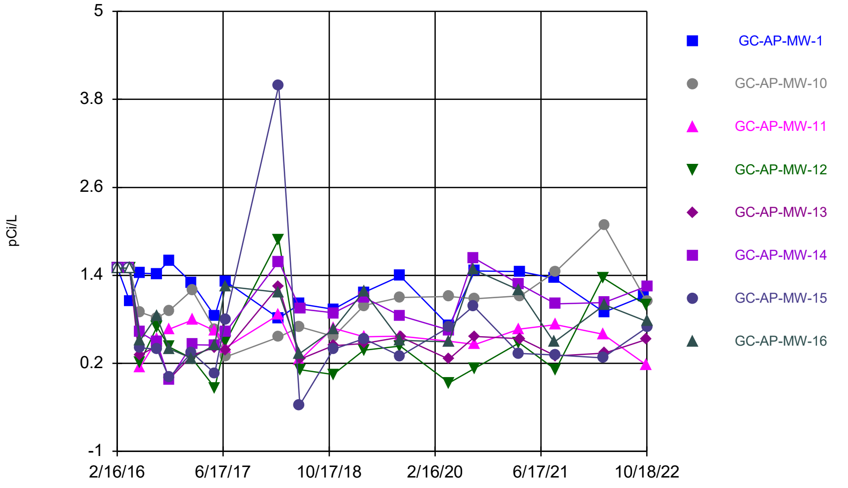
Sanitas™ v.9.6.36 . UG



Constituent: Cobalt Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

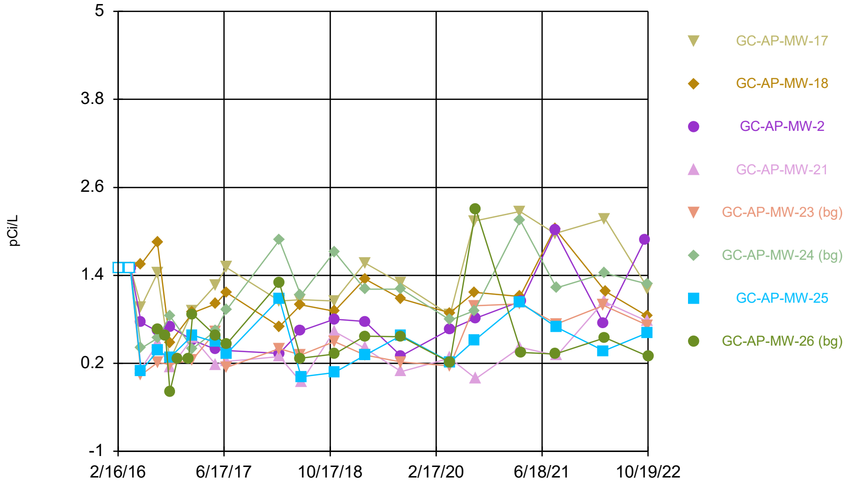
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

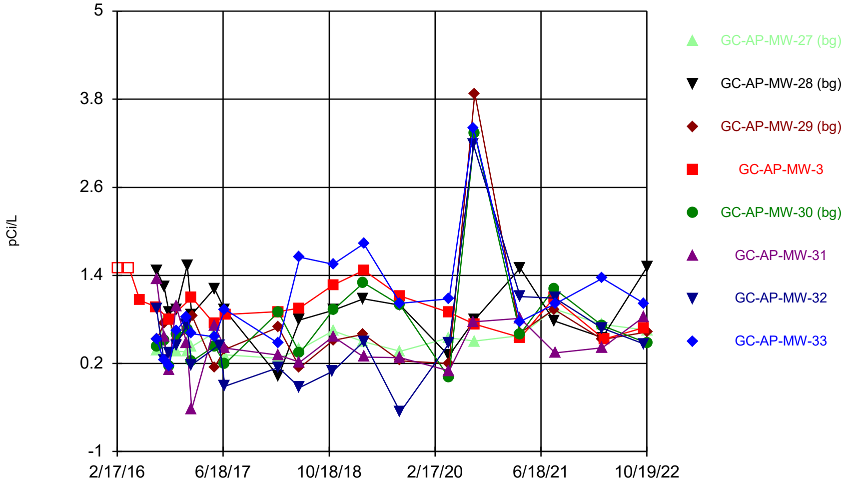
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

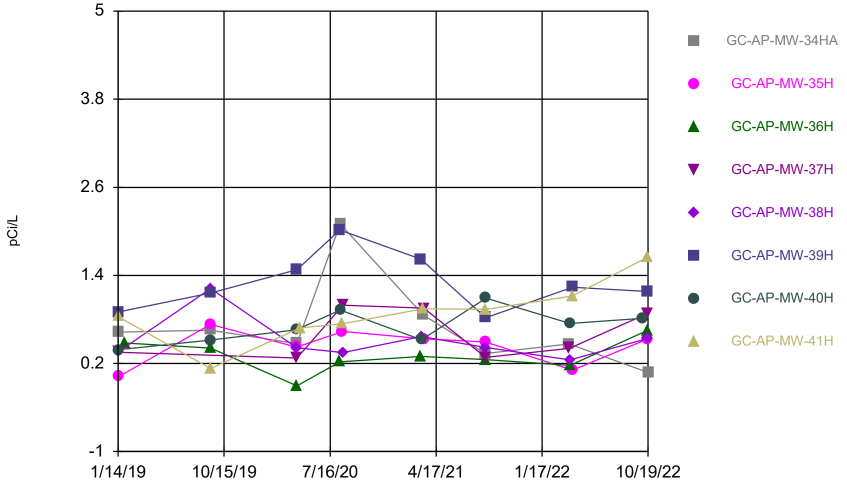
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

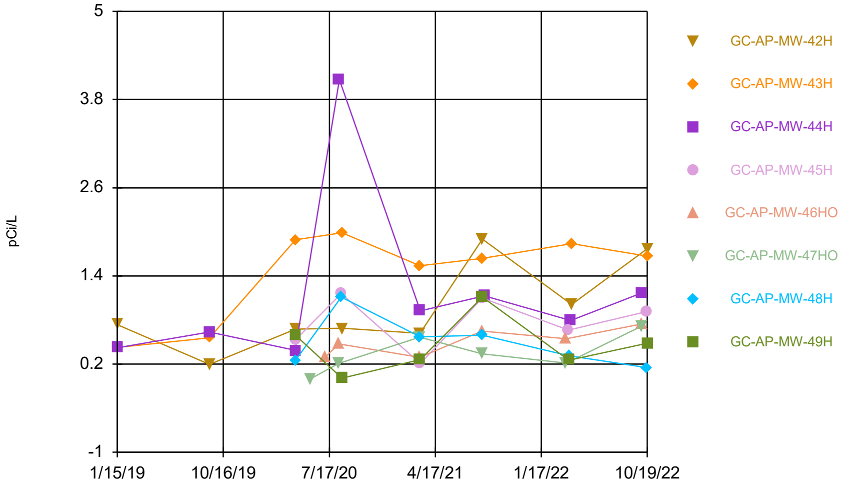
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

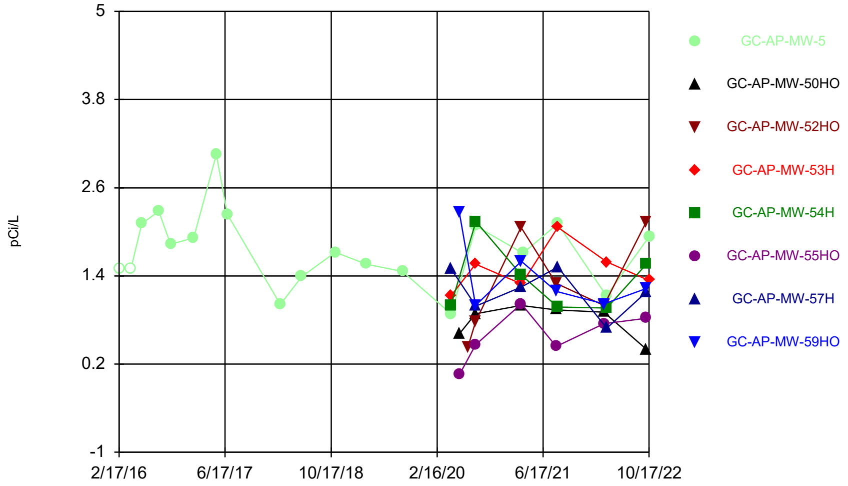
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

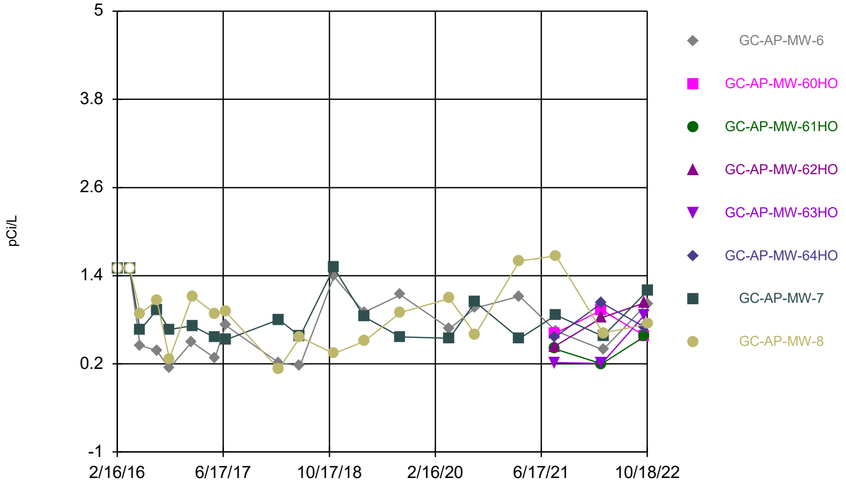
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

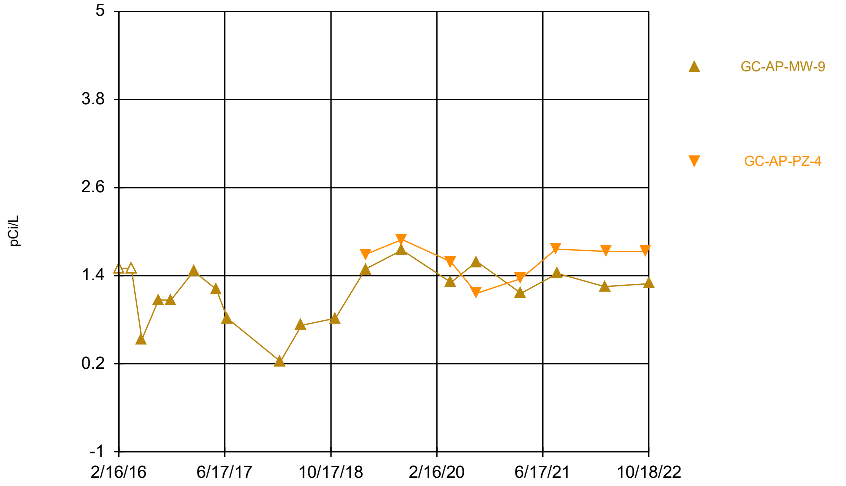
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

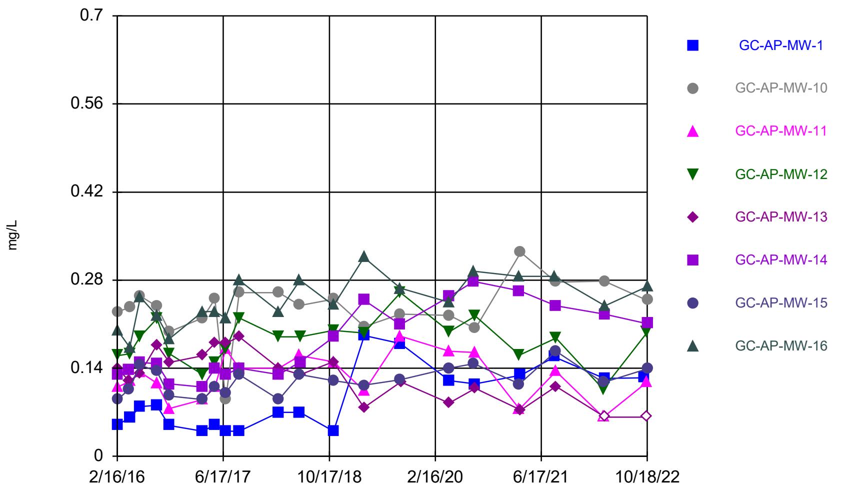
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

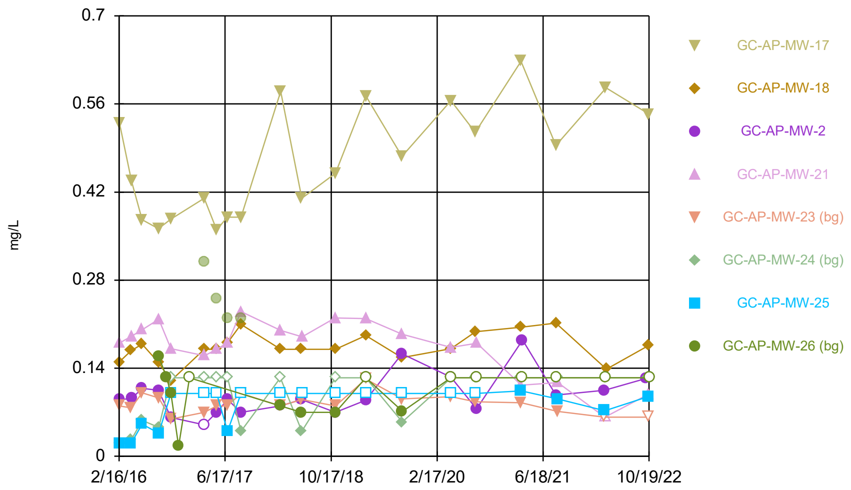
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

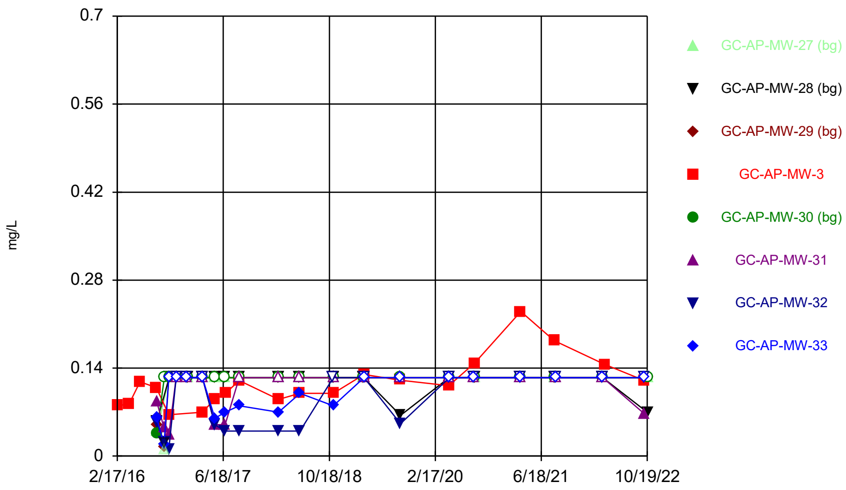
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

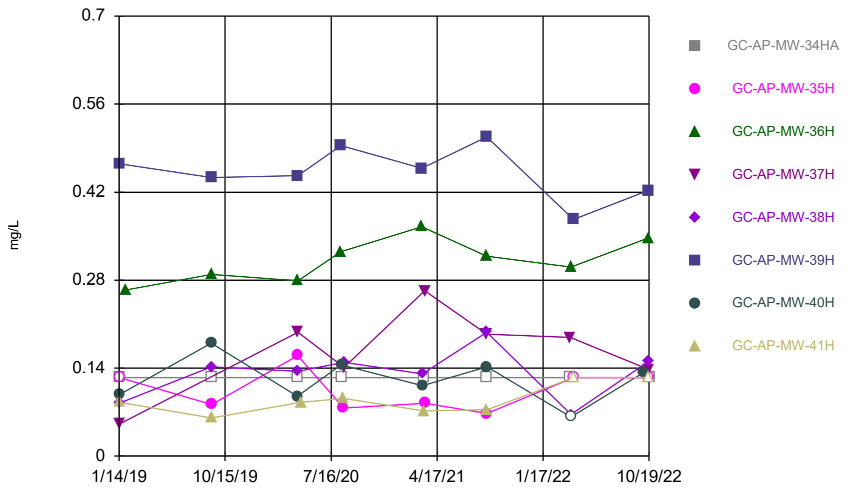
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

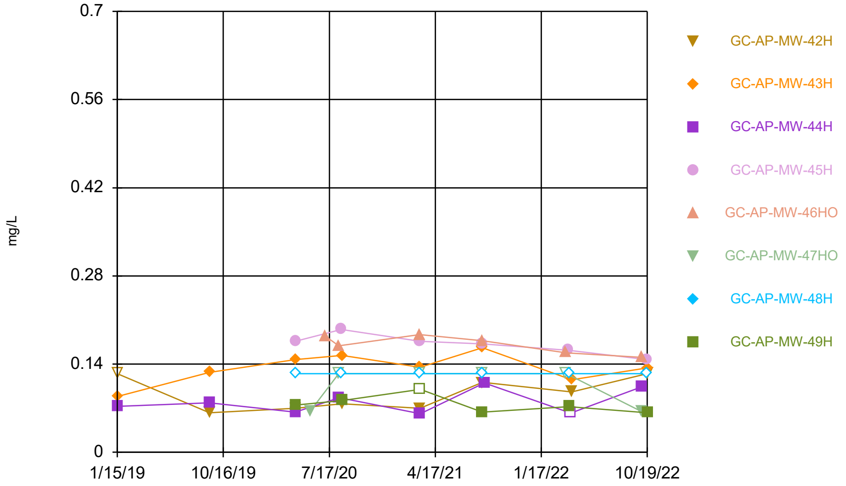
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

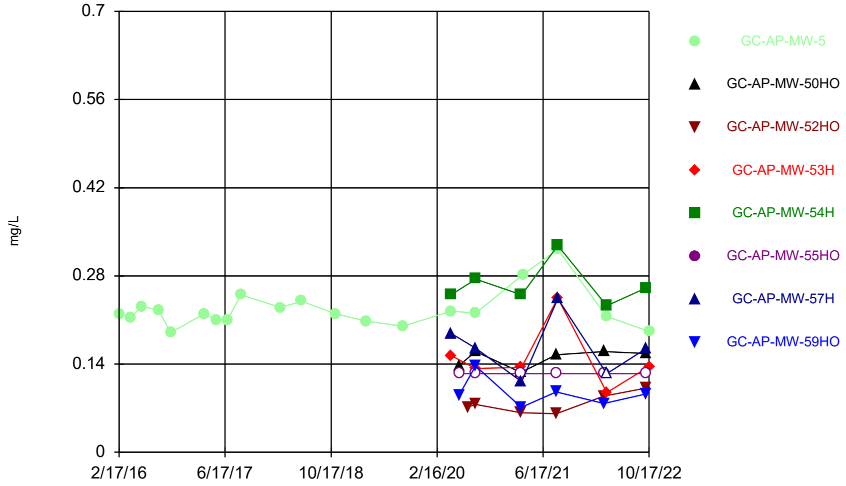
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

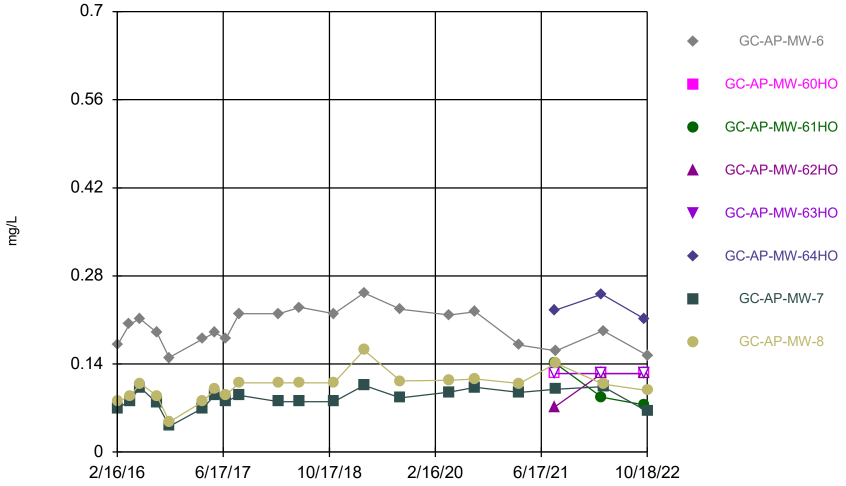
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:21 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

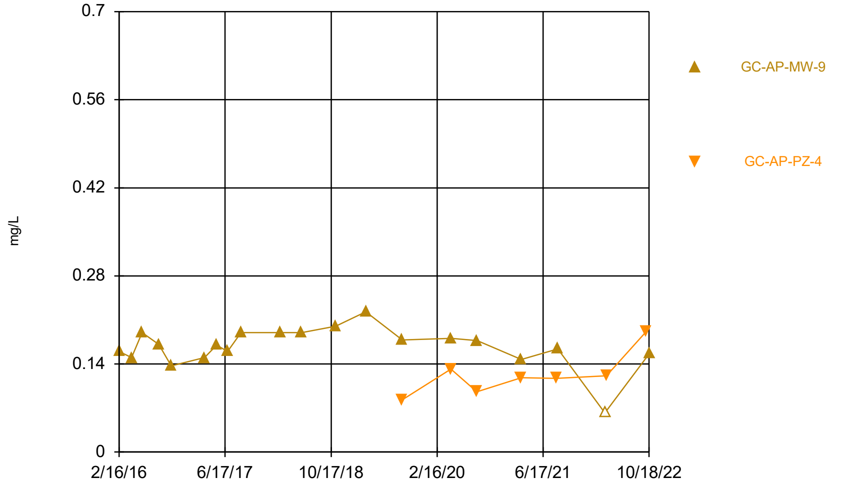
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

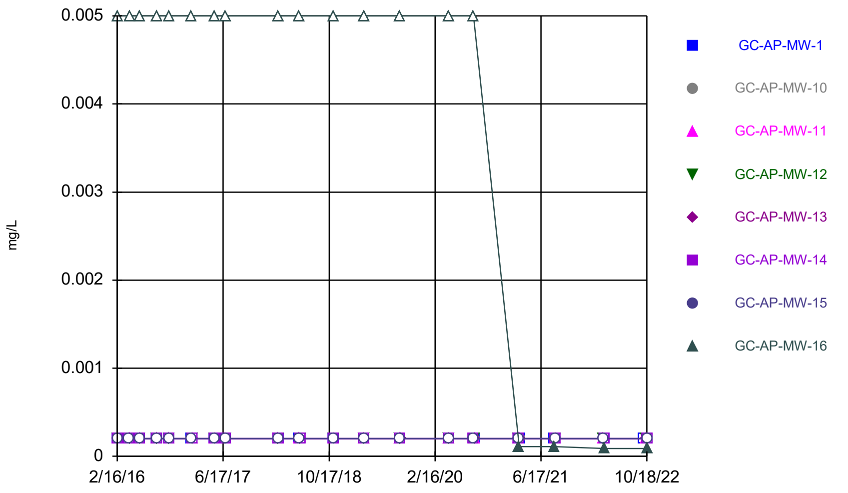
Time Series



Constituent: Fluoride Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

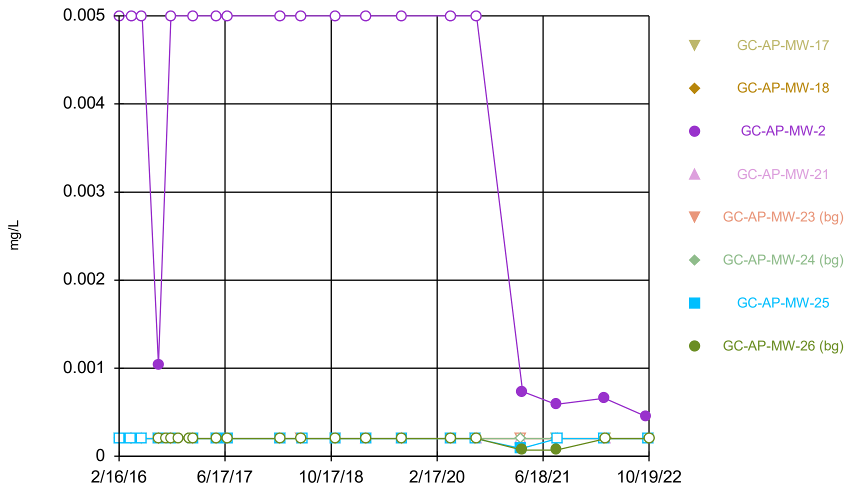
Time Series



Constituent: Lead Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

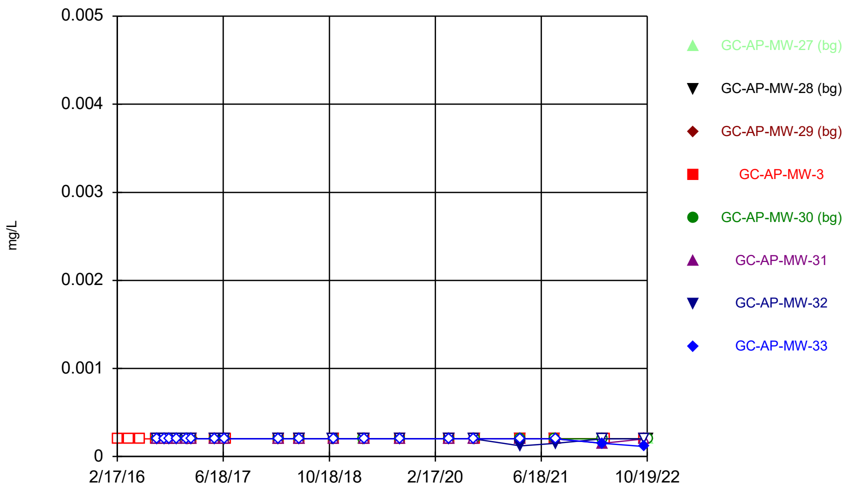
Time Series



Constituent: Lead Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

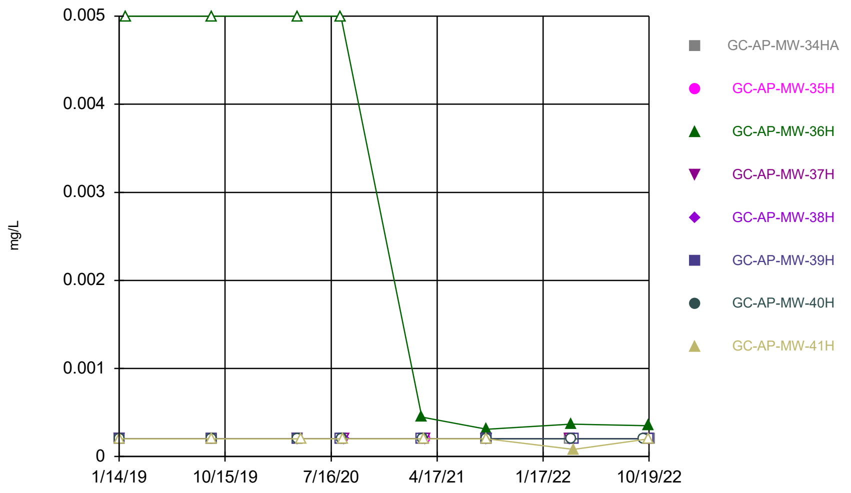
Time Series



Constituent: Lead Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

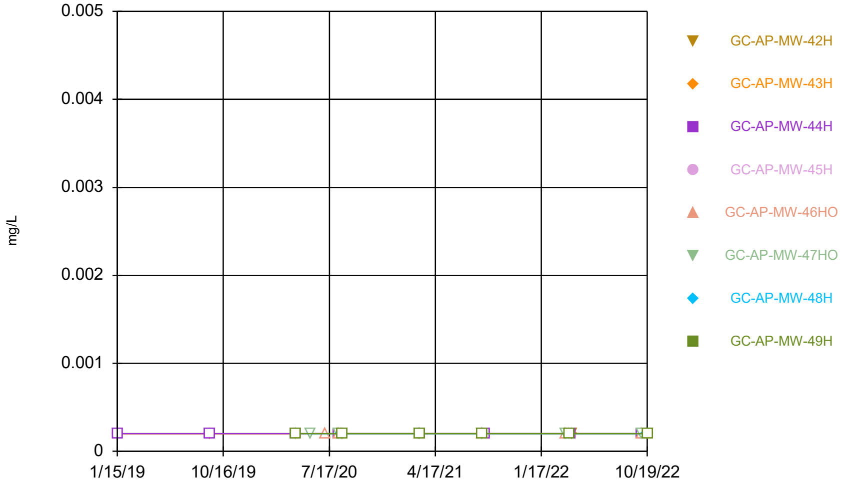
Time Series



Constituent: Lead Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

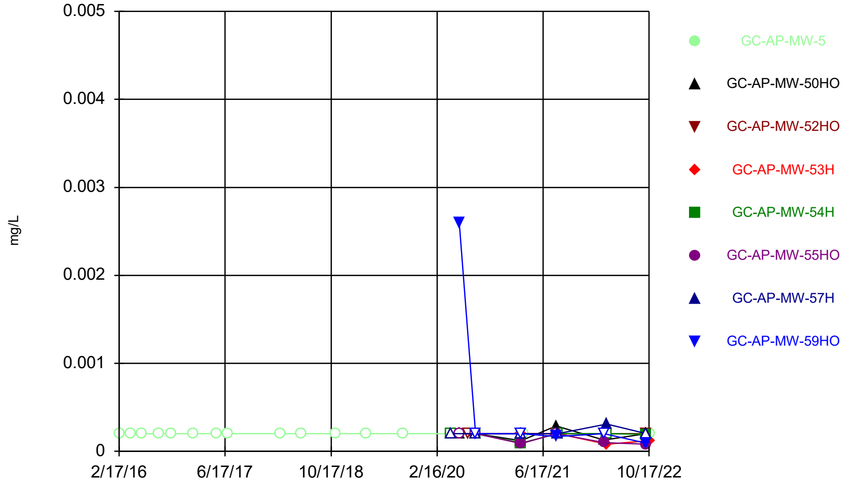
Time Series



Constituent: Lead   Analysis Run 12/9/2022 10:22 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

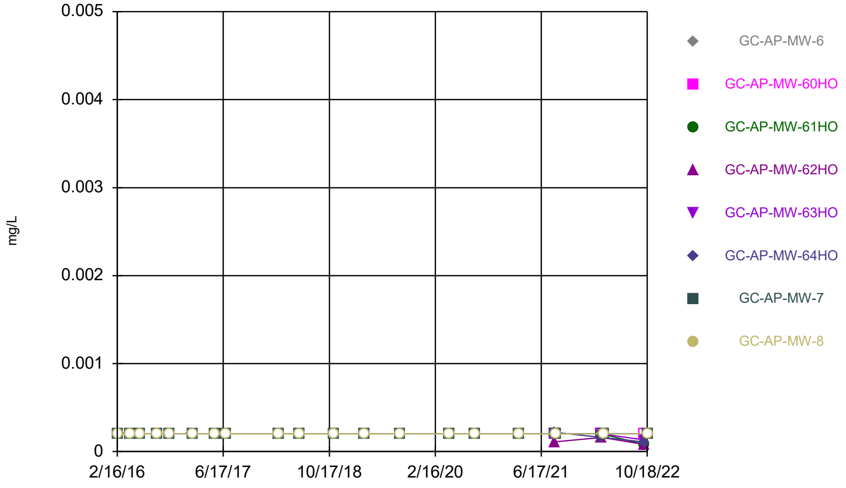
Time Series



Constituent: Lead   Analysis Run 12/9/2022 10:22 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

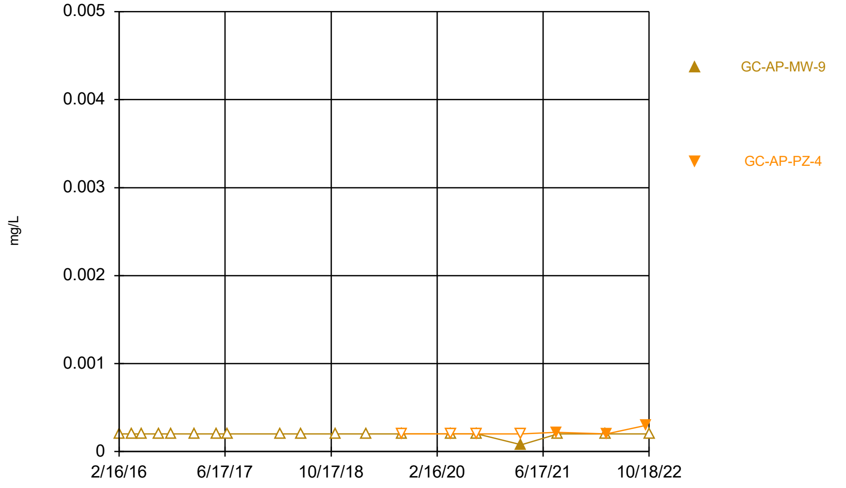
Time Series



Constituent: Lead   Analysis Run 12/9/2022 10:22 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

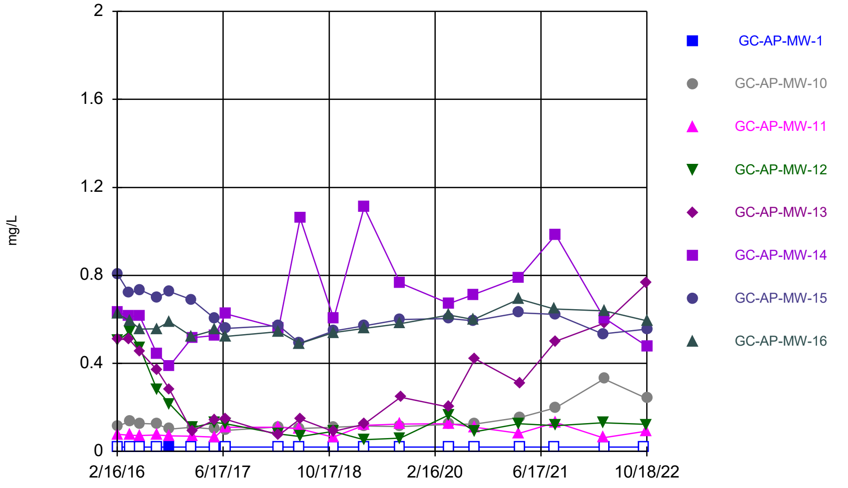
Time Series



Constituent: Lead   Analysis Run 12/9/2022 10:22 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

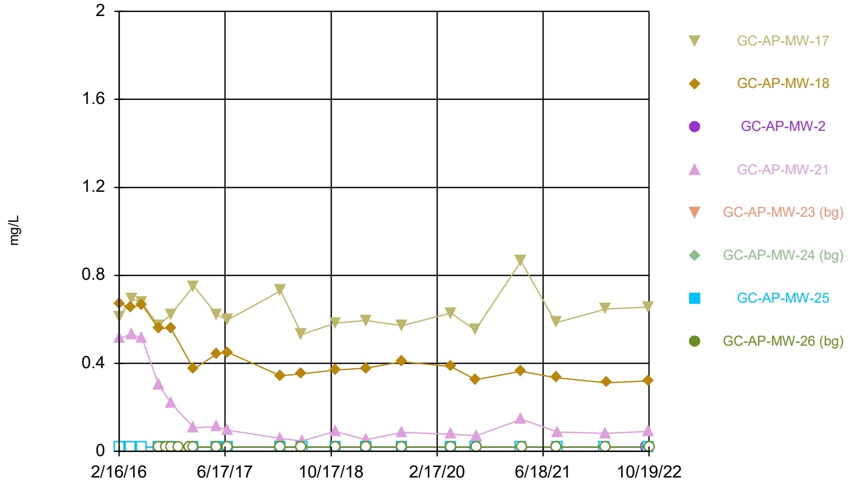
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

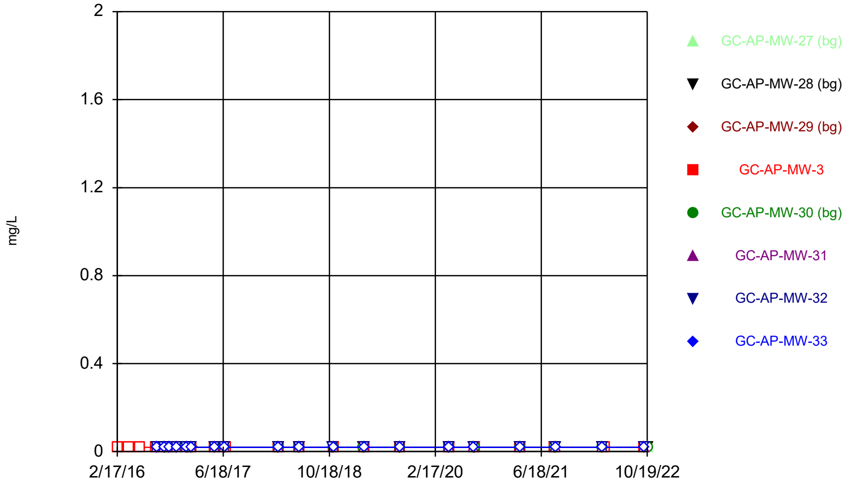
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

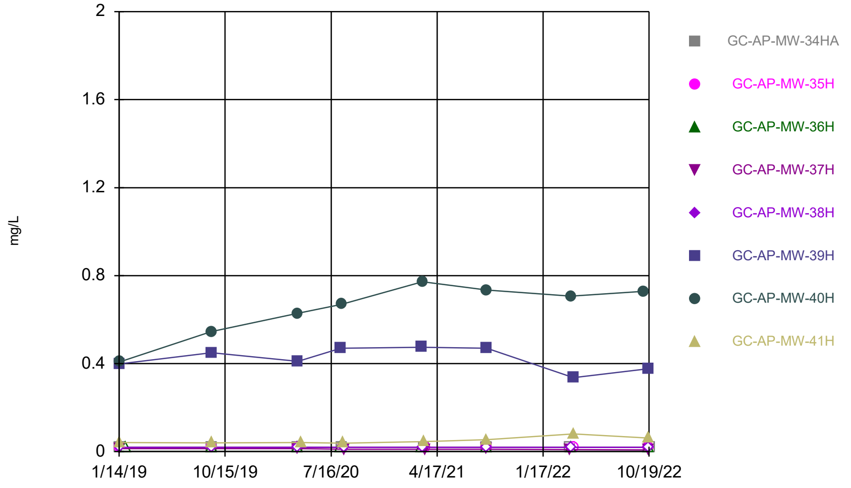
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

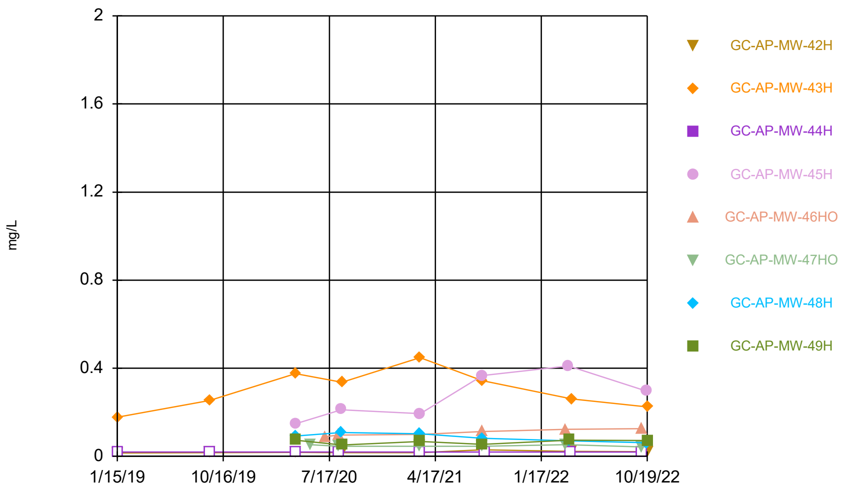
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

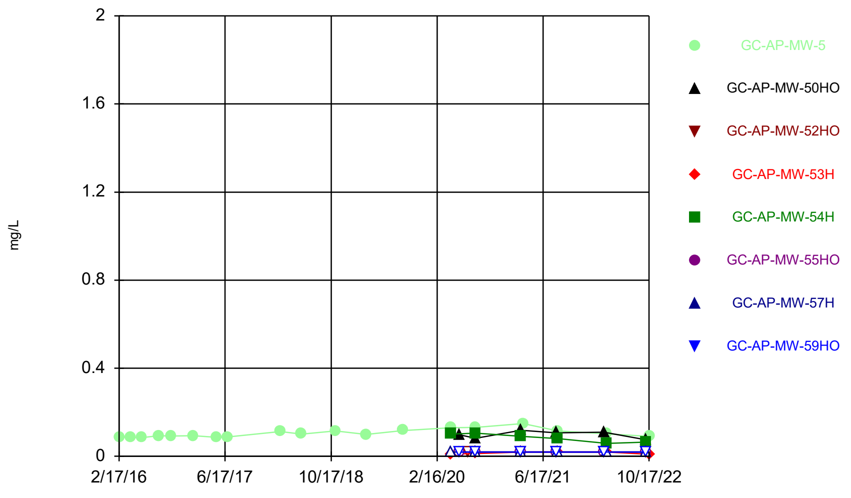
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

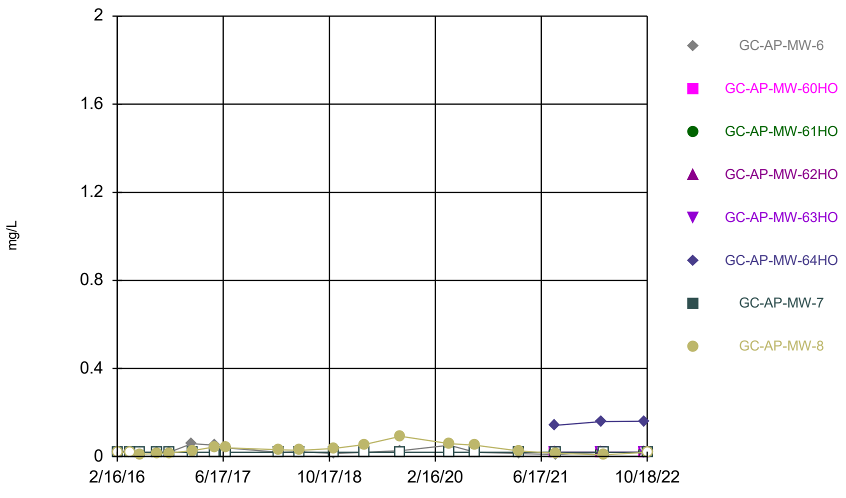
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

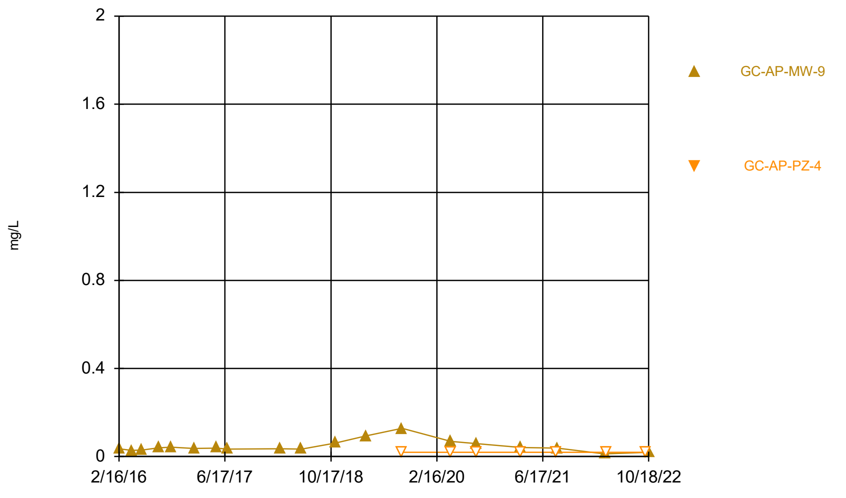
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

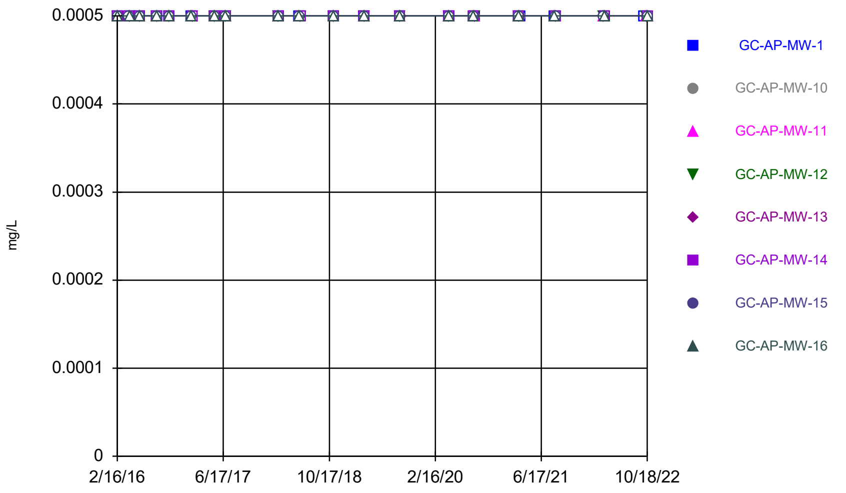
Time Series



Constituent: Lithium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

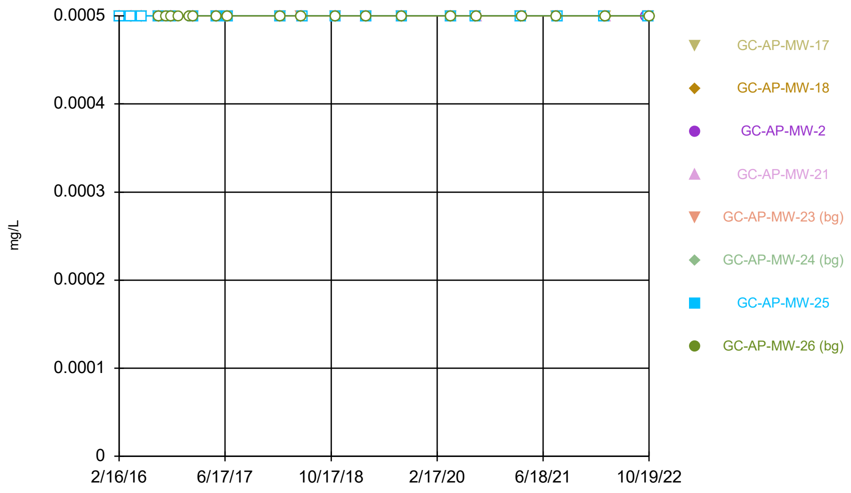
Time Series



Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

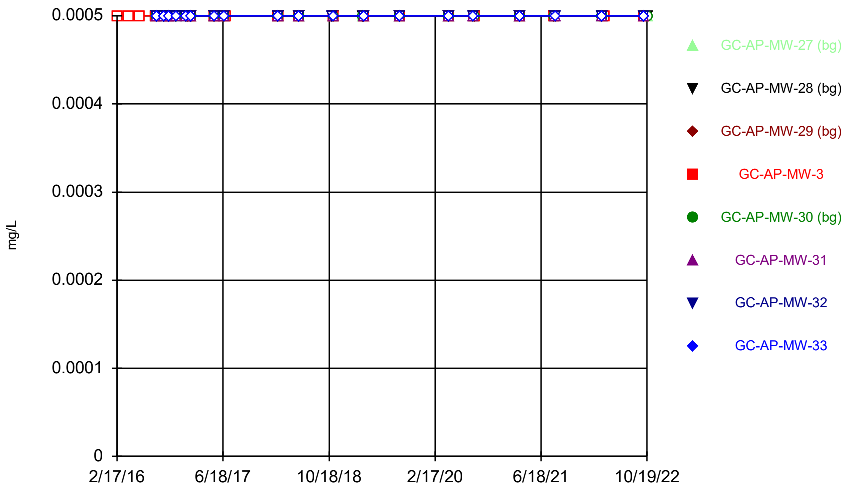
Time Series



Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

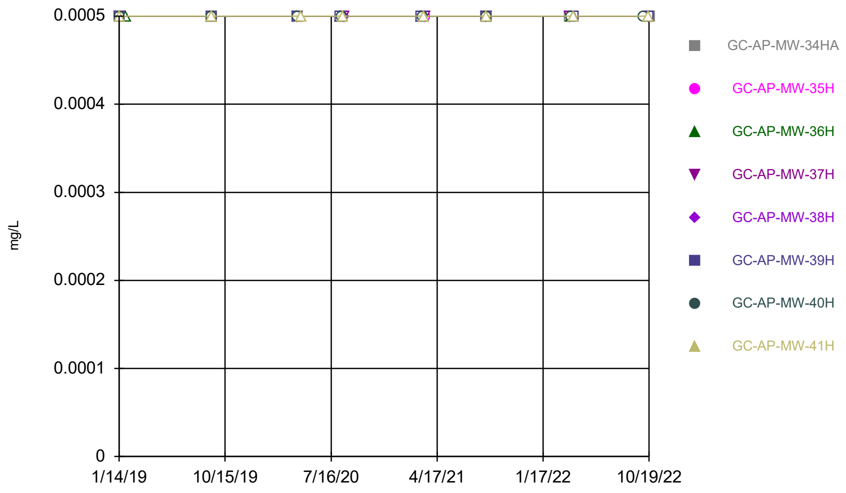
Time Series



Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

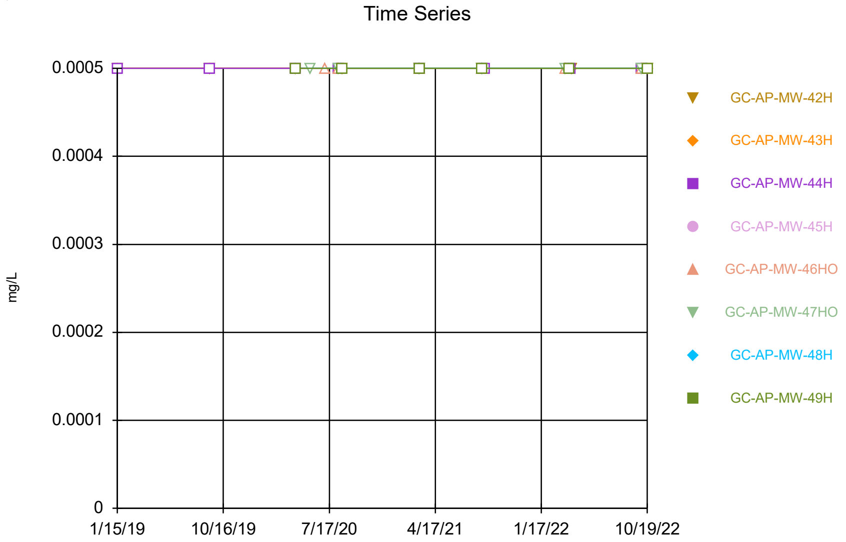
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



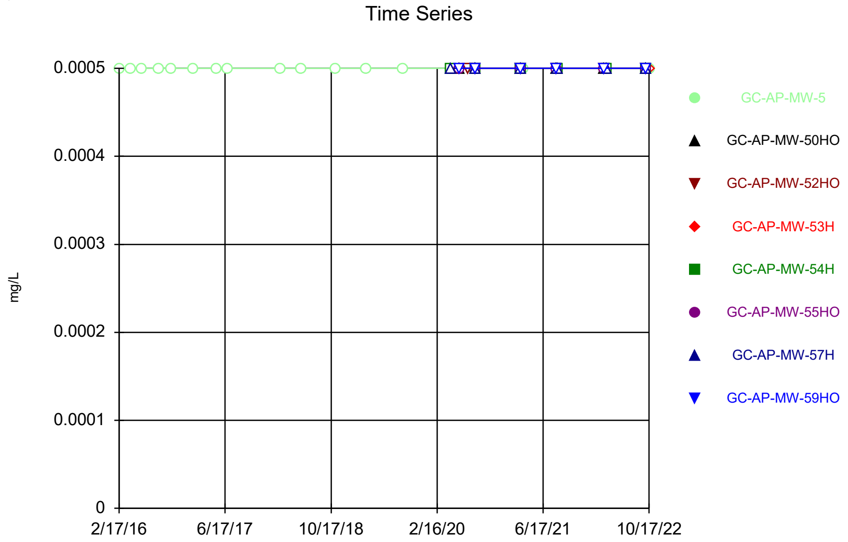
Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



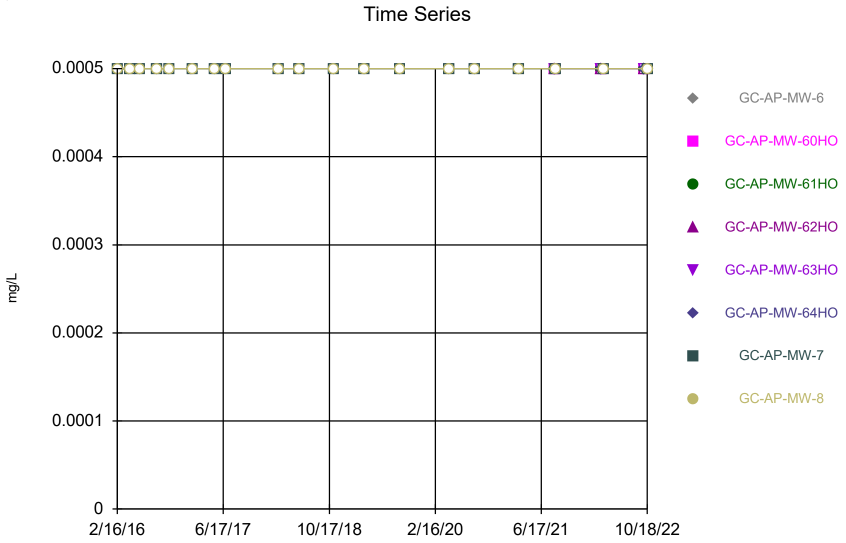
Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



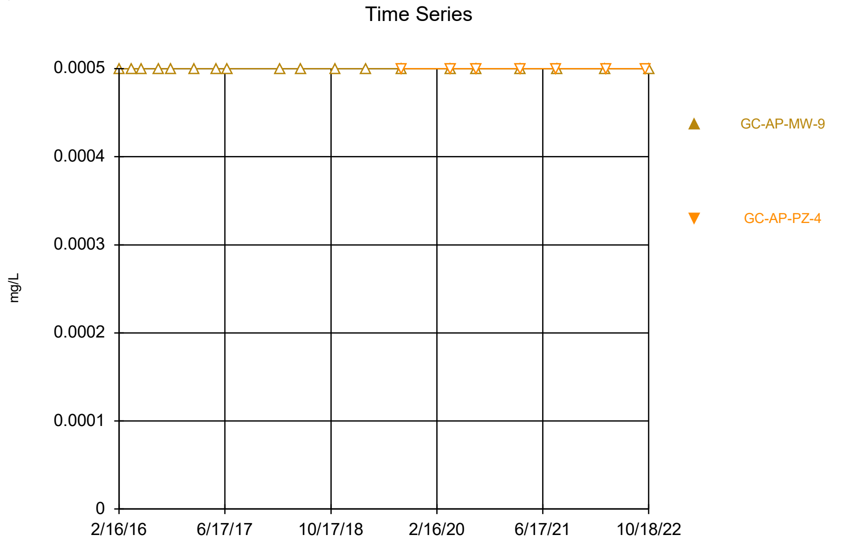
Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

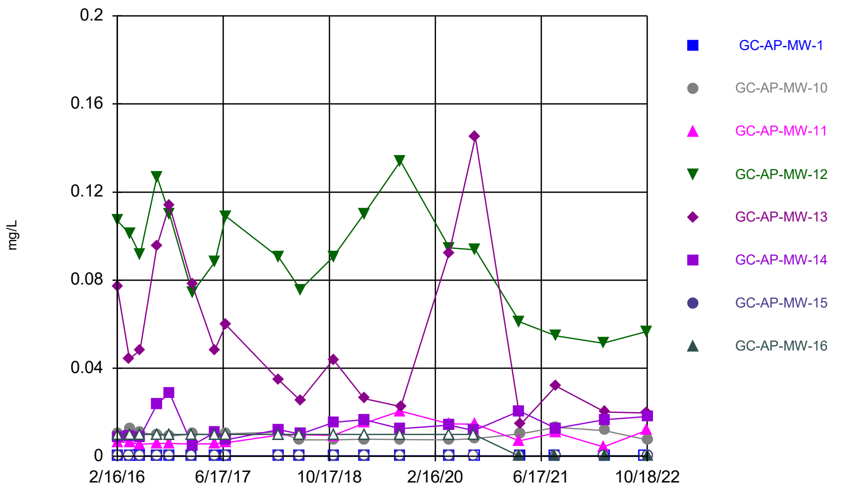
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Mercury Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

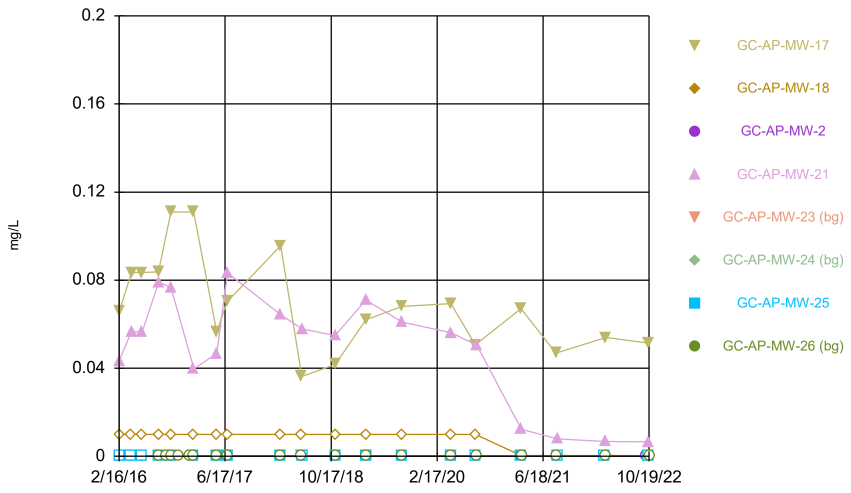
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

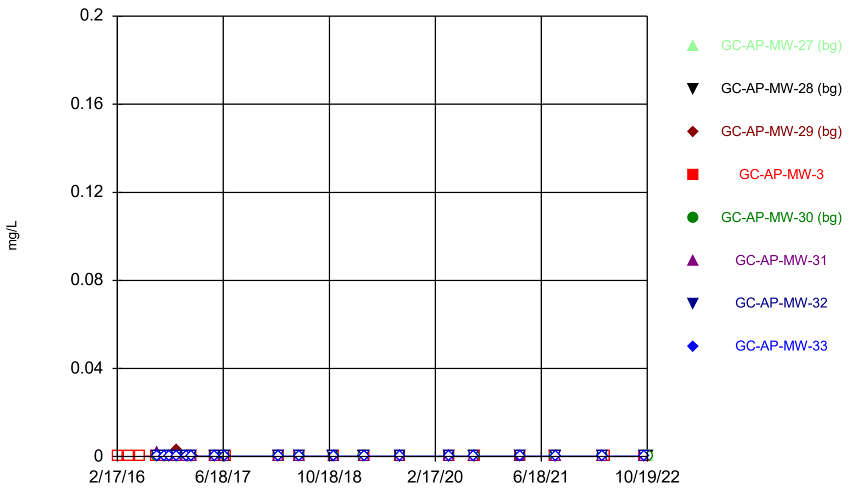
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

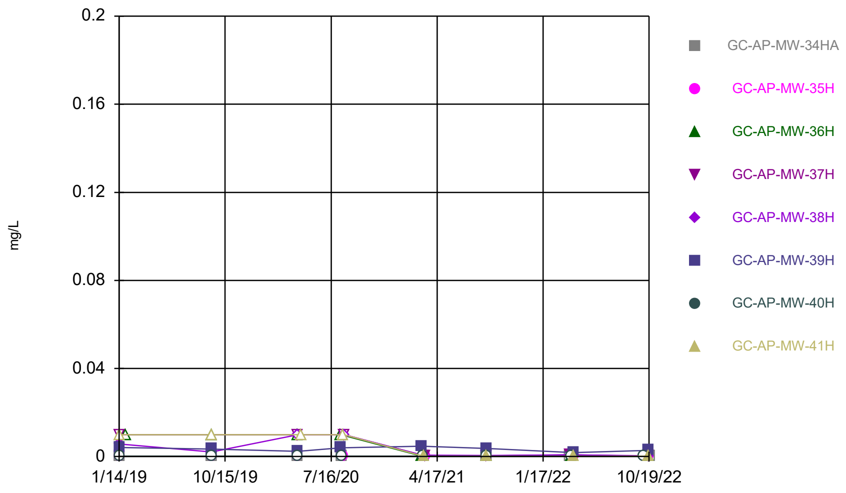
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

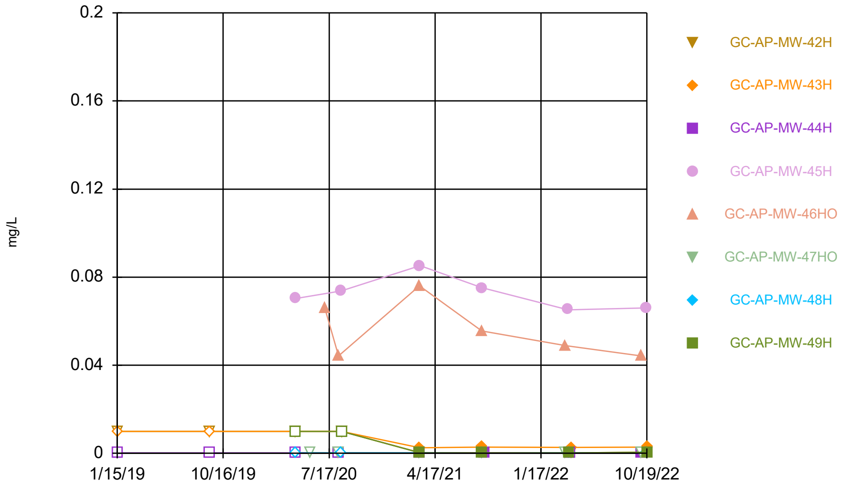
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

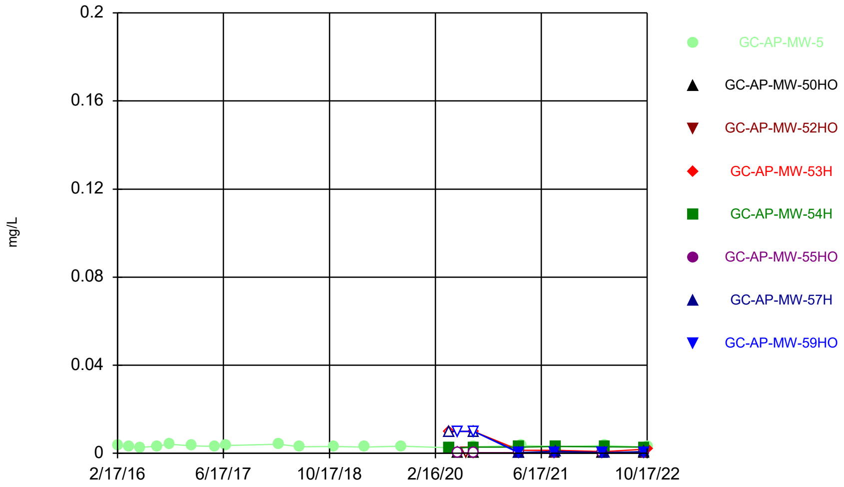
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

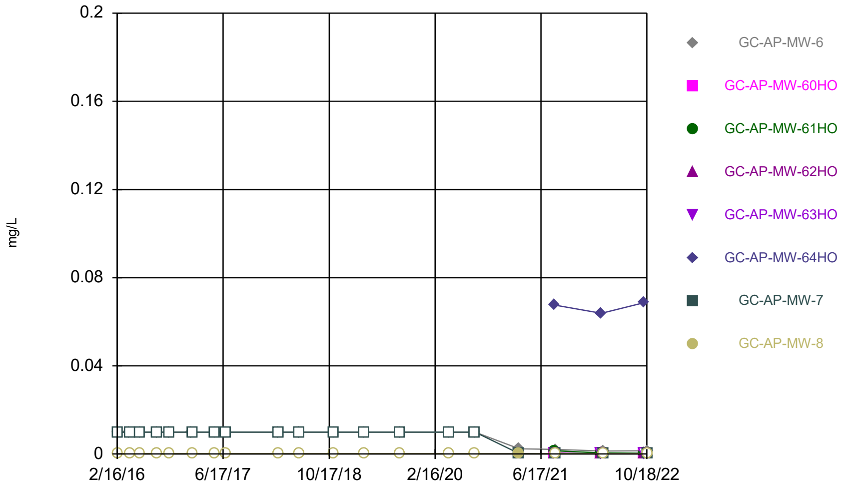
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

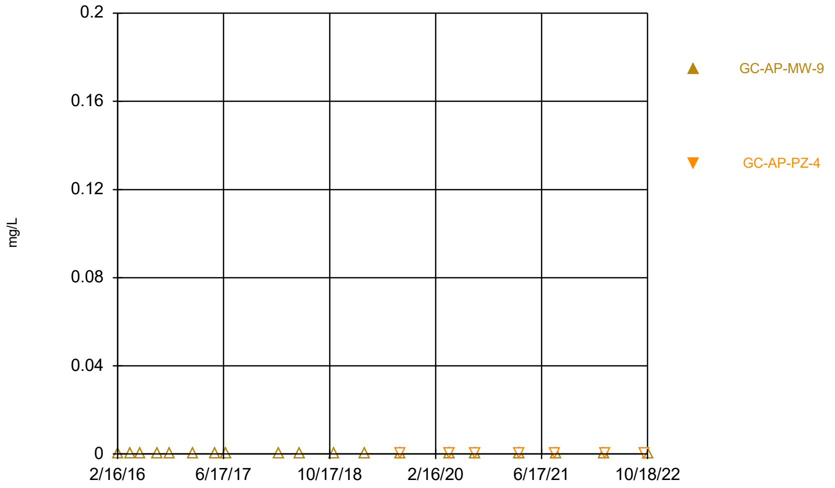
Time Series



Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

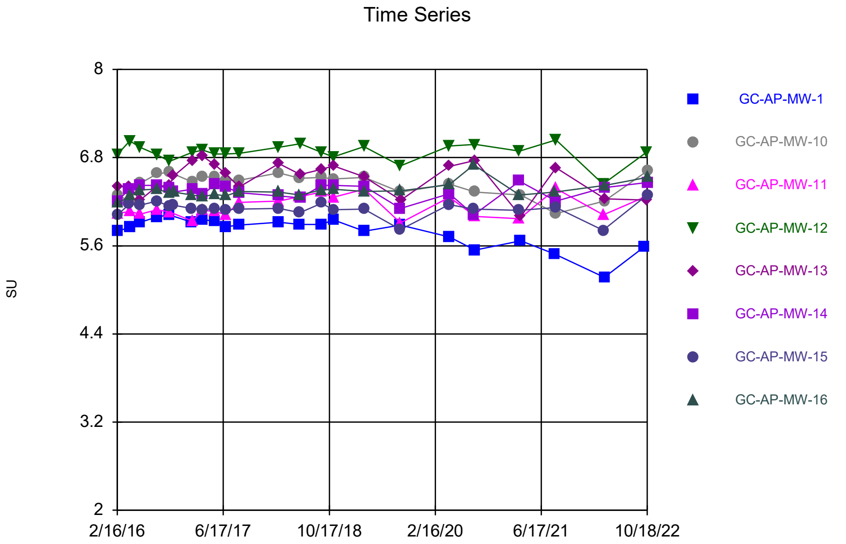
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



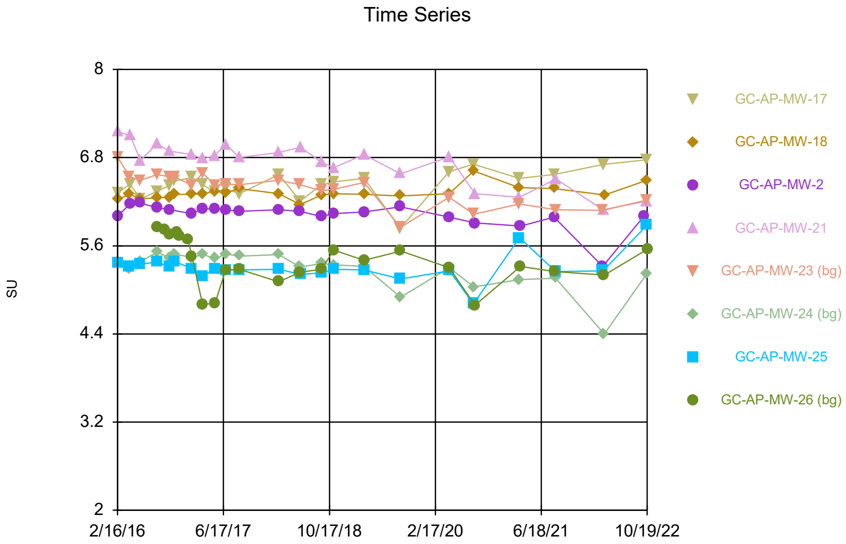
Constituent: Molybdenum Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



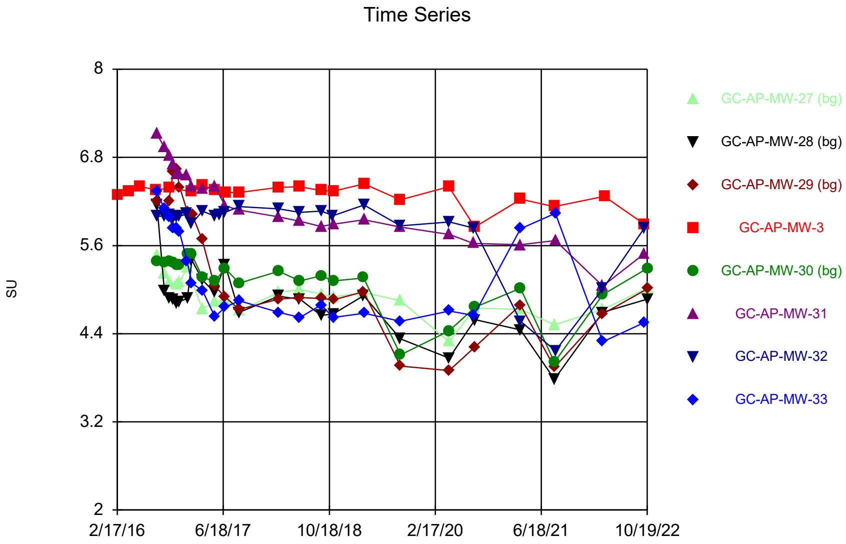
Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



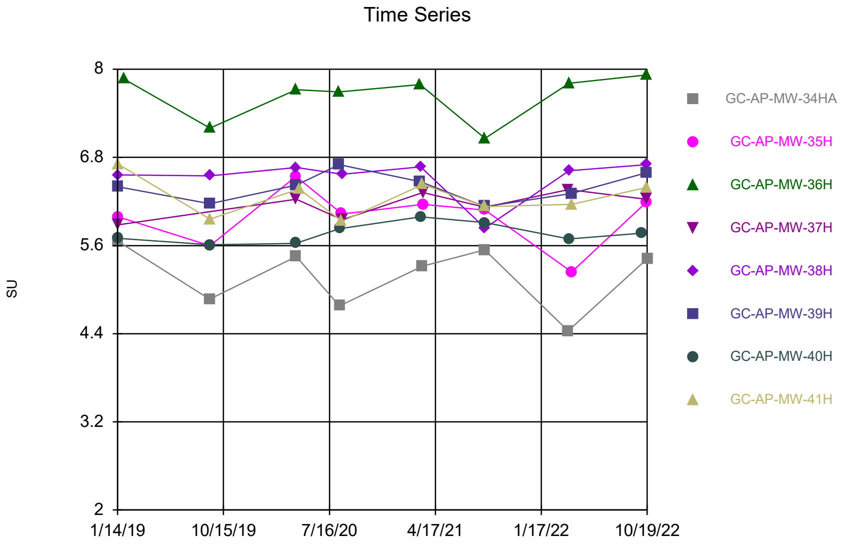
Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

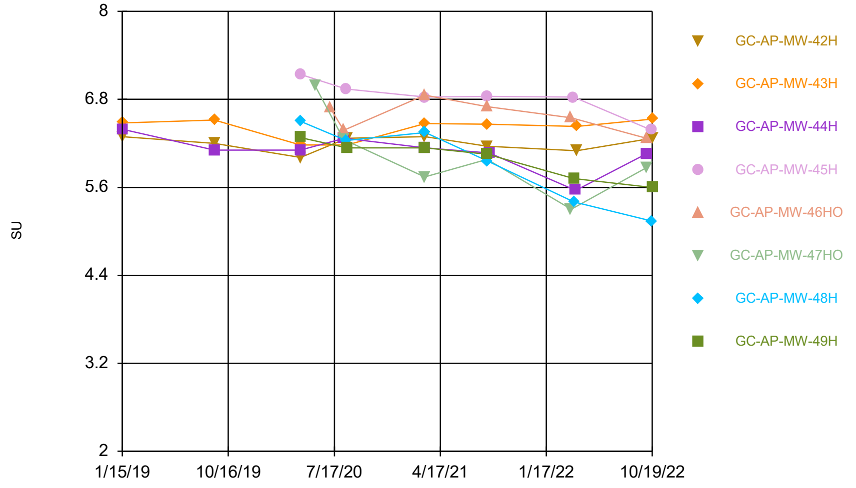
Sanitas™ v.9.6.36 . UG



Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

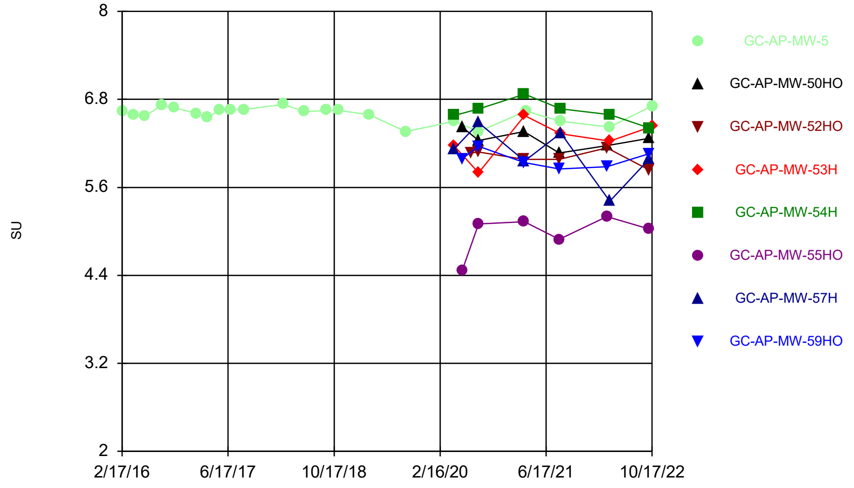
Time Series



Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

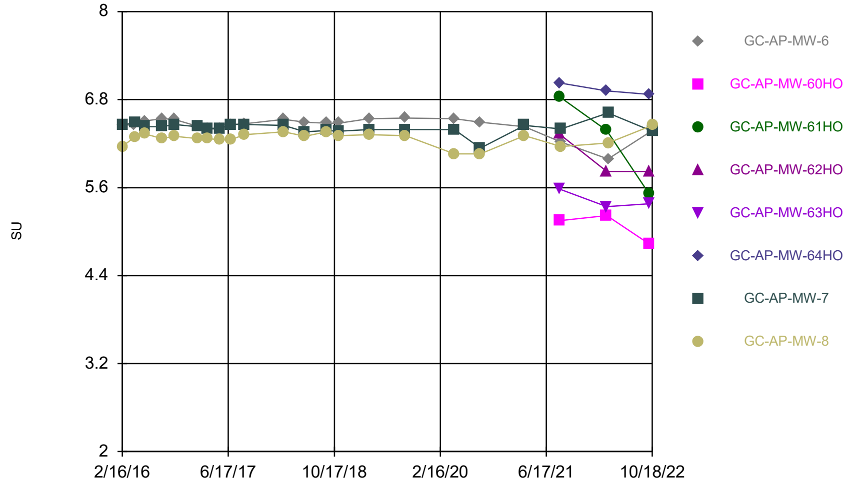
Time Series



Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

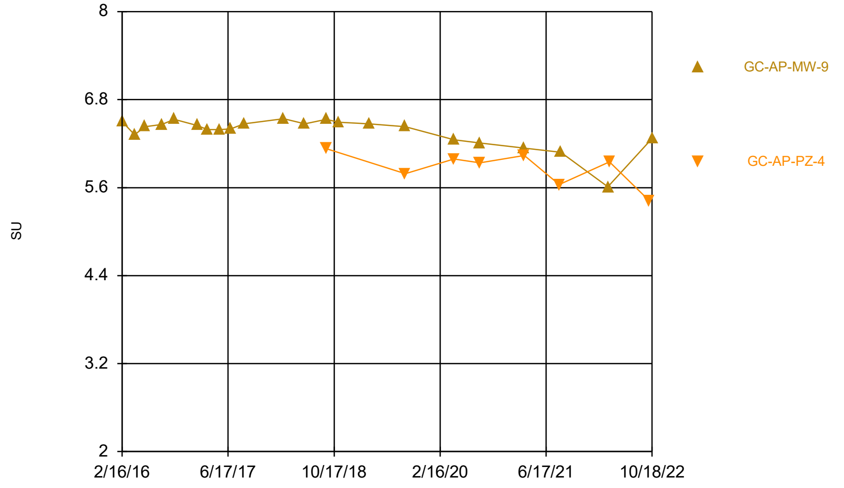
Time Series



Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

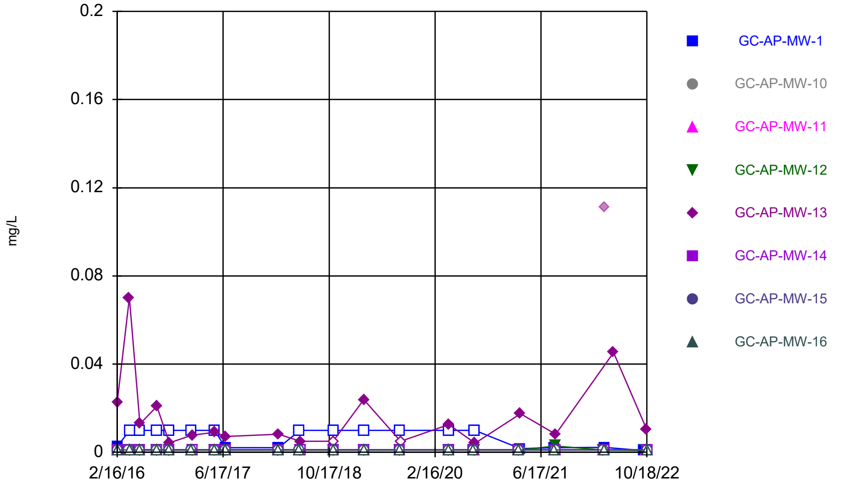
Time Series



Constituent: pH Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

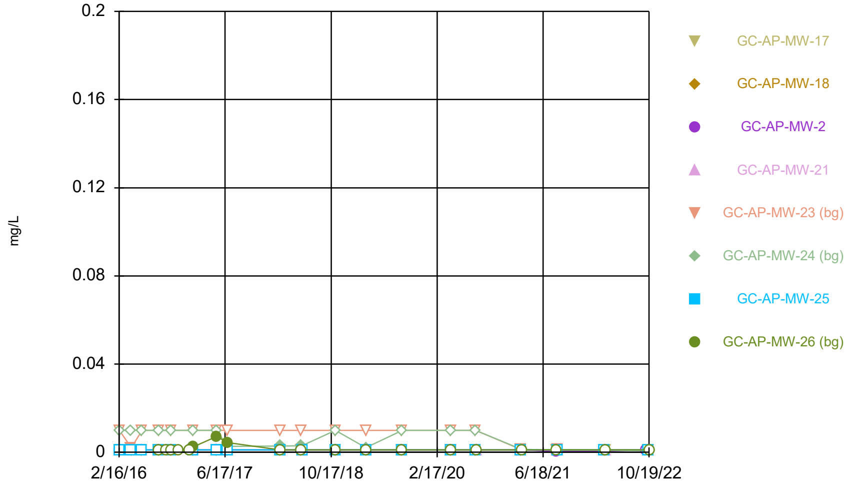
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:22 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

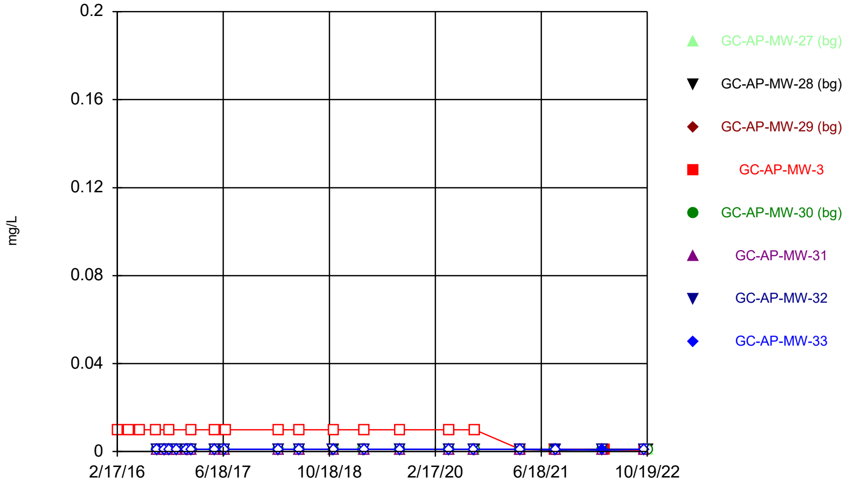
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

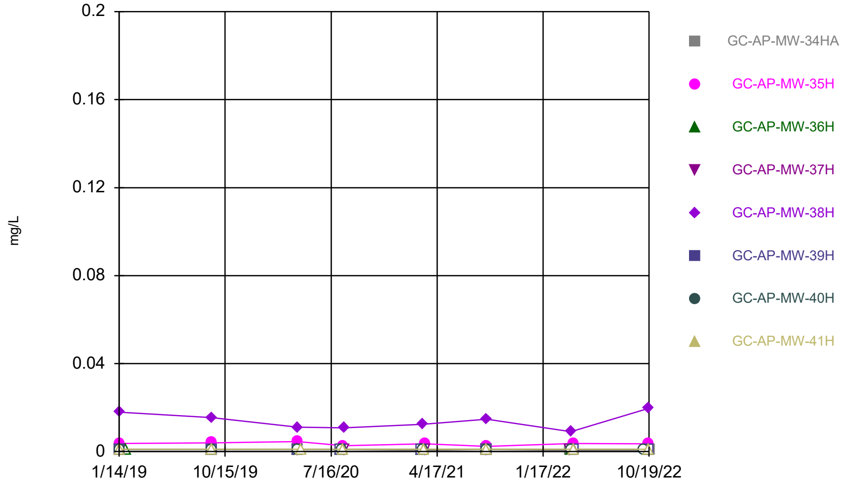
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

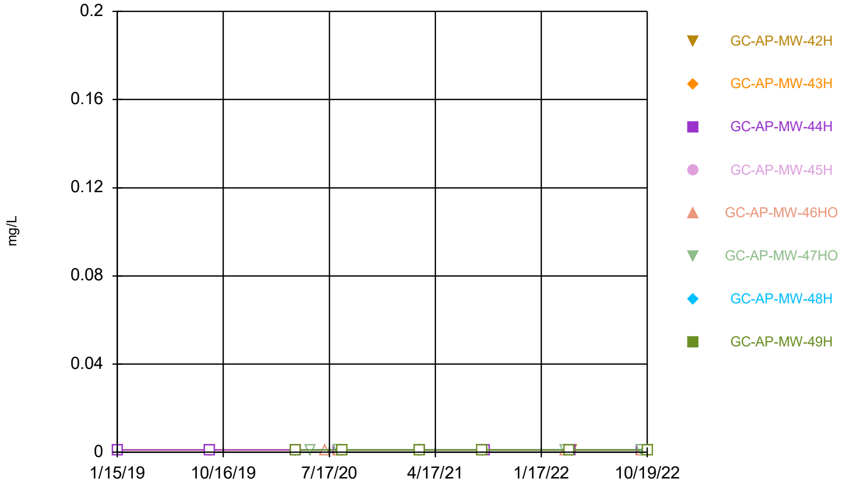
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

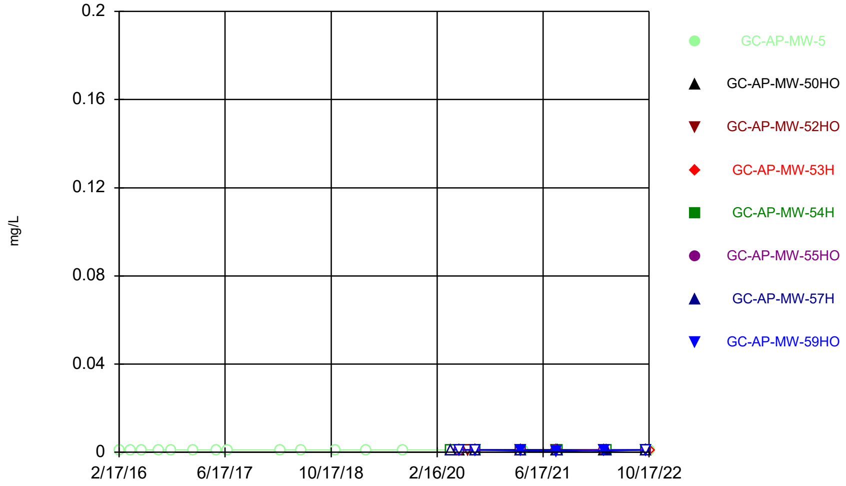
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

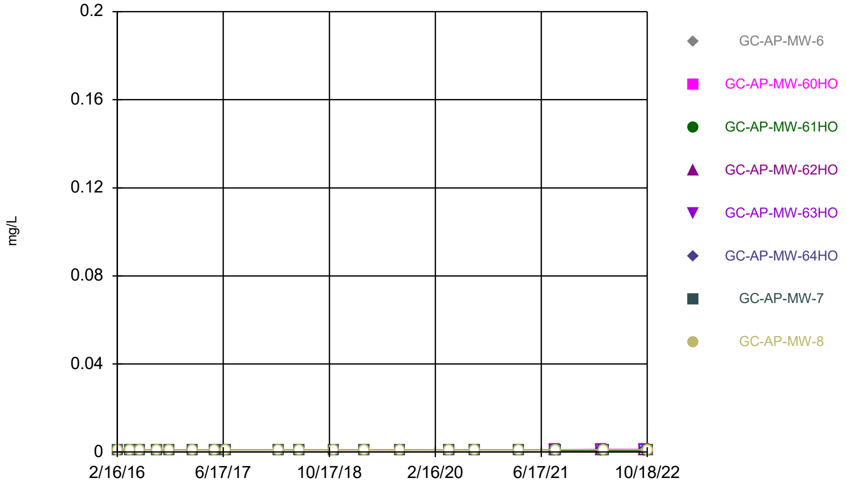
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

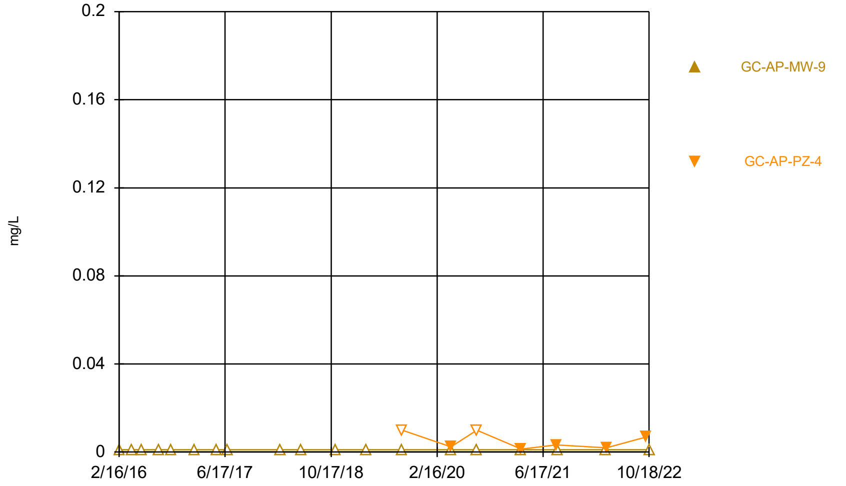
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

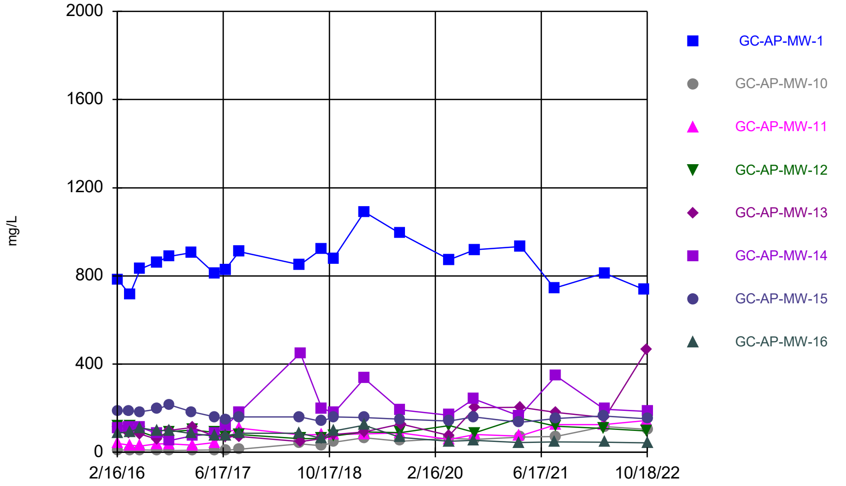
Time Series



Constituent: Selenium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

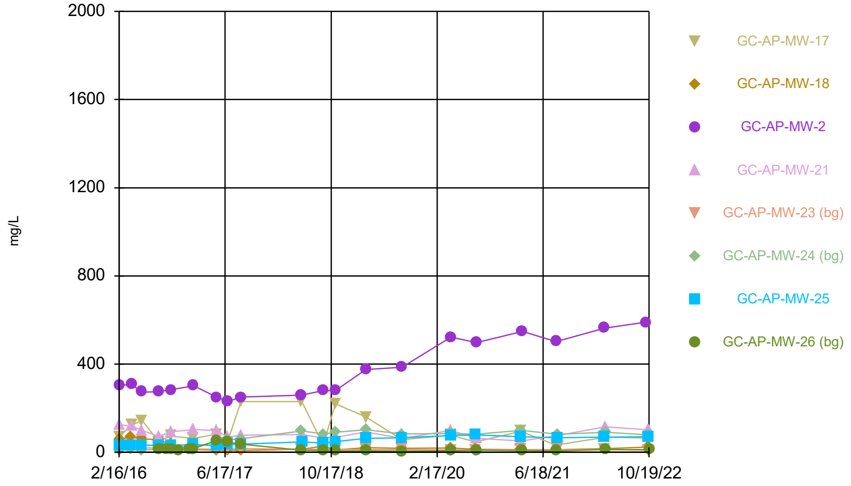
Time Series



Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

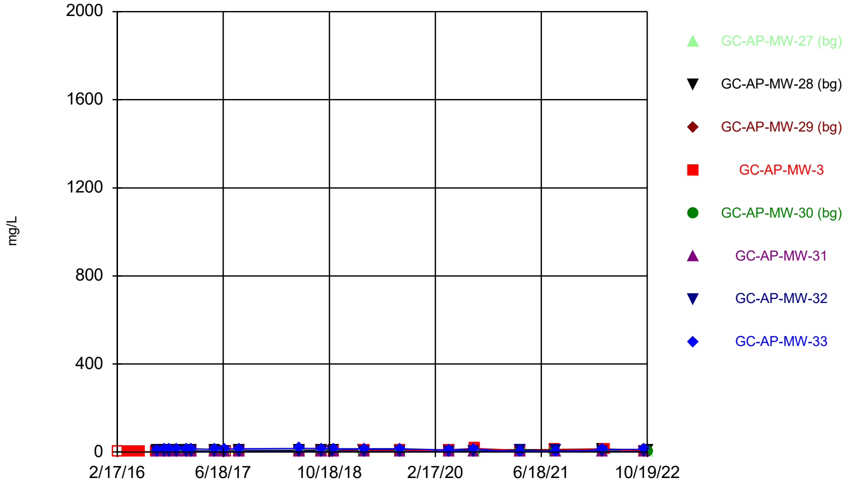
Time Series



Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

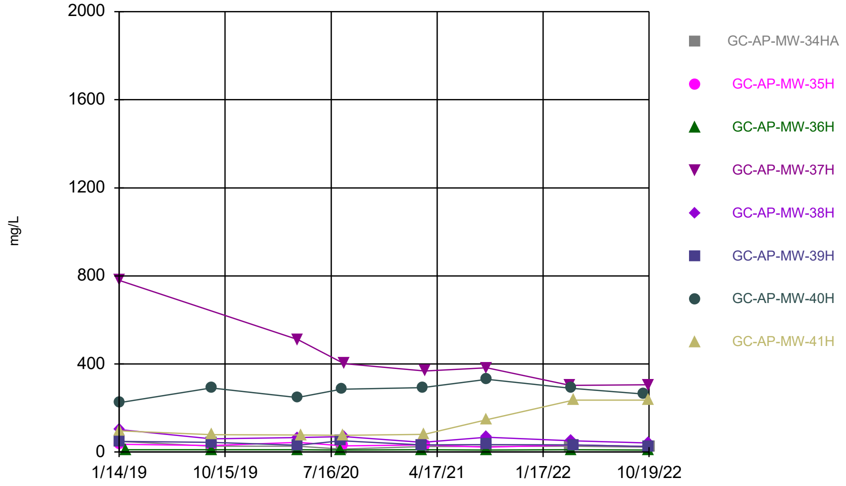
Time Series



Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

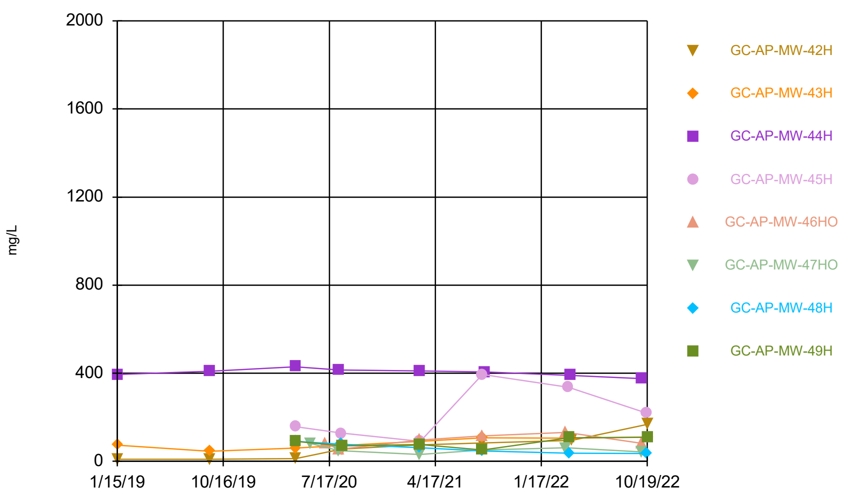
Sanitas™ v.9.6.36 . UG

Time Series



Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

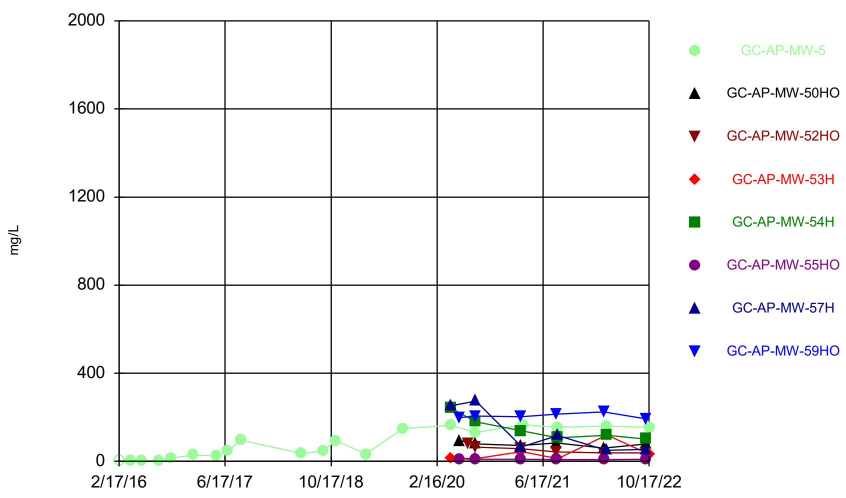
Sanitas™ v.9.6.36 . UG



Time Series

Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

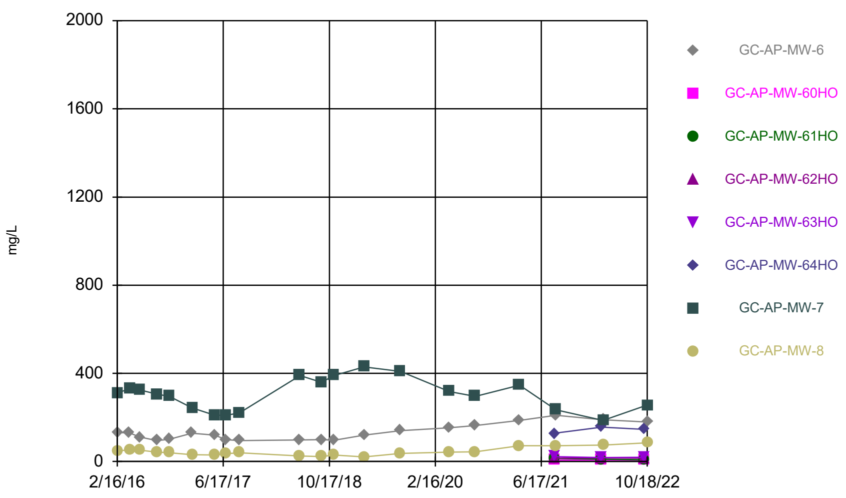
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Time Series

Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

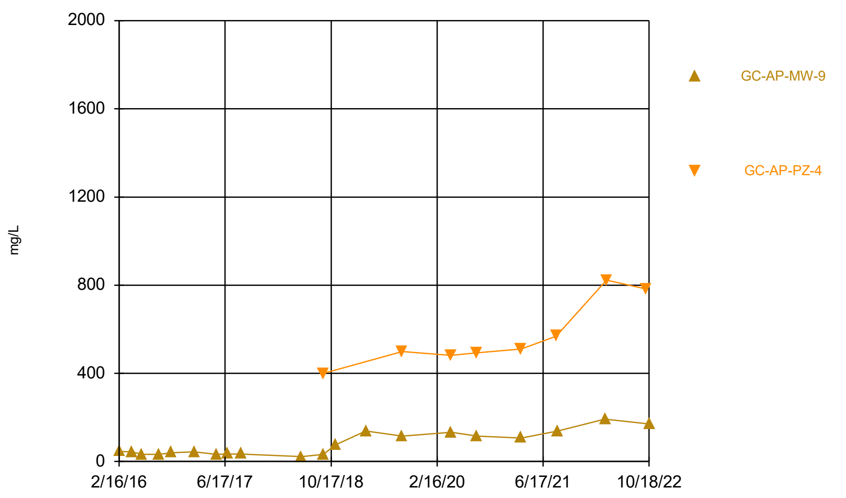
Sanitas™ v.9.6.36 . UG



Time Series

Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

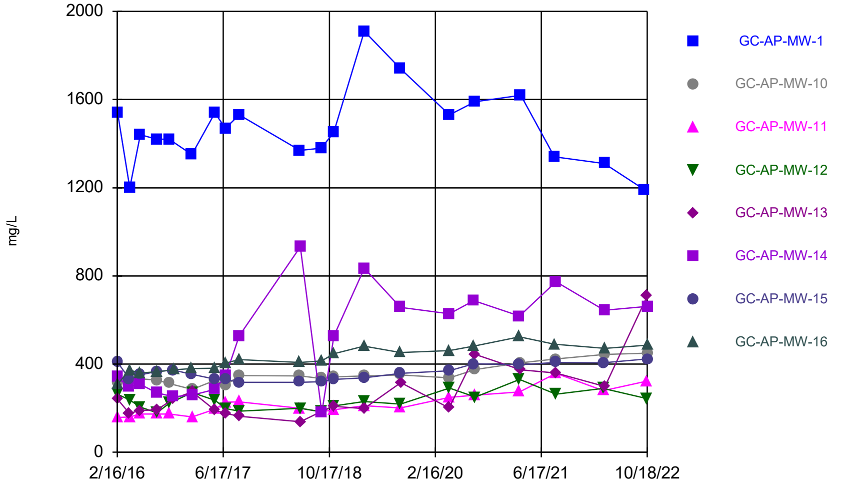


Time Series

Constituent: Sulfate Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

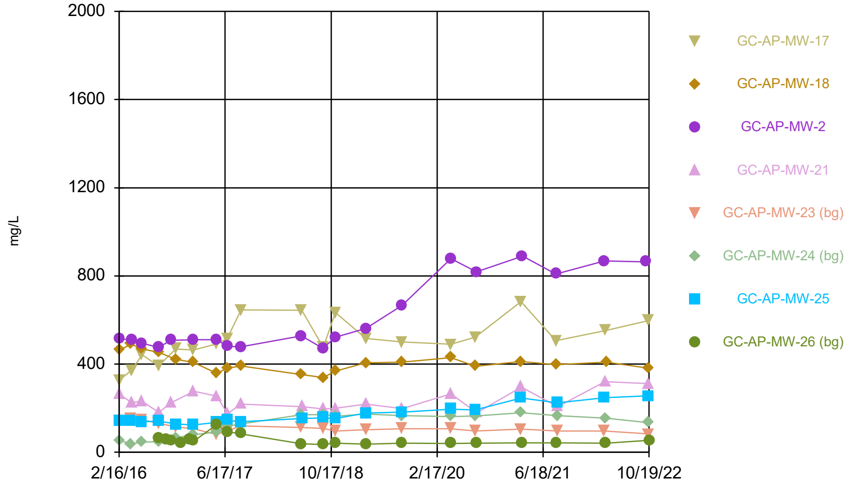
Time Series



Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

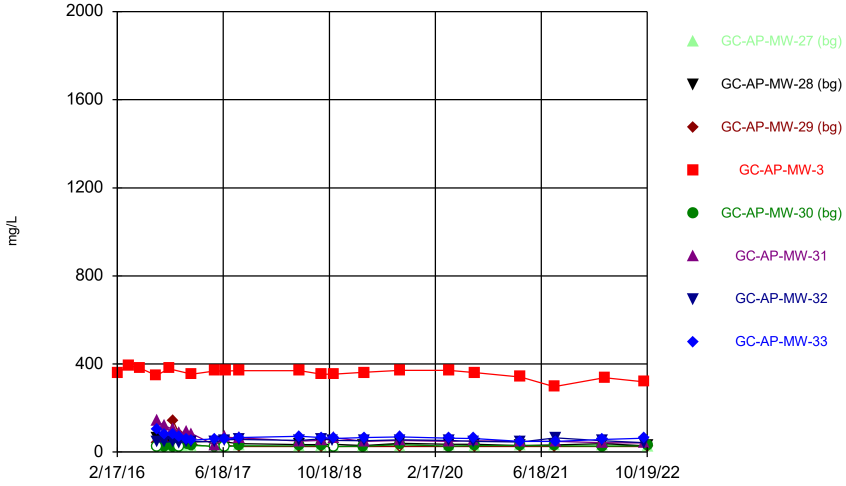
Time Series



Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

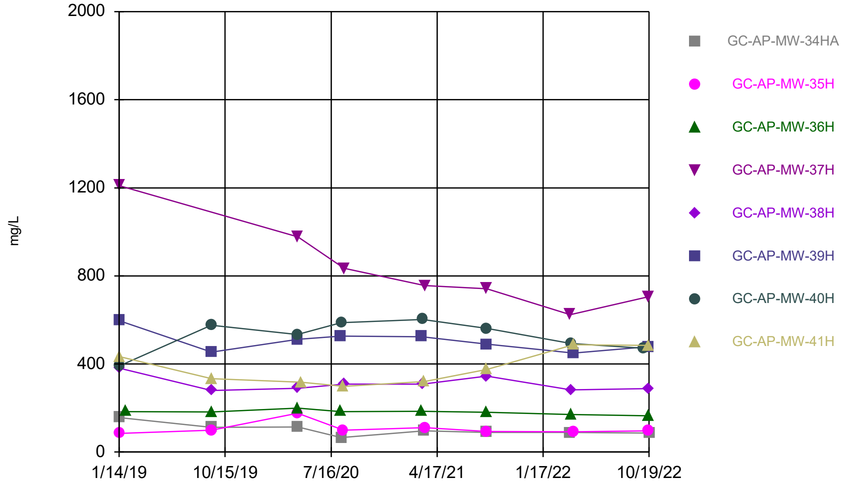
Time Series



Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

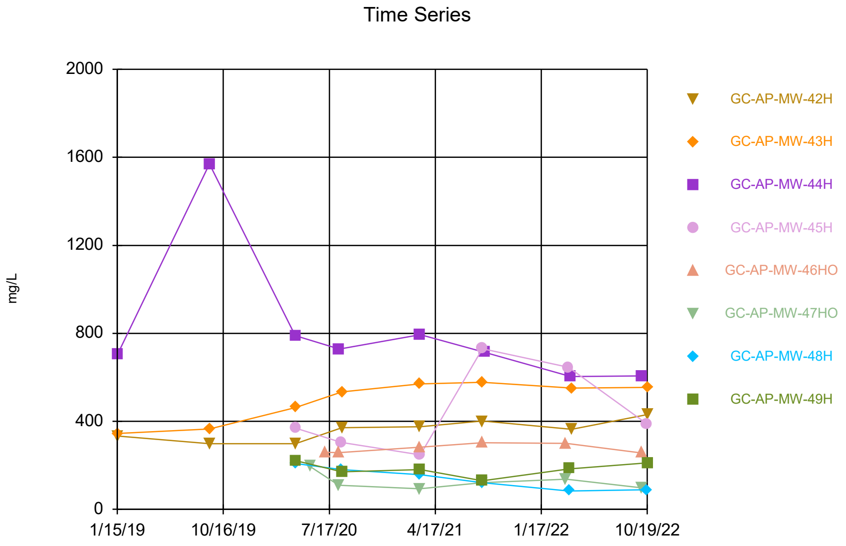
Sanitas™ v.9.6.36 . UG

Time Series



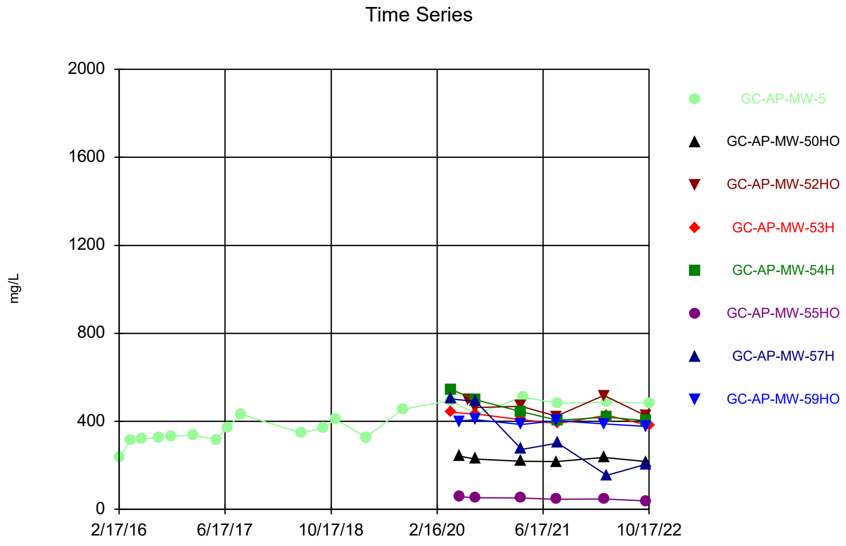
Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



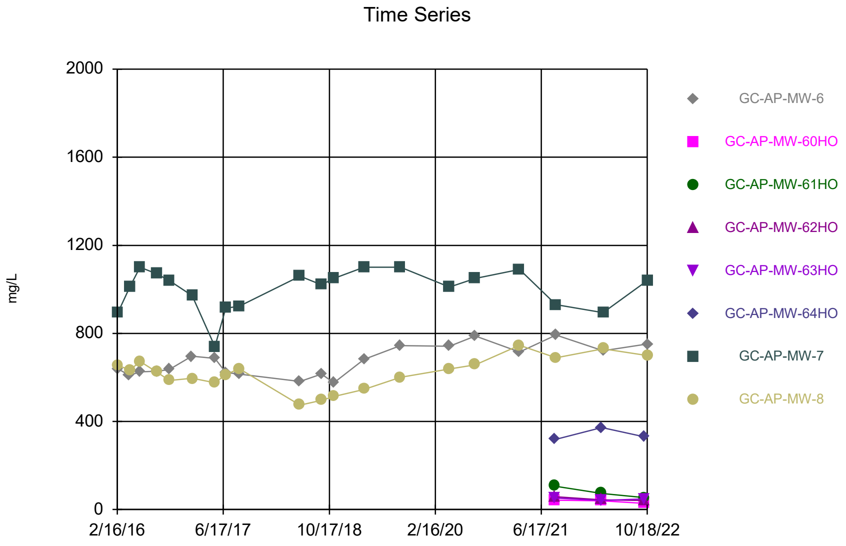
Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



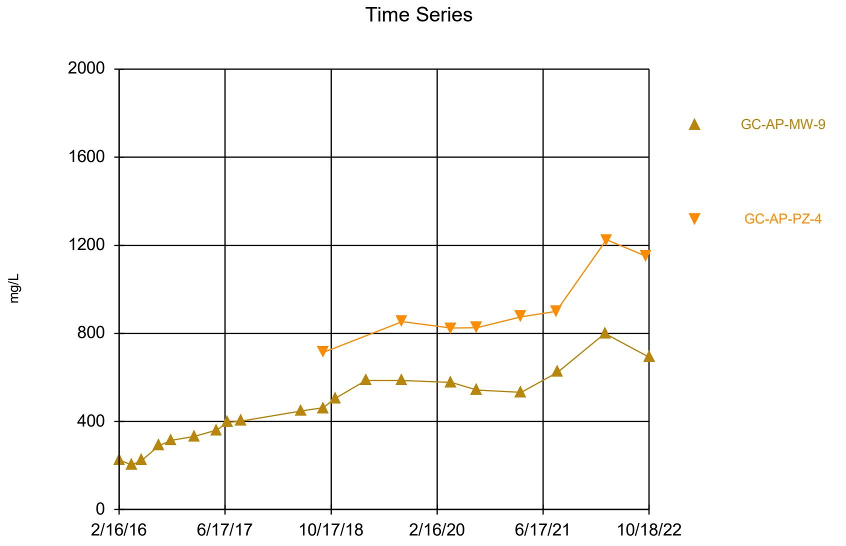
Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



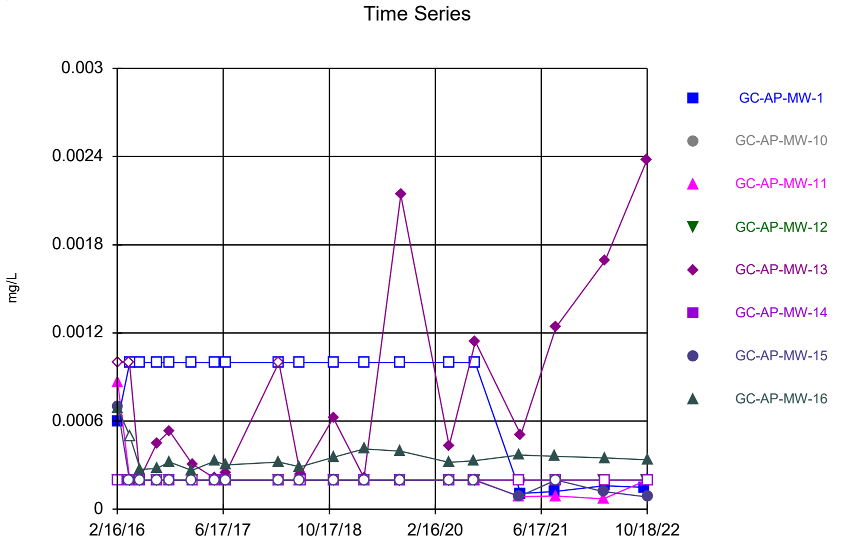
Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



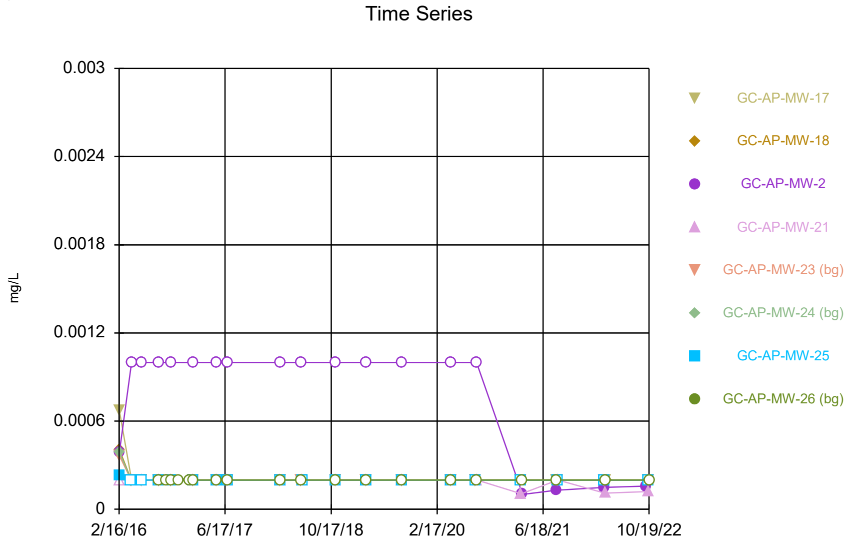
Constituent: TDS Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



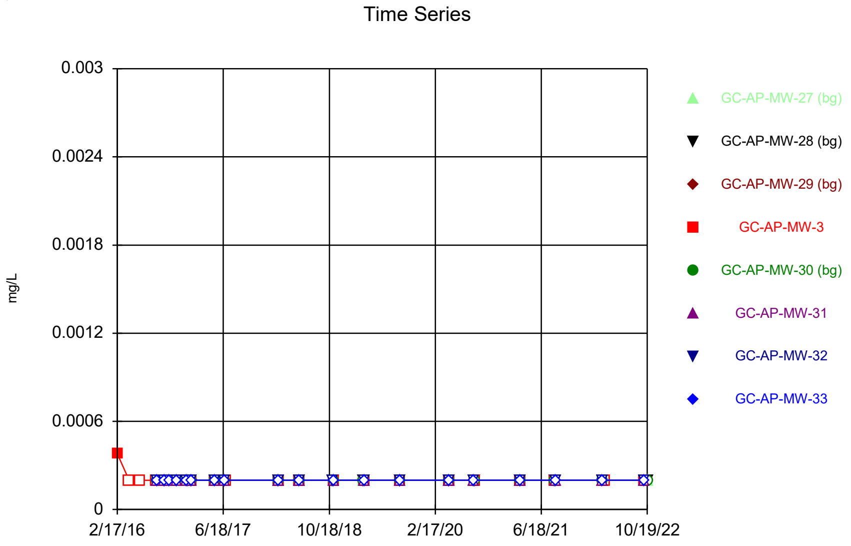
Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



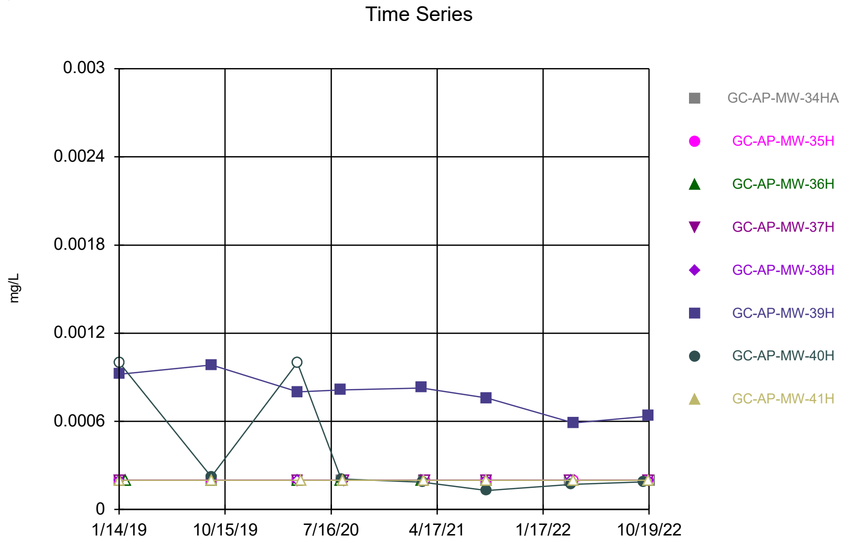
Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

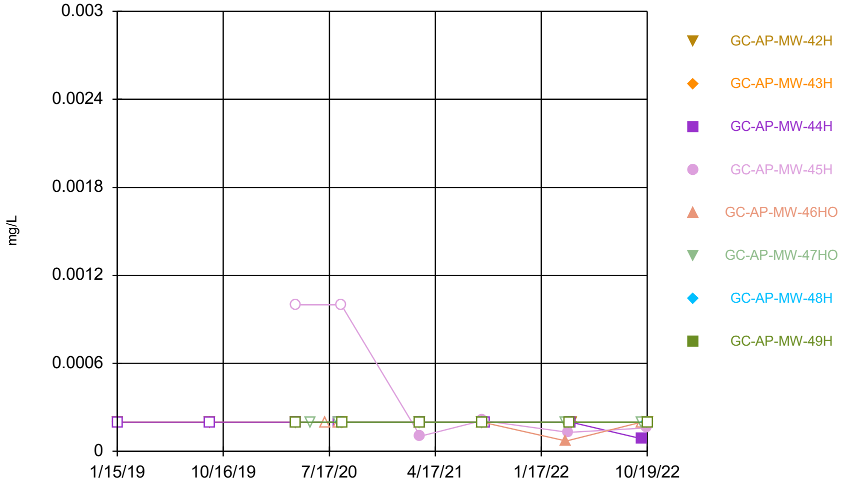
Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

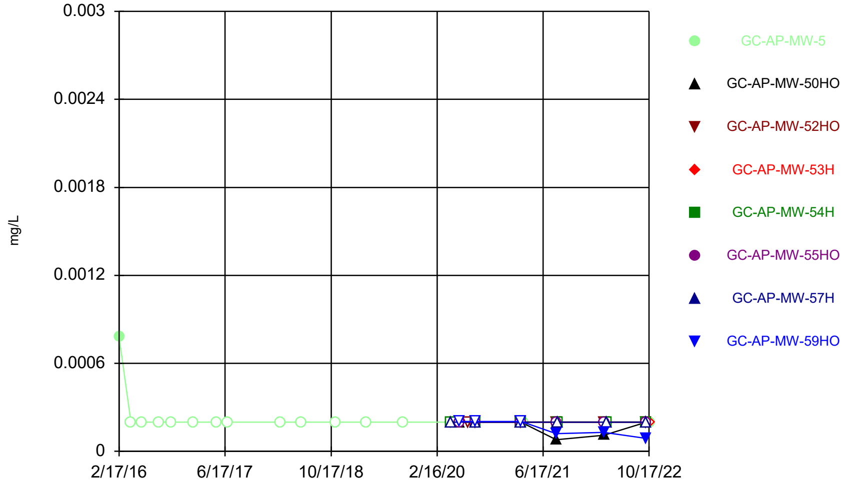
Time Series



Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

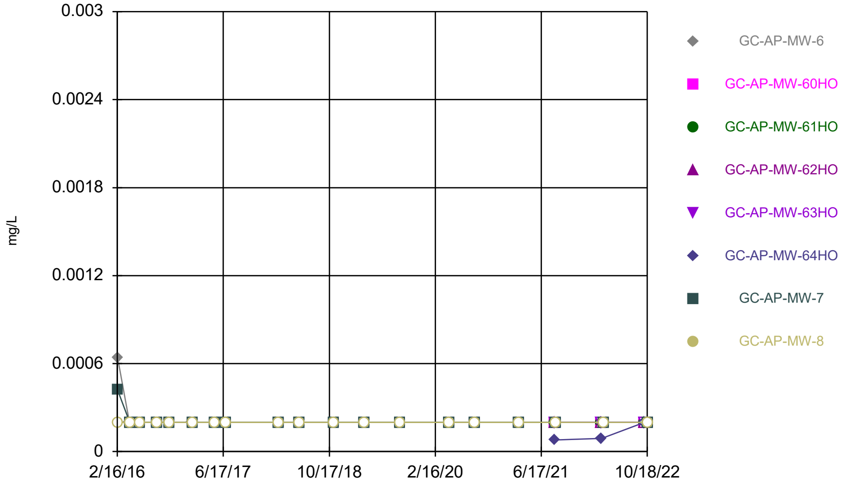
Time Series



Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

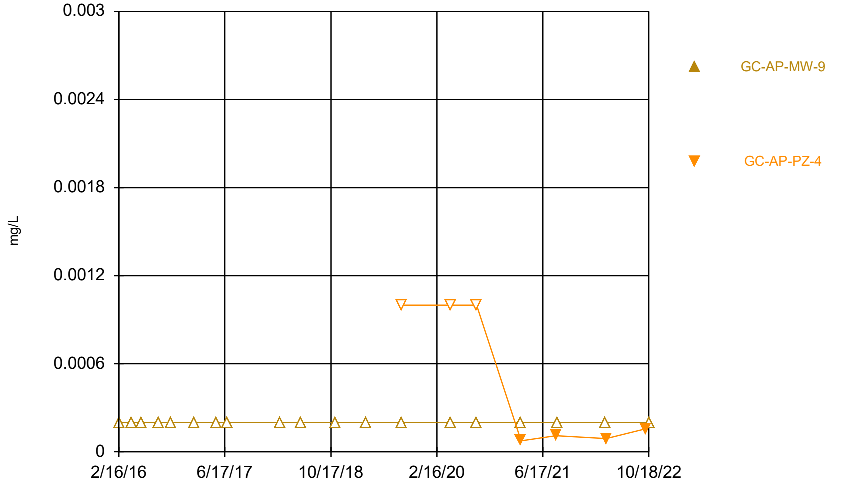
Time Series



Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/9/2022 10:23 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.000786 (J)		0.000933 (J)	0.000972 (J)	<0.00102		
2/17/2016	<0.00102		<0.00102				<0.00102	<0.00102
4/12/2016					<0.003	<0.00102	<0.00102	
4/13/2016	<0.00102	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	0.000834 (J)	0.000869 (J)	0.00062 (J)	<0.00102	
6/1/2016	<0.00102							<0.00102
8/15/2016	<0.00102							<0.00102
8/16/2016		<0.00102	<0.00102	0.00118 (J)	0.00128 (J)		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.00102						<0.00102	
10/12/2016		<0.00102	<0.00102	0.000899 (J)	0.00114 (J)	<0.00102		<0.00102
1/24/2017	0.000799 (J)						0.00111 (J)	0.000935 (J)
1/25/2017		0.00128 (J)	0.000896 (J)	0.00136 (J)	0.00384	0.00106 (J)		
5/9/2017	<0.00102		<0.00102	<0.00102	0.00323	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	<0.00102						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	0.000683 (J)	0.00406	<0.00102		
2/27/2018	<0.00102	<0.00102	<0.00102			<0.00102		
2/28/2018				0.000656 (J)	0.00199 (J)		<0.00102	<0.00102
6/4/2018	<0.00102							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	0.00261 (J)	<0.00102		
11/5/2018			<0.00102	<0.00102	0.00275 (J)			
11/6/2018	<0.00102						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				0.00121 (J)	0.00219 (J)		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					0.00261 (J)			
4/20/2020					0.00338		<0.00102	<0.00102
4/21/2020	<0.00102			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.00102							
8/18/2020		<0.00102	<0.00102	<0.00102	0.00388			
3/9/2021						<0.00102		<0.00102
3/10/2021			<0.00102	<0.00102			<0.00102	
3/15/2021		<0.00102			0.0016			
3/16/2021	<0.00102							
8/17/2021	<0.00102							<0.00102
8/24/2021		<0.00102						
8/25/2021			<0.00102	<0.00102	0.00263	<0.00102	<0.00102	
3/29/2022				<0.00102			<0.00102	
3/30/2022			<0.00102					
4/4/2022	<0.00102	<0.00102				<0.00102		
4/6/2022					0.002			<0.00102
10/5/2022	<0.00102							
10/17/2022			<0.00102	<0.00102	0.002			
10/18/2022		<0.00102				<0.00102	<0.00102	<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
4/12/2016		<0.00102			<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.00102	<0.00102		
8/17/2016							<0.00102	<0.00102
9/20/2016								<0.00102
10/11/2016			<0.00102		<0.00102	<0.00102	<0.00102	
10/12/2016	<0.00102	<0.00102		<0.00102				<0.00102
11/15/2016								<0.00102
1/4/2017								<0.00102
1/23/2017								0.001 (J)
1/24/2017	0.000997 (J)	0.000984 (J)	0.00084 (J)		0.000886 (J)	0.000858 (J)	0.00111 (J)	
1/25/2017				0.00107 (J)				
5/9/2017			<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
5/10/2017	<0.00102	<0.00102				<0.00102		
6/27/2017	<0.00102	<0.00102			<0.00102			<0.00102
6/28/2017			<0.00102	<0.00102		<0.00102	<0.00102	
2/27/2018			<0.00102		<0.00102	<0.00102		<0.00102
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.00102	<0.00102		<0.00102
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102
11/7/2018					<0.00102	<0.00102		
3/26/2019	0.000897 (J)	<0.00102		0.000964 (J)	<0.00102	<0.00102		<0.00102
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.00102	<0.00102	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			<0.00102
4/22/2020						<0.00102	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.00102	<0.00102		
8/17/2020			<0.00102					
8/18/2020				<0.00102				<0.00102
3/9/2021	<0.00102	<0.00102						
3/10/2021				<0.00102	<0.00102	<0.00102	<0.00102	
3/15/2021								<0.00102
3/16/2021			<0.00102					
8/17/2021	<0.00102	<0.00102	<0.00102					
8/18/2021								<0.00102
8/24/2021					<0.00102	<0.00102	<0.00102	
8/25/2021				<0.00102				
3/28/2022			<0.00102		<0.00102			
3/29/2022							<0.00102	
3/30/2022				<0.00102				
4/4/2022	<0.00102					<0.00102		<0.00102
4/6/2022		<0.00102						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.00102					
10/17/2022		<0.00102		<0.00102	<0.00102	<0.00102		
10/18/2022	<0.00102						<0.00102	
10/19/2022								<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.00102				
4/12/2016				<0.00102				
6/1/2016				<0.00102				
8/15/2016				<0.00102				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	0.00083 (J)				0.000701 (J)			
1/24/2017		0.00096 (J)		0.000906 (J)		0.000928 (J)	0.00091 (J)	
1/25/2017								0.00112 (J)
1/26/2017			0.00092 (J)					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.00102				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.00102				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/26/2019	0.00137 (J)	0.000975 (J)	<0.00102		0.000854 (J)			
3/27/2019				<0.00102		<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.00102				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.00102				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
3/16/2021				<0.00102				
8/17/2021				<0.00102				
8/18/2021	<0.00102	<0.00102	<0.00102		<0.00102			
8/23/2021						<0.00102	<0.00102	<0.00102
3/28/2022	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/5/2022				<0.00102				
10/5/2022				<0.00102		<0.00102	<0.00102	<0.00102
10/19/2022	<0.00102	<0.00102	<0.00102		<0.00102			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.00102			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		<0.00102						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		<0.00102	<0.00102		<0.00102	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		<0.00102						
4/22/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		<0.00102						<0.00102
8/19/2020				<0.00102	<0.00102			
3/9/2021			<0.00102			<0.00102		
3/10/2021					<0.00102		<0.00102	
3/15/2021	<0.00102							<0.00102
3/16/2021		<0.00102		<0.00102				
8/23/2021	<0.00102							
8/24/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/25/2021							<0.00102	<0.00102
3/28/2022	<0.00102							
3/29/2022				<0.00102				
3/30/2022			<0.00102		<0.00102		<0.00102	
4/6/2022		<0.00102				<0.00102		<0.00102
10/5/2022							<0.00102	
10/17/2022		<0.00102	<0.00102	<0.00102				
10/18/2022					<0.00102	<0.00102		<0.00102
10/19/2022	<0.00102							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	<0.00102	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	<0.00102	<0.00102						
3/10/2021			<0.00102	<0.00102			<0.00102	<0.00102
8/17/2021					<0.00102	<0.00102		
8/18/2021	<0.00102	<0.00102		<0.00102			<0.00102	<0.00102
8/23/2021			<0.00102					
3/23/2022					<0.00102	<0.00102		
3/29/2022				<0.00102				
3/30/2022							<0.00102	<0.00102
4/4/2022			<0.00102					
4/6/2022	<0.00102	<0.00102						
10/4/2022					<0.00102	<0.00102		
10/5/2022			<0.00102					
10/18/2022				<0.00102			<0.00102	
10/19/2022	<0.00102	<0.00102						<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	0.000728 (J)							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		<0.00102
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		<0.00102	<0.00102					
3/9/2021						<0.00102		<0.00102
3/10/2021				<0.00102	<0.00102		<0.00102	
3/16/2021	<0.00102							
8/16/2021			<0.00102					
8/17/2021		<0.00102				<0.00102		<0.00102
8/23/2021	<0.00102			<0.00102	<0.00102		<0.00102	
3/23/2022		<0.00102	<0.00102			<0.00102		<0.00102
4/4/2022	<0.00102							
4/5/2022					<0.00102		<0.00102	
4/6/2022				<0.00102				
10/3/2022			<0.00102					
10/4/2022		<0.00102				<0.00102		<0.00102
10/5/2022					<0.00102		<0.00102	
10/17/2022	<0.00102			<0.00102				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	0.000792 (J)							
1/25/2017							0.000839 (J)	0.000833 (J)
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	0.00141 (J)						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	<0.00102						<0.00102	<0.00102
8/17/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/24/2021	<0.00102						0.00075 (J)	<0.00102
3/23/2022		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
3/29/2022	<0.00102						0.00066 (J)	<0.00102
10/4/2022		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
10/18/2022	<0.00102						<0.00102	<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	0.000847 (J)	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.00102
4/20/2020		<0.00102
4/21/2020	<0.00102	
8/17/2020		<0.00102
8/18/2020	<0.00102	
3/9/2021	<0.00102	
3/10/2021		<0.00102
8/17/2021		<0.00102
8/24/2021	<0.00102	
3/29/2022	<0.00102	
4/5/2022		<0.00102
10/5/2022		<0.00102
10/18/2022	<0.00102	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.0123		<0.005	0.0141	0.0202		
2/17/2016	0.0181		0.00437 (J)				<0.005	0.0788
4/12/2016					0.0144	0.0214	<0.005	
4/13/2016	0.0178	0.0143	0.00695	<0.005				0.0759
5/31/2016		0.0125	0.0063	<0.005	0.00984	0.0156	<0.005	
6/1/2016	0.016							0.292
8/15/2016	0.0182							0.105
8/16/2016		0.0128	0.0068	<0.005	0.0126		<0.005	
8/17/2016						0.0153		
10/11/2016	0.0186						<0.005	
10/12/2016		0.0145	0.00709	<0.005	0.0117	0.0254		0.0831
1/24/2017	0.0173						<0.005	0.0472
1/25/2017		0.0122	0.00718	<0.005	0.00316 (J)	0.0194		
5/9/2017	0.0176		0.00819	<0.005	0.00393 (J)	0.0361		
5/10/2017		0.0135					<0.005	0.0814
6/27/2017	0.0165						<0.005	0.0693
6/28/2017		0.0131	0.00664	<0.005	0.00406 (J)	0.022		
2/27/2018	0.0201	0.0146	0.00733			0.0265		
2/28/2018				<0.005	0.00278 (J)		<0.005	0.0852
6/4/2018	0.0195							
6/5/2018		0.0233	0.00637				<0.005	0.0648
6/6/2018				<0.005	0.00352 (J)	0.0372		
11/5/2018			0.00195 (J)	<0.005	0.00497 (J)			
11/6/2018	0.0189						<0.005	0.0701
11/7/2018		0.0152				0.0289		
3/26/2019				<0.005	0.00251 (J)		<0.005	0.0952
3/27/2019	0.0267	0.014	0.00573			0.0264		
9/10/2019	0.0226	0.0132	0.00378 (J)	<0.005		0.0263	<0.005	0.0786
9/11/2019					0.00664			
4/20/2020					0.00181 (J)		<0.005	0.105
4/21/2020	0.0219			<0.005		0.0178		
4/22/2020		0.0121	0.00616					
8/11/2020						0.0207		0.0698
8/12/2020							<0.005	
8/17/2020	0.0265							
8/18/2020		0.0121	0.00457 (J)	<0.005	0.00176 (J)			
3/9/2021						0.0292		0.113
3/10/2021			0.00317	0.000251			0.000349	
3/15/2021		0.0125			0.00207			
3/16/2021	0.0238							
8/17/2021	0.0206							0.0765
8/24/2021		0.0129						
8/25/2021			0.00518	0.00023	0.00302	0.0224	0.00046	
3/29/2022				0.00023			0.00032	
3/30/2022			0.00097					
4/4/2022	0.0164	0.0117				0.0241		
4/6/2022					0.00261			0.078
10/5/2022	0.0152							
10/17/2022			0.00251	0.000335	0.00397			
10/18/2022		0.0117				0.0269	0.000379	0.0653

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.005				
2/17/2016	0.177	0.133	0.0142		<0.0002	<0.005	<0.005	
4/12/2016		0.134			<0.0002	<0.005	<0.005	
4/13/2016	0.271		0.0145	<0.005				
6/1/2016	0.251	0.11	0.0112	<0.005	<0.0002	<0.005	<0.005	
8/15/2016	0.253	0.116	0.0154					
8/16/2016				<0.005	<0.0002	<0.005		
8/17/2016							<0.005	0.0017 (J)
9/20/2016								0.00283 (J)
10/11/2016			0.0113		<0.0002	<0.005	<0.005	
10/12/2016	0.243	0.109		<0.005				0.00218 (J)
11/15/2016								0.00124 (J)
1/4/2017								0.0028 (J)
1/23/2017								0.00257 (J)
1/24/2017	0.363	0.0825	0.0115		<0.0002	<0.005	<0.005	
1/25/2017				<0.005				
5/9/2017			0.00989	<0.005	<0.0002		<0.005	0.00138 (J)
5/10/2017	0.499	0.0776				<0.005		
6/27/2017	0.489	0.0672			<0.0002			<0.005
6/28/2017			0.00848	<0.005		<0.005	<0.005	
2/27/2018			0.0106		<0.0002	<0.005		<0.005
2/28/2018	0.532	0.063		<0.005			<0.005	
6/4/2018			0.0124					
6/5/2018	0.382	0.0661			<0.0002	<0.005		<0.005
6/6/2018				<0.005			<0.005	
11/5/2018				<0.005				
11/6/2018	0.299	0.0509	0.0085				<0.005	<0.005
11/7/2018					<0.0002	<0.005		
3/26/2019	0.32	0.0477		<0.005	<0.0002	<0.005		<0.005
3/27/2019			0.0101				<0.005	
9/9/2019	0.356	0.0498	0.022					
9/10/2019				<0.005	<0.0002	<0.005	<0.005	
9/11/2019								<0.005
4/21/2020	0.689	0.0478	0.013	<0.005	<0.0002			<0.005
4/22/2020						<0.005	<0.005	
8/11/2020	0.581						<0.005	
8/12/2020		0.0485			<0.0002	<0.005		
8/17/2020			0.00768					
8/18/2020				<0.005				<0.005
3/9/2021	0.86	0.0505						
3/10/2021				0.000216	<0.0002	0.00045	0.00033	
3/15/2021								0.000125 (J)
3/16/2021			0.0045					
8/17/2021	0.937	0.0509	0.00514					
8/18/2021								0.00016 (J)
8/24/2021					7E-05 (J)	0.00024	0.00028	
8/25/2021				0.00014 (J)				
3/28/2022			0.00381		<0.0002			
3/29/2022							0.00026	
3/30/2022				0.00017 (J)				
4/4/2022	0.861					0.00033		0.00011 (J)
4/6/2022		0.049						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.00331					
10/17/2022		0.0475		0.000217	0.000111 (J)	0.000297		
10/18/2022	0.897						0.000434	
10/19/2022								0.000107 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.00668				
4/12/2016				0.00827				
6/1/2016				0.00768				
8/15/2016				0.00798				
8/16/2016			0.00199 (J)		<0.0002	0.00185 (J)	<0.0002	0.00122 (J)
8/17/2016	<0.0002	<0.0002						
9/19/2016						0.00121 (J)	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	0.00155 (J)		<0.0002			
10/11/2016			0.00231 (J)	0.008	<0.0002	0.00111 (J)	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	0.0044 (J)		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	0.00123 (J)		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		0.00722		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			0.00169 (J)					
5/9/2017	<0.0002	<0.0002	<0.0002	0.00766	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				0.00745				
2/27/2018	<0.0002	<0.0002	<0.0002	0.00699	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				0.00731				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	0.00685	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				0.00596		<0.0002	<0.0002	<0.0002
9/9/2019				0.00806				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				0.00751				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				0.00909				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	0.000111 (J)	0.000142 (J)	<0.0002
3/16/2021				0.0112				
8/17/2021				0.0119				
8/18/2021	<0.0002	9E-05 (J)	9E-05 (J)		<0.0002			
8/23/2021						<0.0002	0.00019 (J)	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	0.00015 (J)
4/5/2022				0.01				
10/5/2022				0.0119		<0.0002	<0.0002	8.1E-05 (J)
10/19/2022	<0.0002	<0.0002	<0.0002		<0.0002			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.000203			
1/15/2019				<0.005		0.0514	<0.005	0.002 (J)
1/16/2019		<0.005						
1/17/2019	<0.005							
1/30/2019			0.0034 (J)					
9/10/2019	<0.005						<0.005	
9/11/2019		<0.005	0.00222 (J)		<0.000203	0.053		0.00208 (J)
4/20/2020							<0.005	
4/21/2020		<0.005						
4/22/2020	<0.005		0.00168 (J)	0.00768	<0.000203	0.0533		
4/29/2020								0.00182 (J)
8/11/2020			0.00223 (J)			0.0635		
8/12/2020	<0.005						<0.005	
8/18/2020		<0.005						0.00171 (J)
8/19/2020				0.00618	<0.000203			
3/9/2021			0.00291			0.0697		
3/10/2021					<0.000203		0.000443	
3/15/2021	0.000158 (J)							0.00174
3/16/2021		0.0001 (J)		0.00685				
8/23/2021	0.00042							
8/24/2021		0.0001 (J)	0.00235	0.00811	0.00012 (J)	0.069		
8/25/2021							0.00043	0.00182
3/28/2022	0.00013 (J)							
3/29/2022				0.011				
3/30/2022			0.00263		9E-05 (J)		0.00027	
4/6/2022		0.00013 (J)				0.0524		0.00197
10/5/2022							0.000232	
10/17/2022		0.000174 (J)	0.00202	0.00335				
10/18/2022					0.000208	0.0603		0.00204
10/19/2022	9.6E-05 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.00372 (J)							
1/16/2019		0.00816	<0.005					
9/11/2019	0.00583	0.0124	0.00269 (J)					
4/20/2020			0.00215 (J)	0.00153 (J)				
4/21/2020	0.00417 (J)	0.0101					0.0021 (J)	<0.005
5/28/2020						<0.0002		
7/6/2020					<0.005			
8/11/2020					<0.005	<0.0002		
8/12/2020			0.00197 (J)					
8/17/2020				<0.005			<0.005	
8/19/2020	0.00445 (J)	0.0103						<0.005
3/8/2021					0.000339	0.000152 (J)		
3/9/2021	0.00343	0.0117						
3/10/2021			0.00172	0.00147			0.000557	0.000592
8/17/2021					0.00027	0.00014 (J)		
8/18/2021	0.00456	0.0116		0.00143			0.00025	0.00074
8/23/2021			0.00263					
3/23/2022					0.00017 (J)	<0.0002		
3/29/2022				0.00106				
3/30/2022							0.00014 (J)	0.00041
4/4/2022			0.00187					
4/6/2022	0.00515	0.011						
10/4/2022					0.000268	<0.0002		
10/5/2022			0.00171					
10/18/2022				0.00088			0.000136 (J)	
10/19/2022	0.00487	0.0113						0.00044

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.353							
4/12/2016	0.402							
5/31/2016	0.33							
8/17/2016	0.369							
10/11/2016	0.378							
1/24/2017	0.386							
5/9/2017	0.406							
6/28/2017	0.353							
2/27/2018	0.425							
6/5/2018	0.454							
11/6/2018	0.432							
3/27/2019	0.455							
9/11/2019	0.406							
4/20/2020				0.0806	0.41		0.0375	
4/21/2020	0.42							
5/28/2020		<0.005				<0.0002		0.00208 (J)
7/6/2020			<0.005					
8/11/2020		<0.005	<0.005	0.0869		<0.0002		<0.005
8/12/2020	0.415				0.467		0.0467	
3/8/2021		0.000267	0.00027					
3/9/2021						0.00013 (J)		0.00103
3/10/2021				0.213	0.45		0.0196	
3/16/2021	0.473							
8/16/2021			0.00014 (J)					
8/17/2021		0.00032				9E-05 (J)		0.0007
8/23/2021	0.368			0.225	0.454		0.029	
3/23/2022		0.00014 (J)	0.00026			<0.0002		0.00082
4/4/2022	0.432							
4/5/2022					0.401		0.00687	
4/6/2022				0.229				
10/3/2022			0.000144 (J)					
10/4/2022		0.000164 (J)				0.000103 (J)		0.000935
10/5/2022					0.425		0.0177	
10/17/2022	0.366			0.342				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.005
2/17/2016	<0.005						<0.005	
4/12/2016	<0.005							
4/13/2016							<0.005	<0.005
5/31/2016	<0.005						<0.005	
6/1/2016								<0.005
8/17/2016	<0.005						<0.005	<0.005
10/11/2016	<0.005							
10/12/2016							<0.005	<0.005
1/24/2017	<0.005							
1/25/2017							<0.005	<0.005
5/10/2017	<0.005						<0.005	<0.005
6/28/2017	<0.005						<0.005	<0.005
2/27/2018	<0.005						<0.005	<0.005
6/5/2018	<0.005						<0.005	<0.005
11/7/2018	<0.005						<0.005	<0.005
3/26/2019	<0.005						<0.005	<0.005
9/10/2019	<0.005						<0.005	<0.005
4/21/2020	<0.005						<0.005	<0.005
8/19/2020	<0.005						<0.005	<0.005
3/9/2021	0.000303						0.00015 (J)	0.000248
8/17/2021		<0.0002	0.00039	0.00026	0.00012 (J)	0.00051		
8/24/2021	0.00028						0.0001 (J)	0.00027
3/23/2022		<0.0002	0.00025	0.00011 (J)	<0.0002	0.0003		
3/29/2022	0.00013 (J)						8E-05 (J)	0.00015 (J)
10/4/2022		<0.0002	0.000353	0.000145 (J)	0.000133 (J)	0.000267		
10/18/2022	0.000182 (J)						0.000148 (J)	0.000261

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.00507	
4/13/2016	0.00556	
6/1/2016	0.00625	
8/17/2016	0.00648	
10/12/2016	0.00772	
1/25/2017	0.00728	
5/10/2017	0.00818	
6/28/2017	0.00718	
2/27/2018	0.00946	
6/5/2018	0.00921	
11/7/2018	0.0098	
3/26/2019	0.00969	
9/10/2019	0.0108	0.00176 (J)
4/20/2020		0.0029 (J)
4/21/2020	0.0102	
8/17/2020		0.00191 (J)
8/18/2020	0.0108	
3/9/2021	0.0105	
3/10/2021		0.00597
8/17/2021		0.0021
8/24/2021	0.00695	
3/29/2022	0.00316	
4/5/2022		0.00404
10/5/2022		0.00368
10/18/2022	0.00787	

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.179		0.0231	0.113	0.0447		
2/17/2016	0.0364		0.105				0.022	0.0368
4/12/2016					0.0912	0.043	0.0242	
4/13/2016	0.0344	0.185	0.106	0.02				0.044
5/31/2016		0.158	0.0907	0.0175	0.0963	0.0383	0.0224	
6/1/2016	0.0353							0.0357
8/15/2016	0.0395							0.0377
8/16/2016		0.16	0.0989	0.0182	0.0878		0.0243	
8/17/2016						0.0332		
10/11/2016	0.0455						0.0291	
10/12/2016		0.17	0.113	0.0221	0.112	0.0454		0.0431
1/24/2017	0.0428						0.0223	0.0418
1/25/2017		0.156	0.103	0.0187	0.114	0.0567		
5/9/2017	0.0399		0.125	0.0232	0.1	0.069		
5/10/2017		0.169					0.0281	0.0449
6/27/2017	0.0348						0.0223	0.042
6/28/2017		0.144	0.103	0.0178	0.0874	0.0764		
2/27/2018	0.0398	0.172	0.0718			0.0908		
2/28/2018				0.0197	0.0984		0.0271	0.0595
6/4/2018	0.0314							
6/5/2018		0.173	0.0643				0.0269	0.0471
6/6/2018				0.0204	0.0951	0.064		
11/5/2018			0.0588	0.0255	0.113			
11/6/2018	0.0348						0.0271	0.0574
11/7/2018		0.171				0.0575		
3/26/2019				0.0218	0.109		0.0282	0.0626
3/27/2019	0.0286	0.167	0.0678			0.0768		
9/10/2019	0.0283	0.199	0.0651	0.0233		0.0685	0.0348	0.0754
9/11/2019					0.275			
4/20/2020					0.104		0.0338	0.0921
4/21/2020	0.0206			0.0325		0.102		
4/22/2020		0.186	0.0967					
8/11/2020						0.0806		0.0948
8/12/2020							0.0352	
8/17/2020	0.0218							
8/18/2020		0.223	0.0866	0.021	0.199			
3/9/2021						0.125		0.102
3/10/2021			0.0637	0.0373			0.0365	
3/15/2021		0.261			0.0699			
3/16/2021	0.024							
8/17/2021	0.0211							0.101
8/24/2021		0.287						
8/25/2021			0.104	0.0323	0.114	0.11	0.0402	
3/29/2022				0.0355			0.0381	
3/30/2022			0.0485					
4/4/2022	0.0235	0.26				0.103		
4/6/2022					0.0701			0.103
10/5/2022	0.0256							
10/17/2022			0.0611	0.0301	0.119			
10/18/2022		0.248				0.103	0.036	0.103

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.0379				
2/17/2016	0.0402	0.12	0.0311		0.0285	0.0305	0.0895	
4/12/2016		0.131			0.035	0.0312	0.0966	
4/13/2016	0.0637		0.0334	0.0291				
6/1/2016	0.0786	0.114	0.029	0.0254	0.0328	0.0298	0.0872	
8/15/2016	0.0634	0.113	0.0317					
8/16/2016				0.0385	0.033	0.0308		
8/17/2016							0.0875	0.0476
9/20/2016								0.0436
10/11/2016			0.0339		0.0352	0.042	0.1	
10/12/2016	0.0995	0.126		0.0486				0.0397
11/15/2016								0.0369
1/4/2017								0.0518
1/23/2017								0.0662
1/24/2017	0.117	0.126	0.0276		0.0286	0.0446	0.0856	
1/25/2017				0.0371				
5/9/2017			0.0285	0.0454	0.0257		0.093	0.0691
5/10/2017	0.158	0.138				0.0568		
6/27/2017	0.139	0.12			0.0246			0.0603
6/28/2017			0.0273	0.0352		0.0663	0.0829	
2/27/2018			0.0292		0.0287	0.101		0.0386
2/28/2018	0.199	0.143		0.0376			0.0958	
6/4/2018			0.0298					
6/5/2018	0.149	0.128			0.0279	0.108		0.0356
6/6/2018				0.0355			0.0892	
11/5/2018				0.0509				
11/6/2018	0.202	0.109	0.0286				0.0807	0.0387
11/7/2018					0.0281	0.1		
3/26/2019	0.242	0.117		0.047	0.0295	0.0978		0.0419
3/27/2019			0.0311				0.0901	
9/9/2019	0.319	0.101	0.035					
9/10/2019				0.0568	0.0338	0.0967	0.101	
9/11/2019								0.0468
4/21/2020	0.306	0.0926	0.0335	0.0763	0.0296			0.0439
4/22/2020						0.0738	0.11	
8/11/2020	0.29						0.111	
8/12/2020		0.0815			0.0311	0.0788		
8/17/2020			0.0376					
8/18/2020				0.0517				0.0409
3/9/2021	0.352	0.0849						
3/10/2021				0.111	0.0305	0.0873	0.0797	
3/15/2021								0.0351
3/16/2021			0.033					
8/17/2021	0.254	0.0763	0.0347					
8/18/2021								0.0311
8/24/2021					0.0311	0.07	0.0988	
8/25/2021				0.0865				
3/28/2022			0.0301		0.0264			
3/29/2022							0.0717	
3/30/2022				0.112				
4/4/2022	0.27					0.0635		0.0335
4/6/2022		0.0769						

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.0344					
10/17/2022		0.07		0.0774	0.0286	0.0511		
10/18/2022	0.253						0.0704	
10/19/2022								0.034

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.0896				
4/12/2016				0.0994				
6/1/2016				0.104				
8/15/2016				0.102				
8/16/2016			0.0527		0.0376	0.0226	0.0134	0.0304
8/17/2016	0.0803	0.336						
9/19/2016						0.0202	0.0125	0.0215
9/20/2016	0.0679	0.341	0.0698		0.0348			
10/11/2016			0.0799	0.11	0.0396	0.0219	0.0128	0.0236
10/12/2016	0.0644	0.347						
11/14/2016						0.0215	0.0129	0.0206
11/15/2016	0.0628	0.332	0.0479		0.0359			
1/3/2017						0.019	0.0116	0.0409
1/4/2017	0.0477	0.299	0.0513		0.0238			
1/23/2017	0.0482				0.029			
1/24/2017		0.264		0.0942		0.0167	0.0118	
1/25/2017								0.0455
1/26/2017			0.0674					
5/9/2017	0.0611	0.322	0.0836	0.105	0.0409			
5/10/2017						0.0246	0.0142	0.0798
6/27/2017	0.0492	0.278	0.0661		0.0303	0.0238	0.0127	0.0679
6/28/2017				0.104				
2/27/2018	0.0463	0.312	0.05	0.0989	0.0383	0.0231	0.0135	0.0856
6/4/2018				0.0936				
6/5/2018	0.0298	0.243	0.0433		0.0633	0.0228	0.0126	0.0875
11/5/2018							0.0123	
11/6/2018	0.0582	0.249	0.0379	0.0936	0.0463	0.0211		0.0726
3/26/2019	0.0499	0.232	0.0348		0.101			
3/27/2019				0.0951		0.025	0.0134	0.0912
9/9/2019				0.111				
9/11/2019	0.0574	0.246	0.0404		0.0855	0.0267	0.0147	0.0824
4/20/2020				0.109				
4/21/2020	0.0827	0.219	0.0542		0.0485			
4/22/2020						0.0285	0.0133	0.102
8/11/2020						0.0264		
8/12/2020							0.0127	0.0601
8/17/2020				0.139				
8/18/2020	0.0734	0.211	0.0442		0.0529			
3/15/2021	0.069	0.222	0.0545		0.0462	0.0316	0.0692	0.0144
3/16/2021				0.159				
8/17/2021				0.15				
8/18/2021	0.0607	0.198	0.0554		0.0329			
8/23/2021						0.0317	0.0764	0.0141
3/28/2022	0.0625	0.186	0.0337		0.0286	0.0325	0.0132	0.0773
4/5/2022				0.145				
10/5/2022				0.138		0.0283	0.0133	0.0665
10/19/2022	0.0608	0.183	0.0379		0.0246			

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.0814			
1/15/2019				0.0454		0.185	0.0361	0.13
1/16/2019		0.0492						
1/17/2019	0.0714							
1/30/2019			0.00776 (J)					
9/10/2019	0.0554						0.0294	
9/11/2019		0.0369	0.00323 (J)		0.0581	0.173		0.1
4/20/2020							0.0282	
4/21/2020		0.0473						
4/22/2020	0.0578		0.0027 (J)	0.0248	0.0607	0.192		
4/29/2020								0.0998
8/11/2020			0.00393 (J)			0.177		
8/12/2020	0.0467						0.0295	
8/18/2020		0.033						0.0879
8/19/2020				0.0591	0.0678			
3/9/2021			0.00297			0.206		
3/10/2021					0.0719		0.0322	
3/15/2021	0.0532							0.116
3/16/2021		0.04		0.0347				
8/23/2021	0.0478							
8/24/2021		0.0336	0.00261	0.037	0.0872	0.213		
8/25/2021							0.0296	0.128
3/28/2022	0.0481							
3/29/2022				0.0235				
3/30/2022			0.00372		0.0702		0.0277	
4/6/2022		0.0385				0.178		0.145
10/5/2022							0.0241	
10/17/2022		0.0386	0.00282	0.106				
10/18/2022					0.0956	0.21		0.119
10/19/2022	0.0444							

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.162							
1/16/2019		0.12	0.131					
9/11/2019	0.123	0.127	0.0797					
4/20/2020			0.0594	0.0898				
4/21/2020	0.108	0.156					0.028	0.0437
5/28/2020						0.0267		
7/6/2020					0.0613			
8/11/2020					0.0653	0.0204		
8/12/2020			0.0589					
8/17/2020				0.0632			0.027	
8/19/2020	0.119	0.168						0.0394
3/8/2021					0.0523	0.0229		
3/9/2021	0.135	0.211						
3/10/2021			0.064	0.0543			0.0281	0.0406
8/17/2021					0.0563	0.0297		
8/18/2021	0.145	0.187		0.0942			0.0239	0.0492
8/23/2021			0.0596					
3/23/2022					0.0595	0.0332		
3/29/2022				0.0534				
3/30/2022							0.0253	0.0642
4/4/2022			0.0482					
4/6/2022	0.147	0.168						
10/4/2022					0.0574	0.0238		
10/5/2022			0.0475					
10/18/2022				0.0372			0.0269	
10/19/2022	0.154	0.164						0.0545

Time Series

Constituent: Barium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.397							
4/12/2016	0.434							
5/31/2016	0.354							
8/17/2016	0.397							
10/11/2016	0.485							
1/24/2017	0.472							
5/9/2017	0.512							
6/28/2017	0.48							
2/27/2018	0.269							
6/5/2018	0.27							
11/6/2018	0.306							
3/27/2019	0.251							
9/11/2019	0.323							
4/20/2020				0.278	0.259		0.0771	
4/21/2020	0.138							
5/28/2020		0.0701				0.0389		0.127
7/6/2020			0.129					
8/11/2020		0.064	0.116	0.246		0.0337		0.0909
8/12/2020	0.134				0.221		0.0796	
3/8/2021		0.0685	0.131					
3/9/2021						0.0404		0.0795
3/10/2021				0.393	0.19		0.103	
3/16/2021	0.143							
8/16/2021			0.129					
8/17/2021		0.0707				0.0317		0.0669
8/23/2021	0.139			0.377	0.2		0.084	
3/23/2022		0.0762	0.149			0.0352		0.0627
4/4/2022	0.131							
4/5/2022					0.18		0.088	
4/6/2022				0.382				
10/3/2022			0.165					
10/4/2022		0.0696				0.0351		0.0602
10/5/2022					0.182		0.0719	
10/17/2022	0.134			0.318				

Time Series

Constituent: Barium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								0.117
2/17/2016	0.0455						0.0772	
4/12/2016	0.0455							
4/13/2016							0.0886	0.113
5/31/2016	0.0407						0.0823	
6/1/2016								0.105
8/17/2016	0.0434						0.0789	0.105
10/11/2016	0.0514							
10/12/2016							0.0883	0.111
1/24/2017	0.0476							
1/25/2017							0.067	0.0963
5/10/2017	0.0543						0.0644	0.103
6/28/2017	0.0402						0.0582	0.0935
2/27/2018	0.0463						0.0669	0.0808
6/5/2018	0.051						0.0672	0.0789
11/7/2018	0.0527						0.0739	0.0855
3/26/2019	0.0682						0.0796	0.0911
9/10/2019	0.0789						0.0887	0.11
4/21/2020	0.0728						0.0762	0.116
8/19/2020	0.0784						0.0816	0.119
3/9/2021	0.0664						0.083	0.15
8/17/2021		0.0379	0.0383	0.0727	0.0597	0.0762		
8/24/2021	0.0737						0.0782	0.122
3/23/2022		0.0338	0.0411	0.0807	0.0498	0.094		
3/29/2022	0.0614						0.0639	0.104
10/4/2022		0.04	0.0413	0.0737	0.0548	0.0681		
10/18/2022	0.0619						0.084	0.107

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.0637	
4/13/2016	0.0552	
6/1/2016	0.0555	
8/17/2016	0.0745	
10/12/2016	0.0897	
1/25/2017	0.0864	
5/10/2017	0.105	
6/28/2017	0.0897	
2/27/2018	0.118	
6/5/2018	0.111	
11/7/2018	0.141	
3/26/2019	0.175	
9/10/2019	0.206	0.0787
4/20/2020		0.0801
4/21/2020	0.175	
8/17/2020		0.0718
8/18/2020	0.165	
3/9/2021	0.16	
3/10/2021		0.0759
8/17/2021		0.0781
8/24/2021	0.168	
3/29/2022	0.139	
4/5/2022		0.0665
10/5/2022		0.0698
10/18/2022	0.147	

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.00102		<0.00102	<0.00102	<0.00102		
2/17/2016	<0.00102		<0.00102				<0.00102	<0.00102
4/12/2016					<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
6/1/2016	<0.00102							<0.00102
8/15/2016	<0.00102							<0.00102
8/16/2016		<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.00102						<0.00102	
10/12/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
1/24/2017	<0.00102						<0.00102	<0.00102
1/25/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
5/9/2017	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	<0.00102						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
2/27/2018	<0.00102	<0.00102	<0.00102			<0.00102		
2/28/2018				<0.00102	<0.00102		<0.00102	<0.00102
6/4/2018	<0.00102							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	<0.00102	<0.00102		
11/5/2018			<0.00102	<0.00102	<0.00102			
11/6/2018	<0.00102						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				<0.00102	<0.00102		<0.00102	<0.00102
3/27/2019	<0.00102	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					<0.00102			
4/20/2020					<0.00102		<0.00102	<0.00102
4/21/2020	<0.00102			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.00102							
8/18/2020		<0.00102	<0.00102	<0.00102	<0.00102			
3/9/2021						<0.00102		<0.00102
3/10/2021			<0.00102	<0.00102			<0.00102	
3/15/2021		<0.00102			<0.00102			
3/16/2021	<0.00102							
8/17/2021	<0.00102							<0.00102
8/24/2021		<0.00102						
8/25/2021			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
3/29/2022				<0.00102			<0.00102	
3/30/2022			<0.00102					
4/4/2022	<0.00102	<0.00102				<0.00102		
4/6/2022					<0.00102			<0.00102
10/5/2022	<0.00102							
10/17/2022			<0.00102	<0.00102	<0.00102			
10/18/2022		<0.00102				<0.00102	<0.00102	<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
4/12/2016		<0.00102			<0.00102	<0.00102	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.00102	<0.00102		
8/17/2016							<0.00102	0.00161 (J)
9/20/2016								0.00155 (J)
10/11/2016			<0.00102		<0.00102	<0.00102	0.000715 (J)	
10/12/2016	<0.00102	<0.00102		<0.00102				0.00138 (J)
11/15/2016								0.00109 (J)
1/4/2017								0.00141 (J)
1/23/2017								0.00171 (J)
1/24/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	
1/25/2017				<0.00102				
5/9/2017			<0.00102	<0.00102	<0.00102		<0.00102	0.00226 (J)
5/10/2017	<0.00102	<0.00102				<0.00102		
6/27/2017	<0.00102	<0.00102			<0.00102			0.0017 (J)
6/28/2017			<0.00102	<0.00102		<0.00102	<0.00102	
2/27/2018			<0.00102		<0.00102	<0.00102		0.00147 (J)
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.00102	<0.00102		0.000821 (J)
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	0.000757 (J)
11/7/2018					<0.00102	<0.00102		
3/26/2019	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102		0.00092 (J)
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.00102	<0.00102	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			0.000756 (J)
4/22/2020						<0.00102	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.00102	<0.00102		
8/17/2020			<0.00102					
8/18/2020				<0.00102				0.000828 (J)
3/9/2021	<0.00102	<0.00102						
3/10/2021				<0.00102	<0.00102	<0.00102	<0.00102	
3/15/2021								0.000453 (J)
3/16/2021			<0.00102					
8/17/2021	<0.00102	<0.00102	<0.00102					
8/18/2021								0.00041 (J)
8/24/2021					<0.00102	<0.00102	<0.00102	
8/25/2021				<0.00102				
3/28/2022			<0.00102		<0.00102			
3/29/2022							<0.00102	
3/30/2022				<0.00102				
4/4/2022	<0.00102					<0.00102		<0.00102
4/6/2022		<0.00102						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.00102					
10/17/2022		<0.00102		<0.00102	<0.00102	<0.00102		
10/18/2022	<0.00102						<0.00102	
10/19/2022								<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.00102				
4/12/2016				<0.00102				
6/1/2016				<0.00102				
8/15/2016				<0.00102				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	<0.00102				<0.00102			
1/24/2017		<0.00102		<0.00102		<0.00102	<0.00102	
1/25/2017								<0.00102
1/26/2017			<0.00102					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.00102				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.00102				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/26/2019	<0.00102	<0.00102	<0.00102		<0.00102			
3/27/2019				<0.00102		<0.00102	<0.00102	<0.00102
9/9/2019				<0.00102				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.00102				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.00102				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
3/16/2021				<0.00102				
8/17/2021				<0.00102				
8/18/2021	<0.00102	<0.00102	<0.00102		<0.00102			
8/23/2021						<0.00102	<0.00102	<0.00102
3/28/2022	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/5/2022				<0.00102				
10/5/2022				<0.00102		<0.00102	<0.00102	<0.00102
10/19/2022	<0.00102	<0.00102	<0.00102		<0.00102			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.00102			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		<0.00102						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		<0.00102	<0.00102		<0.00102	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		<0.00102						
4/22/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		<0.00102						<0.00102
8/19/2020				<0.00102	<0.00102			
3/9/2021			<0.00102			<0.00102		
3/10/2021					<0.00102		<0.00102	
3/15/2021	<0.00102							<0.00102
3/16/2021		<0.00102		<0.00102				
8/23/2021	<0.00102							
8/24/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/25/2021							<0.00102	<0.00102
3/28/2022	<0.00102							
3/29/2022				<0.00102				
3/30/2022			<0.00102		<0.00102		<0.00102	
4/6/2022		<0.00102				<0.00102		<0.00102
10/5/2022							<0.00102	
10/17/2022		<0.00102	<0.00102	<0.00102				
10/18/2022					<0.00102	<0.00102		<0.00102
10/19/2022	<0.00102							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	<0.00102	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	<0.00102	<0.00102						
3/10/2021			<0.00102	<0.00102			<0.00102	<0.00102
8/17/2021					<0.00102	<0.00102		
8/18/2021	<0.00102	<0.00102		<0.00102			<0.00102	<0.00102
8/23/2021			<0.00102					
3/23/2022					<0.00102	<0.00102		
3/29/2022				<0.00102				
3/30/2022							<0.00102	<0.00102
4/4/2022			<0.00102					
4/6/2022	<0.00102	<0.00102						
10/4/2022					<0.00102	<0.00102		
10/5/2022			<0.00102					
10/18/2022				<0.00102			<0.00102	
10/19/2022	<0.00102	<0.00102						<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	<0.00102							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		0.000799 (J)
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		<0.00102	<0.00102					
3/9/2021						<0.00102		<0.00102
3/10/2021				<0.00102	<0.00102		<0.00102	
3/16/2021	<0.00102							
8/16/2021			<0.00102					
8/17/2021		<0.00102				<0.00102		<0.00102
8/23/2021	<0.00102			<0.00102	<0.00102		<0.00102	
3/23/2022		<0.00102	<0.00102			<0.00102		<0.00102
4/4/2022	<0.00102							
4/5/2022					<0.00102		<0.00102	
4/6/2022				<0.00102				
10/3/2022			<0.00102					
10/4/2022		<0.00102				<0.00102		<0.00102
10/5/2022					<0.00102		<0.00102	
10/17/2022	<0.00102			<0.00102				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	<0.00102							
1/25/2017							<0.00102	<0.00102
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	<0.00102						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	<0.00102						<0.00102	<0.00102
8/17/2021		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
8/24/2021	<0.00102						<0.00102	<0.00102
3/23/2022		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
3/29/2022	<0.00102						<0.00102	<0.00102
10/4/2022		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
10/18/2022	<0.00102						<0.00102	<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	<0.00102	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.00102
4/20/2020		<0.00102
4/21/2020	<0.00102	
8/17/2020		<0.00102
8/18/2020	<0.00102	
3/9/2021	<0.00102	
3/10/2021		<0.00102
8/17/2021		<0.00102
8/24/2021	<0.00102	
3/29/2022	<0.00102	
4/5/2022		<0.00102
10/5/2022		<0.00102
10/18/2022	<0.00102	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		1.44		0.273	0.26	0.739		
2/17/2016	0.219		0.581				0.454	1.47
4/12/2016					0.26	0.733	0.444	
4/13/2016	0.211	0.373	0.61	0.276				1.48
5/31/2016		1.26	0.615	0.291	0.318	0.603	0.424	
6/1/2016	0.2							1.22
8/15/2016	0.211							1.31
8/16/2016		1.34	0.554	0.268	0.322		0.438	
8/17/2016						0.509		
10/11/2016	0.23						0.456	
10/12/2016		1.34	0.537	0.252	0.244	0.569		1.37
1/24/2017	0.218						0.458	1.38
1/25/2017		1.38	0.562	0.167	0.188	0.671		
5/9/2017	0.235		0.528	0.32	0.281	0.622		
5/10/2017		1.23					0.486	1.41
6/27/2017	0.206						0.454	1.43
6/28/2017		1.05	0.313	0.231	0.153	0.695		
8/29/2017		1.17	0.241	0.191	0.112	1		
8/30/2017	0.138						0.441	1.36
6/4/2018	0.242							
6/5/2018		1.31	0.311				0.543	1.36
6/6/2018				0.26	0.244	1.01		
11/5/2018			0.262	0.127	0.104			
11/6/2018	0.247						0.614	1.47
11/7/2018		1.26				0.908		
3/26/2019				0.111	0.213		0.697	1.38
3/27/2019	0.488	1.11	0.298			1.33		
9/10/2019	0.398	1.27	0.141	0.153		1.49	0.73	1.69
9/11/2019					0.535			
4/20/2020					0.642		0.791	1.83
4/21/2020	0.347			0.872		1.55		
4/22/2020		1.23	0.447					
8/11/2020						1.44		1.93
8/12/2020							0.813	
8/17/2020	0.496							
8/18/2020		1.37	0.358	0.748	0.501			
3/9/2021						1.81		1.94
3/10/2021			0.502	0.389			0.825	
3/15/2021		1.79			0.523			
3/16/2021	0.313							
8/17/2021	0.281							1.98
8/24/2021		1.93						
8/25/2021			0.601	0.393	0.438	1.33	0.83	
3/29/2022				0.416			0.848	
3/30/2022			0.472					
4/4/2022	0.269	1.92				1.89		
4/6/2022					0.26			2.17
10/5/2022	0.202							
10/17/2022			0.63	0.272	0.499			
10/18/2022		2.13				1.91	0.874	2.14

Time Series

Constituent: Boron (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.286				
2/17/2016	1.66	1.94	0.146		0.0271 (J)	<0.1015	0.0922 (J)	
4/12/2016		2.03			<0.1015	<0.1015	0.0935 (J)	
4/13/2016	1.64		0.125	0.26				
6/1/2016	1.66	1.74	0.114	0.283	<0.1015	<0.1015	0.0826 (J)	
8/15/2016	1.83	1.66	0.128					
8/16/2016				0.292	<0.1015	<0.1015		
8/17/2016							0.092 (J)	<0.1015
9/20/2016								<0.1015
10/11/2016			0.129		0.024 (J)	<0.1015	0.0976 (J)	
10/12/2016	2.12	1.77		0.254				<0.1015
11/15/2016								<0.1015
1/4/2017								<0.1015
1/23/2017								0.0217 (J)
1/24/2017	1.94	1.49	0.124		0.0333 (J)	<0.1015	0.0877 (J)	
1/25/2017				0.133				
5/9/2017			0.121	0.304	<0.1015		0.0953 (J)	<0.1015
5/10/2017	1.99	1.65				<0.1015		
6/27/2017	2.18	1.66			<0.1015			<0.1015
6/28/2017			0.111	0.243		<0.1015	0.0835 (J)	
8/29/2017				0.249	<0.1015	<0.1015	0.0914 (J)	<0.1015
8/30/2017	1.71	1.53	0.0915 (J)					
6/4/2018			0.134					
6/5/2018	1.76	1.36			<0.1015	<0.1015		<0.1015
6/6/2018				0.245			0.102	
11/5/2018				0.151				
11/6/2018	1.74	1.48	0.131				0.0995 (J)	<0.1015
11/7/2018					<0.1015	<0.1015		
3/26/2019	1.74	1.63		0.0834 (J)	<0.1015	<0.1015		<0.1015
3/27/2019			0.138				0.113	
9/9/2019	2.33	1.73	0.157					
9/10/2019				0.16	<0.1015	<0.1015	0.105	
9/11/2019								<0.1015
4/21/2020	1.97	1.51	0.14	0.586	<0.1015			<0.1015
4/22/2020						<0.1015	0.104	
8/11/2020	2.03						0.11	
8/12/2020		1.53			<0.1015	<0.1015		
8/17/2020			0.152					
8/18/2020				0.211				<0.1015
3/9/2021	2.45	1.52						
3/10/2021				0.528	<0.1015	<0.1015	0.146	
3/15/2021								<0.1015
3/16/2021			0.134					
8/17/2021	2.18	1.45	0.131					
8/18/2021								<0.1015
8/24/2021					<0.1015	<0.1015	0.115	
8/25/2021				0.288				
3/28/2022			0.125		<0.1015			
3/29/2022							0.122	
3/30/2022				0.696				
4/4/2022	2.32					<0.1015		<0.1015
4/6/2022		1.6						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.132					
10/17/2022		1.46		0.59	<0.1015	<0.1015		
10/18/2022	2.28						0.124	
10/19/2022								<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.0288 (J)				
4/12/2016				0.0293 (J)				
6/1/2016				0.0279 (J)				
8/15/2016				0.0332 (J)				
8/16/2016			<0.1015		<0.1015	<0.1015	<0.1015	0.0268 (J)
8/17/2016	<0.1015	<0.1015						
9/19/2016						<0.1015	<0.1015	0.0225 (J)
9/20/2016	<0.1015	<0.1015	<0.1015		<0.1015			
10/11/2016			<0.1015	0.0328 (J)	<0.1015	<0.1015	<0.1015	0.0304 (J)
10/12/2016	0.02 (J)	<0.1015						
11/14/2016						<0.1015	<0.1015	0.0355 (J)
11/15/2016	<0.1015	<0.1015	0.0229 (J)		<0.1015			
1/3/2017						<0.1015	<0.1015	0.0304 (J)
1/4/2017	<0.1015	<0.1015	<0.1015		<0.1015			
1/23/2017	0.0287 (J)				<0.1015			
1/24/2017		0.0331 (J)		0.0262 (J)		0.0282 (J)	<0.1015	
1/25/2017								<0.1015
1/26/2017			<0.1015					
5/9/2017	<0.1015	<0.1015	<0.1015	0.0298 (J)	<0.1015			
5/10/2017						<0.1015	<0.1015	<0.1015
6/27/2017	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
6/28/2017				0.0226 (J)				
8/29/2017	<0.1015							
8/30/2017		<0.1015	<0.1015	<0.1	<0.1015	<0.1015	<0.1015	<0.1015
6/4/2018				0.0296 (J)				
6/5/2018	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
11/5/2018							<0.1015	
11/6/2018	<0.1015	<0.1015	<0.1015	0.0268 (J)	<0.1015	<0.1015		<0.1015
3/26/2019	<0.1015	<0.1015	<0.1015		<0.1015			
3/27/2019				0.0316 (J)		<0.1015	<0.1015	<0.1015
9/9/2019				0.035 (J)				
9/11/2019	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
4/20/2020				<0.1				
4/21/2020	<0.1015	<0.1015	<0.1015		<0.1015			
4/22/2020						<0.1015	<0.1015	<0.1015
8/11/2020						<0.1015		
8/12/2020							<0.1015	<0.1015
8/17/2020				0.0636 (J)				
8/18/2020	<0.1015	<0.1015	<0.1015		<0.1015			
3/15/2021	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
3/16/2021				0.0445 (J)				
8/17/2021				0.0518 (J)				
8/18/2021	<0.1015	<0.1015	<0.1015		<0.1015			
8/23/2021						<0.1015	<0.1015	<0.1015
3/28/2022	<0.1015	<0.1015	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
4/5/2022				0.0453 (J)				
10/5/2022				0.0404 (J)		<0.1015	<0.1015	<0.1015
10/19/2022	<0.1015	<0.1015	<0.1015		<0.1015			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.148			
1/15/2019				0.224		1.68	0.702	0.762
1/16/2019		0.0284 (J)						
1/17/2019	<0.1015							
1/30/2019			0.164					
9/10/2019	<0.1015						0.734	
9/11/2019		<0.1015	0.147		0.175	1.67		0.758
4/20/2020							0.821	
4/21/2020		<0.1015						
4/22/2020	<0.1015		0.143	0.186	0.118	1.89		
4/29/2020								0.699
8/11/2020			0.145			1.84		
8/12/2020	<0.1015						0.807	
8/18/2020		<0.1015						0.689
8/19/2020				0.229	0.135			
3/9/2021			0.159			1.81		
3/10/2021					0.104		0.807	
3/15/2021	<0.1015							0.659
3/16/2021		<0.1015		0.159				
8/23/2021	<0.1015							
8/24/2021		<0.1015	0.139	0.179	0.105	2		
8/25/2021							0.627	0.632
3/28/2022	<0.1015							
3/29/2022				0.157				
3/30/2022			0.145		0.102		0.506	
4/6/2022		<0.1015				2.21		0.607
10/5/2022							0.541	
10/17/2022		<0.1015	0.143	0.159				
10/18/2022					0.097 (J)	2.07		0.585
10/19/2022	<0.1015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	1.73							
1/16/2019		0.835	0.173					
9/11/2019	1.88	1.07	0.199					
4/20/2020			0.2	0.426				
4/21/2020	1.76	1.08					0.172	0.272
5/28/2020						0.143		
7/6/2020					0.274			
8/11/2020					0.252	0.0903 (J)		
8/12/2020			0.197					
8/17/2020				0.57			0.218	
8/19/2020	1.26	1.15						0.213
3/8/2021					0.658	0.0769 (J)		
3/9/2021	1.26	1.14						
3/10/2021			0.218	0.625			0.188	0.224
8/17/2021					0.392	0.105		
8/18/2021	1.03	1.23		0.646			0.131	0.157
8/23/2021			0.208					
3/23/2022					0.355	0.159		
3/29/2022				0.567				
3/30/2022							0.0985 (J)	0.33
4/4/2022			0.202					
4/6/2022	1.46	1.29						
10/4/2022					0.302	0.115		
10/5/2022			0.194					
10/18/2022				0.489			0.0976 (J)	
10/19/2022	1.95	1.22						0.437

Time Series

Constituent: Boron (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.478							
4/12/2016	0.467							
5/31/2016	0.443							
8/17/2016	0.477							
10/11/2016	0.489							
1/24/2017	0.475							
5/9/2017	0.479							
6/28/2017	0.448							
8/30/2017	0.407							
6/5/2018	0.489							
11/6/2018	0.508							
3/27/2019	0.502							
9/11/2019	0.595							
4/20/2020				0.309	0.626		0.252	
4/21/2020	0.72							
5/28/2020		0.343				0.0435 (J)		0.208
7/6/2020			1.2					
8/11/2020		0.329	1.25	0.493		0.0406 (J)		0.209
8/12/2020	0.695				0.76		0.338	
3/8/2021		0.302	1.25					
3/9/2021						0.0397 (J)		0.192
3/10/2021				0.338	0.53		0.126	
3/16/2021	0.694							
8/16/2021			1.35					
8/17/2021		0.281				<0.1015		0.192
8/23/2021	0.628			0.517	0.458		0.211	
3/23/2022		0.508	1.33			0.0337 (J)		0.197
4/4/2022	0.615							
4/5/2022					0.462		0.104	
4/6/2022				0.329				
10/3/2022			1.39					
10/4/2022		0.328				0.0305 (J)		0.206
10/5/2022					0.398		0.151	
10/17/2022	0.599			0.555				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								1.54
2/17/2016	2.12						0.503	
4/12/2016	2.06							
4/13/2016							0.478	1.56
5/31/2016	1.97						0.452	
6/1/2016								1.49
8/17/2016	2.01						0.492	1.57
10/11/2016	1.91							
10/12/2016							0.487	1.65
1/24/2017	1.62							
1/25/2017							0.529	1.89
5/10/2017	1.62						0.533	1.94
6/28/2017	1.71						0.501	1.72
8/29/2017	1.7						0.51	1.63
6/5/2018	1.56						0.605	1.73
11/7/2018	1.6						0.677	1.8
3/26/2019	1.63						0.727	1.81
9/10/2019	1.83						0.764	1.82
4/21/2020	1.77						0.793	1.89
8/19/2020	1.86						0.561	1.94
3/9/2021	1.49						0.397	1.57
8/17/2021		<0.1015	<0.1015	<0.1015	<0.1015	0.571		
8/24/2021	1.36						0.216	1.23
3/23/2022		<0.1015	<0.1015	0.0339 (J)	0.0339 (J)	0.567		
3/29/2022	1.39						0.0842 (J)	1.08
10/4/2022		<0.1015	<0.1015	<0.1015	0.036 (J)	0.419		
10/18/2022	1.16						0.0589 (J)	0.815

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.412	
4/13/2016	0.376	
6/1/2016	0.338	
8/17/2016	0.412	
10/12/2016	0.46	
1/25/2017	0.586	
5/10/2017	0.661	
6/28/2017	0.673	
8/29/2017	0.723	
6/5/2018	0.954	
11/7/2018	1.11	
3/26/2019	1.14	
9/10/2019	1.23	0.293
4/20/2020		0.308
4/21/2020	1.27	
8/17/2020		0.344
8/18/2020	1.24	
3/9/2021	1.12	
3/10/2021		0.338
8/17/2021		0.296
8/24/2021	1.14	
3/29/2022	0.71	
4/5/2022		0.351
10/5/2022		0.272
10/18/2022	1.15	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0002		<0.0002	<0.0002	<0.0002		
2/17/2016	<0.0002		<0.0002				<0.001	<0.0002
4/12/2016					<0.0002	<0.0002	<0.001	
4/13/2016	<0.0002	<0.0002	<0.0002	<0.0002				<0.0002
5/31/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	
6/1/2016	<0.0002							<0.0002
8/15/2016	<0.0002							<0.0002
8/16/2016		<0.0002	<0.0002	<0.0002	<0.0002		<0.001	
8/17/2016						<0.0002		
10/11/2016	<0.0002						<0.001	
10/12/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
1/24/2017	<0.0002						<0.001	<0.0002
1/25/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
5/9/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
5/10/2017		<0.0002					<0.001	<0.0002
6/27/2017	<0.0002						<0.001	<0.0002
6/28/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/27/2018	<0.0002	<0.0002	<0.0002			<0.0002		
2/28/2018				<0.0002	<0.0002		<0.001	<0.0002
6/4/2018	<0.0002							
6/5/2018		<0.0002	<0.0002				<0.001	<0.0002
6/6/2018				<0.0002	<0.0002	<0.0002		
11/5/2018			<0.0002	<0.0002	<0.0002			
11/6/2018	<0.0002						<0.001	<0.0002
11/7/2018		<0.0002				<0.0002		
3/26/2019				<0.0002	<0.0002		<0.001	<0.0002
3/27/2019	<0.0002	<0.0002	<0.0002			<0.0002		
9/10/2019	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.001	<0.0002
9/11/2019					<0.0002			
4/20/2020					<0.0002		<0.001	<0.0002
4/21/2020	<0.0002			<0.0002		<0.0002		
4/22/2020		<0.0002	<0.0002					
8/11/2020						<0.0002		<0.0002
8/12/2020							<0.001	
8/17/2020	<0.0002							
8/18/2020		<0.0002	<0.0002	<0.0002	<0.0002			
3/9/2021						<0.0002		<0.0002
3/10/2021			0.000347	<0.0002			0.00012 (J)	
3/15/2021		<0.0002			<0.0002			
3/16/2021	<0.0002							
8/17/2021	<0.0002							<0.0002
8/24/2021		<0.0002						
8/25/2021			<0.0002	<0.0002	<0.0002	<0.0002	0.00014 (J)	
3/29/2022				<0.0002			0.00046	
3/30/2022			<0.0002					
4/4/2022	<0.0002	<0.0002				<0.0002		
4/6/2022					8E-05 (J)			<0.0002
10/5/2022	9.2E-05 (J)							
10/17/2022			<0.0002	<0.0002	0.000145 (J)			
10/18/2022		<0.0002				<0.0002	0.000135 (J)	6.9E-05 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.000203	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.000203	
4/13/2016	<0.0002		<0.0002	<0.0002				
6/1/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000203	
8/15/2016	<0.0002	<0.0002	<0.0002					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.000203	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.0002		<0.0002	<0.0002	<0.000203	
10/12/2016	<0.0002	<0.0002		<0.0002				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.000203	
1/25/2017				<0.0002				
5/9/2017			<0.0002	<0.0002	<0.0002		<0.000203	0.000706 (J)
5/10/2017	<0.0002	<0.0002				<0.0002		
6/27/2017	<0.0002	<0.0002			<0.0002			0.000429 (J)
6/28/2017			<0.0002	<0.0002		<0.0002	<0.000203	
2/27/2018			<0.0002		<0.0002	<0.0002		<0.0002
2/28/2018	<0.0002	<0.0002		<0.0002			<0.000203	
6/4/2018			<0.0002					
6/5/2018	<0.0002	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.000203	
11/5/2018				<0.0002				
11/6/2018	<0.0002	<0.0002	<0.0002				<0.000203	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			<0.0002				<0.000203	
9/9/2019	<0.0002	<0.0002	<0.0002					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.000203	
9/11/2019								<0.0002
4/21/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.000203	
8/11/2020	<0.0002						<0.000203	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.0002					
8/18/2020				<0.0002				<0.0002
3/9/2021	<0.0002	<0.0002						
3/10/2021				7.02E-05 (J)	<0.0002	<0.0002	<0.000203	
3/15/2021								<0.0002
3/16/2021			0.00013 (J)					
8/17/2021	<0.0002	<0.0002	<0.0002					
8/18/2021								<0.0002
8/24/2021					<0.0002	<0.0002	9E-05 (J)	
8/25/2021				<0.0002				
3/28/2022			0.00012 (J)		<0.0002			
3/29/2022							7E-05 (J)	
3/30/2022				7E-05 (J)				
4/4/2022	<0.0002					<0.0002		<0.0002
4/6/2022		<0.0002						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.0002					
10/17/2022		<0.0002		0.000102 (J)	<0.0002	<0.0002		
10/18/2022	<0.0002						8.3E-05 (J)	
10/19/2022								<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0002				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.001		<0.0002	<0.0002	<0.0002	<0.0002
8/17/2016	0.000211 (J)	0.000742 (J)						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.001	0.000857 (J)	<0.001		<0.0002			
10/11/2016			<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.001	0.000912 (J)						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	0.000216 (J)	0.000821 (J)	<0.001		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.001	0.000718 (J)	<0.001		<0.0002			
1/23/2017	0.000231 (J)				<0.0002			
1/24/2017		0.000716 (J)		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			0.000228 (J)					
5/9/2017	<0.001	0.000746 (J)	0.000277 (J)	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.001	0.00065 (J)	<0.001		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.001	0.000752 (J)	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.001	0.000731 (J)	<0.001		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.001	0.000646 (J)	<0.001	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.001	0.000582 (J)	<0.001		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.001	0.000573 (J)	<0.001		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.001	0.00052 (J)	<0.001		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.001	0.000476 (J)	<0.001		<0.0002			
3/15/2021	0.0001 (J)	0.000536	0.000204		8.19E-05 (J)	<0.0002	<0.0002	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	0.00018 (J)	0.00042	0.00019 (J)		8E-05 (J)			
8/23/2021						<0.0002	<0.0002	<0.0002
3/28/2022	0.00018 (J)	0.00043	0.00016 (J)		<0.0002	<0.0002	<0.0002	<0.0002
4/5/2022				<0.0002				
10/5/2022				<0.0002		<0.0002	<0.0002	<0.0002
10/19/2022	0.000193 (J)	0.0004	0.00011 (J)		0.000108 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		<0.0002	<0.001	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.0002					
9/10/2019	<0.0002						<0.001	
9/11/2019		<0.0002	<0.0002		<0.0002	<0.0002		<0.0002
4/20/2020							<0.001	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
4/29/2020								<0.0002
8/11/2020			<0.0002			<0.0002		
8/12/2020	<0.0002						<0.001	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			<0.0002			<0.0002		
3/10/2021					<0.0002		0.000171 (J)	
3/15/2021	<0.0002							<0.0002
3/16/2021		<0.0002		<0.0002				
8/23/2021	<0.0002							
8/24/2021		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
8/25/2021							8E-05 (J)	<0.0002
3/28/2022	<0.0002							
3/29/2022				<0.0002				
3/30/2022			<0.0002		<0.0002		0.00018 (J)	
4/6/2022		<0.0002				<0.0002		<0.0002
10/5/2022							9.6E-05 (J)	
10/17/2022		<0.0002	<0.0002	<0.0002				
10/18/2022					<0.0002	<0.0002		<0.0002
10/19/2022	<0.0002							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.001							
1/16/2019		<0.0002	<0.001					
9/11/2019	<0.001	<0.0002	<0.001					
4/20/2020			<0.001	<0.0002				
4/21/2020	<0.001	<0.0002					<0.0002	<0.001
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			<0.001					
8/17/2020				<0.0002			<0.0002	
8/19/2020	<0.001	<0.0002						0.000334 (J)
3/8/2021					<0.0002	<0.0002		
3/9/2021	0.000682	<0.0002						
3/10/2021			0.000411	<0.0002			<0.0002	0.00017 (J)
8/17/2021					0.0001 (J)	<0.0002		
8/18/2021	9E-05 (J)	<0.0002		<0.0002			7E-05 (J)	0.00021
8/23/2021			0.00032					
3/23/2022					<0.0002	<0.0002		
3/29/2022				<0.0002				
3/30/2022							<0.0002	0.00029
4/4/2022			0.0003					
4/6/2022	0.00024	<0.0002						
10/4/2022					9.6E-05 (J)	<0.0002		
10/5/2022			0.000302					
10/18/2022				<0.0002			8.8E-05 (J)	
10/19/2022	0.000187 (J)	<0.0002						0.000463

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.0002							
4/12/2016	<0.0002							
5/31/2016	<0.0002							
8/17/2016	<0.0002							
10/11/2016	<0.0002							
1/24/2017	<0.0002							
5/9/2017	<0.0002							
6/28/2017	<0.0002							
2/27/2018	<0.0002							
6/5/2018	<0.0002							
11/6/2018	<0.0002							
3/27/2019	<0.0002							
9/11/2019	<0.0002							
4/20/2020				<0.0002	<0.0002		<0.0002	
4/21/2020	<0.0002							
5/28/2020		<0.001				<0.0002		<0.0002
7/6/2020			0.000366 (J)					
8/11/2020		<0.001	0.00042 (J)	<0.0002		<0.0002		<0.0002
8/12/2020	<0.0002				<0.0002		<0.0002	
3/8/2021		0.000287	0.000227					
3/9/2021						<0.0002		7.08E-05 (J)
3/10/2021				<0.0002	<0.0002		<0.0002	
3/16/2021	<0.0002							
8/16/2021			0.00022					
8/17/2021		0.00024				<0.0002		<0.0002
8/23/2021	<0.0002			<0.0002	<0.0002		<0.0002	
3/23/2022		0.00037	0.00014 (J)			<0.0002		0.00012 (J)
4/4/2022	<0.0002							
4/5/2022					<0.0002		<0.0002	
4/6/2022				<0.0002				
10/3/2022			9.8E-05 (J)					
10/4/2022		0.000218				<0.0002		<0.0002
10/5/2022					<0.0002		<0.0002	
10/17/2022	<0.0002			<0.0002				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	0.00278						<0.0002	0.000241
8/17/2021		<0.0002	<0.0002	<0.0002	0.00012 (J)	<0.0002		
8/24/2021	0.00018 (J)						<0.0002	<0.0002
3/23/2022		<0.0002	<0.0002	7E-05 (J)	0.0001 (J)	0.00013 (J)		
3/29/2022	0.0005						<0.0002	<0.0002
10/4/2022		<0.0002	<0.0002	<0.0002	8.4E-05 (J)	0.000167 (J)		
10/18/2022	<0.0002						<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.0002
4/20/2020		<0.0002
4/21/2020	<0.0002	
8/17/2020		<0.0002
8/18/2020	<0.0002	
3/9/2021	<0.0002	
3/10/2021		<0.0002
8/17/2021		<0.0002
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		8E-05 (J)
10/5/2022		0.000168 (J)
10/18/2022	<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		76.3		34.6	29.8	44.4		
2/17/2016	204		18.6				47.7	57
4/12/2016					23.3	43.2	44.4	
4/13/2016	152	30.5	17.8	32.2				62.5
5/31/2016		65.9	17.7	28.8	25.9	43	45.3	
6/1/2016	183							54.4
8/15/2016	197							56.2
8/16/2016		65.6	18.4	24	25.5		49.4	
8/17/2016						35.9		
10/11/2016	186						52.7	
10/12/2016		63.4	17.3	27.8	29.5	31.1		56.6
1/24/2017	193						49.4	59.1
1/25/2017		64.2	16.6	33.7	33.6	42.7		
5/9/2017	184		18	35.5	30.4	48.1		
5/10/2017		62.6					47.4	62.5
6/27/2017	184						44.9	63.6
6/28/2017		60.8	22.6	28	26	55		
8/29/2017		61.4	23.9	26.4	22.3	83.6		
8/30/2017	182						44.4	65.7
6/4/2018	157							
6/5/2018		65.5	25.7				45.1	66.8
6/6/2018				30.1	23.7	167		
9/10/2018	219		27.2					
9/11/2018		66.1		27.4	26.8		48.5	
9/12/2018						109		76.3
11/5/2018			24.1	28.8	29.4			
11/6/2018	186						49.2	77.4
11/7/2018		68.5				105		
3/26/2019				33.7	34.1		54	90
3/27/2019	73.8	71.8	31			162		
9/10/2019	147	69.3	27.7	30.5		125	57.2	86.3
9/11/2019					53.9			
4/20/2020					40.3		61	90.8
4/21/2020	90.5			51		113		
4/22/2020		62.9	36.7					
8/11/2020						118		101
8/12/2020							72.2	
8/17/2020	81.5							
8/18/2020		74.4	37.6	42.9	95.3			
3/9/2021						115		101
3/10/2021			39.9	55.1			67.4	
3/15/2021		73.8			68.9			
3/16/2021	109							
8/17/2021	103							103
8/24/2021		83.4						
8/25/2021			57.6	45.2	74.2	134	74.8	
3/29/2022				52			75.7	
3/30/2022			39.6					
4/4/2022	106	93.7				117		
4/6/2022					55.5			101
10/5/2022	113							
10/17/2022			60.599998	49.799999	158			

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
10/18/2022		105				125	89.400002	128

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				40.4				
2/17/2016	30.7	89.6	75		38.7	6.54	10.2	
4/12/2016		96.2			42.7	6.15	10	
4/13/2016	39.5		70.2	32.2				
6/1/2016	47.7	90.2	71.2	29.3	41.8	5.7	9.87	
8/15/2016	45.6	84.4	72.2					
8/16/2016				25.4	40.9	6.77		
8/17/2016							8.88	5.88
9/20/2016								5.95
10/11/2016			73.8		38.1	8.84	9.22	
10/12/2016	57.6	82.9		30.7				6.1
11/15/2016								6.28
1/4/2017								4.97
1/23/2017								5.17
1/24/2017	69.4	76.4	72.2		27.7	12.8	8.72	
1/25/2017				36.8				
5/9/2017			66.4	36.1	29.3		8.56	15.7
5/10/2017	66.2	77.4				12.4		
6/27/2017	63.8	75.4			28.6			14.2
6/28/2017			65.4	26.9		17.9	7.16	
8/29/2017				29.4	32.3	19	8.32	11.1
8/30/2017	75.1	78	67.8					
6/4/2018			68.3					
6/5/2018	77.4	66.3			34.5	30		3.93
6/6/2018				30.2			9.05	
9/10/2018			73.9	28.8				
9/11/2018					32	28.7		3.76
9/12/2018	58.9	67.8					8.98	
11/5/2018				29.7				
11/6/2018	81.6	72.7	75.1				9.21	4.81
11/7/2018					30.3	30.7		
3/26/2019	84.7	91.5		32.4	31.3	32.3		3.18
3/27/2019			96.1				9.77	
9/9/2019	66.4	83.2	111					
9/10/2019				28.4	30.7	32.8	9.28	
9/11/2019								3.98
4/21/2020	74.4	81.8	133	43.1	30.8			3.83
4/22/2020						31.4	11.3	
8/11/2020	73						10.7	
8/12/2020		85.9			28	35.8		
8/17/2020			156					
8/18/2020				25.5				4.58
3/9/2021	118	82						
3/10/2021				44.9	26.6	42.8	29.3	
3/15/2021								4.67
3/16/2021			145					
8/17/2021	78.3	77.4	143					
8/18/2021								4.84
8/24/2021					26.3	36.5	25.9	
8/25/2021				31				
3/28/2022			157		26			
3/29/2022							31.9	

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/30/2022				51				
4/4/2022	104					37		6.7
4/6/2022		96.1						
10/5/2022			179					
10/17/2022		99.900002		57	23.1	31.6		
10/18/2022	150						38.200001	
10/19/2022								7.91

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				106				
4/12/2016				95.2				
6/1/2016				86.1				
8/15/2016				89.7				
8/16/2016			2.02		1.24	39.5	9.33	5.54
8/17/2016	1.1	7.74						
9/19/2016						34.5	9.26	3.01
9/20/2016	0.771	2.43	1.22		1.11			
10/11/2016			1.48	90.6	1.22	32.4	9.31	2.74
10/12/2016	0.711	2.46						
11/14/2016						26.5	9.17	2.47
11/15/2016	0.641	2.28	1.36		1.34			
1/3/2017						22.6	9.66	2.94
1/4/2017	0.797	2.7	1.11		2.39			
1/23/2017	0.655				1.83			
1/24/2017		4.19		94.2		19.5	9.67	
1/25/2017								2.91
1/26/2017			1.03					
5/9/2017	0.538	3.28	0.289 (J)	90.3	0.823			
5/10/2017						15.7	9.81	2.27
6/27/2017	0.413 (J)	3.76	0.292 (J)		0.956	13.8	9.88	2.2
6/28/2017				80.7				
8/29/2017	0.504							
8/30/2017		2.31	0.336 (J)	84	1.04	11.1	10.3	2.26
6/4/2018				98.8				
6/5/2018	0.339 (J)	2.76	0.2 (J)		1.18	9.12	11.4	2.97
9/11/2018	0.776	2.04	0.171 (J)		1.5	7.5	10.5	2.6
9/12/2018				109				
11/5/2018							10.5	
11/6/2018	0.746	2	0.193 (J)	110	1.64	7.39		2.42
3/26/2019	0.526	2.13	0.223 (J)		1.33			
3/27/2019				111		7.65	11.6	2.75
9/9/2019				98.5				
9/11/2019	0.638	1.98	0.158 (J)		0.925	6.96	9.95	2.17
4/20/2020				91.2				
4/21/2020	1.15	2.41	0.287 (J)		0.864			
4/22/2020						5.92	9.87	3.15
8/11/2020						7.46		
8/12/2020							9.48	1.78
8/17/2020				78.9				
8/18/2020	0.884	2.23	0.231 (J)		0.926			
3/15/2021	0.745	1.73	0.239 (J)		0.646	5.9	2.02	9.77
3/16/2021				66.6				
8/17/2021				55.4				
8/18/2021	1.11	1.94	0.283 (J)		0.716			
8/23/2021						7.11	2.16	9.48
3/28/2022	1.37	1.94	0.172 (J)		0.542	5.95	9.61	2.21
4/5/2022				67.4				
10/5/2022				54.5		6.69	9.18	2.01
10/19/2022	1.02	1.83	0.158 (J)		0.602			

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					123			
1/15/2019				231		97.6	60.7	115
1/16/2019		19.6						
1/17/2019	25.3							
1/30/2019			2.85					
9/10/2019	12.8						97.5	
9/11/2019		22.2	1.16		84	91.6		72.1
4/20/2020							88.2	
4/21/2020		47.3						
4/22/2020	12		0.941	175	83.9	102		
4/29/2020								70.8
8/11/2020			1.06			111		
8/12/2020	9.68						115	
8/18/2020		22.9						66.7
8/19/2020				143	96			
3/9/2021			0.99			108		
3/10/2021					96.2		109	
3/15/2021	12.6							70.4
3/16/2021		24.9		148				
8/23/2021	11.1							
8/24/2021		21	1.07	143	109	115		
8/25/2021							108	78.3
3/28/2022	10.8							
3/29/2022				118				
3/30/2022			1.01		93.5		96	
4/6/2022		22.5				119		110
10/5/2022							106	
10/17/2022		23.700001	0.791	148				
10/18/2022					117	131		130
10/19/2022	12.1							

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	70							
1/16/2019		54.9	174					
9/11/2019	57.2	60.7	179					
4/20/2020			167	64.9				
4/21/2020	56.5	81.4					28.9	36.8
5/28/2020						38.6		
7/6/2020					51.1			
8/11/2020					57.8	15.9		
8/12/2020			173					
8/17/2020				57.2			27.6	
8/19/2020	59.3	99.7						27.4
3/8/2021					47.1	12.9		
3/9/2021	69.5	102						
3/10/2021			159	39.3			22.1	27.3
8/17/2021					55	16.4		
8/18/2021	74.4	106		122			17.9	19.5
8/23/2021			138					
3/23/2022					53.1	21.1		
3/29/2022				110				
3/30/2022							13.4	27.8
4/4/2022			137					
4/6/2022	69.6	110						
10/4/2022					61.5	13		
10/5/2022			137					
10/18/2022				83.400002			13.2	
10/19/2022	91.400002	119						32.400002

Time Series

Constituent: Calcium (mg/L)   Analysis Run 12/9/2022 10:25 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	59.8							
4/12/2016	56.1							
5/31/2016	56.6							
8/17/2016	61							
10/11/2016	61.3							
1/24/2017	61							
5/9/2017	61.7							
6/28/2017	66.1							
8/30/2017	78.9							
6/5/2018	64.8							
9/11/2018	72.2							
11/6/2018	78.9							
3/27/2019	69.1							
9/11/2019	90.8							
4/20/2020				93.1	98.8		69.5	
4/21/2020	93							
5/28/2020		40.1				2.61		72.4
7/6/2020			75.6					
8/11/2020		39.5	73.1	92.8		2.43		76.7
8/12/2020	92.2				101		79.1	
3/8/2021		32.7	63.3					
3/9/2021						2.62		60.5
3/10/2021				80.8	92.8		29	
3/16/2021	99.7							
8/16/2021			61.7					
8/17/2021		38.1				1.96		69.8
8/23/2021	87.6			79.2	78.2		41.4	
3/23/2022		38.7	66			2.26		63.2
4/4/2022	98.8							
4/5/2022					95.6		17.8	
4/6/2022				78.5				
10/3/2022			91.400002					
10/4/2022		37.200001				2.52		71.599998
10/5/2022					78.800003		34.900002	
10/17/2022	119			74.599998				

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								75.9
2/17/2016	128						158	
4/12/2016	115							
4/13/2016							151	74.1
5/31/2016	118						158	
6/1/2016								76.4
8/17/2016	120						152	74.2
10/11/2016	119							
10/12/2016							150	75.7
1/24/2017	110							
1/25/2017							137	76.1
5/10/2017	104						111	78.6
6/28/2017	98						108	76.4
8/29/2017	108						113	74.1
6/5/2018	121						186	58
9/11/2018	119						209	64.9
11/7/2018	124						175	68.1
3/26/2019	148						193	72
9/10/2019	164						188	91
4/21/2020	142						155	84.8
8/19/2020	162						147	98.6
3/9/2021	119						160	100
8/17/2021		3.97	35.7	20.3	8.92	54.6		
8/24/2021	129						123	86.4
3/23/2022		2.95	22.4	8.23	6.43	63.2		
3/29/2022	128						126	92.8
10/4/2022		2.98	16.6	9.58	7.09	69.800003		
10/18/2022	159						158	93.800003

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	33.9	
4/13/2016	32.5	
6/1/2016	33.9	
8/17/2016	50.3	
10/12/2016	53.3	
1/25/2017	59.9	
5/10/2017	66.5	
6/28/2017	69.8	
8/29/2017	72	
6/5/2018	95.1	
9/11/2018	122	
9/12/2018		172
11/7/2018	107	
3/26/2019	132	
9/10/2019	116	160
4/20/2020		147
4/21/2020	111	
8/17/2020		153
8/18/2020	109	
3/9/2021	82.1	
3/10/2021		157
8/17/2021		149
8/24/2021	93.1	
3/29/2022	72.1	
4/5/2022		209
10/5/2022		198
10/18/2022	111	

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		18.4		10.8	6.52	16.4		
2/17/2016	16		16.6				11.8	12.5
4/12/2016					4.47	15.9	12.6	
4/13/2016	21.5	19	17	8.2				13.6
5/31/2016		19.2	19	7.74	10.8	13.6	12.9	
6/1/2016	52.5							14.2
8/15/2016	33.3							13.6
8/16/2016		17.7	17	12.5	16.6		10.2	
8/17/2016						12.8		
10/11/2016	22.2						10.2	
10/12/2016		16.8	16.2	15.7	18.5	16.3		13.8
1/24/2017	18.4						11.2	14.2
1/25/2017		18.6	18	24.4	22	16.4		
5/9/2017	30		23	15	10	19		
5/10/2017		22					14	18
6/27/2017	29						14	17
6/28/2017		20	24	12	9.4	17		
8/29/2017		20	15	10	9.3	17		
8/30/2017	23						14	16
6/4/2018	22							
6/5/2018		18	16				13	15
6/6/2018				11	6.1	14		
9/10/2018	22		13					
9/11/2018		19		12	14		14	
9/12/2018						14		17
11/5/2018			13	17	18			
11/6/2018	17						14	15
11/7/2018		19				15		
3/26/2019				14.5	4.7		13	9.27
3/27/2019	18	17.1	14.2			14.9		
9/10/2019	18.1	16.5	8.88	10.9		13.5	12.8	12.7
9/11/2019					12.3			
4/20/2020					4.7		12	12.1
4/21/2020	19.5			9.49		14.8		
4/22/2020		17.6	20.5					
8/11/2020						12.7		12.1
8/12/2020							11.4	
8/17/2020	23.2							
8/18/2020		21.3	16.2	6.46	8.24			
3/9/2021						10.4		12
3/10/2021			17.1	9.3			11.9	
3/15/2021		23.2			7.68			
3/16/2021	16.6							
8/17/2021	34.4							10.4
8/24/2021		22.4						
8/25/2021			14.4	7.43	6.37	11.5	10.3	
3/29/2022				11.8			10.3	
3/30/2022			12.7					
4/4/2022	41.75 (D)	16.8 (D)				9.875 (D)		
4/6/2022					3.71			11.8 (D)
10/5/2022	7.1							
10/17/2022			22.4	12.9	12			

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:25 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
10/18/2022		17.200001				10.4	8.54	10.1

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				9.95				
2/17/2016	14.6	22.3	14.7		1.54	3.3	22.9	
4/12/2016		22.1			1.51	3.25	22.2	
4/13/2016	14.9		14.3	7.33				
6/1/2016	15.9	22	14.6	6.97	1.46	3.55	22.3	
8/15/2016	19.5	22.4	14.7					
8/16/2016				12	1.5	3.45		
8/17/2016							22.1	2.44
9/20/2016								2.54
10/11/2016			14.8		1.52	3.78	21.8	
10/12/2016	18.5	22.1		15.4				2.67
11/15/2016								2.94
1/4/2017								2.92
1/23/2017								3.21
1/24/2017	19	23.2	15		1.38	4.61	21.8	
1/25/2017				24.7				
5/9/2017			16	17	2.4		23	2.5
5/10/2017	24	26				5.9		
6/27/2017	24	25			2.1			3
6/28/2017			15	11		5.7	22	
8/29/2017				12	2.4	6.8	22	3.6
8/30/2017	18	25	15					
6/4/2018			16					
6/5/2018	15	25			1.7 (J)	7.9		2.2
6/6/2018				9.7			20	
9/10/2018			17	12				
9/11/2018					1.5 (J)	6.1		1.5 (J)
9/12/2018	23	23					20	
11/5/2018				16				
11/6/2018	11	26	17				21	2.5
11/7/2018					1.4 (J)	5.2		
3/26/2019	9.52	25.4		17.2	1.23	6.92		2
3/27/2019			14.8				18.4	
9/9/2019	15.4	25.6	14					
9/10/2019				11	1.38	4.39	17.7	
9/11/2019								2.34
4/21/2020	11.1	26.3	12.3	10.1	1.08			2.04
4/22/2020						2.75	17.1	
8/11/2020	15.4						16.7	
8/12/2020		24.5			1.28	4.14		
8/17/2020			13.1					
8/18/2020				5.54				2.16
3/9/2021	14.3	25.2						
3/10/2021				20.4	1.3	3.51	25.3	
3/15/2021								2.83
3/16/2021			11.6					
8/17/2021	14.3	25.1	12.7					
8/18/2021								2.97
8/24/2021					1.19	3.42	25.3	
8/25/2021				10.4				
3/28/2022			11.5		1.09			
3/29/2022							29.6	

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/30/2022				12.1				
4/4/2022	8.06 (D)					3.09		2.93
4/6/2022		24.35 (D)						
10/5/2022			12.3					
10/17/2022		26		13	0.973 (J)	3.19		
10/18/2022	10.7						32.299999	
10/19/2022								2.84

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				25.2				
4/12/2016				24.6				
6/1/2016				24.5				
8/15/2016				24.2				
8/16/2016			2.21		2.54	5.32	4.24	4.88
8/17/2016	1.78	1.77						
9/19/2016						5.29	4.13	4.45
9/20/2016	1.61	1.56	2.12		2.51			
10/11/2016			2.24	24.4	2.34	5.26	4.07	4.36
10/12/2016	1.51	1.54						
11/14/2016						5.28	4.08	4.42
11/15/2016	1.5	1.53	6.65		2.1			
1/3/2017						5.18	4.06	5.18
1/4/2017	1.53	1.58	2.15		2.44			
1/23/2017	1.62				2.37			
1/24/2017		1.71		24.6		5.41	4.4	
1/25/2017								5.66
1/26/2017			2.31					
5/9/2017	2.2	2.1	2.3	27	2.8			
5/10/2017						5.8	4.4	8
6/27/2017	1.9 (J)	2	2.1		2.1	5.4	4	7.2
6/28/2017				26				
8/29/2017	2							
8/30/2017		1.5 (J)	2.8	26	3	6	4.8	6.9
6/4/2018				27				
6/5/2018	1.9 (J)	1.2 (J)	1.8 (J)		2.3	5.2	3.8	4.2
9/11/2018	<2	<2	<2		1.5 (J)	5.5	4.1	4.2
9/12/2018				26				
11/5/2018							3.9	
11/6/2018	1.9 (J)	<2	<2	26	1.4 (J)	5.1		4.5
3/26/2019	2.18	1.2	1.07		2.42			
3/27/2019				24.8		5.26	3.9	4.33
9/9/2019				23.8				
9/11/2019	1.7	1.26	1.19		3.72	5.31	4.21	4.16
4/20/2020				24.5				
4/21/2020	1.9	1.32	1.09		3.89			
4/22/2020						5.37	4	5.66
8/11/2020						5.45		
8/12/2020							4.17	4.46
8/17/2020				24.6				
8/18/2020	1.63	1.38	1.05		3.8			
3/15/2021	2.46	1.27	1.25		4.38	5.47	5.57	4.18
3/16/2021				24.4				
8/17/2021				21.3				
8/18/2021	2.45	1.42	1.42		4.46			
8/23/2021						6.37	5.61	4.33
3/28/2022	1.96	1.35	1.24		4.12	6	3.98	5.47
4/5/2022				21.1 (D)				
10/5/2022				23.1		7.1	4.04	5.32
10/19/2022	2.01	1.23	1.08		3.7			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					37.9			
1/15/2019				13.4		14.3	13	16.6
1/16/2019		3.1						
1/17/2019	7.87							
1/30/2019			3.04					
9/10/2019	5.54						10.5	
9/11/2019		1.15	3.95		3.82	14.1		16.5
4/20/2020							10.8	
4/21/2020		3.62						
4/22/2020	7.6		4.4	10.3	2.25	12.9		
4/29/2020								16.1
8/11/2020			3.28			7.85		
8/12/2020	2.07						8.34	
8/18/2020		1.12						15.9
8/19/2020				13.9	3.4			
3/9/2021			2.9			8.06		
3/10/2021					2.3		6.74	
3/15/2021	5.81							15.9
3/16/2021		1.91		13				
8/23/2021	4.36							
8/24/2021		2.79	2.91	9.19	4.46	7.38		
8/25/2021							6.66	14.4
3/28/2022	3.52							
3/29/2022				5.57				
3/30/2022			3.04		3.8		5.72	
4/6/2022		1.48				8.39 (D)		13.6
10/5/2022							7.05	
10/17/2022		2.97	2.36	13.2				
10/18/2022					3.6	6.02		13.8
10/19/2022	3.71							

Time Series

Constituent: Chloride (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	19.9							
1/16/2019		26.1	12.3					
9/11/2019	20.7	31.4	11.8					
4/20/2020			12	10.9				
4/21/2020	19.9	40.4					12.3	11.3
5/28/2020						4.92		
7/6/2020					4.5			
8/11/2020					4.27	3.18		
8/12/2020			10.8					
8/17/2020				8.99			11.9	
8/19/2020	18.2	46.9						7.53
3/8/2021					8.51	8.78		
3/9/2021	18.4	41.6						
3/10/2021			11.9	6.5			8.31	7.57
8/17/2021					7.84	8.79		
8/18/2021	17	35.8		9.94			4.07	5.3
8/23/2021			13.1					
3/23/2022					7.84	8.8		
3/29/2022				9.58				
3/30/2022							3.44	8.12
4/4/2022			13.7					
4/6/2022	15.65 (D)	37.7 (D)						
10/4/2022					5.71	3.86		
10/5/2022			7.16					
10/18/2022				9.25			4.34	
10/19/2022	17.6	33.900002						9.04

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	16.4							
4/12/2016	16.6							
5/31/2016	16.8							
8/17/2016	16.4							
10/11/2016	15.2							
1/24/2017	15.1							
5/9/2017	17							
6/28/2017	17							
8/30/2017	17							
6/5/2018	15							
9/11/2018	14							
11/6/2018	13							
3/27/2019	16.1							
9/11/2019	11.6							
4/20/2020				23.9	9.74		7.88	
4/21/2020	12.3							
5/28/2020		13.4				6.88		12.1
7/6/2020			103					
8/11/2020		11.2	87.4	21.2		6.21		12.1
8/12/2020	13				10.8		6.3	
3/8/2021		13.7	90					
3/9/2021						5.06		10.4
3/10/2021				19.4	11.5		55.3	
3/16/2021	10.9							
8/16/2021			60.9					
8/17/2021		14.5				4.25		10.8
8/23/2021	11.6			21.1	6.89		8.41	
3/23/2022		17.7	123			4.56		9.19
4/4/2022	9.63							
4/5/2022					8.175 (D)		19.55 (D)	
4/6/2022				8.09 (D)				
10/3/2022			62.400002					
10/4/2022		12.8				4.27		9.72
10/5/2022					<1		5.31	
10/17/2022	10.8			16.200001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								67.9
2/17/2016	31.8						62.7	
4/12/2016	28.9							
4/13/2016							57.8	64.1
5/31/2016	28.7						55.6	
6/1/2016								66.3
8/17/2016	32.2						53.3	56.7
10/11/2016	34.2							
10/12/2016							51.2	56.1
1/24/2017	38.1							
1/25/2017							44.8	53.6
5/10/2017	41						44	48
6/28/2017	36						45	49
8/29/2017	35						43	52
6/5/2018	32						49	38
9/11/2018	36						52	37
11/7/2018	30						58	41
3/26/2019	31.9						71	39.7
9/10/2019	27.3						67	56.1
4/21/2020	37.4						66.2	69.5
8/19/2020	39.6						123	70.5
3/9/2021	47.5						80.7	106
8/17/2021		4.94	3.13	3.28	3.37	10.9		
8/24/2021	56.6						91.7	90.8
3/23/2022		4.08	2.07	3.19	2.42	16.1		
3/29/2022	45.3						94.7	95.4
10/4/2022		3.66	1.75	2.99	2.58	9.9		
10/18/2022	45						196	96.099998

Time Series

Constituent: Chloride (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	15.6	
4/13/2016	14.3	
6/1/2016	12.6	
8/17/2016	14.4	
10/12/2016	16.4	
1/25/2017	20	
5/10/2017	24	
6/28/2017	25	
8/29/2017	25	
6/5/2018	25	
9/11/2018	26	
9/12/2018		12
11/7/2018	25	
3/26/2019	25.3	
9/10/2019	28	10.9
4/20/2020		9.87
4/21/2020	24.2	
8/17/2020		9.78
8/18/2020	31.4	
3/9/2021	53.9	
3/10/2021		8.48
8/17/2021		8.13
8/24/2021	90.7	
3/29/2022	225	
4/5/2022		7.86 (D)
10/5/2022		6.54
10/18/2022	106	

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.00102		<0.01	<0.01	<0.00102		
2/17/2016	<0.01		<0.001015				<0.00102	<0.01
4/12/2016					<0.01	<0.00102	<0.00102	
4/13/2016	<0.01	<0.00102	<0.001015	<0.01				<0.01
5/31/2016		<0.00102	<0.001015	<0.01	<0.01	<0.00102	<0.00102	
6/1/2016	<0.01							<0.01
8/15/2016	<0.01							<0.01
8/16/2016		<0.00102	<0.001015	<0.01	0.00381 (J)		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.01						<0.00102	
10/12/2016		<0.00102	<0.001015	<0.01	<0.01	<0.00102		<0.01
1/24/2017	<0.01						<0.00102	<0.01
1/25/2017		<0.00102	<0.001015	<0.01	<0.01	<0.00102		
5/9/2017	<0.01		<0.001015	<0.01	<0.01	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.01
6/27/2017	<0.01						<0.00102	<0.01
6/28/2017		<0.00102	<0.001015	<0.01	0.00219 (J)	<0.00102		
2/27/2018	<0.01	<0.00102	<0.001015			<0.00102		
2/28/2018				<0.01	<0.01		<0.00102	<0.01
6/4/2018	<0.01							
6/5/2018		<0.00102	<0.001015				<0.00102	<0.01
6/6/2018				<0.01	<0.01	<0.00102		
11/5/2018			<0.001015	<0.01	<0.01			
11/6/2018	<0.01						<0.00102	<0.01
11/7/2018		<0.00102				<0.00102		
3/26/2019				<0.01	<0.01		<0.00102	<0.01
3/27/2019	<0.01	<0.00102	<0.001015			<0.00102		
9/10/2019	<0.01	<0.00102	<0.001015	<0.01		<0.00102	<0.00102	<0.01
9/11/2019					<0.01			
4/20/2020					<0.01		<0.00102	<0.01
4/21/2020	<0.01			<0.01		<0.00102		
4/22/2020		<0.00102	<0.001015					
8/11/2020						<0.00102		<0.01
8/12/2020							<0.00102	
8/17/2020	<0.01							
8/18/2020		<0.00102	<0.001015	<0.01	<0.01			
3/9/2021						0.000357 (J)		0.000444 (J)
3/10/2021			<0.001015	0.000224 (J)			0.000301 (J)	
3/15/2021		0.000357 (J)			0.000311 (J)			
3/16/2021	0.000341 (J)							
8/17/2021	0.00034 (J)							0.0004 (J)
8/24/2021		0.00036 (J)						
8/25/2021			0.00027 (J)	0.00035 (J)	0.00026 (J)	0.00023 (J)	0.00027 (J)	
3/29/2022				0.00043 (J)			<0.00102	
3/30/2022			0.00023 (J)					
4/4/2022	0.00045 (J)	<0.00102				0.00025 (J)		
4/6/2022					0.0003 (J)			0.00034 (J)
10/5/2022	0.000287 (J)							
10/17/2022			0.000286 (J)	0.000332 (J)	0.000237 (J)			
10/18/2022		0.000217 (J)				<0.00102	<0.00102	0.000267 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.01				
2/17/2016	<0.01	<0.01	<0.01		<0.01	<0.01	<0.00102	
4/12/2016		<0.01			<0.01	<0.01	<0.00102	
4/13/2016	<0.01		<0.01	<0.01				
6/1/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00102	
8/15/2016	<0.01	<0.01	<0.01					
8/16/2016				<0.01	<0.01	<0.01		
8/17/2016							<0.00102	<0.01
9/20/2016								<0.01
10/11/2016			<0.01		<0.01	<0.01	<0.00102	
10/12/2016	<0.01	<0.01		<0.01				<0.01
11/15/2016								<0.01
1/4/2017								<0.01
1/23/2017								<0.01
1/24/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.00102	
1/25/2017				<0.01				
5/9/2017			<0.01	<0.01	<0.01		<0.00102	<0.01
5/10/2017	<0.01	<0.01				<0.01		
6/27/2017	<0.01	<0.01			<0.01			<0.01
6/28/2017			<0.01	<0.01		<0.01	<0.00102	
2/27/2018			<0.01		<0.01	<0.01		<0.01
2/28/2018	<0.01	<0.01		<0.01			<0.00102	
6/4/2018			<0.01					
6/5/2018	<0.01	<0.01			<0.01	<0.01		<0.01
6/6/2018				<0.01			<0.00102	
11/5/2018				<0.01				
11/6/2018	<0.01	<0.01	<0.01				<0.00102	<0.01
11/7/2018					<0.01	<0.01		
3/26/2019	<0.01	<0.01		<0.01	<0.01	<0.01		<0.01
3/27/2019			<0.01				<0.00102	
9/9/2019	<0.01	<0.01	<0.01					
9/10/2019				<0.01	<0.01	<0.01	<0.00102	
9/11/2019								<0.01
4/21/2020	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
4/22/2020						<0.01	<0.00102	
8/11/2020	<0.01						<0.00102	
8/12/2020		<0.01			<0.01	<0.01		
8/17/2020			<0.01					
8/18/2020				<0.01				<0.01
3/9/2021	0.000216 (J)	0.000346 (J)						
3/10/2021				0.000333 (J)	0.000432 (J)	0.000433 (J)	0.0003 (J)	
3/15/2021								0.000474 (J)
3/16/2021			0.0004 (J)					
8/17/2021	0.00022 (J)	0.00023 (J)	0.00267					
8/18/2021								0.00022 (J)
8/24/2021					0.00043 (J)	0.00034 (J)	0.00028 (J)	
8/25/2021				0.00027 (J)				
3/28/2022			0.0003 (J)		0.00034 (J)			
3/29/2022							0.00041 (J)	
3/30/2022				0.00022 (J)				
4/4/2022	0.00022 (J)					0.00037 (J)		0.0003 (J)
4/6/2022		0.00031 (J)						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.000256 (J)					
10/17/2022		0.000294 (J)		0.00026 (J)	0.000347 (J)	0.000301 (J)		
10/18/2022	0.000211 (J)						<0.00102	
10/19/2022								0.00024 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.01				
4/12/2016				<0.01				
6/1/2016				<0.01				
8/15/2016				<0.01				
8/16/2016			<0.01		<0.01	<0.01	<0.01	<0.01
8/17/2016	<0.01	<0.01						
9/19/2016						<0.01	<0.01	<0.01
9/20/2016	<0.01	<0.01	<0.01		<0.01			
10/11/2016			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10/12/2016	<0.01	<0.01						
11/14/2016						<0.01	<0.01	<0.01
11/15/2016	<0.01	<0.01	<0.01		<0.01			
1/3/2017						<0.01	<0.01	<0.01
1/4/2017	<0.01	<0.01	<0.01		<0.01			
1/23/2017	<0.01				<0.01			
1/24/2017		<0.01		<0.01		<0.01	<0.01	
1/25/2017								<0.01
1/26/2017			<0.01					
5/9/2017	<0.01	<0.01	<0.01	<0.01	<0.01			
5/10/2017						<0.01	<0.01	<0.01
6/27/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
6/28/2017				<0.01				
2/27/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
6/4/2018				<0.01				
6/5/2018	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
11/5/2018							<0.01	
11/6/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
3/26/2019	<0.01	<0.01	<0.01		<0.01			
3/27/2019				<0.01		<0.01	<0.01	<0.01
9/9/2019				<0.01				
9/11/2019	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
4/20/2020				<0.01				
4/21/2020	<0.01	<0.01	<0.01		<0.01			
4/22/2020						<0.01	<0.01	<0.01
8/11/2020						<0.01		
8/12/2020							<0.01	<0.01
8/17/2020				<0.01				
8/18/2020	<0.01	<0.01	<0.01		<0.01			
3/15/2021	0.000541 (J)	0.000995 (J)	0.000393 (J)		0.000502 (J)	0.000468 (J)	0.000431 (J)	0.000679 (J)
3/16/2021				0.000347 (J)				
8/17/2021				0.00032 (J)				
8/18/2021	0.00032 (J)	0.00071 (J)	0.00026 (J)		0.00033 (J)			
8/23/2021						0.00042 (J)	0.00038 (J)	0.0005 (J)
3/28/2022	0.00031 (J)	0.00072 (J)	0.00039 (J)		0.0004 (J)	0.00039 (J)	0.00042 (J)	0.00044 (J)
4/5/2022				0.00039 (J)				
10/5/2022				0.000286 (J)		0.000268 (J)	0.000301 (J)	0.000311 (J)
10/19/2022	0.00029 (J)	0.000678 (J)	0.000354 (J)		0.000423 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.0117			
1/15/2019				<0.01		<0.00102	<0.00102	<0.01
1/16/2019		<0.01						
1/17/2019	<0.01							
1/30/2019			<0.01					
9/10/2019	<0.01						<0.00102	
9/11/2019		<0.01	0.0155		<0.01	<0.00102		<0.01
4/20/2020							<0.00102	
4/21/2020		<0.01						
4/22/2020	<0.01		<0.01	<0.01	<0.01	<0.00102		
4/29/2020								<0.01
8/11/2020			<0.01			<0.00102		
8/12/2020	<0.01						<0.00102	
8/18/2020		<0.01						<0.01
8/19/2020				<0.01	<0.01			
3/9/2021			0.00143			0.000342 (J)		
3/10/2021					0.000421 (J)		0.000226 (J)	
3/15/2021	0.000473 (J)							0.000553 (J)
3/16/2021		0.000912 (J)		0.000381 (J)				
8/23/2021	0.0003 (J)							
8/24/2021		0.00075 (J)	0.00096 (J)	0.00026 (J)	0.00038 (J)	0.00033 (J)		
8/25/2021							0.00023 (J)	0.00039 (J)
3/28/2022	0.00035 (J)							
3/29/2022				0.00037 (J)				
3/30/2022			0.00108		0.00037 (J)		0.0003 (J)	
4/6/2022		0.00051 (J)				0.00029 (J)		0.00052 (J)
10/5/2022							<0.00102	
10/17/2022		0.000588 (J)	0.00115	0.000624 (J)				
10/18/2022					0.00022 (J)	<0.00102		0.000486 (J)
10/19/2022	0.000255 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	0.00325 (J)	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.01				
4/21/2020	<0.00102	<0.00102					<0.01	<0.01
5/28/2020						<0.00102		
7/6/2020					<0.001015			
8/11/2020					<0.001015	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.01			<0.01	
8/19/2020	<0.00102	<0.00102						<0.01
3/8/2021					<0.001015	<0.00102		
3/9/2021	0.000286 (J)	0.000227 (J)						
3/10/2021			0.000428 (J)	0.000314 (J)			0.00026 (J)	0.000366 (J)
8/17/2021					0.00028 (J)	0.00039 (J)		
8/18/2021	<0.00102	<0.00102		0.0003 (J)			0.00022 (J)	0.0004 (J)
8/23/2021			0.0003 (J)					
3/23/2022					0.00032 (J)	0.0004 (J)		
3/29/2022				0.00026 (J)				
3/30/2022							0.00024 (J)	0.00021 (J)
4/4/2022			0.00022 (J)					
4/6/2022	0.00028 (J)	0.00026 (J)						
10/4/2022					0.000215 (J)	<0.00102		
10/5/2022			<0.00102					
10/18/2022				0.00023 (J)			0.000309 (J)	
10/19/2022	<0.00102	0.000235 (J)						0.000244 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.01							
4/12/2016	<0.01							
5/31/2016	<0.01							
8/17/2016	<0.01							
10/11/2016	<0.01							
1/24/2017	<0.01							
5/9/2017	<0.01							
6/28/2017	<0.01							
2/27/2018	<0.01							
6/5/2018	<0.01							
11/6/2018	<0.01							
3/27/2019	<0.01							
9/11/2019	<0.01							
4/20/2020				<0.01	<0.01		<0.00102	
4/21/2020	<0.01							
5/28/2020		<0.00102				<0.01		0.00515 (J)
7/6/2020			<0.001015					
8/11/2020		<0.00102	<0.001015	<0.01		<0.01		<0.00102
8/12/2020	<0.01				<0.01		<0.00102	
3/8/2021		0.00028 (J)	<0.001015					
3/9/2021						0.000619 (J)		0.000256 (J)
3/10/2021				0.000474 (J)	0.000574 (J)		0.000271 (J)	
3/16/2021	0.000285 (J)							
8/16/2021			0.00038 (J)					
8/17/2021		0.00081 (J)				0.00064 (J)		0.00057 (J)
8/23/2021	0.00027 (J)			0.00046 (J)	0.00039 (J)		0.00029 (J)	
3/23/2022		0.00051 (J)	0.00035 (J)			0.00107		0.00031 (J)
4/4/2022	0.00025 (J)							
4/5/2022					0.0003 (J)		0.00042 (J)	
4/6/2022				0.00047 (J)				
10/3/2022			0.000213 (J)					
10/4/2022		<0.00102				0.000584 (J)		<0.00102
10/5/2022					0.000414 (J)		<0.00102	
10/17/2022	0.000348 (J)			0.000567 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.01
2/17/2016	<0.00102						<0.01	
4/12/2016	<0.00102							
4/13/2016							<0.01	<0.01
5/31/2016	<0.00102						<0.01	
6/1/2016								<0.01
8/17/2016	<0.00102						<0.01	<0.01
10/11/2016	<0.00102							
10/12/2016							<0.01	<0.01
1/24/2017	<0.00102							
1/25/2017							<0.01	<0.01
5/10/2017	<0.00102						<0.01	<0.01
6/28/2017	<0.00102						<0.01	<0.01
2/27/2018	<0.00102						<0.01	<0.01
6/5/2018	<0.00102						<0.01	<0.01
11/7/2018	<0.00102						<0.01	<0.01
3/26/2019	<0.00102						<0.01	<0.01
9/10/2019	<0.00102						<0.01	<0.01
4/21/2020	<0.00102						<0.01	<0.01
8/19/2020	<0.00102						<0.01	<0.01
3/9/2021	0.000347 (J)						0.000351 (J)	0.000346 (J)
8/17/2021		0.00065 (J)	0.00057 (J)	0.00067 (J)	0.00035 (J)	0.00086 (J)		
8/24/2021	0.00026 (J)						0.00036 (J)	0.00031 (J)
3/23/2022		0.00111	0.00065 (J)	0.00072 (J)	0.00045 (J)	0.00061 (J)		
3/29/2022	<0.00102						0.00024 (J)	0.00027 (J)
10/4/2022		0.000421 (J)	0.000587 (J)	0.000435 (J)	0.000384 (J)	0.000348 (J)		
10/18/2022	0.000228 (J)						0.000297 (J)	0.000217 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.01	
4/13/2016	<0.01	
6/1/2016	<0.01	
8/17/2016	<0.01	
10/12/2016	<0.01	
1/25/2017	<0.01	
5/10/2017	<0.01	
6/28/2017	<0.01	
2/27/2018	<0.01	
6/5/2018	<0.01	
11/7/2018	<0.01	
3/26/2019	<0.01	
9/10/2019	<0.01	<0.01
4/20/2020		<0.01
4/21/2020	<0.01	
8/17/2020		<0.01
8/18/2020	<0.01	
3/9/2021	0.000381 (J)	
3/10/2021		0.000247 (J)
8/17/2021		0.00033 (J)
8/24/2021	0.0003 (J)	
3/29/2022	0.00027 (J)	
4/5/2022		0.00047 (J)
10/5/2022		0.000226 (J)
10/18/2022	0.000238 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.0135		<0.005	<0.005	0.00732 (J)		
2/17/2016	0.0395		0.0504				0.0169	0.016
4/12/2016					<0.005	0.00785 (J)	0.0158	
4/13/2016	0.0452	0.0155	0.0448	<0.005				0.0139
5/31/2016		0.0146	0.0405	<0.005	<0.005	0.00712 (J)	0.014	
6/1/2016	0.0576							0.0117
8/15/2016	0.0573							0.0133
8/16/2016		0.016	0.0464	<0.005	<0.005		0.0153	
8/17/2016						0.00545 (J)		
10/11/2016	0.0531						0.0162	
10/12/2016		0.0154	0.0489	<0.005	<0.005	0.00497 (J)		0.0147
1/24/2017	0.0539						0.0132	0.0122
1/25/2017		0.0139	0.0417	<0.005	<0.005	0.00454 (J)		
5/9/2017	0.057		0.0471	<0.005	<0.005	0.00488 (J)		
5/10/2017		0.0144					0.014	0.0133
6/27/2017	0.0664						0.0163	0.0141
6/28/2017		0.0134	0.0664	<0.005	<0.005	0.00805 (J)		
2/27/2018	0.0652	0.0148	0.0438			0.016		
2/28/2018				<0.005	<0.005		0.0157	0.014
6/4/2018	0.0758							
6/5/2018		0.0139	0.036				0.0148	0.0114
6/6/2018				<0.005	<0.005	0.024		
11/5/2018			0.0171	<0.005	<0.005			
11/6/2018	0.0898						0.0158	0.0141
11/7/2018		0.015				0.0124		
3/26/2019				<0.005	<0.005		0.0184	0.0177
3/27/2019	0.176	0.014	0.0292			0.0303		
9/10/2019	0.104	0.0191	0.02	<0.005		0.0278	0.0201	0.0162
9/11/2019					<0.005			
4/20/2020					<0.005		0.0189	0.0146
4/21/2020	0.206			<0.005		0.0339		
4/22/2020		0.0233	0.0319					
8/11/2020						0.0373		0.0148
8/12/2020							0.0184	
8/17/2020	0.195							
8/18/2020		0.0287	0.0298	<0.005	<0.005			
3/9/2021						0.0302		0.0162
3/10/2021			0.0197	0.00118			0.0189	
3/15/2021		0.0475			0.000312			
3/16/2021	0.257							
8/17/2021	0.24							0.0155
8/24/2021		0.0514						
8/25/2021			0.0507	0.00094	7E-05 (J)	0.0436	0.0181	
3/29/2022				0.00088			0.0172	
3/30/2022			0.0157					
4/4/2022	0.296	0.0218				0.0423		
4/6/2022					0.00126			0.0147
10/5/2022	0.226							
10/17/2022			0.0256	0.00077	0.00424			
10/18/2022		0.0223				0.0349	0.0189	0.0143

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.005				
2/17/2016	0.0101	0.0227	0.00989 (J)		<0.0002	0.00219 (J)	0.00683 (J)	
4/12/2016		0.0209			<0.0002	<0.005	0.00656 (J)	
4/13/2016	0.0109		0.0106	<0.005				
6/1/2016	0.0134	0.02	0.011	<0.005	<0.0002	<0.005	0.00637 (J)	
8/15/2016	0.0134	0.0225	0.0117					
8/16/2016				<0.005	<0.0002	<0.005		
8/17/2016							0.00659 (J)	0.0167
9/20/2016								0.0122
10/11/2016			0.0117		<0.0002	<0.005	0.00687 (J)	
10/12/2016	0.0204	0.0206		<0.005				0.00839 (J)
11/15/2016								0.00562 (J)
1/4/2017								0.00655 (J)
1/23/2017								0.0116
1/24/2017	0.0157	0.015	0.00863 (J)		<0.0002	<0.005	0.00522 (J)	
1/25/2017				<0.005				
5/9/2017			0.00975 (J)	<0.005	<0.0002		0.00646 (J)	0.0167
5/10/2017	0.0179	0.0141				<0.005		
6/27/2017	0.0166	0.0144			<0.0002			0.0109
6/28/2017			0.0102	<0.005		<0.005	0.00721 (J)	
2/27/2018			0.00924 (J)		<0.0002	<0.005		0.00278 (J)
2/28/2018	0.0251	0.0136		<0.005			0.00771 (J)	
6/4/2018			0.00866 (J)					
6/5/2018	0.0456	0.0138			<0.0002	<0.005		0.00223 (J)
6/6/2018				<0.005			0.00712 (J)	
11/5/2018				<0.005				
11/6/2018	0.0321	0.0158	0.0101				0.00791	0.00202 (J)
11/7/2018					<0.0002	<0.005		
3/26/2019	0.0192	0.0161		<0.005	<0.0002	<0.005		<0.005
3/27/2019			0.0131				0.0114	
9/9/2019	0.0121	0.0174	0.0154					
9/10/2019				<0.005	<0.0002	<0.005	0.0127	
9/11/2019								<0.005
4/21/2020	0.0158	0.0173	0.0194	<0.005	<0.0002			<0.005
4/22/2020						<0.005	0.0133	
8/11/2020	0.0122						0.0126	
8/12/2020		0.0152			<0.0002	<0.005		
8/17/2020			0.0249					
8/18/2020				<0.005				0.00279 (J)
3/9/2021	0.0151	0.017						
3/10/2021				0.00204	<0.0002	0.000676	0.0115	
3/15/2021								0.000606
3/16/2021			0.0272					
8/17/2021	0.0109	0.0175	0.0296					
8/18/2021								0.00067
8/24/2021					<0.0002	0.00073	0.0117	
8/25/2021				0.00147				
3/28/2022			0.0309		<0.0002			
3/29/2022							0.0101	
3/30/2022				0.00284				
4/4/2022	0.0115					0.00073		0.00045
4/6/2022		0.0183						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.0293					
10/17/2022		0.0201		0.00501	<0.0002	0.000595		
10/18/2022	0.00934						0.00995	
10/19/2022								0.000438

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.00507 (J)				
4/12/2016				0.0047 (J)				
6/1/2016				0.00372 (J)				
8/15/2016				0.0039 (J)				
8/16/2016			0.0122		0.00548 (J)	<0.005	<0.0002	0.00923 (J)
8/17/2016	0.00692 (J)	0.00599 (J)						
9/19/2016						0.00242 (J)	<0.0002	0.00539 (J)
9/20/2016	0.00232 (J)	0.00466 (J)	0.012		0.0026 (J)			
10/11/2016			0.0135	0.00415 (J)	0.00214 (J)	0.0024 (J)	<0.0002	0.00506 (J)
10/12/2016	<0.005	0.00394 (J)						
11/14/2016						<0.005	<0.0002	0.00399 (J)
11/15/2016	<0.005	0.00296 (J)	0.00938 (J)		<0.005			
1/3/2017						0.00217 (J)	<0.0002	0.0037 (J)
1/4/2017	<0.005	0.00448 (J)	0.00859 (J)		<0.005			
1/23/2017	0.00203 (J)				<0.005			
1/24/2017		0.00259 (J)		0.00383 (J)		0.00239 (J)	<0.0002	
1/25/2017								0.0077 (J)
1/26/2017			0.0104					
5/9/2017	<0.005	<0.005	0.0119	0.00396 (J)	<0.005			
5/10/2017						<0.005	<0.0002	0.00291 (J)
6/27/2017	<0.005	<0.005	0.0106		<0.005	<0.005	<0.0002	0.00247 (J)
6/28/2017				0.00336 (J)				
2/27/2018	<0.005	<0.005	0.0027 (J)	0.00442 (J)	<0.005	<0.005	<0.0002	<0.0002
6/4/2018				0.0038 (J)				
6/5/2018	<0.005	<0.005	0.00317 (J)		<0.005	<0.005	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.005	<0.005	0.00367 (J)	0.00439 (J)	<0.005	<0.005		<0.0002
3/26/2019	<0.005	<0.005	<0.005		<0.005			
3/27/2019				0.00463 (J)		<0.005	<0.0002	<0.0002
9/9/2019				0.00413 (J)				
9/11/2019	<0.005	<0.005	0.00265 (J)		<0.005	<0.005	<0.0002	<0.0002
4/20/2020				0.00396 (J)				
4/21/2020	<0.005	<0.005	<0.005		<0.005			
4/22/2020						<0.005	<0.0002	<0.0002
8/11/2020						<0.005		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.005				
8/18/2020	<0.005	<0.005	0.00224 (J)		<0.005			
3/15/2021	0.000139 (J)	0.000452	0.00145		0.000137 (J)	0.000624	0.000908	<0.0002
3/16/2021				0.00076				
8/17/2021				0.00039				
8/18/2021	0.00016 (J)	0.00036	0.0019		0.00011 (J)			
8/23/2021						0.0006	0.00105	<0.0002
3/28/2022	0.00014 (J)	0.00052	0.00079		7E-05 (J)	0.00061	<0.0002	0.00099
4/5/2022				0.00083				
10/5/2022				0.000297		0.000728	<0.0002	0.000909
10/19/2022	0.000139 (J)	0.000326	0.00112		8E-05 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.005			
1/15/2019				0.0407		0.0173	0.0203	0.0044 (J)
1/16/2019		<0.0002						
1/17/2019	0.033							
1/30/2019			<0.005					
9/10/2019	0.0131						0.0139	
9/11/2019		<0.0002	<0.005		0.00363 (J)	0.0194		0.00897
4/20/2020							0.0132	
4/21/2020		<0.0002						
4/22/2020	0.00675		<0.005	0.0327	<0.005	0.0192		
4/29/2020								0.00777
8/11/2020			<0.005			0.0176		
8/12/2020	0.00222 (J)						0.00717	
8/18/2020		<0.0002						0.00814
8/19/2020				0.0176	<0.005			
3/9/2021			0.000522			0.0178		
3/10/2021					0.000455		0.00791	
3/15/2021	0.00198							0.00472
3/16/2021		<0.0002		0.0225				
8/23/2021	0.00159							
8/24/2021		<0.0002	0.00032	0.0228	0.00071	0.0183		
8/25/2021							0.00901	0.0101
3/28/2022	0.00117							
3/29/2022				0.0198				
3/30/2022			0.0007		0.00034		0.0103	
4/6/2022		8E-05 (J)				0.0173		0.0185
10/5/2022							0.00884	
10/17/2022		<0.0002	0.00039	0.00563				
10/18/2022					0.000519	0.0151		0.015
10/19/2022	0.00114							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.0281							
1/16/2019		0.0131	0.106					
9/11/2019	0.0449	0.0143	0.106					
4/20/2020			0.324	0.00451 (J)				
4/21/2020	0.0359	0.0162					0.00236 (J)	0.00799
5/28/2020						<0.000203		
7/6/2020					<0.005			
8/11/2020					<0.005	<0.000203		
8/12/2020			0.273					
8/17/2020				0.00458 (J)			<0.005	
8/19/2020	0.037	0.0173						0.00853
3/8/2021					0.00155	<0.000203		
3/9/2021	0.0559	0.0175						
3/10/2021			0.415	0.00442			0.000388	0.00662
8/17/2021					0.00295	0.00025		
8/18/2021	0.0436	0.0196		0.0119			0.0004	0.00507
8/23/2021			0.428					
3/23/2022					0.0053	0.00025		
3/29/2022				0.0108				
3/30/2022							0.00018 (J)	0.00562
4/4/2022			0.323					
4/6/2022	0.0651	0.0184						
10/4/2022					0.00561	0.000117 (J)		
10/5/2022			0.288					
10/18/2022				0.00703			0.000226	
10/19/2022	0.0693	0.02						0.00683

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.0216							
4/12/2016	0.0205							
5/31/2016	0.0196							
8/17/2016	0.0169							
10/11/2016	0.0157							
1/24/2017	0.00858 (J)							
5/9/2017	0.00755 (J)							
6/28/2017	0.0069 (J)							
2/27/2018	0.00471 (J)							
6/5/2018	0.00481 (J)							
11/6/2018	0.00545							
3/27/2019	0.00614							
9/11/2019	0.00767							
4/20/2020				0.119	0.0203		0.0862	
4/21/2020	0.00601							
5/28/2020		0.00801				<0.005		0.0445
7/6/2020			0.0158					
8/11/2020		0.0056	0.0129	0.0859		<0.005		0.022
8/12/2020	0.00678				0.0272		0.0857	
3/8/2021		0.00553	0.0153					
3/9/2021						0.000738		0.0263
3/10/2021				0.0204	0.0239		0.0345	
3/16/2021	0.00857							
8/16/2021			0.0146					
8/17/2021		0.00608				0.00095		0.0216
8/23/2021	0.00645			0.0233	0.031		0.0477	
3/23/2022		0.0096	0.0164			0.00102		0.0281
4/4/2022	0.0104							
4/5/2022					0.0265		0.0191	
4/6/2022				0.00706				
10/3/2022			0.0122					
10/4/2022		0.00685				0.000975		0.0187
10/5/2022					0.0331		0.0334	
10/17/2022	0.0062			0.00583				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								0.0129
2/17/2016	<0.01						<0.01	
4/12/2016	<0.01							
4/13/2016							0.00218 (J)	0.0139
5/31/2016	0.00389 (J)						0.00328 (J)	
6/1/2016								0.0139
8/17/2016	0.00234 (J)						0.00217 (J)	0.0138
10/11/2016	0.00202 (J)							
10/12/2016							0.00225 (J)	0.0138
1/24/2017	<0.01							
1/25/2017							<0.01	0.0115
5/10/2017	<0.01						<0.01	0.0125
6/28/2017	<0.01						<0.01	0.0137
2/27/2018	<0.01						<0.01	0.00698 (J)
6/5/2018	0.00237 (J)						<0.01	0.00478 (J)
11/7/2018	0.00258 (J)						0.00277 (J)	0.00651
3/26/2019	0.00223 (J)						0.0024 (J)	0.00445 (J)
9/10/2019	0.00306 (J)						0.0034 (J)	0.0108
4/21/2020	0.00228 (J)						0.00206 (J)	0.0111
8/19/2020	0.00278 (J)						0.0046 (J)	0.00975
3/9/2021	0.00367						0.00181	0.00707
8/17/2021		0.00077	0.00049	0.00033	0.00081	0.00348		
8/24/2021	0.00419						0.00333	0.00898
3/23/2022		0.0007	0.00037	0.00038	0.00031	0.00419		
3/29/2022	0.00223						0.0014	0.00619
10/4/2022		0.00073	0.000471	0.000286	0.000312	0.00315		
10/18/2022	0.00233						0.00301	0.00537

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.00869 (J)	
4/13/2016	0.00936 (J)	
6/1/2016	0.00976 (J)	
8/17/2016	0.012	
10/12/2016	0.0127	
1/25/2017	0.0109	
5/10/2017	0.0129	
6/28/2017	0.0125	
2/27/2018	0.013	
6/5/2018	0.0113	
11/7/2018	0.0145	
3/26/2019	0.0167	
9/10/2019	0.0177	0.146
4/20/2020		0.157
4/21/2020	0.0166	
8/17/2020		0.148
8/18/2020	0.0164	
3/9/2021	0.0247	
3/10/2021		0.167
8/17/2021		0.211
8/24/2021	0.0323	
3/29/2022	0.0267	
4/5/2022		0.39
10/5/2022		0.528
10/18/2022	0.0297	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<3		<3	<3	<3		
2/17/2016	<3		<3				<3	<3
4/12/2016					<3	<3	<3	
4/13/2016	1.0468 (U)	<3	<3	<3				<3
5/31/2016		0.899	0.145 (U)	0.21 (U)	0.313 (U)	0.624	0.41 (U)	
6/1/2016	1.43							0.515
8/15/2016	1.42							0.843
8/16/2016		0.82	0.521 (U)	0.697	0.435 (U)		0.399 (U)	
8/17/2016						0.49 (U)		
10/11/2016	1.6						0.00389 (U)	
10/12/2016		0.92	0.669 (U)	0.421 (U)	-0.0137 (U)	-0.0237 (U)		0.397 (U)
1/24/2017	1.3						0.35 (U)	0.269 (U)
1/25/2017		1.2	0.789	0.265 (U)	0.309 (U)	0.455 (U)		
5/9/2017	0.844		0.647	-0.132 (U)	0.42	0.451		
5/10/2017		0.665					0.0662 (U)	0.454
6/27/2017	1.32						0.793	1.25
6/28/2017		0.29 (U)	0.415	0.493	0.373	0.63		
2/27/2018			0.864	1.89	1.25	1.59		
2/28/2018	0.815	0.558					3.99	1.17
6/4/2018	1.01							
6/5/2018		0.698	0.244 (U)				-0.365 (U)	0.337 (U)
6/6/2018				0.114 (U)	0.258 (U)	0.943		
11/5/2018			0.682	0.048 (U)	0.441 (U)			
11/6/2018	0.938						0.391 (U)	0.661
11/7/2018		0.568				0.888		
3/26/2019				0.381	0.471		0.535	1.18
3/27/2019	1.17	0.988	0.564			1.1		
9/10/2019	1.39	1.1	0.57	0.434 (U)		0.852	0.3 (U)	0.516 (U)
9/11/2019					0.557 (U)			
4/20/2020					0.256 (U)		0.693	0.493 (U)
4/21/2020	0.712			-0.0655 (U)		0.653		
4/22/2020		1.11	0.502 (U)					
8/11/2020						1.64		1.48
8/12/2020							0.983	
8/17/2020	1.46							
8/18/2020		1.08	0.457 (U)	0.135 (U)	0.568 (U)			
3/9/2021						1.28 (U)		1.2 (U)
3/10/2021			0.666 (U)	0.481 (U)			0.335 (U)	
3/15/2021		1.12 (U)			0.537 (U)			
3/16/2021	1.45							
8/17/2021	1.36							0.49 (U)
8/24/2021		1.45						
8/25/2021			0.729 (U)	0.113 (U)	0.3 (U)	1.01	0.314 (U)	
3/29/2022				1.37			0.273 (U)	
3/30/2022			0.597 (U)					
4/4/2022	0.899	2.08				1.03		
4/6/2022					0.338 (U)			1 (U)
10/5/2022	1.12							
10/17/2022			0.175 (U)	0.99 (U)	0.529 (U)			
10/18/2022		1.04				1.25	0.69 (U)	0.772 (U)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<3				
2/17/2016	<3	<3	<3		<3	<3	<3	
4/12/2016		<3			<3	<3	<3	
4/13/2016	<3		<3	<3				
6/1/2016	0.972	1.55	0.758	0.126 (U)	0.044 (U)	0.407	0.1 (U)	
8/15/2016	1.43	1.85	0.638					
8/16/2016				0.477	0.213 (U)	0.547 (U)		
8/17/2016							0.372 (U)	0.66
9/20/2016								0.582
10/11/2016			0.701		0.184 (U)	0.845	0.277 (U)	
10/12/2016	0.246 (U)	0.481		0.137 (U)				-0.183 (U)
11/15/2016								0.262 (U)
1/4/2017								0.255 (U)
1/23/2017								0.871
1/24/2017	0.918	0.889	0.515 (U)		0.251 (U)	0.403 (U)	0.585	
1/25/2017				0.55				
5/9/2017			0.393 (U)	0.182 (U)	0.631		0.489	0.575
5/10/2017	1.27	1.01				0.645		
6/27/2017	1.51	1.17			0.145 (U)			0.459
6/28/2017			0.374	0.228 (U)		0.93	0.333	
2/27/2018		0.702	0.334 (U)	0.293 (U)	0.402 (U)	1.88	1.08	1.3
2/28/2018	1.05							
6/4/2018			0.64					
6/5/2018	1.07	0.999			0.313 (U)	1.13		0.269 (U)
6/6/2018				-0.056 (U)			0.016 (U)	
11/5/2018				0.637				
11/6/2018	1.05	0.913	0.803				0.0751 (U)	0.328 (U)
11/7/2018					0.496 (U)	1.72		
3/26/2019	1.57	1.35		0.405	0.315 (U)	1.21		0.571
3/27/2019			0.77				0.309 (U)	
9/9/2019	1.29	1.08	0.3 (U)					
9/10/2019				0.0889 (U)	0.219 (U)	1.21	0.578	
9/11/2019								0.561
4/21/2020	0.859	0.888	0.663 (U)	0.271 (U)	0.166 (U)			0.215 (U)
4/22/2020						0.791	0.218 (U)	
8/11/2020	2.14						0.511 (U)	
8/12/2020		1.17			0.986	0.919		
8/17/2020			0.817					
8/18/2020				-0.0105 (U)				2.3
3/9/2021	2.27	1.11 (U)						
3/10/2021				0.418 (U)	1.01 (U)	2.15	1.03 (U)	
3/15/2021								0.347 (U)
3/16/2021			1.05 (U)					
8/17/2021	1.97	2.04	2.01					
8/18/2021								0.327 (U)
8/24/2021					0.735 (U)	1.23	0.693 (U)	
8/25/2021				0.305 (U)				
3/28/2022			0.745 (U)		0.99 (U)			
3/29/2022							0.37 (U)	
3/30/2022				1.04				
4/4/2022	2.17					1.43		0.55 (U)
4/6/2022		1.18 (U)						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			1.89					
10/17/2022		0.84 (U)		0.772 (U)	0.72 (U)	1.28		
10/18/2022	1.22						0.617 (U)	
10/19/2022								0.298 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<3				
4/12/2016				<3				
6/1/2016				1.06				
8/15/2016				0.972				
8/16/2016			0.522		0.434 (U)	1.34	0.951	0.534 (U)
8/17/2016	0.386 (U)	1.47						
9/19/2016						0.561 (U)	0.242 (U)	0.238 (U)
9/20/2016	0.794	1.24	0.746		0.51			
10/11/2016			0.819	0.802	0.166 (U)	0.118 (U)	0.34 (U)	0.158 (U)
10/12/2016	0.81	0.899						
11/14/2016						0.984	0.447 (U)	0.641
11/15/2016	0.366 (U)	0.933	0.516		0.589			
1/3/2017						0.473 (U)	0.729	0.834
1/4/2017	0.356 (U)	1.54	0.648 (U)		0.659			
1/23/2017	0.429 (U)				0.227 (U)			
1/24/2017		0.868		1.1		-0.422 (U)	0.184 (U)	
1/25/2017								0.605
1/26/2017			0.852					
5/9/2017	0.62	1.22	0.148 (U)	0.74	0.436 (U)			
5/10/2017						0.706		0.563
5/31/2017							0.454	
6/27/2017	0.319 (U)	0.925	0.393		0.197 (U)	0.412	-0.111 (U)	0.937
6/28/2017				0.867				
2/27/2018	0.271 (U)	0.0271 (U)	0.695	0.905	0.896	0.314 (U)	0.146 (U)	0.475
6/4/2018				0.954				
6/5/2018	0.391	0.792	0.145 (U)		0.342 (U)	0.218 (U)	-0.128 (U)	1.65
11/5/2018							0.0946 (U)	
11/6/2018	0.646	0.926	0.513 (U)	1.27	0.928	0.566 (U)		1.55
3/26/2019	0.498	1.08	0.598		1.3			
3/27/2019				1.47		0.29 (U)	0.5	1.83
9/9/2019				1.12				
9/11/2019	0.368 (U)	0.995	0.237 (U)		0.995	0.28 (U)	-0.464 (U)	1.02
4/20/2020				0.899				
4/21/2020	0.55	0.307 (U)	0.201 (U)		0.00976 (U)			
4/22/2020						0.0983 (U)	0.474 (U)	1.08
8/11/2020						0.767		
8/12/2020							3.18	3.41
8/17/2020				0.738				
8/18/2020	0.504 (U)	0.797	3.88		3.33			
3/15/2021	0.578 (U)	1.5	0.618 (U)		0.601 (U)	0.817 (U)	1.11 (U)	0.771 (U)
3/16/2021				0.553 (U)				
8/17/2021				1.09				
8/18/2021	0.941 (U)	0.779 (U)	0.937 (U)		1.22 (U)			
8/23/2021						0.345 (U)	1.09	1.01 (U)
3/28/2022	0.733 (U)	0.554 (U)	0.529 (U)		0.714 (U)	0.413 (U)	0.682 (U)	1.36
4/5/2022				0.532 (U)				
10/5/2022				0.688 (U)		0.837 (U)	0.467 (U)	1.02
10/19/2022	0.654 (U)	1.51	0.629 (U)		0.481 (U)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.359 (U)			
1/15/2019				0.354 (U)		0.901	0.387 (U)	0.839
1/16/2019		0.0207 (U)						
1/17/2019	0.628							
1/30/2019			0.479 (U)					
9/10/2019	0.656						0.519 (U)	
9/11/2019		0.734	0.412 (U)		1.22	1.16		0.13 (U)
4/20/2020							0.66	
4/21/2020		0.423 (U)						
4/22/2020	0.473 (U)		-0.103 (U)	0.273 (U)	0.413 (U)	1.48		
4/29/2020								0.684
8/11/2020			0.223 (U)			2.02		
8/12/2020	2.1						0.928	
8/18/2020		0.636 (U)						0.742
8/19/2020				0.994	0.347 (U)			
3/9/2021			0.296 (U)			1.62		
3/10/2021					0.566 (U)		0.522 (U)	
3/15/2021	0.858 (U)							0.946 (U)
3/16/2021		0.536 (U)		0.954 (U)				
8/23/2021	0.336 (U)							
8/24/2021		0.492 (U)	0.253 (U)	0.282 (U)	0.417 (U)	0.823 (U)		
8/25/2021							1.09 (U)	0.938 (U)
3/28/2022	0.466 (U)			0.405 (U)				
3/29/2022				0.405 (U)				
3/30/2022			0.174 (U)		0.248 (U)		0.745 (U)	
4/6/2022		0.108 (U)				1.24		1.12
10/5/2022							0.814 (U)	
10/17/2022		0.533 (U)	0.65 (U)	0.881 (U)				
10/18/2022					0.54 (U)	1.18		1.65
10/19/2022	0.0804 (U)							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.739							
1/16/2019		0.426 (U)	0.422 (U)					
9/11/2019	0.195 (U)	0.558 (U)	0.637 (U)					
4/20/2020			0.386 (U)	0.529				
4/21/2020	0.678	1.89					0.251 (U)	0.594
5/28/2020						-0.0036 (U)		
7/6/2020					0.292 (U)			
8/11/2020					0.477 (U)	0.208 (U)		
8/12/2020			4.07					
8/17/2020				1.16			1.11	
8/19/2020	0.687	1.99						0.0107 (U)
3/8/2021					0.291 (U)	0.568 (U)		
3/9/2021	0.618 (U)	1.54						
3/10/2021			0.923 (U)	0.21 (U)			0.57 (U)	0.261 (U)
8/17/2021					0.651 (U)	0.339 (U)		
8/18/2021	1.9	1.64		1.1			0.595 (U)	1.11 (U)
8/23/2021			1.13					
3/23/2022					0.547 (U)	0.214 (U)		
3/29/2022				0.661 (U)				
3/30/2022							0.315 (U)	0.254 (U)
4/4/2022			0.795 (U)					
4/6/2022	1.01	1.84						
10/4/2022					0.744 (U)	0.714 (U)		
10/5/2022			1.17					
10/18/2022				0.914 (U)			0.152 (U)	
10/19/2022	1.77	1.67						0.484 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<3							
4/12/2016	<3							
5/31/2016	2.11							
8/17/2016	2.28							
10/11/2016	1.83							
1/24/2017	1.92							
5/9/2017	3.05							
6/28/2017	2.24							
2/27/2018	1.01							
6/5/2018	1.39							
11/6/2018	1.72							
3/27/2019	1.56							
9/11/2019	1.46							
4/20/2020				1.13	1		1.5	
4/21/2020	0.882							
5/28/2020		0.612				0.0544 (U)		2.27
7/6/2020			0.432 (U)					
8/11/2020		0.883	0.777	1.56		0.462 (U)		0.997
8/12/2020	2.08				2.14		0.991	
3/8/2021		1 (U)	2.06					
3/9/2021						1.02 (U)		1.6
3/10/2021				1.29 (U)	1.41		1.25 (U)	
3/16/2021	1.71							
8/16/2021			1.3					
8/17/2021		0.939 (U)				0.442 (U)		1.19 (U)
8/23/2021	2.11			2.06	0.978 (U)		1.52	
3/23/2022		0.908 (U)	0.999			0.748 (U)		1.02 (U)
4/4/2022	1.13							
4/5/2022					0.963 (U)		0.689 (U)	
4/6/2022				1.59				
10/3/2022			2.13					
10/4/2022		0.402 (U)				0.823 (U)		1.23
10/5/2022					1.56		1.18	
10/17/2022	1.93			1.34				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<3
2/17/2016	<3						<3	
4/12/2016	<3							
4/13/2016							<3	<3
5/31/2016	0.453 (U)						0.658	
6/1/2016								0.884
8/17/2016	0.381 (U)						0.936	1.06
10/11/2016	0.139 (U)							
10/12/2016							0.668	0.269 (U)
1/24/2017	0.496							
1/25/2017							0.718	1.12
5/10/2017	0.278 (U)						0.56	0.887
6/28/2017	0.724						0.526	0.908
2/27/2018	0.214 (U)						0.803	
2/28/2018								0.131 (U)
6/5/2018	0.176 (U)						0.577	0.564
11/7/2018	1.39						1.51	0.34 (U)
3/26/2019	0.904						0.841	0.507
9/10/2019	1.14						0.569 (U)	0.898
4/21/2020	0.679 (U)						0.549 (U)	1.09
8/19/2020	0.96						1.04	0.6 (U)
3/9/2021	1.12 (U)						0.545 (U)	1.6
8/17/2021		0.612 (U)	0.404 (U)	0.437 (U)	0.219 (U)	0.56 (U)		
8/24/2021	0.645 (U)						0.865 (U)	1.67
3/23/2022		0.932 (U)	0.201 (U)	0.829 (U)	0.207 (U)	1.03		
3/29/2022	0.394 (U)						0.575 (U)	0.621 (U)
10/4/2022		0.583 (U)	0.572 (U)	1.03	0.862 (U)	0.702 (U)		
10/18/2022	1.02						1.19	0.741 (U)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<3	
4/13/2016	<3	
6/1/2016	0.532	
8/17/2016	1.07	
10/12/2016	1.07	
1/25/2017	1.46	
5/10/2017	1.21	
6/28/2017	0.821	
2/28/2018	0.232 (U)	
6/5/2018	0.722	
11/7/2018	0.82	
3/26/2019	1.49	
3/27/2019		1.69
9/10/2019	1.75	1.89
4/20/2020		1.59
4/21/2020	1.31	
8/17/2020		1.16
8/18/2020	1.59	
3/9/2021	1.16 (U)	
3/10/2021		1.36 (U)
8/17/2021		1.76
8/24/2021	1.43	
3/29/2022	1.25	
4/5/2022		1.73
10/5/2022		1.73
10/18/2022	1.29	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.23 (J)		0.16 (J)	0.14 (J)	0.13 (J)		
2/17/2016	0.05 (J)		0.11 (J)				0.09 (J)	0.2 (J)
4/12/2016					0.119 (J)	0.137 (J)	0.107 (J)	
4/13/2016	0.061 (J)	0.236 (J)	0.119 (J)	0.163 (J)				0.173 (J)
5/31/2016		0.255 (J)	0.134 (J)	0.19 (J)	0.132 (J)	0.149 (J)	0.145 (J)	
6/1/2016	0.079 (J)							0.253 (J)
8/15/2016	0.081 (J)							0.224 (J)
8/16/2016		0.238 (J)	0.116 (J)	0.219 (J)	0.177 (J)		0.135 (J)	
8/17/2016						0.147 (J)		
10/11/2016	0.049 (J)						0.096 (J)	
10/12/2016		0.198 (J)	0.076 (J)	0.163 (J)	0.149 (J)	0.115 (J)		0.187 (J)
3/14/2017	0.04 (J)		0.09 (J)			0.11	0.09 (J)	0.23
3/15/2017		0.22		0.13	0.16			
5/9/2017	0.05 (J)		0.11	0.15	0.18	0.14		
5/10/2017		0.25					0.11	0.23
6/27/2017	0.04 (J)						0.1	0.22
6/28/2017		0.09 (J)	0.17	0.17	0.18	0.13		
8/29/2017		0.26	0.14	0.22	0.19	0.14		
8/30/2017	0.04 (J)						0.13	0.28
2/27/2018	0.07 (J)	0.26	0.14			0.13		
2/28/2018				0.19	0.14		0.09 (J)	0.23
6/4/2018	0.07 (J)							
6/5/2018		0.24	0.16				0.13	0.28
6/6/2018				0.19	0.13	0.15		
11/5/2018			0.15	0.2	0.15			
11/6/2018	0.04 (J)						0.12	0.24
11/7/2018		0.25				0.19		
3/26/2019				0.196	0.0775 (J)		0.113	0.316
3/27/2019	0.192	0.206	0.104			0.248		
9/10/2019	0.179	0.226	0.191	0.26		0.209	0.122	0.267
9/11/2019					0.118			
4/20/2020					0.0844 (J)		0.14	0.245
4/21/2020	0.12			0.198		0.254		
4/22/2020		0.224	0.167					
8/11/2020						0.278		0.294
8/12/2020							0.147	
8/17/2020	0.115							
8/18/2020		0.203	0.165	0.223	0.108			
3/9/2021						0.263		0.286
3/10/2021			0.0749 (J)	0.161			0.115	
3/15/2021		0.324			0.0737 (J)			
3/16/2021	0.129							
8/17/2021	0.158							0.286
8/24/2021		0.277						
8/25/2021			0.135	0.188	0.111	0.239	0.167	
3/29/2022				0.107 (J)			0.117 (J)	
3/30/2022			<0.125					
4/4/2022	0.124 (JD)	0.2785 (D)				0.226 (D)		
4/6/2022					<0.125			0.2395 (D)
10/5/2022	0.125							
10/17/2022			0.118 (J)	0.197	<0.125			
10/18/2022		0.248				0.211	0.139	0.27

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.18 (J)				
2/17/2016	0.53	0.15 (J)	0.09 (J)		0.08 (J)	0.02 (J)	0.02 (J)	
4/12/2016		0.168 (J)			0.077 (J)	0.026 (J)	0.021 (J)	
4/13/2016	0.437		0.092 (J)	0.191 (J)				
6/1/2016	0.376	0.178 (J)	0.108 (J)	0.201 (J)	0.101 (J)	0.057 (J)	0.051 (J)	
8/15/2016	0.362	0.149 (J)	0.105 (J)					
8/16/2016				0.218 (J)	0.093 (J)	0.046 (J)		
8/17/2016							0.037 (J)	0.159 (J)
9/20/2016								0.126 (J)
10/11/2016			0.062 (J)		0.059 (J)	<0.125	<0.1	
10/12/2016	0.377	0.12 (J)		0.171 (J)				0.1 (J)
11/15/2016								0.016 (J)
1/4/2017								<0.125
3/13/2017								0.31 (o)
3/14/2017	0.41	0.17	<0.1		0.07 (J)	<0.125	<0.1	
3/15/2017				0.16				
5/9/2017			0.07 (J)	0.17	0.08 (J)		<0.1	0.25 (o)
5/10/2017	0.36	0.17				<0.125		
6/27/2017	0.38	0.18			0.08 (J)			0.22 (o)
6/28/2017			0.09 (J)	0.18		<0.125	0.04 (J)	
8/29/2017				0.23	0.1	0.04 (J)	<0.1	0.22 (o)
8/30/2017	0.38	0.21	0.07 (J)					
2/27/2018			0.08 (J)		0.08 (J)	<0.125		0.08 (J)
2/28/2018	0.58	0.17		0.2			<0.1	
6/4/2018			0.09 (J)					
6/5/2018	0.41	0.17			0.09 (J)	0.04 (J)		0.07 (J)
6/6/2018				0.19			<0.1	
11/5/2018				0.22				
11/6/2018	0.45	0.17	0.07 (J)				<0.1	0.07 (J)
11/7/2018					0.08 (J)	<0.125		
3/26/2019	0.573	0.192		0.219	0.123	<0.125		<0.125
3/27/2019			0.089 (J)				<0.1	
9/9/2019	0.477	0.157	0.163					
9/10/2019				0.194	0.0914 (J)	0.0545 (J)	<0.1	
9/11/2019								0.0716 (J)
4/21/2020	0.565	0.171	0.126	0.173	0.095 (J)			<0.125
4/22/2020						<0.125	<0.1	
8/11/2020	0.515						<0.1	
8/12/2020		0.198			0.0867 (J)	<0.125		
8/17/2020			0.0753 (J)					
8/18/2020				0.18				<0.125
3/9/2021	0.628	0.205						
3/10/2021				0.113	0.085 (J)	<0.125	0.104	
3/15/2021								<0.125
3/16/2021			0.185					
8/17/2021	0.494	0.212	0.0974 (J)					
8/18/2021								<0.125
8/24/2021					0.0713 (J)	<0.125	0.0914 (J)	
8/25/2021				0.117				
3/28/2022			0.105 (J)		<0.125			
3/29/2022							0.0724 (J)	
3/30/2022				<0.125				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
4/4/2022	0.5855 (D)					<0.125		<0.125
4/6/2022		0.1385 (JD)						
10/5/2022			0.124 (J)					
10/17/2022		0.176		0.0988 (J)	<0.125	<0.125		
10/18/2022	0.544						0.0955 (J)	
10/19/2022								<0.125

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.08 (J)				
4/12/2016				0.083 (J)				
6/1/2016				0.118 (J)				
8/15/2016				0.109 (J)				
8/16/2016			0.05 (J)		0.036 (J)	0.087 (J)	0.054 (J)	0.061 (J)
8/17/2016	0.039 (J)	0.055 (J)						
9/19/2016						0.045 (J)	0.023 (J)	0.018 (J)
9/20/2016	0.01 (o)	0.021 (o)	0.015 (J)		<0.125			
10/11/2016			<0.125	0.066 (J)	<0.125	0.034 (J)	0.011 (J)	<0.125
10/12/2016	<0.125	<0.125						
11/14/2016						<0.125	<0.125	<0.125
11/15/2016	<0.125	<0.125	<0.125		<0.125			
1/3/2017						<0.125	<0.125	<0.125
1/4/2017	<0.125	<0.125	<0.125		<0.125			
3/13/2017			<0.125					
3/14/2017	<0.125	<0.125		0.07 (J)	<0.125	<0.125	<0.125	<0.125
5/9/2017	<0.125	<0.125	<0.125	0.09 (J)	<0.125			
5/10/2017						0.05 (J)	0.05 (J)	0.06 (J)
6/27/2017	<0.125	<0.125	<0.125		<0.125	0.05 (J)	0.04 (J)	0.07 (J)
6/28/2017				0.1				
8/29/2017	<0.125							
8/30/2017		<0.125	<0.125	0.12	<0.125	<0.125	0.04 (J)	0.08 (J)
2/27/2018	<0.125	<0.125	<0.125	0.09 (J)	<0.125	<0.125	0.04 (J)	0.07 (J)
6/4/2018				0.1				
6/5/2018	<0.125	<0.125	<0.125		<0.125	<0.125	0.04 (J)	0.1
11/5/2018							<0.125	
11/6/2018	<0.125	<0.125	<0.125	0.1	<0.125	<0.125		0.08 (J)
3/26/2019	<0.125	<0.125	<0.125		<0.125			
3/27/2019				0.13		<0.125	<0.125	<0.125
9/9/2019				0.121				
9/11/2019	<0.125	0.0649 (J)	<0.125		<0.125	<0.125	0.0518 (J)	<0.125
4/20/2020				0.112				
4/21/2020	<0.125	<0.125	<0.125		<0.125			
4/22/2020						<0.125	<0.125	<0.125
8/11/2020						<0.125		
8/12/2020							<0.125	<0.125
8/17/2020				0.148				
8/18/2020	<0.125	<0.125	<0.125		<0.125			
3/15/2021	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125	<0.125
3/16/2021				0.23				
8/17/2021				0.184				
8/18/2021	<0.125	<0.125	<0.125		<0.125			
8/23/2021						<0.125	<0.125	<0.125
3/28/2022	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125	<0.125
4/5/2022				0.146 (JD)				
10/5/2022				0.12 (J)		0.0671 (J)	<0.125	<0.125
10/19/2022	<0.125	0.0698 (J)	<0.125		<0.125			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.0841 (J)			
1/15/2019				0.0512 (J)		0.465	0.0981 (J)	0.0859 (J)
1/16/2019		<0.125						
1/17/2019	<0.125							
1/30/2019			0.264					
9/10/2019	<0.125						0.18	
9/11/2019		0.082 (J)	0.289		0.142	0.443		0.0609 (J)
4/20/2020							0.0952 (J)	
4/21/2020		0.16						
4/22/2020	<0.125		0.279	0.197	0.135	0.446		
4/29/2020								0.0857 (J)
8/11/2020			0.325			0.494		
8/12/2020	<0.125						0.145	
8/18/2020		0.0766 (J)						0.092 (J)
8/19/2020				0.141	0.149			
3/9/2021			0.365			0.458		
3/10/2021					0.131		0.112	
3/15/2021	<0.125							0.0721 (J)
3/16/2021		0.0841 (J)		0.263				
8/23/2021	<0.125							
8/24/2021		0.0681 (J)	0.318	0.194	0.197	0.508		
8/25/2021							0.142	0.074 (J)
3/28/2022	<0.125							
3/29/2022				0.189				
3/30/2022			0.301		0.0661 (J)		<0.125	
4/6/2022		<0.125				0.3765 (D)		<0.125
10/5/2022							0.133	
10/17/2022		<0.125	0.347	0.138				
10/18/2022					0.151	0.423		<0.125
10/19/2022	<0.125							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.125							
1/16/2019		0.0888 (J)	0.0727 (J)					
9/11/2019	0.063 (J)	0.127	0.0783 (J)					
4/20/2020			0.0638 (J)	0.176				
4/21/2020	0.0701 (J)	0.147					<0.125	0.075 (J)
5/28/2020						0.0647 (J)		
7/6/2020					0.185			
8/11/2020					0.169	<0.125		
8/12/2020			0.0867 (J)					
8/17/2020				0.195			<0.125	
8/19/2020	0.077 (J)	0.154						0.0823 (J)
3/8/2021					0.187	<0.125		
3/9/2021	0.0697 (J)	0.135						
3/10/2021			0.0611 (J)	0.176			<0.125	<0.1
8/17/2021					0.177	<0.125		
8/18/2021	0.111	0.166		0.172			<0.125	0.0638 (J)
8/23/2021			0.11					
3/23/2022					0.158	<0.125		
3/29/2022				0.162				
3/30/2022							<0.125	0.0724 (J)
4/4/2022			<0.125					
4/6/2022	0.0957 (JD)	0.11535 (JD)						
10/4/2022					0.151	0.0647 (J)		
10/5/2022			0.104 (J)					
10/18/2022				0.147			<0.125	
10/19/2022	<0.125	0.134						0.0628 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.22 (J)							
4/12/2016	0.214 (J)							
5/31/2016	0.232 (J)							
8/17/2016	0.225 (J)							
10/11/2016	0.19 (J)							
3/14/2017	0.22							
5/9/2017	0.21							
6/28/2017	0.21							
8/30/2017	0.25							
2/27/2018	0.23							
6/5/2018	0.24							
11/6/2018	0.22							
3/27/2019	0.208							
9/11/2019	0.2							
4/20/2020				0.154	0.25		0.189	
4/21/2020	0.224							
5/28/2020		0.138				<0.125		0.0914 (J)
7/6/2020			0.0721 (J)					
8/11/2020		0.16	0.0762 (J)	0.133		<0.125		0.137
8/12/2020	0.221				0.275		0.165	
3/8/2021		0.127	0.0628 (J)					
3/9/2021						<0.125		0.0715 (J)
3/10/2021				0.135	0.25		0.112	
3/16/2021	0.282							
8/16/2021			0.0613 (J)					
8/17/2021		0.155				<0.125		0.096 (J)
8/23/2021	0.322			0.245	0.328		0.244	
3/23/2022		0.16	0.0894 (J)			<0.125		0.0775 (J)
4/4/2022	0.216							
4/5/2022					0.2325 (D)		<0.125 (D)	
4/6/2022				0.0946 (JD)				
10/3/2022			0.102 (J)					
10/4/2022		0.157				<0.125		0.0929 (J)
10/5/2022					0.261		0.165	
10/17/2022	0.192			0.136				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								0.08 (J)
2/17/2016	0.17 (J)						0.07 (J)	
4/12/2016	0.203 (J)							
4/13/2016							0.081 (J)	0.088 (J)
5/31/2016	0.212 (J)						0.103 (J)	
6/1/2016								0.109 (J)
8/17/2016	0.19 (J)						0.078 (J)	0.089 (J)
10/11/2016	0.15 (J)							
10/12/2016							0.041 (J)	0.048 (J)
3/14/2017	0.18						0.07 (J)	
3/15/2017								0.08 (J)
5/10/2017	0.19						0.09 (J)	0.1
6/28/2017	0.18						0.08 (J)	0.09 (J)
8/29/2017	0.22						0.09 (J)	0.11
2/27/2018	0.22						0.08 (J)	0.11
6/5/2018	0.23						0.08 (J)	0.11
11/7/2018	0.22						0.08 (J)	0.11
3/26/2019	0.253						0.106	0.162
9/10/2019	0.227						0.086 (J)	0.113
4/21/2020	0.218						0.0951 (J)	0.114
8/19/2020	0.223						0.103	0.116
3/9/2021	0.17						0.0949 (J)	0.109
8/17/2021		<0.125	0.142	0.0716 (J)	<0.125	0.225		
8/24/2021	0.161						0.1	0.141
3/23/2022		<0.125	0.0871 (J)	<0.125	<0.125	0.251		
3/29/2022	0.193						0.104 (J)	0.108 (J)
10/4/2022		<0.125	0.0748 (J)	<0.125	<0.125	0.212		
10/18/2022	0.154						0.0649 (J)	0.0981 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.16 (J)	
4/13/2016	0.15 (J)	
6/1/2016	0.19 (J)	
8/17/2016	0.171 (J)	
10/12/2016	0.137 (J)	
3/15/2017	0.15	
5/10/2017	0.17	
6/28/2017	0.16	
8/29/2017	0.19	
2/27/2018	0.19	
6/5/2018	0.19	
11/7/2018	0.2	
3/26/2019	0.223	
9/10/2019	0.178	0.0831 (J)
4/20/2020		0.132
4/21/2020	0.181	
8/17/2020		0.0959 (J)
8/18/2020	0.177	
3/9/2021	0.147	
3/10/2021		0.118
8/17/2021		0.117
8/24/2021	0.164	
3/29/2022	<0.125	
4/5/2022		0.12105 (JD)
10/5/2022		0.192
10/18/2022	0.156	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0002		<0.0002	<0.0002	<0.0002		
2/17/2016	<0.0002		<0.0002				<0.0002	<0.005
4/12/2016					<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002	<0.0002	<0.0002	<0.0002				<0.005
5/31/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
6/1/2016	<0.0002							<0.005
8/15/2016	<0.0002							<0.005
8/16/2016		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	
8/17/2016						<0.0002		
10/11/2016	<0.0002						<0.0002	
10/12/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.005
1/24/2017	<0.0002						<0.0002	<0.005
1/25/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
5/9/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
5/10/2017		<0.0002					<0.0002	<0.005
6/27/2017	<0.0002						<0.0002	<0.005
6/28/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/27/2018	<0.0002	<0.0002	<0.0002			<0.0002		
2/28/2018				<0.0002	<0.0002		<0.0002	<0.005
6/4/2018	<0.0002							
6/5/2018		<0.0002	<0.0002				<0.0002	<0.005
6/6/2018				<0.0002	<0.0002	<0.0002		
11/5/2018			<0.0002	<0.0002	<0.0002			
11/6/2018	<0.0002						<0.0002	<0.005
11/7/2018		<0.0002				<0.0002		
3/26/2019				<0.0002	<0.0002		<0.0002	<0.005
3/27/2019	<0.0002	<0.0002	<0.0002			<0.0002		
9/10/2019	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.005
9/11/2019					<0.0002			
4/20/2020					<0.0002		<0.0002	<0.005
4/21/2020	<0.0002			<0.0002		<0.0002		
4/22/2020		<0.0002	<0.0002					
8/11/2020						<0.0002		<0.005
8/12/2020							<0.0002	
8/17/2020	<0.0002							
8/18/2020		<0.0002	<0.0002	<0.0002	<0.0002			
3/9/2021						<0.0002		0.000109 (J)
3/10/2021			<0.0002	<0.0002			<0.0002	
3/15/2021		<0.0002			<0.0002			
3/16/2021	<0.0002							
8/17/2021	<0.0002							0.00011 (J)
8/24/2021		<0.0002						
8/25/2021			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
3/29/2022				<0.0002			<0.0002	
3/30/2022			<0.0002					
4/4/2022	<0.0002	<0.0002				<0.0002		
4/6/2022					<0.0002			9E-05 (J)
10/5/2022	<0.0002							
10/17/2022			<0.0002	<0.0002	<0.0002			
10/18/2022		<0.0002				<0.0002	<0.0002	8.9E-05 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	<0.0002	<0.0002	<0.005		<0.0002	<0.0002	<0.0002	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002		<0.005	<0.0002				
6/1/2016	<0.0002	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	
8/15/2016	<0.0002	<0.0002	0.00104 (J)					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.005		<0.0002	<0.0002	<0.0002	
10/12/2016	<0.0002	<0.0002		<0.0002				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	<0.0002	<0.0002	<0.005		<0.0002	<0.0002	<0.0002	
1/25/2017				<0.0002				
5/9/2017			<0.005	<0.0002	<0.0002		<0.0002	<0.0002
5/10/2017	<0.0002	<0.0002				<0.0002		
6/27/2017	<0.0002	<0.0002			<0.0002			<0.0002
6/28/2017			<0.005	<0.0002		<0.0002	<0.0002	
2/27/2018			<0.005		<0.0002	<0.0002		<0.0002
2/28/2018	<0.0002	<0.0002		<0.0002			<0.0002	
6/4/2018			<0.005					
6/5/2018	<0.0002	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.0002	
11/5/2018				<0.0002				
11/6/2018	<0.0002	<0.0002	<0.005				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			<0.005				<0.0002	
9/9/2019	<0.0002	<0.0002	<0.005					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	<0.0002	<0.0002	<0.005	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	<0.0002						<0.0002	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.005					
8/18/2020				<0.0002				<0.0002
3/9/2021	<0.0002	<0.0002						
3/10/2021				<0.0002	<0.0002	<0.0002	8.84E-05 (J)	
3/15/2021								6.99E-05 (J)
3/16/2021			0.000736					
8/17/2021	<0.0002	<0.0002	0.00059					
8/18/2021								7E-05 (J)
8/24/2021					<0.0002	<0.0002	<0.0002	
8/25/2021				<0.0002				
3/28/2022			0.00066		<0.0002			
3/29/2022							<0.0002	
3/30/2022				<0.0002				
4/4/2022	<0.0002					<0.0002		<0.0002
4/6/2022		<0.0002						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.000453					
10/17/2022		<0.0002		<0.0002	<0.0002	<0.0002		
10/18/2022	<0.0002						<0.0002	
10/19/2022								<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0002				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/17/2016	<0.0002	<0.0002						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	<0.0002		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			<0.0002					
5/9/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.000121 (J)	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	<0.0002	<0.0002	<0.0002		<0.0002			
8/23/2021						<0.0002	0.00015 (J)	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	0.00015 (J)	<0.0002	0.00015 (J)
4/5/2022				<0.0002				
10/5/2022				<0.0002		<0.0002	<0.0002	0.000115 (J)
10/19/2022	<0.0002	<0.0002	<0.0002		<0.0002			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		<0.0002	<0.0002	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.005					
9/10/2019	<0.0002						<0.0002	
9/11/2019		<0.0002	<0.005		<0.0002	<0.0002		<0.0002
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.005	<0.0002	<0.0002	<0.0002		
4/29/2020								<0.0002
8/11/2020			<0.005			<0.0002		
8/12/2020	<0.0002						<0.0002	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			0.000447			<0.0002		
3/10/2021					<0.0002		<0.0002	
3/15/2021	<0.0002							<0.0002
3/16/2021		<0.0002		<0.0002				
8/23/2021	<0.0002							
8/24/2021		<0.0002	0.00031	<0.0002	<0.0002	<0.0002		
8/25/2021							<0.0002	<0.0002
3/28/2022	<0.0002							
3/29/2022				<0.0002				
3/30/2022			0.00037		<0.0002		<0.0002	
4/6/2022		<0.0002				<0.0002		8E-05 (J)
10/5/2022							<0.0002	
10/17/2022		<0.0002	0.000349	<0.0002				
10/18/2022					<0.0002	<0.0002		<0.0002
10/19/2022	<0.0002							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0002							
1/16/2019		<0.0002	<0.0002					
9/11/2019	<0.0002	<0.0002	<0.0002					
4/20/2020			<0.0002	<0.0002				
4/21/2020	<0.0002	<0.0002					<0.0002	<0.0002
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			<0.0002					
8/17/2020				<0.0002			<0.0002	
8/19/2020	<0.0002	<0.0002						<0.0002
3/8/2021					<0.0002	<0.0002		
3/9/2021	<0.0002	<0.0002						
3/10/2021			<0.0002	<0.0002			<0.0002	<0.0002
8/17/2021					<0.0002	<0.0002		
8/18/2021	<0.0002	<0.0002		<0.0002			<0.0002	<0.0002
8/23/2021			<0.0002					
3/23/2022					<0.0002	<0.0002		
3/29/2022				<0.0002				
3/30/2022							<0.0002	<0.0002
4/4/2022			<0.0002					
4/6/2022	<0.0002	<0.0002						
10/4/2022					<0.0002	<0.0002		
10/5/2022			<0.0002					
10/18/2022				<0.0002			<0.0002	
10/19/2022	<0.0002	<0.0002						<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.0002							
4/12/2016	<0.0002							
5/31/2016	<0.0002							
8/17/2016	<0.0002							
10/11/2016	<0.0002							
1/24/2017	<0.0002							
5/9/2017	<0.0002							
6/28/2017	<0.0002							
2/27/2018	<0.0002							
6/5/2018	<0.0002							
11/6/2018	<0.0002							
3/27/2019	<0.0002							
9/11/2019	<0.0002							
4/20/2020				<0.0002	<0.0002		<0.0002	
4/21/2020	<0.0002							
5/28/2020		<0.0002				<0.0002		0.0026 (J)
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002
8/12/2020	<0.0002				<0.0002		<0.0002	
3/8/2021		0.000122 (J)	<0.0002					
3/9/2021						8.75E-05 (J)		<0.0002
3/10/2021				<0.0002	9.49E-05 (J)		<0.0002	
3/16/2021	<0.0002							
8/16/2021			<0.0002					
8/17/2021		0.00029				<0.0002		0.00017 (J)
8/23/2021	<0.0002			<0.0002	<0.0002		<0.0002	
3/23/2022		0.00013 (J)	<0.0002			0.0001 (J)		<0.0002
4/4/2022	<0.0002							
4/5/2022					<0.0002		0.00031	
4/6/2022				8E-05 (J)				
10/3/2022			<0.0002					
10/4/2022		<0.0002				8E-05 (J)		9.4E-05 (J)
10/5/2022					0.000194 (J)		<0.0002	
10/17/2022	<0.0002			0.00012 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.0002						<0.0002	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	<0.0002						<0.0002	<0.0002
8/17/2021		<0.0002	<0.0002	0.00011 (J)	<0.0002	0.00022		
8/24/2021	<0.0002						<0.0002	<0.0002
3/23/2022		<0.0002	<0.0002	0.00016 (J)	<0.0002	0.00016 (J)		
3/29/2022	<0.0002						<0.0002	<0.0002
10/4/2022		<0.0002	8E-05 (J)	8.3E-05 (J)	0.000134 (J)	0.000109 (J)		
10/18/2022	<0.0002						<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.000203
4/20/2020		<0.000203
4/21/2020	<0.0002	
8/17/2020		<0.000203
8/18/2020	<0.0002	
3/9/2021	7.84E-05 (J)	
3/10/2021		<0.000203
8/17/2021		0.00022
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		0.0002 (J)
10/5/2022		0.000298
10/18/2022	<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.115		0.502	0.51	0.632		
2/17/2016	<0.02		0.0777				0.806	0.626
4/12/2016					0.508	0.615	0.719	
4/13/2016	<0.02	0.135	0.073	0.544				0.594
5/31/2016		0.127	0.0721	0.47	0.454	0.613	0.735	
6/1/2016	<0.02							0.556
8/15/2016	<0.02							0.557
8/16/2016		0.124	0.075	0.282	0.371		0.699	
8/17/2016						0.444		
10/11/2016	0.0194 (J)						0.727	
10/12/2016		0.101	0.0703	0.217	0.282	0.387		0.589
1/24/2017	<0.02						0.689	0.522
1/25/2017		0.109	0.0683	0.108	0.0904	0.516		
5/9/2017	<0.02		0.0646	0.132	0.144	0.526		
5/10/2017		0.101					0.603	0.552
6/27/2017	<0.02						0.558	0.523
6/28/2017		0.0954	0.109	0.126	0.146	0.626		
2/27/2018	<0.02	0.111	0.11			0.562		
2/28/2018				0.0786	0.0738		0.571	0.544
6/4/2018	<0.02							
6/5/2018		0.104	0.102				0.492	0.49
6/6/2018				0.067	0.148	1.06		
11/5/2018			0.0641	0.0912	0.0914			
11/6/2018	<0.02						0.547	0.54
11/7/2018		0.11				0.604		
3/26/2019				0.0532	0.123		0.57	0.558
3/27/2019	<0.02	0.115	0.119			1.11		
9/10/2019	<0.02	0.112	0.124	0.0598		0.765	0.6	0.581
9/11/2019					0.246			
4/20/2020					0.201		0.604	0.62
4/21/2020	<0.02			0.166		0.672		
4/22/2020		0.123	0.126					
8/11/2020						0.712		0.599
8/12/2020							0.594	
8/17/2020	<0.02							
8/18/2020		0.124	0.109	0.0892	0.42			
3/9/2021						0.791		0.692
3/10/2021			0.0826	0.125			0.63	
3/15/2021		0.155			0.308			
3/16/2021	<0.02							
8/17/2021	<0.02							0.647
8/24/2021		0.198						
8/25/2021			0.132	0.117	0.5	0.985	0.622	
3/29/2022				0.13			0.534	
3/30/2022			0.0615					
4/4/2022	<0.02	0.329				0.607		
4/6/2022					0.584			0.638
10/5/2022	<0.02							
10/17/2022			0.0928	0.122	0.764			
10/18/2022		0.241				0.478	0.556	0.594

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.513				
2/17/2016	0.612	0.67	<0.02		<0.02	<0.02	<0.02	
4/12/2016		0.655			<0.02	<0.02	<0.02	
4/13/2016	0.694		<0.02	0.532				
6/1/2016	0.675	0.666	<0.02	0.513	<0.02	<0.02	<0.02	
8/15/2016	0.571	0.558	<0.02					
8/16/2016				0.301	<0.02	<0.02		
8/17/2016							<0.02	<0.02
9/20/2016								<0.02
10/11/2016			<0.02		<0.02	<0.02	<0.02	
10/12/2016	0.622	0.56		0.22				<0.02
11/15/2016								<0.02
1/4/2017								<0.02
1/23/2017								<0.02
1/24/2017	0.752	0.374	<0.02		<0.02	<0.02	<0.02	
1/25/2017				0.107				
5/9/2017			<0.02	0.113	<0.02		<0.02	<0.02
5/10/2017	0.622	0.443				<0.02		
6/27/2017	0.597	0.451			<0.02			<0.02
6/28/2017			<0.02	0.0962		<0.02	<0.02	
2/27/2018			<0.02		<0.02	<0.02		<0.02
2/28/2018	0.73	0.343		0.0594			<0.02	
6/4/2018			<0.02					
6/5/2018	0.531	0.353			<0.02	<0.02		<0.02
6/6/2018				0.0469 (J)			<0.02	
11/5/2018				0.0902				
11/6/2018	0.583	0.369	<0.02				<0.02	<0.02
11/7/2018					<0.02	<0.02		
3/26/2019	0.595	0.378		0.0531	<0.02	<0.02		<0.02
3/27/2019			<0.02				<0.02	
9/9/2019	0.571	0.408	<0.02					
9/10/2019				0.0862	<0.02	<0.02	<0.02	
9/11/2019								<0.02
4/21/2020	0.629	0.386	<0.02	0.0782	<0.02			<0.02
4/22/2020						<0.02	<0.02	
8/11/2020	0.552						<0.02	
8/12/2020		0.326			<0.02	<0.02		
8/17/2020			<0.02					
8/18/2020				0.0718				<0.02
3/9/2021	0.864	0.364						
3/10/2021				0.146	<0.02	<0.02	<0.02	
3/15/2021								<0.02
3/16/2021			<0.02					
8/17/2021	0.585	0.335	<0.02					
8/18/2021								<0.02
8/24/2021					<0.02	<0.02	<0.02	
8/25/2021				0.0872				
3/28/2022			<0.02		<0.02			
3/29/2022							<0.02	
3/30/2022				0.082				
4/4/2022	0.647					<0.02		<0.02
4/6/2022		0.312						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.02					
10/17/2022		0.321		0.0902	<0.02	<0.02		
10/18/2022	0.656						<0.02	
10/19/2022								<0.02

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.02				
4/12/2016				<0.02				
6/1/2016				<0.02				
8/15/2016				<0.02				
8/16/2016			<0.02		<0.02	<0.02	<0.02	<0.02
8/17/2016	<0.02	<0.02						
9/19/2016						<0.02	<0.02	<0.02
9/20/2016	<0.02	<0.02	<0.02		<0.02			
10/11/2016			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/12/2016	<0.02	<0.02						
11/14/2016						<0.02	<0.02	<0.02
11/15/2016	<0.02	<0.02	<0.02		<0.02			
1/3/2017						<0.02	<0.02	<0.02
1/4/2017	<0.02	<0.02	<0.02		<0.02			
1/23/2017	<0.02				<0.02			
1/24/2017		<0.02		<0.02		<0.02	<0.02	
1/25/2017								<0.02
1/26/2017			<0.02					
5/9/2017	<0.02	<0.02	<0.02	<0.02	<0.02			
5/10/2017						<0.02	<0.02	<0.02
6/27/2017	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
6/28/2017				<0.02				
2/27/2018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
6/4/2018				<0.02				
6/5/2018	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
11/5/2018							<0.02	
11/6/2018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02
3/26/2019	<0.02	<0.02	<0.02		<0.02			
3/27/2019				<0.02		<0.02	<0.02	<0.02
9/9/2019				<0.02				
9/11/2019	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
4/20/2020				<0.02				
4/21/2020	<0.02	<0.02	<0.02		<0.02			
4/22/2020						<0.02	<0.02	<0.02
8/11/2020						<0.02		
8/12/2020							<0.02	<0.02
8/17/2020				<0.02				
8/18/2020	<0.02	<0.02	<0.02		<0.02			
3/15/2021	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
3/16/2021				<0.02				
8/17/2021				<0.02				
8/18/2021	<0.02	<0.02	<0.02		<0.02			
8/23/2021						<0.02	<0.02	<0.02
3/28/2022	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
4/5/2022				<0.02				
10/5/2022				<0.02		<0.02	<0.02	<0.02
10/19/2022	<0.02	<0.02	<0.02		<0.02			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.02			
1/15/2019				0.0141 (J)		0.399	0.407	0.0411
1/16/2019		<0.02						
1/17/2019	<0.02							
1/30/2019			<0.02					
9/10/2019	<0.02						0.545	
9/11/2019		<0.02	<0.02		<0.02	0.45		0.0396
4/20/2020							0.628	
4/21/2020		<0.02						
4/22/2020	<0.02		<0.02	0.0134 (J)	<0.02	0.41		
4/29/2020								0.041
8/11/2020			<0.02			0.47		
8/12/2020	<0.02						0.669	
8/18/2020		<0.02						0.039
8/19/2020				0.0108 (J)	<0.02			
3/9/2021			<0.02			0.474		
3/10/2021					<0.02		0.772	
3/15/2021	<0.02							0.0459
3/16/2021		<0.02		0.0107 (J)				
8/23/2021	<0.02							
8/24/2021		<0.02	<0.02	0.0112 (J)	<0.02	0.47		
8/25/2021							0.734	0.0545
3/28/2022	<0.02							
3/29/2022				0.00867 (J)				
3/30/2022			<0.02		<0.02		0.707	
4/6/2022		<0.02				0.336		0.0809
10/5/2022							0.729	
10/17/2022		<0.02	<0.02	0.00728 (J)				
10/18/2022					<0.02	0.377		0.0617
10/19/2022	<0.02							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	0.0146 (J)							
1/16/2019		0.178	<0.02					
9/11/2019	0.0169 (J)	0.254	<0.02					
4/20/2020			<0.02	0.148				
4/21/2020	0.0174 (J)	0.376					0.0924	0.0733
5/28/2020						0.0527		
7/6/2020					0.089			
8/11/2020					0.097	0.0457		
8/12/2020			<0.02					
8/17/2020				0.212			0.108	
8/19/2020	0.0168 (J)	0.336						0.0511
3/8/2021					0.0991	0.0456		
3/9/2021	0.0172 (J)	0.448						
3/10/2021			<0.02	0.194			0.102	0.0681
8/17/2021					0.112	0.0453		
8/18/2021	0.0304	0.344		0.367			0.0821	0.0538
8/23/2021			<0.02					
3/23/2022					0.122	0.0531		
3/29/2022				0.411				
3/30/2022							0.0704	0.0726
4/4/2022			<0.02					
4/6/2022	0.0231	0.261						
10/4/2022					0.125	0.0422		
10/5/2022			<0.02					
10/18/2022				0.296			0.061	
10/19/2022	0.0212	0.225						0.0722

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.0883							
4/12/2016	0.0862							
5/31/2016	0.085							
8/17/2016	0.093							
10/11/2016	0.0928							
1/24/2017	0.094							
5/9/2017	0.0865							
6/28/2017	0.0879							
2/27/2018	0.113							
6/5/2018	0.101							
11/6/2018	0.116							
3/27/2019	0.0988							
9/11/2019	0.117							
4/20/2020				0.0107 (J)	0.101		<0.02	
4/21/2020	0.13							
5/28/2020		0.0979				<0.02		<0.02
7/6/2020			<0.02					
8/11/2020		0.0825	<0.02	0.0125 (J)		<0.02		<0.02
8/12/2020	0.132				0.105		<0.02	
3/8/2021		0.119	<0.02					
3/9/2021						<0.02		<0.02
3/10/2021				<0.02	0.0906		<0.02	
3/16/2021	0.149							
8/16/2021			<0.02					
8/17/2021		0.106				<0.02		<0.02
8/23/2021	0.116			<0.02	0.0805		<0.02	
3/23/2022		0.11	<0.02			<0.02		<0.02
4/4/2022	0.102							
4/5/2022					0.0584		<0.02	
4/6/2022				<0.02				
10/3/2022			<0.02					
10/4/2022		0.0749				<0.02		<0.02
10/5/2022					0.065		<0.02	
10/17/2022	0.0901			0.00881 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.02
2/17/2016	<0.02						<0.02	
4/12/2016	<0.02							
4/13/2016							<0.02	<0.02
5/31/2016	<0.02						<0.02	
6/1/2016								0.0101 (J)
8/17/2016	<0.02						<0.02	0.0143 (J)
10/11/2016	<0.02							
10/12/2016							<0.02	0.0166 (J)
1/24/2017	0.0591							
1/25/2017							<0.02	0.0272 (J)
5/10/2017	0.0519						<0.02	0.0436 (J)
6/28/2017	0.0403 (J)						<0.02	0.0401 (J)
2/27/2018	0.0201 (J)						<0.02	0.0309 (J)
6/5/2018	0.0218 (J)						<0.02	0.0286 (J)
11/7/2018	0.0141 (J)						<0.02	0.0371
3/26/2019	0.0192 (J)						<0.02	0.0537
9/10/2019	0.0267						<0.02	0.0928
4/21/2020	0.0518						<0.02	0.0582
8/19/2020	0.0197 (J)						<0.02	0.0511
3/9/2021	0.013 (J)						<0.02	0.0249
8/17/2021		<0.02	<0.02	<0.02	<0.02	0.142		
8/24/2021	0.00951 (J)						<0.02	0.0155 (J)
3/23/2022		<0.02	<0.02	<0.02	<0.02	0.159		
3/29/2022	<0.02						<0.02	0.00828 (J)
10/4/2022		<0.02	<0.02	<0.02	<0.02	0.16		
10/18/2022	<0.02						<0.02	<0.02

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	0.0359 (J)	
4/13/2016	0.0276 (J)	
6/1/2016	0.0296 (J)	
8/17/2016	0.0398 (J)	
10/12/2016	0.0433 (J)	
1/25/2017	0.0366 (J)	
5/10/2017	0.039 (J)	
6/28/2017	0.0345 (J)	
2/27/2018	0.0349 (J)	
6/5/2018	0.0338 (J)	
11/7/2018	0.0616	
3/26/2019	0.0931	
9/10/2019	0.128	<0.02
4/20/2020		<0.02
4/21/2020	0.0693	
8/17/2020		<0.02
8/18/2020	0.0591	
3/9/2021	0.0417	
3/10/2021		<0.02
8/17/2021		<0.02
8/24/2021	0.0383	
3/29/2022	0.0126 (J)	
4/5/2022		<0.02
10/5/2022		<0.02
10/18/2022	0.0189 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0005		<0.0005	<0.0005	<0.0005		
2/17/2016	<0.0005		<0.0005				<0.0005	<0.0005
4/12/2016					<0.0005	<0.0005	<0.0005	
4/13/2016	<0.0005	<0.0005	<0.0005	<0.0005				<0.0005
5/31/2016		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
6/1/2016	<0.0005							<0.0005
8/15/2016	<0.0005							<0.0005
8/16/2016		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	
8/17/2016						<0.0005		
10/11/2016	<0.0005						<0.0005	
10/12/2016		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
1/24/2017	<0.0005						<0.0005	<0.0005
1/25/2017		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
5/9/2017	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		
5/10/2017		<0.0005					<0.0005	<0.0005
6/27/2017	<0.0005						<0.0005	<0.0005
6/28/2017		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
2/27/2018	<0.0005	<0.0005	<0.0005			<0.0005		
2/28/2018				<0.0005	<0.0005		<0.0005	<0.0005
6/4/2018	<0.0005							
6/5/2018		<0.0005	<0.0005				<0.0005	<0.0005
6/6/2018				<0.0005	<0.0005	<0.0005		
11/5/2018			<0.0005	<0.0005	<0.0005			
11/6/2018	<0.0005						<0.0005	<0.0005
11/7/2018		<0.0005				<0.0005		
3/26/2019				<0.0005	<0.0005		<0.0005	<0.0005
3/27/2019	<0.0005	<0.0005	<0.0005			<0.0005		
9/10/2019	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
9/11/2019					<0.0005			
4/20/2020					<0.0005		<0.0005	<0.0005
4/21/2020	<0.0005			<0.0005		<0.0005		
4/22/2020		<0.0005	<0.0005					
8/11/2020						<0.0005		<0.0005
8/12/2020							<0.0005	
8/17/2020	<0.0005							
8/18/2020		<0.0005	<0.0005	<0.0005	<0.0005			
3/9/2021						<0.0005		<0.0005
3/10/2021			<0.0005	<0.0005			<0.0005	
3/15/2021		<0.0005			<0.0005			
3/16/2021	<0.0005							
8/17/2021	<0.0005							<0.0005
8/24/2021		<0.0005						
8/25/2021			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
3/29/2022				<0.0005			<0.0005	
3/30/2022			<0.0005					
4/4/2022	<0.0005	<0.0005				<0.0005		
4/6/2022					<0.0005			<0.0005
10/5/2022	<0.0005							
10/17/2022			<0.0005	<0.0005	<0.0005			
10/18/2022		<0.0005				<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0005				
2/17/2016	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
4/12/2016		<0.0005			<0.0005	<0.0005	<0.0005	
4/13/2016	<0.0005		<0.0005	<0.0005				
6/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/15/2016	<0.0005	<0.0005	<0.0005					
8/16/2016				<0.0005	<0.0005	<0.0005		
8/17/2016							<0.0005	<0.0005
9/20/2016								<0.0005
10/11/2016			<0.0005		<0.0005	<0.0005	<0.0005	
10/12/2016	<0.0005	<0.0005		<0.0005				<0.0005
11/15/2016								<0.0005
1/4/2017								<0.0005
1/23/2017								<0.0005
1/24/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
1/25/2017				<0.0005				
5/9/2017			<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
5/10/2017	<0.0005	<0.0005				<0.0005		
6/27/2017	<0.0005	<0.0005			<0.0005			<0.0005
6/28/2017			<0.0005	<0.0005		<0.0005	<0.0005	
2/27/2018			<0.0005		<0.0005	<0.0005		<0.0005
2/28/2018	<0.0005	<0.0005		<0.0005			<0.0005	
6/4/2018			<0.0005					
6/5/2018	<0.0005	<0.0005			<0.0005	<0.0005		<0.0005
6/6/2018				<0.0005			<0.0005	
11/5/2018				<0.0005				
11/6/2018	<0.0005	<0.0005	<0.0005				<0.0005	<0.0005
11/7/2018					<0.0005	<0.0005		
3/26/2019	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
3/27/2019			<0.0005				<0.0005	
9/9/2019	<0.0005	<0.0005	<0.0005					
9/10/2019				<0.0005	<0.0005	<0.0005	<0.0005	
9/11/2019								<0.0005
4/21/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005
4/22/2020						<0.0005	<0.0005	
8/11/2020	<0.0005						<0.0005	
8/12/2020		<0.0005			<0.0005	<0.0005		
8/17/2020			<0.0005					
8/18/2020				<0.0005				<0.0005
3/9/2021	<0.0005	<0.0005						
3/10/2021				<0.0005	<0.0005	<0.0005	<0.0005	
3/15/2021								<0.0005
3/16/2021			<0.0005					
8/17/2021	<0.0005	<0.0005	<0.0005					
8/18/2021								<0.0005
8/24/2021					<0.0005	<0.0005	<0.0005	
8/25/2021				<0.0005				
3/28/2022			<0.0005		<0.0005			
3/29/2022							<0.0005	
3/30/2022				<0.0005				
4/4/2022	<0.0005					<0.0005		<0.0005
4/6/2022		<0.0005						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.0005					
10/17/2022		<0.0005		<0.0005	<0.0005	<0.0005		
10/18/2022	<0.0005						<0.0005	
10/19/2022								<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0005				
4/12/2016				<0.0005				
6/1/2016				<0.0005				
8/15/2016				<0.0005				
8/16/2016			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
8/17/2016	<0.0005	<0.0005						
9/19/2016						<0.0005	<0.0005	<0.0005
9/20/2016	<0.0005	<0.0005	<0.0005		<0.0005			
10/11/2016			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10/12/2016	<0.0005	<0.0005						
11/14/2016						<0.0005	<0.0005	<0.0005
11/15/2016	<0.0005	<0.0005	<0.0005		<0.0005			
1/3/2017						<0.0005	<0.0005	<0.0005
1/4/2017	<0.0005	<0.0005	<0.0005		<0.0005			
1/23/2017	<0.0005				<0.0005			
1/24/2017		<0.0005		<0.0005		<0.0005	<0.0005	
1/25/2017								<0.0005
1/26/2017			<0.0005					
5/9/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
5/10/2017						<0.0005	<0.0005	<0.0005
6/27/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
6/28/2017				<0.0005				
2/27/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/4/2018				<0.0005				
6/5/2018	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
11/5/2018							<0.0005	
11/6/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
3/26/2019	<0.0005	<0.0005	<0.0005		<0.0005			
3/27/2019				<0.0005		<0.0005	<0.0005	<0.0005
9/9/2019				<0.0005				
9/11/2019	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
4/20/2020				<0.0005				
4/21/2020	<0.0005	<0.0005	<0.0005		<0.0005			
4/22/2020						<0.0005	<0.0005	<0.0005
8/11/2020						<0.0005		
8/12/2020							<0.0005	<0.0005
8/17/2020				<0.0005				
8/18/2020	<0.0005	<0.0005	<0.0005		<0.0005			
3/15/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
3/16/2021				<0.0005				
8/17/2021				<0.0005				
8/18/2021	<0.0005	<0.0005	<0.0005		<0.0005			
8/23/2021						<0.0005	<0.0005	<0.0005
3/28/2022	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
4/5/2022				<0.0005				
10/5/2022				<0.0005		<0.0005	<0.0005	<0.0005
10/19/2022	<0.0005	<0.0005	<0.0005		<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0005			
1/15/2019				<0.0005		<0.0005	<0.0005	<0.0005
1/16/2019		<0.0005						
1/17/2019	<0.0005							
1/30/2019			<0.0005					
9/10/2019	<0.0005						<0.0005	
9/11/2019		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005
4/20/2020							<0.0005	
4/21/2020		<0.0005						
4/22/2020	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		
4/29/2020								<0.0005
8/11/2020			<0.0005			<0.0005		
8/12/2020	<0.0005						<0.0005	
8/18/2020		<0.0005						<0.0005
8/19/2020				<0.0005	<0.0005			
3/9/2021			<0.0005			<0.0005		
3/10/2021					<0.0005		<0.0005	
3/15/2021	<0.0005							<0.0005
3/16/2021		<0.0005		<0.0005				
8/23/2021	<0.0005							
8/24/2021		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/25/2021							<0.0005	<0.0005
3/28/2022	<0.0005							
3/29/2022				<0.0005				
3/30/2022			<0.0005		<0.0005		<0.0005	
4/6/2022		<0.0005				<0.0005		<0.0005
10/5/2022							<0.0005	
10/17/2022		<0.0005	<0.0005	<0.0005				
10/18/2022					<0.0005	<0.0005		<0.0005
10/19/2022	<0.0005							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0005							
1/16/2019		<0.0005	<0.0005					
9/11/2019	<0.0005	<0.0005	<0.0005					
4/20/2020			<0.0005	<0.0005				
4/21/2020	<0.0005	<0.0005					<0.0005	<0.0005
5/28/2020						<0.0005		
7/6/2020					<0.0005			
8/11/2020					<0.0005	<0.0005		
8/12/2020			<0.0005					
8/17/2020				<0.0005			<0.0005	
8/19/2020	<0.0005	<0.0005						<0.0005
3/8/2021					<0.0005	<0.0005		
3/9/2021	<0.0005	<0.0005						
3/10/2021			<0.0005	<0.0005			<0.0005	<0.0005
8/17/2021					<0.0005	<0.0005		
8/18/2021	<0.0005	<0.0005		<0.0005			<0.0005	<0.0005
8/23/2021			<0.0005					
3/23/2022					<0.0005	<0.0005		
3/29/2022				<0.0005				
3/30/2022							<0.0005	<0.0005
4/4/2022			<0.0005					
4/6/2022	<0.0005	<0.0005						
10/4/2022					<0.0005	<0.0005		
10/5/2022			<0.0005					
10/18/2022				<0.0005			<0.0005	
10/19/2022	<0.0005	<0.0005						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.0005							
4/12/2016	<0.0005							
5/31/2016	<0.0005							
8/17/2016	<0.0005							
10/11/2016	<0.0005							
1/24/2017	<0.0005							
5/9/2017	<0.0005							
6/28/2017	<0.0005							
2/27/2018	<0.0005							
6/5/2018	<0.0005							
11/6/2018	<0.0005							
3/27/2019	<0.0005							
9/11/2019	<0.0005							
4/20/2020				<0.0005	<0.0005		<0.0005	
4/21/2020	<0.0005							
5/28/2020		<0.0005				<0.0005		<0.0005
7/6/2020			<0.0005					
8/11/2020		<0.0005	<0.0005	<0.0005		<0.0005		<0.0005
8/12/2020	<0.0005				<0.0005		<0.0005	
3/8/2021		<0.0005	<0.0005					
3/9/2021						<0.0005		<0.0005
3/10/2021				<0.0005	<0.0005		<0.0005	
3/16/2021	<0.0005							
8/16/2021			<0.0005					
8/17/2021		<0.0005				<0.0005		<0.0005
8/23/2021	<0.0005			<0.0005	<0.0005		<0.0005	
3/23/2022		<0.0005	<0.0005			<0.0005		<0.0005
4/4/2022	<0.0005							
4/5/2022					<0.0005		<0.0005	
4/6/2022				<0.0005				
10/3/2022			<0.0005					
10/4/2022		<0.0005				<0.0005		<0.0005
10/5/2022					<0.0005		<0.0005	
10/17/2022	<0.0005			<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0005
2/17/2016	<0.0005						<0.0005	
4/12/2016	<0.0005							
4/13/2016							<0.0005	<0.0005
5/31/2016	<0.0005						<0.0005	
6/1/2016								<0.0005
8/17/2016	<0.0005						<0.0005	<0.0005
10/11/2016	<0.0005							
10/12/2016							<0.0005	<0.0005
1/24/2017	<0.0005							
1/25/2017							<0.0005	<0.0005
5/10/2017	<0.0005						<0.0005	<0.0005
6/28/2017	<0.0005						<0.0005	<0.0005
2/27/2018	<0.0005						<0.0005	<0.0005
6/5/2018	<0.0005						<0.0005	<0.0005
11/7/2018	<0.0005						<0.0005	<0.0005
3/26/2019	<0.0005						<0.0005	<0.0005
9/10/2019	<0.0005						<0.0005	<0.0005
4/21/2020	<0.0005						<0.0005	<0.0005
8/19/2020	<0.0005						<0.0005	<0.0005
3/9/2021	<0.0005						<0.0005	<0.0005
8/17/2021		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/24/2021	<0.0005						<0.0005	<0.0005
3/23/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
3/29/2022	<0.0005						<0.0005	<0.0005
10/4/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
10/18/2022	<0.0005						<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0005	
4/13/2016	<0.0005	
6/1/2016	<0.0005	
8/17/2016	<0.0005	
10/12/2016	<0.0005	
1/25/2017	<0.0005	
5/10/2017	<0.0005	
6/28/2017	<0.0005	
2/27/2018	<0.0005	
6/5/2018	<0.0005	
11/7/2018	<0.0005	
3/26/2019	<0.0005	
9/10/2019	<0.0005	<0.0005
4/20/2020		<0.0005
4/21/2020	<0.0005	
8/17/2020		<0.0005
8/18/2020	<0.0005	
3/9/2021	<0.0005	
3/10/2021		<0.0005
8/17/2021		<0.0005
8/24/2021	<0.0005	
3/29/2022	<0.0005	
4/5/2022		<0.0005
10/5/2022		<0.0005
10/18/2022	<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		0.0101		0.107	0.0769	0.00839 (J)		
2/17/2016	<0.0002		0.00651 (J)				<0.0002	<0.01
4/12/2016					0.0442	0.00918 (J)	<0.0002	
4/13/2016	<0.0002	0.0127	0.00646 (J)	0.101				<0.01
5/31/2016		0.0106	0.00546 (J)	0.0915	0.0481	0.00877 (J)	<0.0002	
6/1/2016	<0.0002							<0.01
8/15/2016	<0.0002							<0.01
8/16/2016		0.00991 (J)	0.00582 (J)	0.127	0.0956		<0.0002	
8/17/2016						0.0236		
10/11/2016	<0.0002						<0.0002	
10/12/2016		0.00919 (J)	0.00589 (J)	0.11	0.114	0.0289		<0.01
1/24/2017	<0.0002						<0.0002	<0.01
1/25/2017		0.0101	0.00556 (J)	0.0741	0.078	0.00501 (J)		
5/9/2017	<0.0002		0.0058 (J)	0.0883	0.0484	0.0108		
5/10/2017		0.00984 (J)					<0.0002	<0.01
6/27/2017	<0.0002						<0.0002	<0.01
6/28/2017		0.0102	0.00616 (J)	0.109	0.0598	0.00752 (J)		
2/27/2018	<0.0002	0.011	0.00962 (J)			0.0121		
2/28/2018				0.0903	0.0346		<0.0002	<0.01
6/4/2018	<0.0002							
6/5/2018		0.00752 (J)	0.00984 (J)				<0.0002	<0.01
6/6/2018				0.0757	0.0253	0.0101		
11/5/2018			0.00944 (J)	0.0906	0.044			
11/6/2018	<0.0002						<0.0002	<0.01
11/7/2018		0.00748 (J)				0.0155		
3/26/2019				0.11	0.0262		<0.0002	<0.01
3/27/2019	<0.0002	0.00778 (J)	0.0151			0.0167		
9/10/2019	<0.0002	0.00757 (J)	0.0205	0.134		0.0125	<0.0002	<0.01
9/11/2019					0.0226			
4/20/2020					0.0924		<0.0002	<0.01
4/21/2020	<0.0002			0.0947		0.0141		
4/22/2020		0.00747 (J)	0.0147					
8/11/2020						0.0117		<0.01
8/12/2020							<0.0002	
8/17/2020	<0.0002							
8/18/2020		0.00808 (J)	0.0146	0.0938	0.145			
3/9/2021						0.0205		0.000113 (J)
3/10/2021			0.00701	0.0611			<0.0002	
3/15/2021		0.0103			0.0146			
3/16/2021	0.000117 (J)							
8/17/2021	<0.0002							0.00014 (J)
8/24/2021		0.0132						
8/25/2021			0.0106	0.0547	0.0319	0.0127	<0.0002	
3/29/2022				0.0514			<0.0002	
3/30/2022			0.00425					
4/4/2022	<0.0002	0.0117				0.0166		
4/6/2022					0.0201			0.00015 (J)
10/5/2022	<0.0002							
10/17/2022			0.0119	0.0568	0.0197			
10/18/2022		0.0075				0.0181	<0.0002	0.000194 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				0.0433				
2/17/2016	0.066	<0.01	<0.0002		<0.0002	<0.0002	<0.0002	
4/12/2016		<0.01			<0.0002	<0.0002	<0.0002	
4/13/2016	0.0835		<0.0002	0.0567				
6/1/2016	0.0835	<0.01	<0.0002	0.0565	<0.0002	<0.0002	<0.0002	
8/15/2016	0.0838	<0.01	<0.0002					
8/16/2016				0.0791	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.0002		<0.0002	<0.0002	<0.0002	
10/12/2016	0.111	<0.01		0.0767				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	0.111	<0.01	<0.0002		<0.0002	<0.0002	<0.0002	
1/25/2017				0.0398				
5/9/2017			<0.0002	0.0467	<0.0002		<0.0002	<0.0002
5/10/2017	0.0566	<0.01				<0.0002		
6/27/2017	0.0702	<0.01			<0.0002			<0.0002
6/28/2017			<0.0002	0.0833		<0.0002	<0.0002	
2/27/2018			<0.0002		<0.0002	<0.0002		<0.0002
2/28/2018	0.0957	<0.01		0.0643			<0.0002	
6/4/2018			<0.0002					
6/5/2018	0.0363	<0.01			<0.0002	<0.0002		<0.0002
6/6/2018				0.0579			<0.0002	
11/5/2018				0.0548				
11/6/2018	0.0418	<0.01	<0.0002				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	0.062	<0.01		0.071	<0.0002	<0.0002		<0.0002
3/27/2019			<0.0002				<0.0002	
9/9/2019	0.0681	<0.01	<0.0002					
9/10/2019				0.0609	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	0.0694	<0.01	<0.0002	0.0562	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	0.0506						<0.0002	
8/12/2020		<0.01			<0.0002	<0.0002		
8/17/2020			<0.0002					
8/18/2020				0.0505				<0.0002
3/9/2021	0.067	0.000362						
3/10/2021				0.0123	0.000179 (J)	<0.0002	8.43E-05 (J)	
3/15/2021								<0.0002
3/16/2021			8.04E-05 (J)					
8/17/2021	0.0468	0.0004	0.00017 (J)					
8/18/2021								<0.0002
8/24/2021					0.00017 (J)	<0.0002	<0.0002	
8/25/2021				0.00789				
3/28/2022			<0.0002		0.00012 (J)			
3/29/2022							<0.0002	
3/30/2022				0.00682				
4/4/2022	0.054					<0.0002		<0.0002
4/6/2022		0.00032						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.0002					
10/17/2022		0.000305		0.00666	<0.0002	<0.0002		
10/18/2022	0.0513						<0.0002	
10/19/2022								<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.0002				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	0.00201 (J)	<0.0002	<0.0002
8/17/2016	<0.0002	<0.0002						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	0.00308 (J)		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			<0.0002					
5/9/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	7.41E-05 (J)	<0.0002	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	<0.0002	<0.0002	<0.0002		<0.0002			
8/23/2021						<0.0002	<0.0002	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/5/2022				<0.0002				
10/5/2022				<0.0002		<0.0002	<0.0002	<0.0002
10/19/2022	<0.0002	<0.0002	<0.0002		<0.0002			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.00574 (J)			
1/15/2019				<0.01		0.00419 (J)	<0.0002	<0.01
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.01					
9/10/2019	<0.0002						<0.0002	
9/11/2019		<0.0002	<0.01		0.00203 (J)	0.00338 (J)		<0.01
4/20/2020							<0.0002	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.01	<0.01	<0.01	0.00246 (J)		
4/29/2020								<0.01
8/11/2020			<0.01			0.00401 (J)		
8/12/2020	<0.0002						<0.0002	
8/18/2020		<0.0002						<0.01
8/19/2020				<0.01	<0.01			
3/9/2021			0.000166 (J)			0.0047		
3/10/2021					0.000699		<0.0002	
3/15/2021	<0.0002							0.000131 (J)
3/16/2021		<0.0002		0.000373				
8/23/2021	<0.0002							
8/24/2021		<0.0002	9E-05 (J)	0.00037	0.00048	0.00376		
8/25/2021							<0.0002	0.0001 (J)
3/28/2022	<0.0002							
3/29/2022				0.00079				
3/30/2022			0.00017 (J)		0.00076		<0.0002	
4/6/2022		<0.0002				0.00174		0.00013 (J)
10/5/2022							<0.0002	
10/17/2022		<0.0002	0.000144 (J)	0.000164 (J)				
10/18/2022					0.00031	0.00284		0.000147 (J)
10/19/2022	<0.0002							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.01							
1/16/2019		<0.01	<0.0002					
9/11/2019	<0.01	<0.01	<0.0002					
4/20/2020			<0.0002	0.0703				
4/21/2020	<0.01	<0.01					<0.0002	<0.01
5/28/2020						<0.0002		
7/6/2020					0.0661			
8/11/2020					0.0443	<0.0002		
8/12/2020			<0.0002					
8/17/2020				0.0737			<0.0002	
8/19/2020	<0.01	<0.01						<0.01
3/8/2021					0.0761	<0.0002		
3/9/2021	0.000315	0.0026						
3/10/2021			0.000171 (J)	0.0852			0.000144 (J)	0.000173 (J)
8/17/2021					0.0555	<0.0002		
8/18/2021	0.00015 (J)	0.00283		0.0752			7E-05 (J)	0.00022
8/23/2021			0.00018 (J)					
3/23/2022					0.0489	<0.0002		
3/29/2022				0.0652				
3/30/2022							<0.0002	0.00019 (J)
4/4/2022			<0.0002					
4/6/2022	0.00023	0.00264						
10/4/2022					0.0442	<0.0002		
10/5/2022			0.000228					
10/18/2022				0.066			<0.0002	
10/19/2022	0.000531	0.00283						0.000541

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.00347 (J)							
4/12/2016	0.00297 (J)							
5/31/2016	0.00261 (J)							
8/17/2016	0.0033 (J)							
10/11/2016	0.0041 (J)							
1/24/2017	0.00336 (J)							
5/9/2017	0.0031 (J)							
6/28/2017	0.00356 (J)							
2/27/2018	0.0042 (J)							
6/5/2018	0.00293 (J)							
11/6/2018	0.00318 (J)							
3/27/2019	0.00284 (J)							
9/11/2019	0.00328 (J)							
4/20/2020				<0.01	0.00223 (J)		<0.01	
4/21/2020	0.00255 (J)							
5/28/2020		<0.0002				<0.0002		<0.01
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	<0.01		<0.0002		<0.01
8/12/2020	0.00292 (J)				0.00278 (J)		<0.01	
3/8/2021		<0.0002	<0.0002					
3/9/2021						<0.0002		0.000127 (J)
3/10/2021				0.00131	0.00289		0.000369	
3/16/2021	0.00358							
8/16/2021			<0.0002					
8/17/2021		9E-05 (J)				<0.0002		0.00018 (J)
8/23/2021	0.0031			0.00142	0.00312		0.00089	
3/23/2022		<0.0002	<0.0002			<0.0002		0.00012 (J)
4/4/2022	0.00354							
4/5/2022					0.00291		0.0004	
4/6/2022				0.00082				
10/3/2022			<0.0002					
10/4/2022		<0.0002				<0.0002		0.000225
10/5/2022					0.00277		0.000757	
10/17/2022	0.00287			0.00197				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	<0.01						<0.01	
4/12/2016	<0.01							
4/13/2016							<0.01	<0.0002
5/31/2016	<0.01						<0.01	
6/1/2016								<0.0002
8/17/2016	<0.01						<0.01	<0.0002
10/11/2016	<0.01							
10/12/2016							<0.01	<0.0002
1/24/2017	<0.01							
1/25/2017							<0.01	<0.0002
5/10/2017	<0.01						<0.01	<0.0002
6/28/2017	<0.01						<0.01	<0.0002
2/27/2018	<0.01						<0.01	<0.0002
6/5/2018	<0.01						<0.01	<0.0002
11/7/2018	<0.01						<0.01	<0.0002
3/26/2019	<0.01						<0.01	<0.0002
9/10/2019	<0.01						<0.01	<0.0002
4/21/2020	<0.01						<0.01	<0.0002
8/19/2020	<0.01						<0.01	<0.0002
3/9/2021	0.0024						0.000156 (J)	8.12E-05 (J)
8/17/2021		<0.0002	0.00151	0.00055	7E-05 (J)	0.0676		
8/24/2021	0.00211						0.00013 (J)	<0.0002
3/23/2022		<0.0002	0.00052	0.00013 (J)	<0.0002	0.0639		
3/29/2022	0.00142						0.00016 (J)	<0.0002
10/4/2022		<0.0002	0.000323	0.000145 (J)	<0.0002	0.0686		
10/18/2022	0.00149						0.00012 (J)	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.0002
4/20/2020		<0.0002
4/21/2020	<0.0002	
8/17/2020		<0.0002
8/18/2020	<0.0002	
3/9/2021	<0.0002	
3/10/2021		<0.0002
8/17/2021		<0.0002
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		<0.0002
10/5/2022		<0.0002
10/18/2022	<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		6.29		6.84	6.4	6.21		
2/17/2016	5.8		6.04				6.02	6.18
4/12/2016					6.41	6.37	6.17	
4/13/2016	5.85	6.21	6.07	7.03				6.28
5/31/2016		6.45	6.03	6.94	6.22	6.42	6.15	
6/1/2016	5.92							6.36
8/15/2016	5.99							6.37
8/16/2016		6.58	6.09	6.84	6.41		6.21	
8/17/2016						6.42		
10/11/2016	6.02						6.14	
10/12/2016		6.6	6.06	6.75	6.42	6.38		6.32
11/1/2016					6.55	6.33	6.15	
11/2/2016								6.33
1/24/2017	5.92						6.11	6.29
1/25/2017		6.47	5.94	6.87	6.76	6.37		
3/14/2017	5.96		6.08			6.3	6.09	6.27
3/15/2017		6.54		6.9	6.82			
5/9/2017	5.93		6.07	6.85	6.7	6.43		
5/10/2017		6.53					6.11	6.3
6/27/2017	5.86						6.09	6.28
6/28/2017		6.49	6.02	6.85	6.58	6.4		
8/29/2017		6.49	6.19	6.86	6.4	6.32		
8/30/2017	5.88						6.1	6.34
2/27/2018	5.92	6.59	6.21			6.28		
2/28/2018				6.94	6.72		6.11	6.33
6/4/2018	5.89							
6/5/2018		6.52	6.27				6.05	6.29
6/6/2018				6.99	6.57	6.25		
9/10/2018	5.89		6.33					
9/11/2018		6.53		6.87	6.64		6.18	
9/12/2018						6.42		6.36
11/5/2018			6.26	6.81	6.69			
11/6/2018	5.95						6.09	6.37
11/7/2018		6.51				6.42		
3/26/2019				6.95	6.54		6.1	6.34
3/27/2019	5.8	6.53	6.37			6.41		
9/10/2019	5.88	6.33	5.91	6.69		6.11	5.82	6.35
9/11/2019					6.22			
4/20/2020					6.68		6.16	6.43
4/21/2020	5.72			6.96		6.31		
4/22/2020		6.44	6.26					
8/11/2020						6.02		6.7
8/12/2020							6.1	
8/17/2020	5.54							
8/18/2020		6.33	6	6.98	6.76			
3/9/2021						6.48		6.29
3/10/2021			5.97	6.89			6.08	
3/15/2021		6.29			6			
3/16/2021	5.67							
8/17/2021	5.49							6.33
8/24/2021		6.04						
8/25/2021			6.38	7.04	6.66	6.21	6.12	

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
3/29/2022				6.44			5.81	
3/30/2022			6.02					
4/4/2022	5.17 (D)	6.21 (D)				6.39 (D)		
4/6/2022					6.24			6.42 (D)
10/5/2022	5.59							
10/17/2022			6.28	6.88	6.22			
10/18/2022		6.62				6.46	6.29	6.53

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				7.15				
2/17/2016	6.32	6.23	6.01		6.8	5.39	5.36	
4/12/2016		6.3			6.54	5.29	5.31	
4/13/2016	6.44		6.17	7.1				
6/1/2016	6.24	6.24	6.18	6.76	6.49	5.39	5.35	
8/15/2016	6.34	6.25	6.12					
8/16/2016				6.99	6.57	5.51		
8/17/2016							5.38	5.85
9/20/2016								5.82
10/11/2016			6.09		6.54	5.44	5.31	
10/12/2016	6.42	6.26		6.89				5.76
11/2/2016	6.48	6.3			6.54	5.49	5.39	
11/15/2016								5.79
11/29/2016								5.73
1/4/2017								5.69
1/23/2017								5.45
1/24/2017	6.53	6.3	6.04		6.42	5.44	5.29	
1/25/2017				6.84				
3/13/2017								4.8
3/14/2017	6.43	6.31	6.11		6.59	5.48	5.19	
3/15/2017				6.78				
5/9/2017			6.1	6.83	6.42		5.29	4.82
5/10/2017	6.33	6.34				5.43		
6/27/2017	6.38	6.32			6.44			5.27
6/28/2017			6.09	6.98		5.49	5.27	
8/29/2017				6.8	6.43	5.46	5.27	5.28
8/30/2017	6.31	6.38	6.07					
2/27/2018			6.09		6.49	5.48		5.11
2/28/2018	6.57	6.31		6.87			5.28	
6/4/2018			6.07					
6/5/2018	6.21	6.16			6.43	5.31		5.24
6/6/2018				6.94			5.21	
9/10/2018			6	6.74				
9/11/2018					6.35	5.36		5.28
9/12/2018	6.43	6.29					5.23	
11/5/2018				6.66				
11/6/2018	6.47	6.31	6.04				5.28	5.54
11/7/2018					6.37	5.34		
3/26/2019	6.52	6.3		6.84	6.46	5.32		5.4
3/27/2019			6.06				5.27	
9/9/2019	5.84	6.28	6.13					
9/10/2019				6.58	5.85	4.9	5.15	
9/11/2019								5.53
4/21/2020	6.61	6.31	5.99	6.81	6.26			5.3
4/22/2020						5.3	5.26	
8/11/2020	6.71						4.81	
8/12/2020		6.62			6.03	5.04		
8/17/2020			5.91					
8/18/2020				6.31				4.79
3/9/2021	6.52	6.39						
3/10/2021				6.26	6.17	5.14	5.71	
3/15/2021								5.32

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/16/2021			5.87					
8/17/2021	6.57	6.38	5.99					
8/18/2021								5.25
8/24/2021					6.09	5.16	5.25	
8/25/2021				6.51				
3/28/2022			5.32		6.08			
3/29/2022							5.26	
3/30/2022				6.09				
4/4/2022	6.71 (D)					4.4 (D)		5.2 (D)
4/6/2022		6.29 (D)						
10/5/2022			6.01					
10/17/2022		6.49		6.21	6.22	5.22		
10/18/2022	6.77						5.88	
10/19/2022								5.55

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				6.29				
4/12/2016				6.33				
6/1/2016				6.4				
8/15/2016				6.36				
8/16/2016			6.21		5.39	7.13	6	6.34
8/17/2016	5.47	6.15						
9/19/2016						6.94	6	6.11
9/20/2016	5.22	4.99	6.05		5.37			
10/11/2016			6.2	6.38	5.39	6.82	6.02	5.99
10/12/2016	5.1	4.88						
10/31/2016		4.87	6.61		5.36			
11/1/2016						6.71	5.97	5.84
11/14/2016						6.57	5.98	5.83
11/15/2016	5.07	4.81	6.64		5.33			
11/28/2016						6.57	6	5.79
11/29/2016	5.1	4.84	6.39		5.33			
1/3/2017						6.56	6.03	5.39
1/4/2017	5.3	4.88	6.06		5.49			
1/23/2017	5.12				5.48			
1/24/2017		5.4		6.34		6.41	5.9	
1/25/2017								5.09
1/26/2017			6.02					
3/13/2017			5.68					
3/14/2017	4.74	5.13		6.42	5.17	6.37	6.07	4.99
5/9/2017	4.83	4.96	5.05	6.35	5.11			
5/10/2017						6.41	6	4.63
5/31/2017							6.02	
6/27/2017	4.87	5.34	4.9		5.29	6.14	6.05	4.76
6/28/2017				6.32				
8/29/2017	4.71							
8/30/2017		4.69	4.73	6.32	5.09	6.08	6.13	4.85
2/27/2018	4.96	4.91	4.87	6.39	5.25	5.99	6.1	4.69
6/4/2018				6.4				
6/5/2018	5	4.87	4.89		5.12	5.93	6.05	4.62
9/11/2018	4.94	4.65	4.88		5.19	5.86	6.07	4.79
9/12/2018				6.35				
11/5/2018							6.01	
11/6/2018	4.9	4.67	4.86	6.34	5.12	5.89		4.62
3/26/2019	4.96	4.92	4.97		5.16			
3/27/2019				6.44		5.95	6.15	4.68
9/9/2019				6.22				
9/11/2019	4.85	4.33	3.96		4.11	5.85	5.87	4.57
4/20/2020				6.4				
4/21/2020	4.29	4.07	3.9		4.44			
4/22/2020						5.75	5.92	4.71
8/11/2020						5.63		
8/12/2020							5.84	4.65
8/17/2020				5.85				
8/18/2020	4.75	4.59	4.22		4.76			
3/15/2021	4.73	4.45	4.79		5.02	5.61	4.57	5.83
3/16/2021				6.23				
8/17/2021				6.13				

Time Series

Constituent: pH (SU) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
8/18/2021	4.52	3.78	3.94		4.01			
8/23/2021						5.67	4.17	6.04
3/28/2022	4.73	4.69	4.67		4.93	5.05	5.01	4.29
4/5/2022				6.27 (D)				
10/5/2022				5.89		5.49	5.84	4.55
10/19/2022	5.02	4.87	5.01		5.29			

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					6.56			
1/15/2019				5.88		6.4	5.7	6.71
1/16/2019		5.99						
1/17/2019	5.65							
1/30/2019			7.87					
9/10/2019	4.87						5.61	
9/11/2019		5.6	7.2		6.55	6.17		5.96
4/20/2020							5.63	
4/21/2020		6.54						
4/22/2020	5.45		7.72	6.23	6.66	6.42		
4/29/2020								6.37
8/11/2020			7.69			6.7		
8/12/2020	4.78						5.83	
8/18/2020		6.03						5.93
8/19/2020				5.95	6.57			
3/9/2021			7.79			6.47		
3/10/2021					6.67		5.99	
3/15/2021	5.32							6.43
3/16/2021		6.16		6.32				
8/23/2021	5.54							
8/24/2021		6.08	7.06	6.12	5.84	6.13		
8/25/2021							5.91	6.13
3/28/2022	4.44							
3/29/2022				6.36				
3/30/2022			7.81		6.62		5.69	
4/6/2022		5.24				6.31 (D)		6.16
10/5/2022							5.77	
10/17/2022		6.19	7.92	6.23				
10/18/2022					6.7	6.59		6.39
10/19/2022	5.42							

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	6.29							
1/16/2019		6.48	6.39					
9/11/2019	6.2	6.52	6.11					
4/20/2020			6.11	7.14				
4/21/2020	6.01	6.18					6.5	6.28
5/28/2020						6.99		
7/6/2020					6.69			
8/11/2020					6.38	6.25		
8/12/2020			6.27					
8/17/2020				6.94			6.24	
8/19/2020	6.27	6.18						6.14
3/8/2021					6.86	5.74		
3/9/2021	6.29	6.47						
3/10/2021			6.14	6.83			6.35	6.14
8/17/2021					6.7	5.98		
8/18/2021	6.16	6.46		6.84			5.96	6.05
8/23/2021			6.07					
3/23/2022					6.55	5.3		
3/29/2022				6.83				
3/30/2022							5.4	5.72
4/4/2022			5.56 (D)					
4/6/2022	6.1 (D)	6.43 (D)						
10/4/2022					6.27	5.87		
10/5/2022			6.06					
10/18/2022				6.38			5.14	
10/19/2022	6.27	6.53						5.6

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	6.63							
4/12/2016	6.59							
5/31/2016	6.57							
8/17/2016	6.72							
10/11/2016	6.69							
1/24/2017	6.61							
3/14/2017	6.55							
5/9/2017	6.65							
6/28/2017	6.66							
8/30/2017	6.66							
2/27/2018	6.73							
6/5/2018	6.63							
9/11/2018	6.65							
11/6/2018	6.65							
3/27/2019	6.59							
9/11/2019	6.36							
4/20/2020				6.17	6.58		6.12	
4/21/2020	6.5							
5/28/2020		6.42				4.47		5.99
7/6/2020			6.07					
8/11/2020		6.24	6.08	5.8		5.1		6.16
8/12/2020	6.36				6.67		6.48	
3/8/2021		6.36	5.98					
3/9/2021						5.13		5.94
3/10/2021				6.58	6.87		5.96	
3/16/2021	6.64							
8/16/2021			5.98					
8/17/2021		6.07				4.89		5.85
8/23/2021	6.5			6.33	6.67		6.34	
3/23/2022		6.17	6.14			5.2		5.88
4/4/2022	6.42 (D)							
4/5/2022					6.59 (D)		5.41 (D)	
4/6/2022				6.23 (D)				
10/3/2022			5.84					
10/4/2022		6.27				5.03		6.06
10/5/2022					6.41		5.99	
10/17/2022	6.71			6.43				

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								6.16
2/17/2016	6.46						6.45	
4/12/2016	6.45							
4/13/2016							6.49	6.29
5/31/2016	6.51						6.43	
6/1/2016								6.33
8/17/2016	6.54						6.43	6.27
10/11/2016	6.53							
10/12/2016							6.46	6.3
1/24/2017	6.44							
1/25/2017							6.43	6.27
3/14/2017	6.4						6.41	
3/15/2017								6.27
5/10/2017	6.4						6.41	6.25
6/28/2017	6.46						6.46	6.25
8/29/2017	6.47						6.46	6.32
2/27/2018	6.53						6.45	6.36
6/5/2018	6.49						6.36	6.3
9/11/2018	6.48						6.38	6.36
11/7/2018	6.48						6.37	6.31
3/26/2019	6.54						6.39	6.32
9/10/2019	6.55						6.39	6.31
4/21/2020	6.54						6.39	6.06
8/19/2020	6.49						6.14	6.06
3/9/2021	6.43						6.45	6.31
8/17/2021		5.15	6.84	6.33	5.58	7.03		
8/24/2021	6.22						6.4	6.16
3/23/2022		5.22	6.38	5.82	5.34	6.92		
3/29/2022	5.99						6.62	6.21
10/4/2022		4.83	5.51	5.82	5.38	6.87		
10/18/2022	6.38						6.37	6.45

Time Series

Constituent: pH (SU)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	6.5	
4/13/2016	6.32	
6/1/2016	6.43	
8/17/2016	6.46	
10/12/2016	6.53	
1/25/2017	6.45	
3/15/2017	6.39	
5/10/2017	6.39	
6/28/2017	6.4	
8/29/2017	6.47	
2/27/2018	6.54	
6/5/2018	6.47	
9/11/2018	6.53	
9/12/2018		6.13
11/7/2018	6.49	
3/26/2019	6.47	
9/10/2019	6.43	5.79
4/20/2020		5.99
4/21/2020	6.25	
8/17/2020		5.94
8/18/2020	6.21	
3/9/2021	6.14	
3/10/2021		6.04
8/17/2021		5.64
8/24/2021	6.08	
3/29/2022	5.61	
4/5/2022		5.95 (D)
10/5/2022		5.42
10/18/2022	6.27	

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.00102		<0.00102	0.0227	<0.00102		
2/17/2016	0.00277 (J)		<0.00102				<0.00102	<0.00102
4/12/2016					0.0701	<0.00102	<0.00102	
4/13/2016	<0.01	<0.00102	<0.00102	<0.00102				<0.00102
5/31/2016		<0.00102	<0.00102	<0.00102	0.0129	<0.00102	<0.00102	
6/1/2016	<0.01							<0.00102
8/15/2016	<0.01							<0.00102
8/16/2016		<0.00102	<0.00102	<0.00102	0.0208		<0.00102	
8/17/2016						<0.00102		
10/11/2016	<0.01						<0.00102	
10/12/2016		<0.00102	<0.00102	<0.00102	0.00431 (J)	<0.00102		<0.00102
1/24/2017	<0.01						<0.00102	<0.00102
1/25/2017		<0.00102	<0.00102	<0.00102	0.00779 (J)	<0.00102		
5/9/2017	<0.01		<0.00102	<0.00102	0.00905 (J)	<0.00102		
5/10/2017		<0.00102					<0.00102	<0.00102
6/27/2017	0.00206 (J)						<0.00102	<0.00102
6/28/2017		<0.00102	<0.00102	<0.00102	0.0072 (J)	<0.00102		
2/27/2018	0.00206 (J)	<0.00102	<0.00102			<0.00102		
2/28/2018				<0.00102	0.00826 (J)		<0.00102	<0.00102
6/4/2018	<0.01							
6/5/2018		<0.00102	<0.00102				<0.00102	<0.00102
6/6/2018				<0.00102	0.00496 (J)	<0.00102		
11/5/2018			<0.00102	<0.00102	<0.01			
11/6/2018	<0.01						<0.00102	<0.00102
11/7/2018		<0.00102				<0.00102		
3/26/2019				<0.00102	0.0239		<0.00102	<0.00102
3/27/2019	<0.01	<0.00102	<0.00102			<0.00102		
9/10/2019	<0.01	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
9/11/2019					<0.01			
4/20/2020					0.0125		<0.00102	<0.00102
4/21/2020	<0.01			<0.00102		<0.00102		
4/22/2020		<0.00102	<0.00102					
8/11/2020						<0.00102		<0.00102
8/12/2020							<0.00102	
8/17/2020	<0.01							
8/18/2020		<0.00102	<0.00102	<0.00102	0.00416 (J)			
3/9/2021						<0.00102		<0.00102
3/10/2021			<0.00102	<0.00102			<0.00102	
3/15/2021		<0.00102			0.0175			
3/16/2021	0.00163							
8/17/2021	0.00209							<0.00102
8/24/2021		<0.00102						
8/25/2021			<0.00102	0.00281	0.00826	<0.00102	<0.00102	
3/29/2022				<0.00102			<0.00102	
3/30/2022			<0.00102					
4/4/2022	0.00221	<0.00102				<0.00102		
4/6/2022					0.111 (o)			<0.00102
5/17/2022					0.0452 (R)			
10/5/2022	0.000737 (J)							
10/17/2022			<0.00102	0.00081 (J)	0.0103			
10/18/2022		<0.00102				<0.00102	<0.00102	<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.00102				
2/17/2016	<0.00102	<0.00102	<0.00102		<0.01	<0.01	<0.00102	
4/12/2016		<0.00102			0.00205 (J)	<0.01	<0.00102	
4/13/2016	<0.00102		<0.00102	<0.00102				
6/1/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.01	<0.01	<0.00102	
8/15/2016	<0.00102	<0.00102	<0.00102					
8/16/2016				<0.00102	<0.01	<0.01		
8/17/2016							<0.00102	<0.00102
9/20/2016								<0.00102
10/11/2016			<0.00102		<0.01	<0.01	<0.00102	
10/12/2016	<0.00102	<0.00102		<0.00102				<0.00102
11/15/2016								<0.00102
1/4/2017								<0.00102
1/23/2017								0.00247 (J)
1/24/2017	<0.00102	<0.00102	<0.00102		<0.01	<0.01	<0.00102	
1/25/2017				<0.00102				
5/9/2017			<0.00102	<0.00102	<0.01		<0.00102	0.0072 (J)
5/10/2017	<0.00102	<0.00102				<0.01		
6/27/2017	<0.00102	<0.00102			<0.01			0.00443 (J)
6/28/2017			<0.00102	<0.00102		0.00268 (J)	<0.00102	
2/27/2018			<0.00102		<0.01	0.00281 (J)		<0.00102
2/28/2018	<0.00102	<0.00102		<0.00102			<0.00102	
6/4/2018			<0.00102					
6/5/2018	<0.00102	<0.00102			<0.01	0.00294 (J)		<0.00102
6/6/2018				<0.00102			<0.00102	
11/5/2018				<0.00102				
11/6/2018	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102
11/7/2018					<0.01	<0.01		
3/26/2019	<0.00102	<0.00102		<0.00102	<0.01	0.00208 (J)		<0.00102
3/27/2019			<0.00102				<0.00102	
9/9/2019	<0.00102	<0.00102	<0.00102					
9/10/2019				<0.00102	<0.01	<0.01	<0.00102	
9/11/2019								<0.00102
4/21/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.01			<0.00102
4/22/2020						<0.01	<0.00102	
8/11/2020	<0.00102						<0.00102	
8/12/2020		<0.00102			<0.01	<0.01		
8/17/2020			<0.00102					
8/18/2020				<0.00102				<0.00102
3/9/2021	<0.00102	<0.00102						
3/10/2021				<0.00102	0.00117	0.00139	<0.00102	
3/15/2021								<0.00102
3/16/2021			<0.00102					
8/17/2021	<0.00102	<0.00102	0.00054 (J)					
8/18/2021								<0.00102
8/24/2021					0.00113	0.00093 (J)	<0.00102	
8/25/2021				<0.00102				
3/28/2022			0.00058 (J)		0.00099 (J)			
3/29/2022							<0.00102	
3/30/2022				<0.00102				
4/4/2022	<0.00102					0.00093 (J)		<0.00102
4/6/2022		<0.00102						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			<0.00102					
10/17/2022		<0.00102		<0.00102	0.000864 (J)	0.000816 (J)		
10/18/2022	<0.00102						<0.00102	
10/19/2022								<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<0.01				
4/12/2016				<0.01				
6/1/2016				<0.01				
8/15/2016				<0.01				
8/16/2016			<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/17/2016	<0.00102	<0.00102						
9/19/2016						<0.00102	<0.00102	<0.00102
9/20/2016	<0.00102	<0.00102	<0.00102		<0.00102			
10/11/2016			<0.00102	<0.01	<0.00102	<0.00102	<0.00102	<0.00102
10/12/2016	<0.00102	<0.00102						
11/14/2016						<0.00102	<0.00102	<0.00102
11/15/2016	<0.00102	<0.00102	<0.00102		<0.00102			
1/3/2017						<0.00102	<0.00102	<0.00102
1/4/2017	<0.00102	<0.00102	<0.00102		<0.00102			
1/23/2017	<0.00102				<0.00102			
1/24/2017		<0.00102		<0.01		<0.00102	<0.00102	
1/25/2017								<0.00102
1/26/2017			<0.00102					
5/9/2017	<0.00102	<0.00102	<0.00102	<0.01	<0.00102			
5/10/2017						<0.00102	<0.00102	<0.00102
6/27/2017	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
6/28/2017				<0.01				
2/27/2018	<0.00102	<0.00102	<0.00102	<0.01	<0.00102	<0.00102	<0.00102	<0.00102
6/4/2018				<0.01				
6/5/2018	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
11/5/2018							<0.00102	
11/6/2018	<0.00102	<0.00102	<0.00102	<0.01	<0.00102	<0.00102		<0.00102
3/26/2019	<0.00102	<0.00102	<0.00102		<0.00102			
3/27/2019				<0.01		<0.00102	<0.00102	<0.00102
9/9/2019				<0.01				
9/11/2019	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
4/20/2020				<0.01				
4/21/2020	<0.00102	<0.00102	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102	<0.00102
8/11/2020						<0.00102		
8/12/2020							<0.00102	<0.00102
8/17/2020				<0.01				
8/18/2020	<0.00102	<0.00102	<0.00102		<0.00102			
3/15/2021	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
3/16/2021				0.000959 (J)				
8/17/2021				0.00097 (J)				
8/18/2021	<0.00102	<0.00102	<0.00102		<0.00102			
8/23/2021						<0.00102	0.00059 (J)	<0.00102
3/28/2022	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	0.00071 (J)
4/5/2022				0.00074 (J)				
10/5/2022				0.000612 (J)		<0.00102	<0.00102	<0.00102
10/19/2022	<0.00102	<0.00102	<0.00102		<0.00102			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					0.018			
1/15/2019				<0.00102		<0.00102	<0.00102	<0.00102
1/16/2019		0.00367 (J)						
1/17/2019	<0.00102							
1/30/2019			<0.00102					
9/10/2019	<0.00102						<0.00102	
9/11/2019		0.00404 (J)	<0.00102		0.0155	<0.00102		<0.00102
4/20/2020							<0.00102	
4/21/2020		0.00451 (J)						
4/22/2020	<0.00102		<0.00102	<0.00102	0.0111	<0.00102		
4/29/2020								<0.00102
8/11/2020			<0.00102			<0.00102		
8/12/2020	<0.00102						<0.00102	
8/18/2020		0.00268 (J)						<0.00102
8/19/2020				<0.00102	0.0108			
3/9/2021			<0.00102			<0.00102		
3/10/2021					0.0124		<0.00102	
3/15/2021	0.000704 (J)							<0.00102
3/16/2021		0.00362		<0.00102				
8/23/2021	<0.00102							
8/24/2021		0.00237	<0.00102	<0.00102	0.0148	<0.00102		
8/25/2021							<0.00102	<0.00102
3/28/2022	0.0006 (J)							
3/29/2022				<0.00102				
3/30/2022			<0.00102		0.00902		<0.00102	
4/6/2022		0.00364				<0.00102		<0.00102
10/5/2022							<0.00102	
10/17/2022		0.00352	<0.00102	<0.00102				
10/18/2022					0.0197	<0.00102		<0.00102
10/19/2022	0.000622 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.00102							
1/16/2019		<0.00102	<0.00102					
9/11/2019	<0.00102	<0.00102	<0.00102					
4/20/2020			<0.00102	<0.00102				
4/21/2020	<0.00102	<0.00102					<0.00102	<0.00102
5/28/2020						<0.00102		
7/6/2020					<0.00102			
8/11/2020					<0.00102	<0.00102		
8/12/2020			<0.00102					
8/17/2020				<0.00102			<0.00102	
8/19/2020	<0.00102	<0.00102						<0.00102
3/8/2021					<0.00102	<0.00102		
3/9/2021	<0.00102	<0.00102						
3/10/2021			<0.00102	<0.00102			<0.00102	<0.00102
8/17/2021					<0.00102	<0.00102		
8/18/2021	<0.00102	<0.00102		<0.00102			<0.00102	<0.00102
8/23/2021			<0.00102					
3/23/2022					<0.00102	<0.00102		
3/29/2022				<0.00102				
3/30/2022							<0.00102	<0.00102
4/4/2022			<0.00102					
4/6/2022	<0.00102	<0.00102						
10/4/2022					<0.00102	<0.00102		
10/5/2022			<0.00102					
10/18/2022				<0.00102			<0.00102	
10/19/2022	<0.00102	<0.00102						<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<0.00102							
4/12/2016	<0.00102							
5/31/2016	<0.00102							
8/17/2016	<0.00102							
10/11/2016	<0.00102							
1/24/2017	<0.00102							
5/9/2017	<0.00102							
6/28/2017	<0.00102							
2/27/2018	<0.00102							
6/5/2018	<0.00102							
11/6/2018	<0.00102							
3/27/2019	<0.00102							
9/11/2019	<0.00102							
4/20/2020				<0.00102	<0.00102		<0.00102	
4/21/2020	<0.00102							
5/28/2020		<0.00102				<0.00102		<0.00102
7/6/2020			<0.00102					
8/11/2020		<0.00102	<0.00102	<0.00102		<0.00102		<0.00102
8/12/2020	<0.00102				<0.00102		<0.00102	
3/8/2021		<0.00102	<0.00102					
3/9/2021						<0.00102		0.000652 (J)
3/10/2021				<0.00102	<0.00102		<0.00102	
3/16/2021	<0.00102							
8/16/2021			<0.00102					
8/17/2021		<0.00102				<0.00102		0.00051 (J)
8/23/2021	<0.00102			<0.00102	<0.00102		<0.00102	
3/23/2022		<0.00102	<0.00102			<0.00102		0.00097 (J)
4/4/2022	<0.00102							
4/5/2022					<0.00102		0.00059 (J)	
4/6/2022				<0.00102				
10/3/2022			<0.00102					
10/4/2022		<0.00102				<0.00102		<0.00102
10/5/2022					<0.00102		<0.00102	
10/17/2022	<0.00102			<0.00102				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.00102
2/17/2016	<0.00102						<0.00102	
4/12/2016	<0.00102							
4/13/2016							<0.00102	<0.00102
5/31/2016	<0.00102						<0.00102	
6/1/2016								<0.00102
8/17/2016	<0.00102						<0.00102	<0.00102
10/11/2016	<0.00102							
10/12/2016							<0.00102	<0.00102
1/24/2017	<0.00102							
1/25/2017							<0.00102	<0.00102
5/10/2017	<0.00102						<0.00102	<0.00102
6/28/2017	<0.00102						<0.00102	<0.00102
2/27/2018	<0.00102						<0.00102	<0.00102
6/5/2018	<0.00102						<0.00102	<0.00102
11/7/2018	<0.00102						<0.00102	<0.00102
3/26/2019	<0.00102						<0.00102	<0.00102
9/10/2019	<0.00102						<0.00102	<0.00102
4/21/2020	<0.00102						<0.00102	<0.00102
8/19/2020	<0.00102						<0.00102	<0.00102
3/9/2021	<0.00102						<0.00102	<0.00102
8/17/2021		0.00115	0.00058 (J)	<0.00102	<0.00102	<0.00102		
8/24/2021	<0.00102						<0.00102	<0.00102
3/23/2022		0.00122	0.00071 (J)	<0.00102	<0.00102	<0.00102		
3/29/2022	<0.00102						<0.00102	<0.00102
10/4/2022		0.00118	0.000631 (J)	<0.00102	<0.00102	<0.00102		
10/18/2022	<0.00102						<0.00102	<0.00102

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.00102	
4/13/2016	<0.00102	
6/1/2016	<0.00102	
8/17/2016	<0.00102	
10/12/2016	<0.00102	
1/25/2017	<0.00102	
5/10/2017	<0.00102	
6/28/2017	<0.00102	
2/27/2018	<0.00102	
6/5/2018	<0.00102	
11/7/2018	<0.00102	
3/26/2019	<0.00102	
9/10/2019	<0.00102	<0.01
4/20/2020		0.00237 (J)
4/21/2020	<0.00102	
8/17/2020		<0.01
8/18/2020	<0.00102	
3/9/2021	<0.00102	
3/10/2021		0.0013
8/17/2021		0.00321
8/24/2021	<0.00102	
3/29/2022	<0.00102	
4/5/2022		0.00192
10/5/2022		0.00692
10/18/2022	<0.00102	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		9.03		119	113	108		
2/17/2016	785		40.2				187	87.4
4/12/2016					86.7	114	188	
4/13/2016	715	10.7	33.1	122				92.7
5/31/2016		10.2	28.1	94.3	83.1	114	183	
6/1/2016	832							111
8/15/2016	862							98.3
8/16/2016		9.1	38.5	67.1	59.3		196	
8/17/2016						85.4		
10/11/2016	888						216	
10/12/2016		7.24	38.3	94.1	99.3	53.5		99.3
1/24/2017	906						183	85.4
1/25/2017		9.71	32	101	113	75.4		
5/9/2017	810		44	91	74	84		
5/10/2017		11					160	74
6/27/2017	830						150	75
6/28/2017		10	88	71	71	120		
8/29/2017		14	110	80	72	180		
8/30/2017	910						160	87
6/4/2018	850							
6/5/2018		39	79				160	87
6/6/2018				62	48	450		
9/10/2018	920		80					
9/11/2018		29		63	62		140	
9/12/2018						200		63
11/5/2018			81	74	81			
11/6/2018	880						160	97
11/7/2018		45				180		
3/26/2019				92.3	92.4		157	123
3/27/2019	1090	66.2	83.2			335		
9/10/2019	992	50.5	87.2	89.3		193	150	68
9/11/2019					128			
4/20/2020					76.5		142	49.6
4/21/2020	874			121		168		
4/22/2020		63.2	58.7					
8/11/2020						242		55
8/12/2020							160	
8/17/2020	919							
8/18/2020		58.6	81.1	89	203			
3/9/2021						165		43.9
3/10/2021			73.2	155			136	
3/15/2021		68.5			204			
3/16/2021	933							
8/17/2021	745							46.6
8/24/2021		71.6						
8/25/2021			126	118	181	346	153	
3/29/2022				108			165	
3/30/2022			125					
4/4/2022	812.5 (D)	116.5 (D)				195.5 (D)		
4/6/2022					157			45.3 (D)
10/5/2022	737							
10/17/2022			144	96.199997	467			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
10/18/2022		104				185	152	42.400002

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				125				
2/17/2016	72.3	60.2	304		14.7	10.4	28.7	
4/12/2016		68.2			20	11.3	32.5	
4/13/2016	123		307	119				
6/1/2016	144	61.4	273	99.2	20.1	10.4	31.9	
8/15/2016	50.1	56	275					
8/16/2016				71.9	19.1	12.2		
8/17/2016							30.5	16.2
9/20/2016								14.9
10/11/2016			284		18.4	19.8	32.3	
10/12/2016	72.6	36.6		93.9				12.4
11/15/2016								8.6
1/4/2017								12.2
1/23/2017								16
1/24/2017	63.4	12.3	302		15	30.7	33.5	
1/25/2017				103				
5/9/2017			250	100	14		33	55
5/10/2017	82	10				33		
6/27/2017	44	9.7			14			45
6/28/2017			230	69		56	35	
8/29/2017				77	16	61	37	37
8/30/2017	230	7.8	250					
6/4/2018			260					
6/5/2018	230	13			14	97		9.3
6/6/2018				81			47	
9/10/2018			280	64				
9/11/2018					13	83		7.8
9/12/2018	33	28					41	
11/5/2018				68				
11/6/2018	220	11	280				48	6
11/7/2018					14	91		
3/26/2019	161	21.3		92	12.3	103		6.86
3/27/2019			375				62.4	
9/9/2019	57.3	17.8	385					
9/10/2019				63.1	12.4	83.4	66	
9/11/2019								5.29
4/21/2020	78	19.2	522	99	10.2			6.28
4/22/2020						84.7	76.1	
8/11/2020	46.7						79.5	
8/12/2020		13.8			10.2	82.2		
8/17/2020			497					
8/18/2020				63.4				9.57
3/9/2021	95.8	11.6						
3/10/2021				51.7	11.8	99.9	70.3	
3/15/2021								7.66
3/16/2021			548					
8/17/2021	32.8	12.2	502					
8/18/2021								7.07
8/24/2021					11.6	81.8	66.6	
8/25/2021				76.1				
3/28/2022			563		11.8			
3/29/2022							68.6	

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/30/2022				115				
4/4/2022	68.9 (D)					90.2		12.5
4/6/2022		16.05 (D)						
10/5/2022			590					
10/17/2022		23.299999		103	9.72	79.599998		
10/18/2022	64.900002						70.599998	
10/19/2022								12.5

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				<5				
4/12/2016				0.49 (J)				
6/1/2016				0.544 (J)				
8/15/2016				0.332 (J)				
8/16/2016			0.894 (J)		0.702 (J)	1.78	2.06	9.33
8/17/2016	0.928 (J)	6.46						
9/19/2016						2.06	1.44	11.2
9/20/2016	0.478 (J)	8.3	<1		<1			
10/11/2016			<1	<5	<1	2.33	1.38	12.6
10/12/2016	0.727 (J)	8.36						
11/14/2016						2.31	1.15	12.4
11/15/2016	0.448 (J)	8.75	1.19		<1			
1/3/2017						2.81	1.57	14.3
1/4/2017	0.627 (J)	7.85	<1		<1			
1/23/2017	1.34				0.493 (J)			
1/24/2017		6.62		<5		3.34	2.06	
1/25/2017								15.2
1/26/2017			0.6 (J)					
5/9/2017	<5	5.6	<1	2.1 (J)	<1			
5/10/2017						2.9 (J)	2.1 (J)	12
6/27/2017	<5	5.3	<1		<1	3.4 (J)	2.7 (J)	13
6/28/2017				<5				
8/29/2017	<5							
8/30/2017		8.2	<1	<5	<1	3.7 (J)	2.6 (J)	15
6/4/2018				1.4 (J)				
6/5/2018	2.1 (J)	8.3	1.4 (J)		<1	3.7 (J)	3.1 (J)	17
9/11/2018	<5	8.9	<1		<1	2.2 (J)	1.6 (J)	16
9/12/2018				<5				
11/5/2018							2.4 (J)	
11/6/2018	<5	8.6	<1	<5	<1	3.1 (J)		15
3/26/2019	1.66	10.1	0.594 (J)		<1			
3/27/2019				6.64		3.55	3.24	15.1
9/9/2019				6.56				
9/11/2019	1.29	10.6	<1		<1	3.83	2.66	14.5
4/20/2020				10.5				
4/21/2020	2.21	9.4	0.694 (J)		<1			
4/22/2020						3.78	2.51	9.64
8/11/2020						4.33		
8/12/2020							2.54	13.6
8/17/2020				17.3				
8/18/2020	1.57	10.3	0.608 (J)		<1			
3/15/2021	2.5	10.4	<1		<1	3.74	8.5	2.76
3/16/2021				7.62				
8/17/2021				12				
8/18/2021	3.18	10.1	0.86 (J)		0.754 (J)			
8/23/2021						4	9.18	2.44
3/28/2022	6.24	11.2	1.29 (J)		0.951 (J)	3.34	2.55	11.8
4/5/2022				14.95 (D)				
10/5/2022				5.11		4.08	2.71	12.2
10/19/2022	3.95	8.96	1.37 (J)		1.27 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					103			
1/15/2019				780		48.5	224	96
1/16/2019		34.9						
1/17/2019	47.9							
1/30/2019			11					
9/10/2019	27.1						291	
9/11/2019		30	11		60.5	44.1		79.1
4/20/2020							247	
4/21/2020		44.5						
4/22/2020	26.8		10.9	510	66.5	31.7		
4/29/2020								77.2
8/11/2020			8.73			51.7		
8/12/2020	13.5						285	
8/18/2020		28.8						76.6
8/19/2020				402	70			
3/9/2021			10.4			32.2		
3/10/2021					44.8		292	
3/15/2021	25.6							80.9
3/16/2021		32.4		368				
8/23/2021	24.8							
8/24/2021		22.9	9.79	383	68.2	34.1		
8/25/2021							330	147
3/28/2022	27							
3/29/2022				303				
3/30/2022			10.3		51.9		290	
4/6/2022		32.3				32.95 (D)		236
10/5/2022							264	
10/17/2022		25.6	9.18	306				
10/18/2022					40.599998	25		236
10/19/2022	22.6							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	9.73							
1/16/2019		74	394					
9/11/2019	9.43	45.7	409					
4/20/2020			429	157				
4/21/2020	12.4	59.7					90.2	90.8
5/28/2020						81.5		
7/6/2020					83.4			
8/11/2020					54.5	49.3		
8/12/2020			415					
8/17/2020				128			78	
8/19/2020	55.7	71.8						70.7
3/8/2021					96.1	31.4		
3/9/2021	74.8	91.3						
3/10/2021			410	90.9			62	76.1
8/17/2021					115	52.1		
8/18/2021	83.6	107		395			47	51.4
8/23/2021			406					
3/23/2022					131	61.1		
3/29/2022				337				
3/30/2022							36.4	106
4/4/2022			390					
4/6/2022	95.1 (D)	105.5 (D)						
10/4/2022					82.199997	42.799999		
10/5/2022			376					
10/18/2022				219			36.200001	
10/19/2022	168	109						109

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	<1							
4/12/2016	0.483 (J)							
5/31/2016	0.518 (J)							
8/17/2016	3.63							
10/11/2016	15.6							
1/24/2017	28.9							
5/9/2017	25							
6/28/2017	45							
8/30/2017	96							
6/5/2018	36							
9/11/2018	48							
11/6/2018	93							
3/27/2019	33.4							
9/11/2019	149							
4/20/2020				14.7	242		252	
4/21/2020	163							
5/28/2020		94.7				10.3		198
7/6/2020			78.2					
8/11/2020		79	64.1	12.6		9.32		206
8/12/2020	132				180		274	
3/8/2021		71.5	56.9					
3/9/2021						9.2		202
3/10/2021				44.2	139		66.5	
3/16/2021	167							
8/16/2021			42.2					
8/17/2021		83.1				7.2		214
8/23/2021	155			11.6	106		117	
3/23/2022		60.4	38.9			8.46		225
4/4/2022	160							
4/5/2022					119 (D)		50.75 (D)	
4/6/2022				120 (D)				
10/3/2022			37.799999					
10/4/2022		79.400002				9		193
10/5/2022					101		54.799999	
10/17/2022	154			32.099998				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								49.4
2/17/2016	132						311	
4/12/2016	130							
4/13/2016							330	51.7
5/31/2016	111						324	
6/1/2016								51.2
8/17/2016	95.8						306	42.9
10/11/2016	101							
10/12/2016							296	39.5
1/24/2017	129							
1/25/2017							243	31.3
5/10/2017	120						210	30
6/28/2017	100						210	35
8/29/2017	95						220	40
6/5/2018	98						390	25
9/11/2018	100						360	23
11/7/2018	97						390	30
3/26/2019	120						430	21.6
9/10/2019	140						409	37.4
4/21/2020	153						318	43.3
8/19/2020	163						296	44.5
3/9/2021	187						347	71.7
8/17/2021		6.86	13	14.9	22.7	128		
8/24/2021	210						234	71.4
3/23/2022		6.73	10.1	15.9	18.5	156		
3/29/2022	190						187	75.3
10/4/2022		6.49	8.6	14.9	19.5	146		
10/18/2022	179						256	84.800003

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	45.2	
4/13/2016	43.9	
6/1/2016	32	
8/17/2016	31.9	
10/12/2016	39.6	
1/25/2017	44	
5/10/2017	32	
6/28/2017	34	
8/29/2017	34	
6/5/2018	22	
9/11/2018	33	
9/12/2018		400
11/7/2018	76	
3/26/2019	138	
9/10/2019	115	499
4/20/2020		482
4/21/2020	133	
8/17/2020		493
8/18/2020	115	
3/9/2021	107	
3/10/2021		510
8/17/2021		569
8/24/2021	139	
3/29/2022	193	
4/5/2022		822.5 (D)
10/5/2022		782
10/18/2022	171	

Time Series

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		312		264	242	340		
2/17/2016	1540		158				408	310
4/12/2016					176	298	334	
4/13/2016	1200	324	161	238				372
5/31/2016		333	173	206	189	309	351	
6/1/2016	1440							360
8/15/2016	1420							366
8/16/2016		327	173	180	192		367	
8/17/2016						269		
10/11/2016	1420							
10/12/2016		312	173	223				
11/1/2016					244	252	372	
11/2/2016								374
1/24/2017	1350						354	380
1/25/2017		286	161	271	274	259		
5/9/2017	1540		195	236	191	285		
5/10/2017		326					332	381
6/27/2017	1470						331	404
6/28/2017		304	227	198	176	348		
8/29/2017		348	229	187	163	528		
8/30/2017	1530						317	420
6/4/2018	1370							
6/5/2018		346	200				318	408
6/6/2018				199	138	932		
9/10/2018	1380		183					
9/11/2018		335		184	185		321	
9/12/2018						180		415
11/5/2018			193	210	208			
11/6/2018	1450						331	447
11/7/2018		342				528		
3/26/2019				230	198		338 (D)	481
3/27/2019	1910	347	211			834		
9/10/2019	1740	351	201	218 (D)		658	358	453
9/11/2019					316			
4/20/2020					201		369	461
4/21/2020	1530			291		628		
4/22/2020		338	249					
8/11/2020						688		482
8/12/2020							401	
8/17/2020	1590							
8/18/2020		376	260	250	444			
3/9/2021						618		524
3/10/2021			274	331			397	
3/15/2021		406			374			
3/16/2021	1620							
8/17/2021	1340							490
8/24/2021		423						
8/25/2021			358	263	359	774	407	
3/29/2022				290			406	
3/30/2022			280					
4/4/2022	1310 (D)	443.5 (D)				644 (D)		
4/6/2022					298			472 (D)

Time Series

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
10/5/2022	1190							
10/17/2022			323	243	708			
10/18/2022		449				662	423	486

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				264				
2/17/2016	328	464	516		142	53	144	
4/12/2016		491			155	38.7	140	
4/13/2016	373		508	226				
6/1/2016	442	468	494	231	148	46	139	
8/15/2016	392	454	476					
8/16/2016				181	132	48		
8/17/2016							142	64
9/20/2016								60
10/11/2016			508					
10/12/2016				225				54.7
11/2/2016	469	422			115	66.7	128	
11/29/2016								42
1/4/2017								56
1/23/2017								50.7
1/24/2017	464	408	510		107	78.7	124	
1/25/2017				277				
5/9/2017			510	255	80.7		136	126
5/10/2017	492	358				92.7		
6/27/2017	516	382			96.7			93.3
6/28/2017			480	175		118	145	
8/29/2017				218	120	128	139	84
8/30/2017	646	392	478					
6/4/2018			528					
6/5/2018	644	352			113	171		38.7
6/6/2018				207			153	
9/10/2018			472	197				
9/11/2018					108	170		35.3
9/12/2018	476	339					156	
11/5/2018				200				
11/6/2018	634	368	522				153	40.7
11/7/2018					96.7	163		
3/26/2019	516	406		218	103	174		36.7
3/27/2019			562				178	
9/9/2019	500	409 (D)	666					
9/10/2019				198	107	167	182	
9/11/2019								40.7
4/21/2020	490	429	878	265	107			39.3
4/22/2020						162	195	
8/11/2020	522						193	
8/12/2020		390			96	165		
8/17/2020			818					
8/18/2020				179				42
3/9/2021	684	412						
3/10/2021				296	105	179	246	
3/15/2021								42.7
3/16/2021			890					
8/17/2021	506	397	808					
8/18/2021								43.3
8/24/2021					96.7	167	224	
8/25/2021				207				
3/28/2022			868		96			

Time Series

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
3/29/2022							247	
3/30/2022				320				
4/4/2022	553 (D)					155		40.7
4/6/2022		408.5 (D)						
10/5/2022			864					
10/17/2022		382		311	83.300003	134		
10/18/2022	598						256	
10/19/2022								54

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				358				
4/12/2016				393				
6/1/2016				381				
8/15/2016				348				
8/16/2016			41.3		<25	142	49.3	101
8/17/2016	36.7	65.3						
9/19/2016						121	44.7	80
9/20/2016	25.3	44	42.7		26.7			
10/11/2016				379				
10/12/2016	<25							
10/31/2016		38.7	140		25.3			
11/1/2016						103	48	78
11/28/2016						84	40.7	68.7
11/29/2016	<25	34	78		<25			
1/3/2017						89.3	49.3	60.7
1/4/2017	27.3	42	34		34.7			
1/23/2017	<25				33.3			
1/24/2017		45.3		354		83.3	48.7	
1/25/2017								54.7
1/26/2017			32.7					
5/9/2017	28.7	49.3	<25	368	<25			
5/10/2017						31.3	46.7	60.7
6/27/2017	27.3	46	30.7		<25	67.3	55.3	58
6/28/2017				368				
8/29/2017	30.7							
8/30/2017		38.7	25.3	370	28	64	57.3	66.7
6/4/2018				369				
6/5/2018	26	34.7	<25		28.7	50	52.7	71.3
9/11/2018	<25	34.7	<25		29.3	53.3	60	66.7
9/12/2018				354				
11/5/2018							53.3	
11/6/2018	26	36	<25	354	<25	66		61.3
3/26/2019	<25	30	<25		26.15 (D)			
3/27/2019				362		48.7	51.35 (D)	65.3
9/9/2019				371				
9/11/2019	27.3	40	<25		34	52.7	55.3	68.3 (D)
4/20/2020				371				
4/21/2020	30.7	36	<25		26.7			
4/22/2020						49.3	52.7	62.7
8/11/2020						52		
8/12/2020							49.3	62
8/17/2020				361				
8/18/2020	27.3	35.3	<25		30			
3/15/2021	30.7	30	<25		30	49.3	46	48
3/16/2021				340				
8/17/2021				297				
8/18/2021	28.7	32	<25		28.7			
8/23/2021						49.3	64.7	48.7
3/28/2022	32.7	38.7	<25		27.3	43.3	51.3	57.3
4/5/2022				338 (D)				
10/5/2022				319		40.700001	43.299999	62.700001
10/19/2022	26	28.700001	<25		28			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					381			
1/15/2019				1210		597	392	433
1/16/2019		85.3						
1/17/2019	156							
1/30/2019			184					
9/10/2019	112						576	
9/11/2019		100	182		280	454		334
4/20/2020							534	
4/21/2020		176						
4/22/2020	114		199	977	290	512		
4/29/2020								317
8/11/2020			184			526		
8/12/2020	66						588	
8/18/2020		100						299
8/19/2020				834	308			
3/9/2021			185			524		
3/10/2021					308		602	
3/15/2021	96							321
3/16/2021		111		756				
8/23/2021	89.3							
8/24/2021		94	181	742	345	490		
8/25/2021							562	376
3/28/2022	88.7							
3/29/2022				624				
3/30/2022			170		282		493	
4/6/2022		92				450 (D)		488
10/5/2022							471	
10/17/2022		96	165	706				
10/18/2022					288	478		484
10/19/2022	86.699997							

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	334							
1/16/2019		345	706					
9/11/2019	299	366 (D)	1570					
4/20/2020			790	369				
4/21/2020	299	463					208	222
5/28/2020						195		
7/6/2020					260			
8/11/2020					258	109		
8/12/2020			728					
8/17/2020				305			181	
8/19/2020	371	534						171
3/8/2021					282	93.3		
3/9/2021	375	570						
3/10/2021			794	247			158	181
8/17/2021					303	121		
8/18/2021	401	578		730			121	130
8/23/2021			714					
3/23/2022					300	137		
3/29/2022				646				
3/30/2022							84	184
4/4/2022			604					
4/6/2022	363.5 (D)	551 (D)						
10/4/2022					257	98.699997		
10/5/2022			606					
10/18/2022				388			88.699997	
10/19/2022	431	554						211

Time Series

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	238							
4/12/2016	316							
5/31/2016	320							
8/17/2016	325							
10/11/2016	333							
1/24/2017	336							
5/9/2017	317							
6/28/2017	373							
8/30/2017	432							
6/5/2018	347							
9/11/2018	370							
11/6/2018	409							
3/27/2019	328							
9/11/2019	455							
4/20/2020				441	545		502	
4/21/2020	494							
5/28/2020		242				56.7		401
7/6/2020			498					
8/11/2020		229	462	434		52.7		407
8/12/2020	433				497		491	
3/8/2021		218	469					
3/9/2021						52		386
3/10/2021				408	444		273	
3/16/2021	510							
8/16/2021			423					
8/17/2021		217				45.3		403
8/23/2021	481			390	405		301	
3/23/2022		236	518			47.3		389
4/4/2022	488							
4/5/2022					419 (D)		154 (D)	
4/6/2022				428 (D)				
10/3/2022			425					
10/4/2022		217				38.700001		377
10/5/2022					403		206	
10/17/2022	483			382				

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								656
2/17/2016	640						892	
4/12/2016	610							
4/13/2016							1010	634
5/31/2016	626						1100	
6/1/2016								672
8/17/2016	628						1070	624
10/11/2016	636							
10/12/2016							1040	586
1/24/2017	696							
1/25/2017							972	596
5/10/2017	687						740	576
6/28/2017	622						914	612
8/29/2017	616						924	640
6/5/2018	582						1060	474
9/11/2018	616						1020	496
11/7/2018	576						1050	514
3/26/2019	682						1100	546
9/10/2019	744						1100	601 (D)
4/21/2020	742						1010	638
8/19/2020	788						1050	658
3/9/2021	716						1090	746
8/17/2021		43.3	107	59.3	53.3	318		
8/24/2021	792						930	690
3/23/2022		39.3	74	44.7	41.3	373		
3/29/2022	722						894	730
10/4/2022		28	54	42	48	330		
10/18/2022	752						1040	700

Time Series

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	226	
4/13/2016	202	
6/1/2016	224	
8/17/2016	290	
10/12/2016	315	
1/25/2017	332	
5/10/2017	361	
6/28/2017	396	
8/29/2017	402	
6/5/2018	448	
9/11/2018	462	
9/12/2018		714
11/7/2018	506	
3/26/2019	586	
9/10/2019	586	854
4/20/2020		824
4/21/2020	578	
8/17/2020		826
8/18/2020	542	
3/9/2021	532	
3/10/2021		876
8/17/2021		900
8/24/2021	624	
3/29/2022	800	
4/5/2022		1225 (D)
10/5/2022		1150
10/18/2022	692	

Time Series

Constituent: Thallium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
2/16/2016		<0.0002		<0.0002	<0.001	<0.0002		
2/17/2016	0.000601 (J)		0.000869 (J)				0.000697 (J)	0.000687 (J)
4/12/2016					<0.001	<0.0002	<0.0002	
4/13/2016	<0.001	<0.0002	<0.0002	<0.0002				<0.001
5/31/2016		<0.0002	<0.0002	<0.0002	0.000212 (J)	<0.0002	<0.0002	
6/1/2016	<0.001							0.000272 (J)
8/15/2016	<0.001							0.000278 (J)
8/16/2016		<0.0002	<0.0002	<0.0002	0.000449 (J)		<0.0002	
8/17/2016						<0.0002		
10/11/2016	<0.001						<0.0002	
10/12/2016		<0.0002	<0.0002	<0.0002	0.000532 (J)	<0.0002		0.000322 (J)
1/24/2017	<0.001						<0.0002	0.000265 (J)
1/25/2017		<0.0002	<0.0002	<0.0002	0.000309 (J)	<0.0002		
5/9/2017	<0.001		<0.0002	<0.0002	0.00021 (J)	<0.0002		
5/10/2017		<0.0002					<0.0002	0.000327 (J)
6/27/2017	<0.001						<0.0002	0.000301 (J)
6/28/2017		<0.0002	<0.0002	<0.0002	0.000244 (J)	<0.0002		
2/27/2018	<0.001	<0.0002	<0.0002			<0.0002		
2/28/2018				<0.0002	<0.001		<0.0002	0.000321 (J)
6/4/2018	<0.001							
6/5/2018		<0.0002	<0.0002				<0.0002	0.000288 (J)
6/6/2018				<0.0002	0.000239 (J)	<0.0002		
11/5/2018			<0.0002	<0.0002	0.000623 (J)			
11/6/2018	<0.001						<0.0002	0.000354 (J)
11/7/2018		<0.0002				<0.0002		
3/26/2019				<0.0002	0.000215 (J)		<0.0002	0.00041 (J)
3/27/2019	<0.001	<0.0002	<0.0002			<0.0002		
9/10/2019	<0.001	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.000396 (J)
9/11/2019					0.00214			
4/20/2020					0.000433 (J)		<0.0002	0.00032 (J)
4/21/2020	<0.001			<0.0002		<0.0002		
4/22/2020		<0.0002	<0.0002					
8/11/2020						<0.0002		0.000329 (J)
8/12/2020							<0.0002	
8/17/2020	<0.001							
8/18/2020		<0.0002	<0.0002	<0.0002	0.00114			
3/9/2021						<0.0002		0.000369
3/10/2021			8.7E-05 (J)	<0.0002			8.78E-05 (J)	
3/15/2021		<0.0002			0.000506			
3/16/2021	0.000107 (J)							
8/17/2021	0.00012 (J)							0.00036
8/24/2021		<0.0002						
8/25/2021			9E-05 (J)	<0.0002	0.00124	<0.0002	<0.0002	
3/29/2022				<0.0002			0.00012 (J)	
3/30/2022			7E-05 (J)					
4/4/2022	0.00016 (J)	<0.0002				<0.0002		
4/6/2022					0.00169			0.00035
10/5/2022	0.000149 (J)							
10/17/2022			<0.0002	<0.0002	0.00238			
10/18/2022		<0.0002				<0.0002	8.4E-05 (J)	0.000337

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
2/16/2016				<0.0002				
2/17/2016	0.00067 (J)	0.000404 (J)	0.000388 (J)		0.000364 (J)	0.00039 (J)	0.000232 (J)	
4/12/2016		<0.0002			<0.0002	<0.0002	<0.0002	
4/13/2016	<0.0002		<0.001	<0.0002				
6/1/2016	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	
8/15/2016	<0.0002	<0.0002	<0.001					
8/16/2016				<0.0002	<0.0002	<0.0002		
8/17/2016							<0.0002	<0.0002
9/20/2016								<0.0002
10/11/2016			<0.001		<0.0002	<0.0002	<0.0002	
10/12/2016	<0.0002	<0.0002		<0.0002				<0.0002
11/15/2016								<0.0002
1/4/2017								<0.0002
1/23/2017								<0.0002
1/24/2017	<0.0002	<0.0002	<0.001		<0.0002	<0.0002	<0.0002	
1/25/2017				<0.0002				
5/9/2017			<0.001	<0.0002	<0.0002		<0.0002	<0.0002
5/10/2017	<0.0002	<0.0002				<0.0002		
6/27/2017	<0.0002	<0.0002			<0.0002			<0.0002
6/28/2017			<0.001	<0.0002		<0.0002	<0.0002	
2/27/2018			<0.001		<0.0002	<0.0002		<0.0002
2/28/2018	<0.0002	<0.0002		<0.0002			<0.0002	
6/4/2018			<0.001					
6/5/2018	<0.0002	<0.0002			<0.0002	<0.0002		<0.0002
6/6/2018				<0.0002			<0.0002	
11/5/2018				<0.0002				
11/6/2018	<0.0002	<0.0002	<0.001				<0.0002	<0.0002
11/7/2018					<0.0002	<0.0002		
3/26/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
3/27/2019			<0.001				<0.0002	
9/9/2019	<0.0002	<0.0002	<0.001					
9/10/2019				<0.0002	<0.0002	<0.0002	<0.0002	
9/11/2019								<0.0002
4/21/2020	<0.0002	<0.0002	<0.001	<0.0002	<0.0002			<0.0002
4/22/2020						<0.0002	<0.0002	
8/11/2020	<0.0002						<0.0002	
8/12/2020		<0.0002			<0.0002	<0.0002		
8/17/2020			<0.001					
8/18/2020				<0.0002				<0.0002
3/9/2021	<0.0002	<0.0002						
3/10/2021				0.000106 (J)	<0.0002	<0.0002	<0.0002	
3/15/2021								<0.0002
3/16/2021			0.000101 (J)					
8/17/2021	<0.0002	<0.0002	0.00013 (J)					
8/18/2021								<0.0002
8/24/2021					<0.0002	<0.0002	<0.0002	
8/25/2021				<0.0002				
3/28/2022			0.00015 (J)		<0.0002			
3/29/2022							<0.0002	
3/30/2022				0.00011 (J)				
4/4/2022	<0.0002					<0.0002		<0.0002
4/6/2022		<0.0002						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-23 (bg)	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-26 (bg)
10/5/2022			0.000158 (J)					
10/17/2022		<0.0002		0.00012 (J)	<0.0002	<0.0002		
10/18/2022	<0.0002						<0.0002	
10/19/2022								<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 12/9/2022 10:26 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-3	GC-AP-MW-30 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33
2/17/2016				0.00038 (J)				
4/12/2016				<0.0002				
6/1/2016				<0.0002				
8/15/2016				<0.0002				
8/16/2016			<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/17/2016	<0.0002	<0.0002						
9/19/2016						<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002		<0.0002			
10/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/12/2016	<0.0002	<0.0002						
11/14/2016						<0.0002	<0.0002	<0.0002
11/15/2016	<0.0002	<0.0002	<0.0002		<0.0002			
1/3/2017						<0.0002	<0.0002	<0.0002
1/4/2017	<0.0002	<0.0002	<0.0002		<0.0002			
1/23/2017	<0.0002				<0.0002			
1/24/2017		<0.0002		<0.0002		<0.0002	<0.0002	
1/25/2017								<0.0002
1/26/2017			<0.0002					
5/9/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
5/10/2017						<0.0002	<0.0002	<0.0002
6/27/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
6/28/2017				<0.0002				
2/27/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/4/2018				<0.0002				
6/5/2018	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
11/5/2018							<0.0002	
11/6/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/26/2019	<0.0002	<0.0002	<0.0002		<0.0002			
3/27/2019				<0.0002		<0.0002	<0.0002	<0.0002
9/9/2019				<0.0002				
9/11/2019	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/20/2020				<0.0002				
4/21/2020	<0.0002	<0.0002	<0.0002		<0.0002			
4/22/2020						<0.0002	<0.0002	<0.0002
8/11/2020						<0.0002		
8/12/2020							<0.0002	<0.0002
8/17/2020				<0.0002				
8/18/2020	<0.0002	<0.0002	<0.0002		<0.0002			
3/15/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
3/16/2021				<0.0002				
8/17/2021				<0.0002				
8/18/2021	<0.0002	<0.0002	<0.0002		<0.0002			
8/23/2021						<0.0002	<0.0002	<0.0002
3/28/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/5/2022				<0.0002				
10/5/2022				<0.0002		<0.0002	<0.0002	<0.0002
10/19/2022	<0.0002	<0.0002	<0.0002		<0.0002			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-34HA	GC-AP-MW-35H	GC-AP-MW-36H	GC-AP-MW-37H	GC-AP-MW-38H	GC-AP-MW-39H	GC-AP-MW-40H	GC-AP-MW-41H
1/14/2019					<0.0002			
1/15/2019				<0.0002		0.00092 (J)	<0.001	<0.0002
1/16/2019		<0.0002						
1/17/2019	<0.0002							
1/30/2019			<0.0002					
9/10/2019	<0.0002						0.000223 (J)	
9/11/2019		<0.0002	<0.0002		<0.0002	0.000983 (J)		<0.0002
4/20/2020							<0.001	
4/21/2020		<0.0002						
4/22/2020	<0.0002		<0.0002	<0.0002	<0.0002	0.0008 (J)		
4/29/2020								<0.0002
8/11/2020			<0.0002			0.000814 (J)		
8/12/2020	<0.0002						0.000208 (J)	
8/18/2020		<0.0002						<0.0002
8/19/2020				<0.0002	<0.0002			
3/9/2021			<0.0002			0.000828		
3/10/2021					<0.0002		0.000186 (J)	
3/15/2021	<0.0002							<0.0002
3/16/2021		<0.0002		<0.0002				
8/23/2021	<0.0002							
8/24/2021		<0.0002	<0.0002	<0.0002	<0.0002	0.00076		
8/25/2021							0.00013 (J)	<0.0002
3/28/2022	<0.0002							
3/29/2022				<0.0002				
3/30/2022			<0.0002		<0.0002		0.00017 (J)	
4/6/2022		<0.0002				0.00059		<0.0002
10/5/2022							0.000188 (J)	
10/17/2022		<0.0002	<0.0002	<0.0002				
10/18/2022					<0.0002	0.000636		<0.0002
10/19/2022	<0.0002							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-42H	GC-AP-MW-43H	GC-AP-MW-44H	GC-AP-MW-45H	GC-AP-MW-46HO	GC-AP-MW-47HO	GC-AP-MW-48H	GC-AP-MW-49H
1/15/2019	<0.0002							
1/16/2019		<0.0002	<0.0002					
9/11/2019	<0.0002	<0.0002	<0.0002					
4/20/2020			<0.0002	<0.001				
4/21/2020	<0.0002	<0.0002					<0.0002	<0.0002
5/28/2020						<0.0002		
7/6/2020					<0.0002			
8/11/2020					<0.0002	<0.0002		
8/12/2020			<0.0002					
8/17/2020				<0.001			<0.0002	
8/19/2020	<0.0002	<0.0002						<0.0002
3/8/2021					<0.0002	<0.0002		
3/9/2021	<0.0002	<0.0002						
3/10/2021			<0.0002	0.000103 (J)			<0.0002	<0.0002
8/17/2021					<0.0002	<0.0002		
8/18/2021	<0.0002	<0.0002		0.00021			<0.0002	<0.0002
8/23/2021			<0.0002					
3/23/2022					7E-05 (J)	<0.0002		
3/29/2022				0.00013 (J)				
3/30/2022							<0.0002	<0.0002
4/4/2022			<0.0002					
4/6/2022	<0.0002	<0.0002						
10/4/2022					<0.0002	<0.0002		
10/5/2022			8.7E-05 (J)					
10/18/2022				0.000159 (J)			<0.0002	
10/19/2022	<0.0002	<0.0002						<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-5	GC-AP-MW-50HO	GC-AP-MW-52HO	GC-AP-MW-53H	GC-AP-MW-54H	GC-AP-MW-55HO	GC-AP-MW-57H	GC-AP-MW-59HO
2/17/2016	0.000779 (J)							
4/12/2016	<0.0002							
5/31/2016	<0.0002							
8/17/2016	<0.0002							
10/11/2016	<0.0002							
1/24/2017	<0.0002							
5/9/2017	<0.0002							
6/28/2017	<0.0002							
2/27/2018	<0.0002							
6/5/2018	<0.0002							
11/6/2018	<0.0002							
3/27/2019	<0.0002							
9/11/2019	<0.0002							
4/20/2020				<0.0002	<0.0002		<0.0002	
4/21/2020	<0.0002							
5/28/2020		<0.0002				<0.0002		<0.000203
7/6/2020			<0.0002					
8/11/2020		<0.0002	<0.0002	<0.0002		<0.0002		<0.000203
8/12/2020	<0.0002				<0.0002		<0.0002	
3/8/2021		<0.0002	<0.0002					
3/9/2021						<0.0002		<0.000203
3/10/2021				<0.0002	<0.0002		<0.0002	
3/16/2021	<0.0002							
8/16/2021			<0.0002					
8/17/2021		8E-05 (J)				<0.0002		0.00012 (J)
8/23/2021	<0.0002			<0.0002	<0.0002		<0.0002	
3/23/2022		0.00011 (J)	<0.0002			<0.0002		0.00013 (J)
4/4/2022	<0.0002							
4/5/2022					<0.0002		<0.0002	
4/6/2022				<0.0002				
10/3/2022			<0.0002					
10/4/2022		<0.0002				<0.0002		8.8E-05 (J)
10/5/2022					<0.0002		<0.0002	
10/17/2022	<0.0002			<0.0002				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-60HO	GC-AP-MW-61HO	GC-AP-MW-62HO	GC-AP-MW-63HO	GC-AP-MW-64HO	GC-AP-MW-7	GC-AP-MW-8
2/16/2016								<0.0002
2/17/2016	0.000639 (J)						0.00042 (J)	
4/12/2016	<0.0002							
4/13/2016							<0.0002	<0.0002
5/31/2016	<0.0002						<0.0002	
6/1/2016								<0.0002
8/17/2016	<0.0002						<0.0002	<0.0002
10/11/2016	<0.0002							
10/12/2016							<0.0002	<0.0002
1/24/2017	<0.0002							
1/25/2017							<0.0002	<0.0002
5/10/2017	<0.0002						<0.0002	<0.0002
6/28/2017	<0.0002						<0.0002	<0.0002
2/27/2018	<0.0002						<0.0002	<0.0002
6/5/2018	<0.0002						<0.0002	<0.0002
11/7/2018	<0.0002						<0.0002	<0.0002
3/26/2019	<0.0002						<0.0002	<0.0002
9/10/2019	<0.0002						<0.0002	<0.0002
4/21/2020	<0.0002						<0.0002	<0.0002
8/19/2020	<0.0002						<0.0002	<0.0002
3/9/2021	<0.0002						<0.0002	<0.0002
8/17/2021		<0.0002	<0.0002	<0.0002	<0.0002	8E-05 (J)		
8/24/2021	<0.0002						<0.0002	<0.0002
3/23/2022		<0.0002	<0.0002	<0.0002	<0.0002	9E-05 (J)		
3/29/2022	<0.0002						<0.0002	<0.0002
10/4/2022		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
10/18/2022	<0.0002						<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 10:26 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

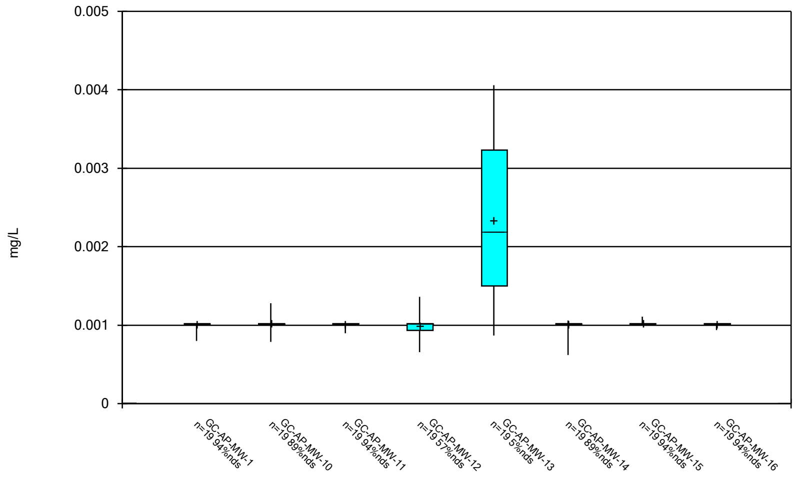
	GC-AP-MW-9	GC-AP-PZ-4
2/16/2016	<0.0002	
4/13/2016	<0.0002	
6/1/2016	<0.0002	
8/17/2016	<0.0002	
10/12/2016	<0.0002	
1/25/2017	<0.0002	
5/10/2017	<0.0002	
6/28/2017	<0.0002	
2/27/2018	<0.0002	
6/5/2018	<0.0002	
11/7/2018	<0.0002	
3/26/2019	<0.0002	
9/10/2019	<0.0002	<0.001
4/20/2020		<0.001
4/21/2020	<0.0002	
8/17/2020		<0.001
8/18/2020	<0.0002	
3/9/2021	<0.0002	
3/10/2021		7.61E-05 (J)
8/17/2021		0.00011 (J)
8/24/2021	<0.0002	
3/29/2022	<0.0002	
4/5/2022		9E-05 (J)
10/5/2022		0.000158 (J)
10/18/2022	<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.

Sanitas™ v.9.6.36 . UG

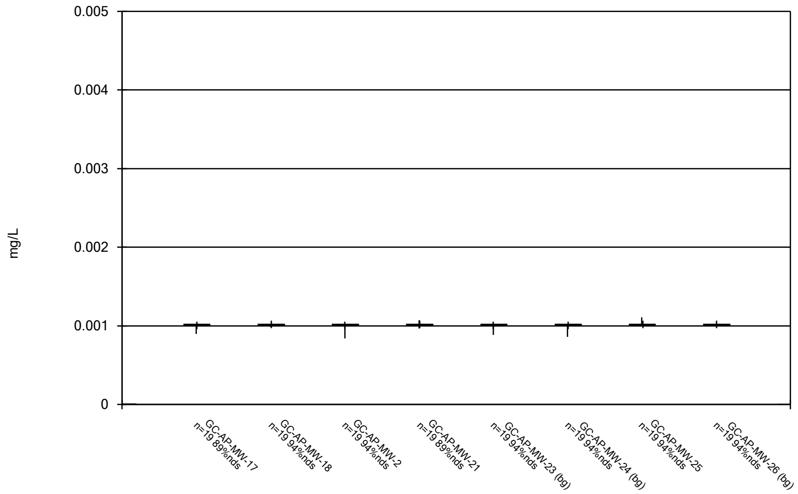
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

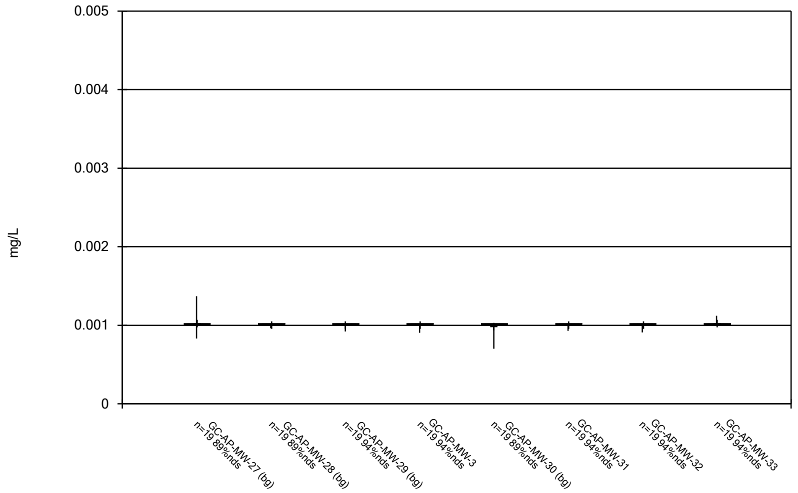
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

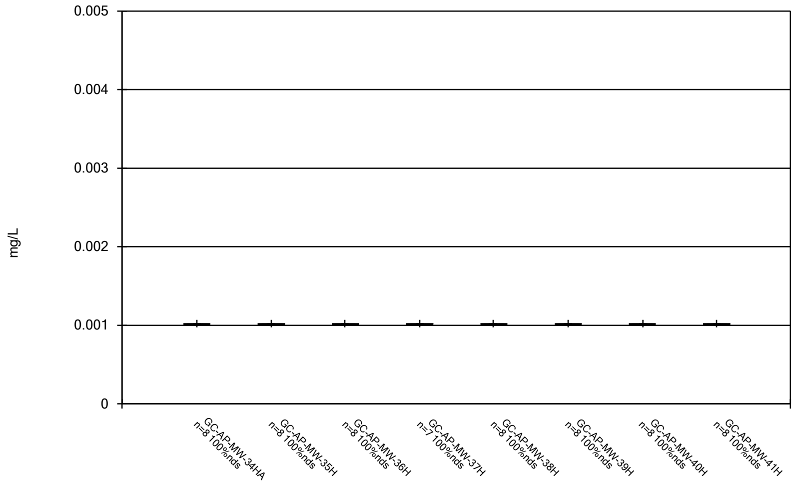
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

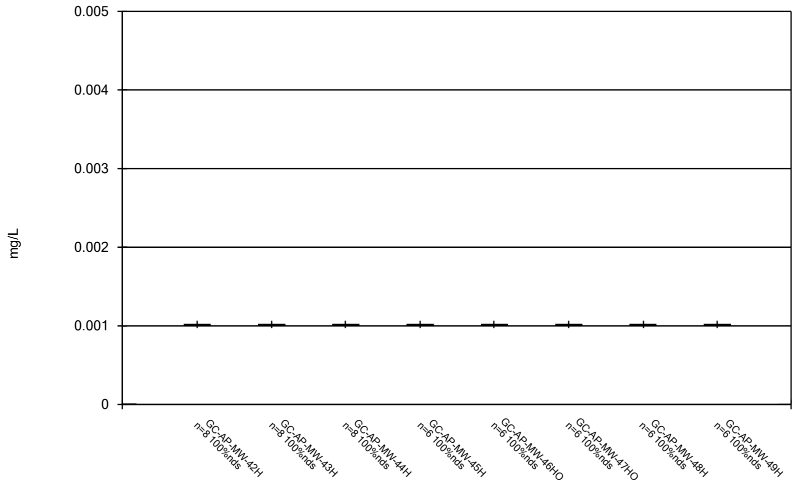
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

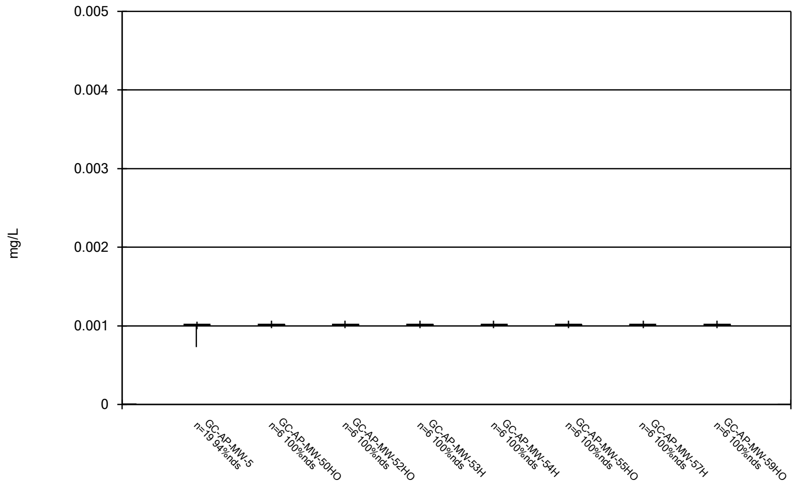
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

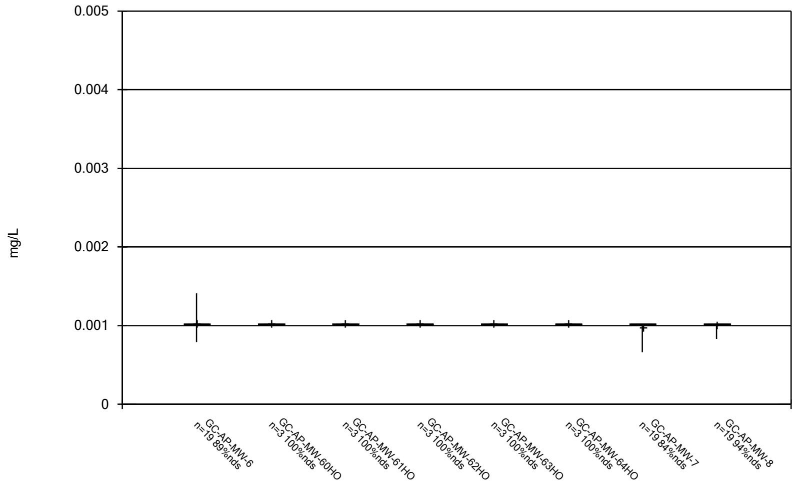
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

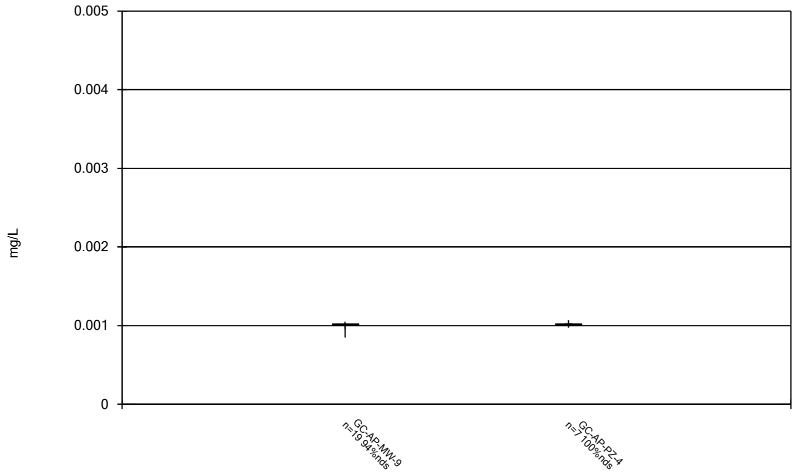
Box & Whiskers Plot



Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

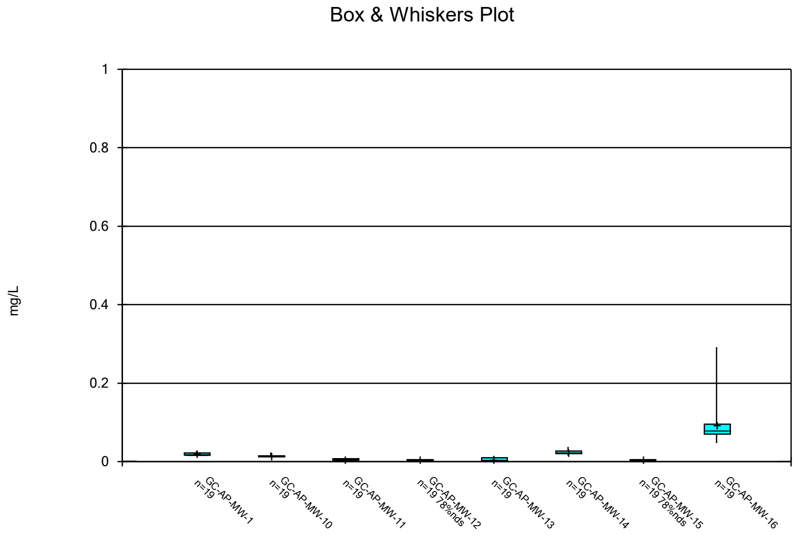
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



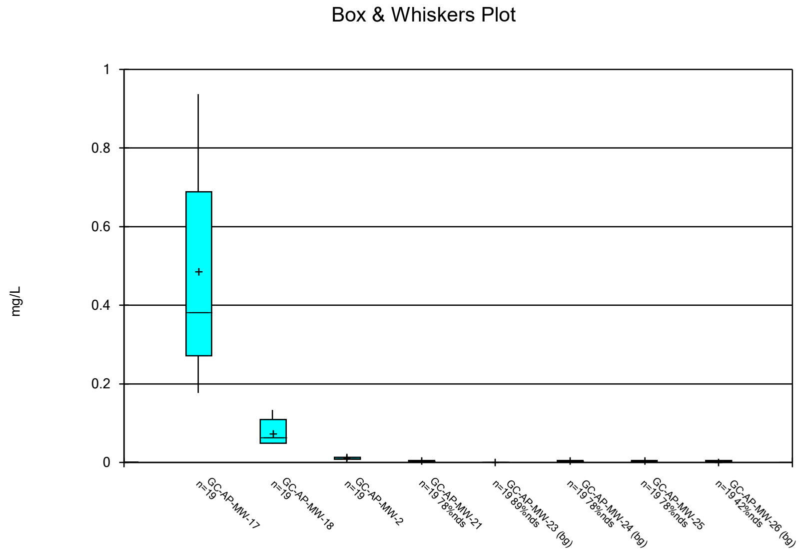
Constituent: Antimony   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



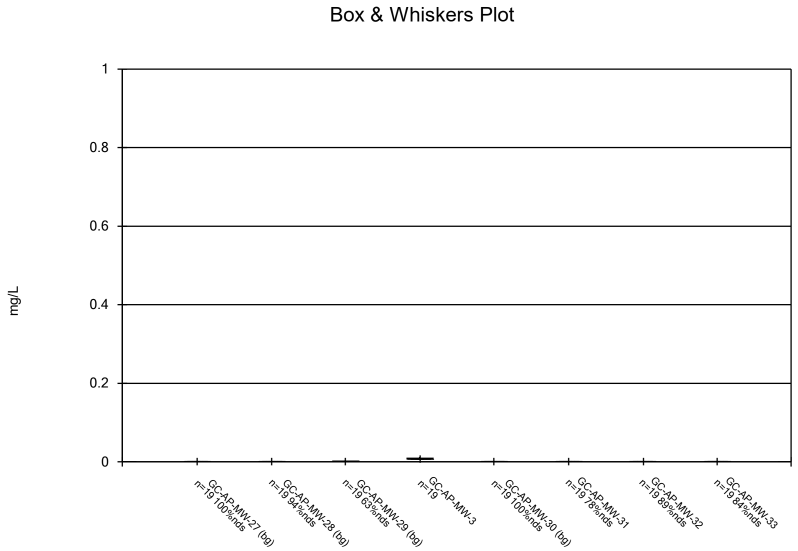
Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



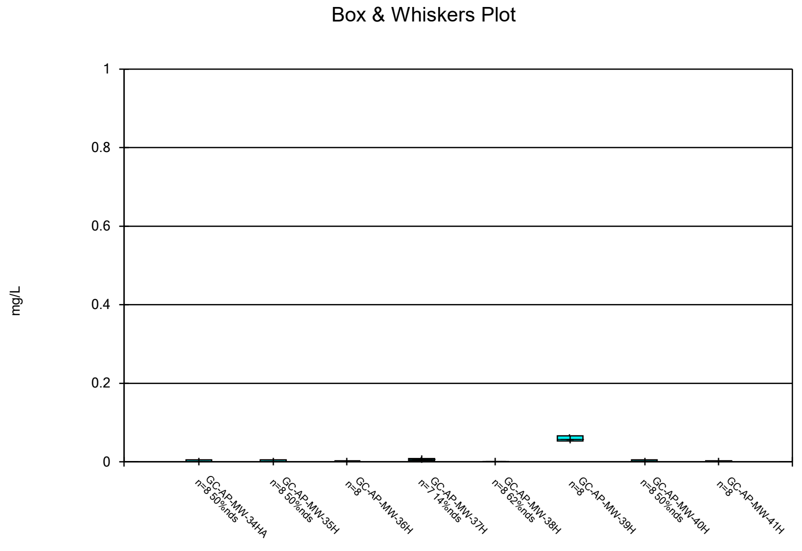
Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

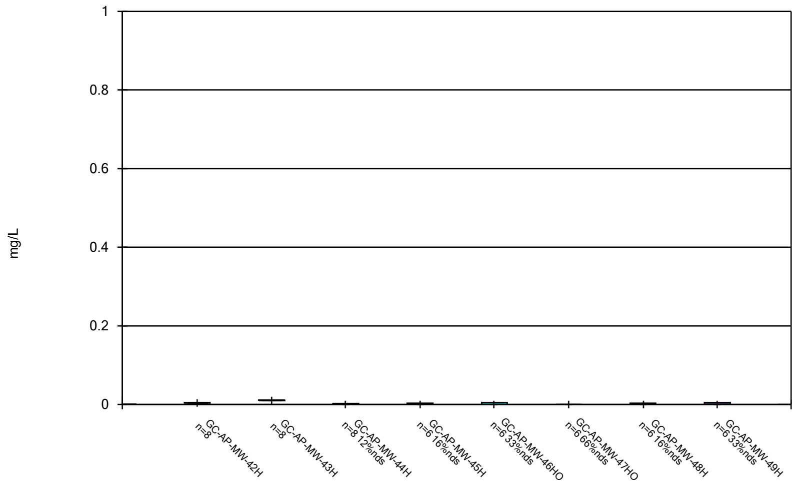
Sanitas™ v.9.6.36 . UG



Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

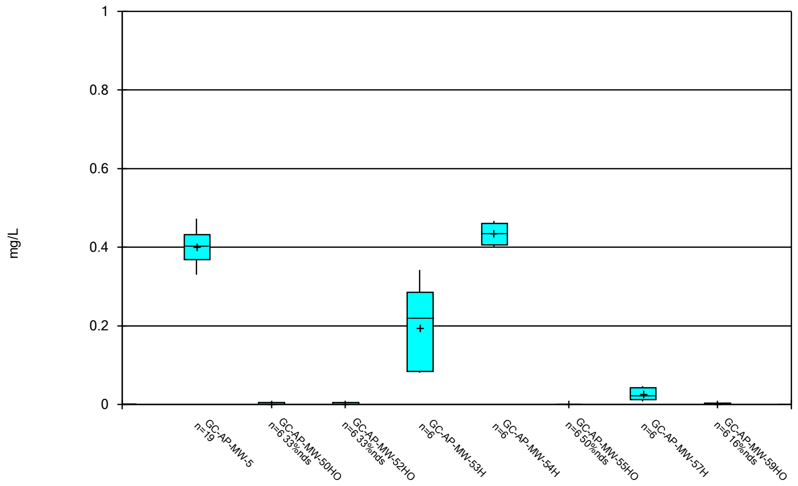


Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

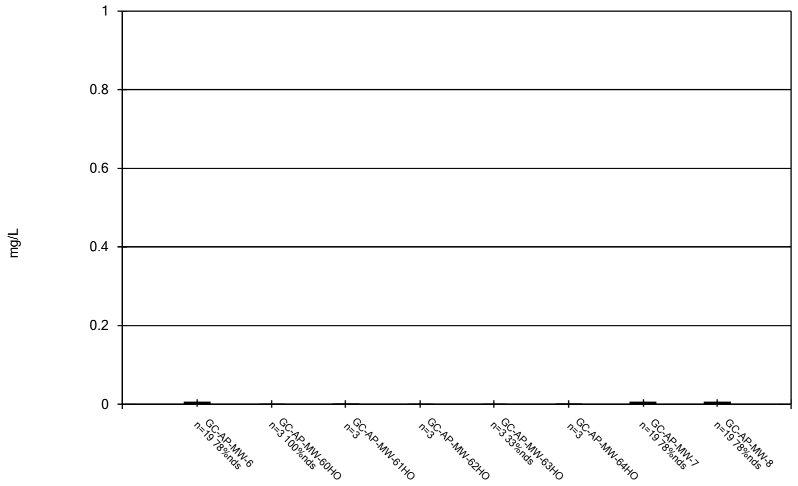


Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

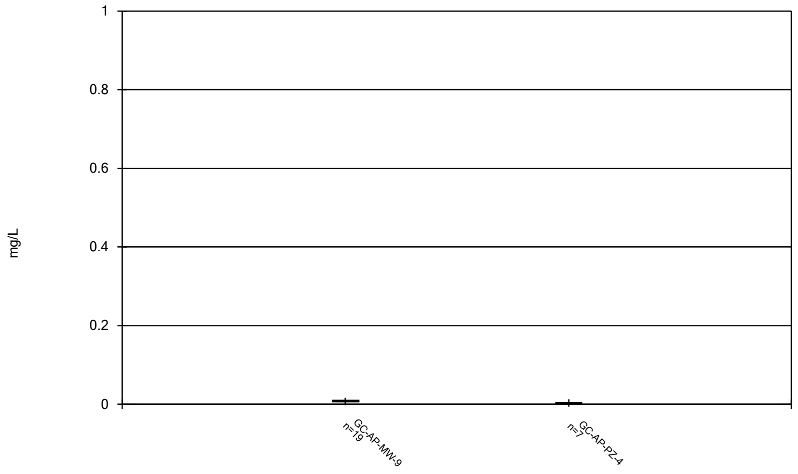


Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

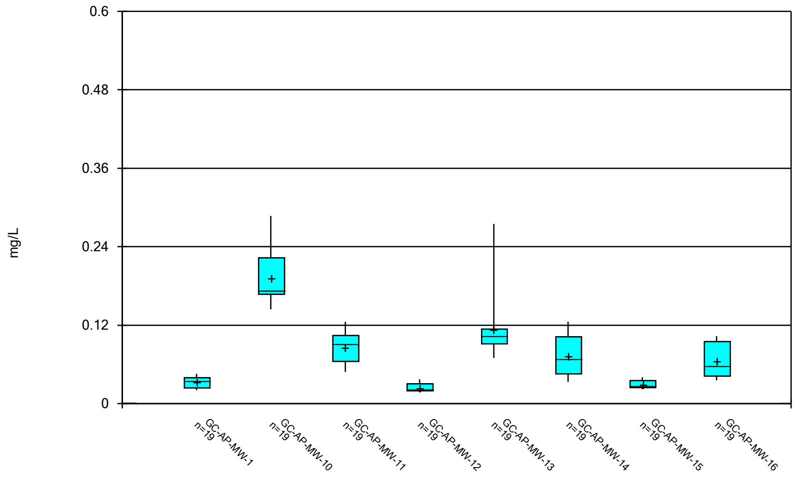


Constituent: Arsenic   Analysis Run 12/9/2022 10:31 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

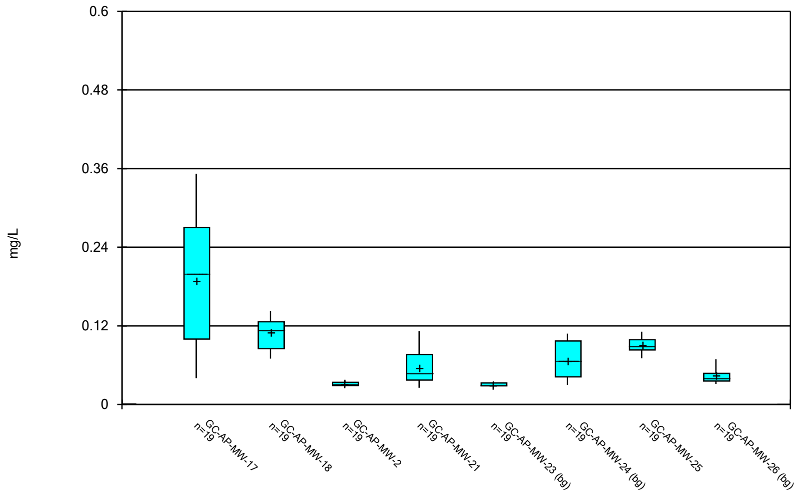
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

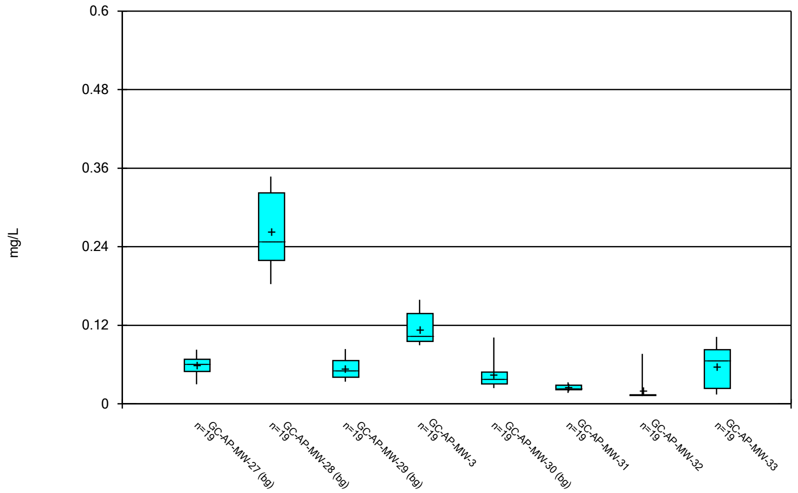
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

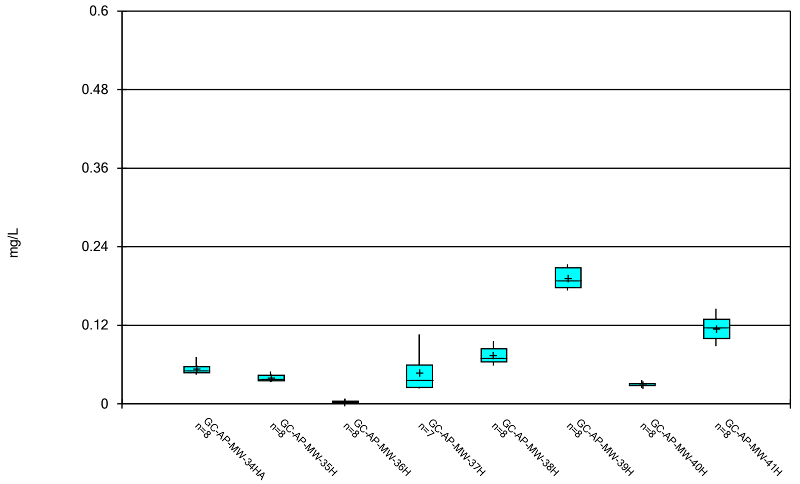
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

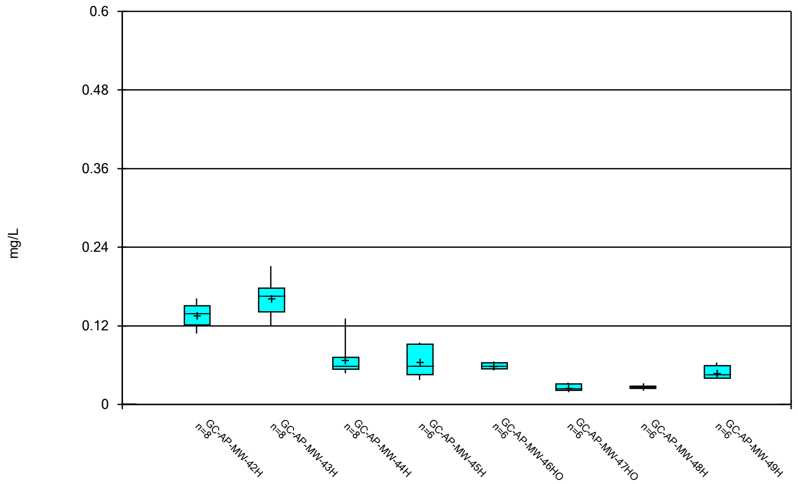
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

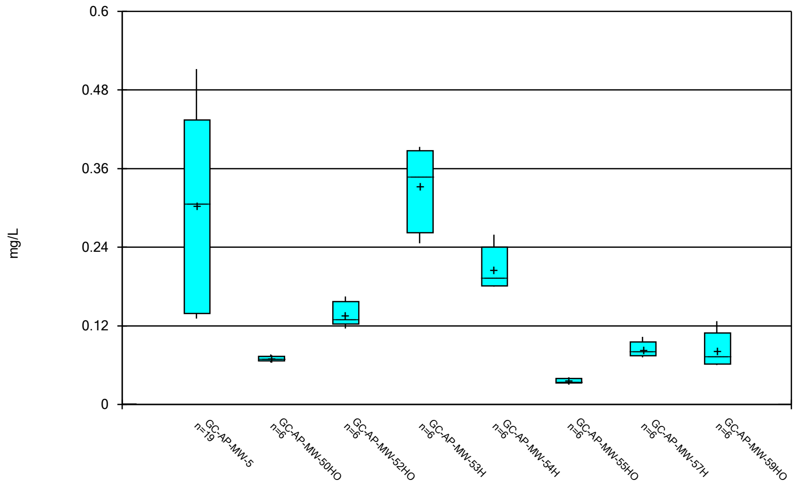
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

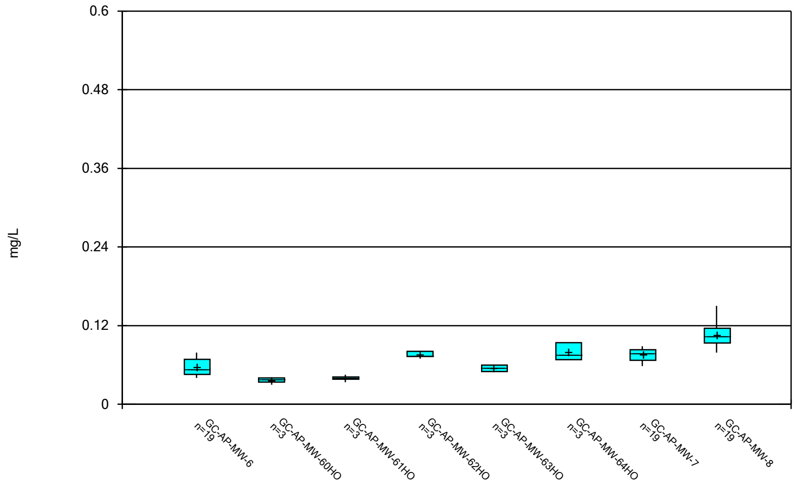
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

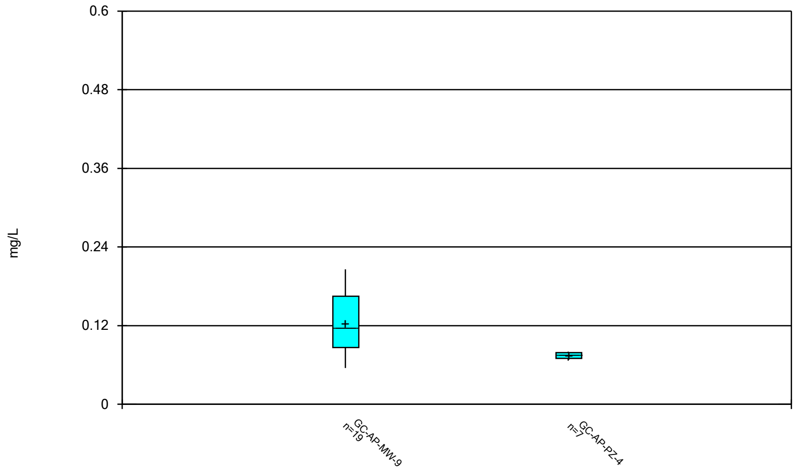
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

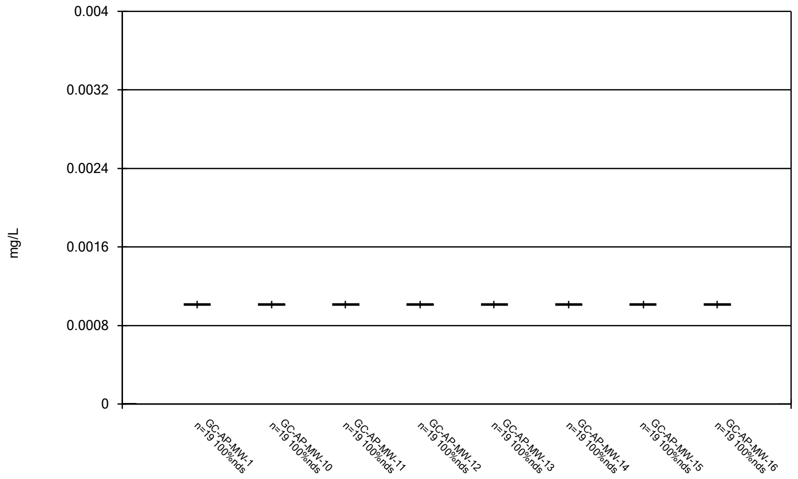
Box & Whiskers Plot



Constituent: Barium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

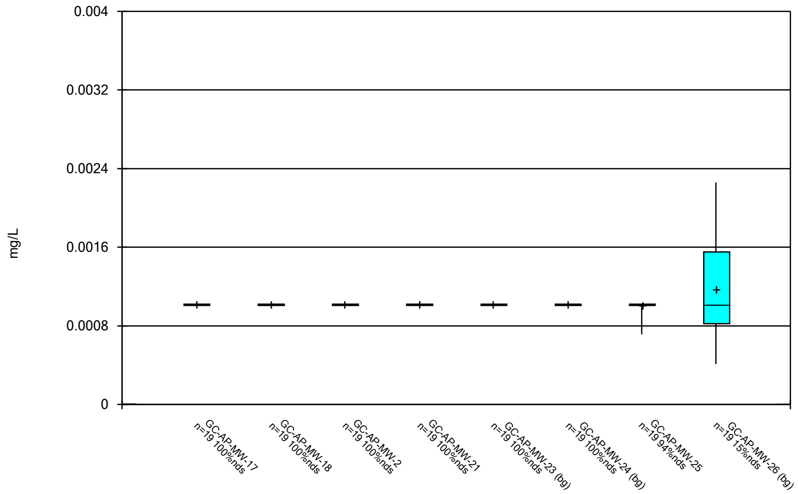
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

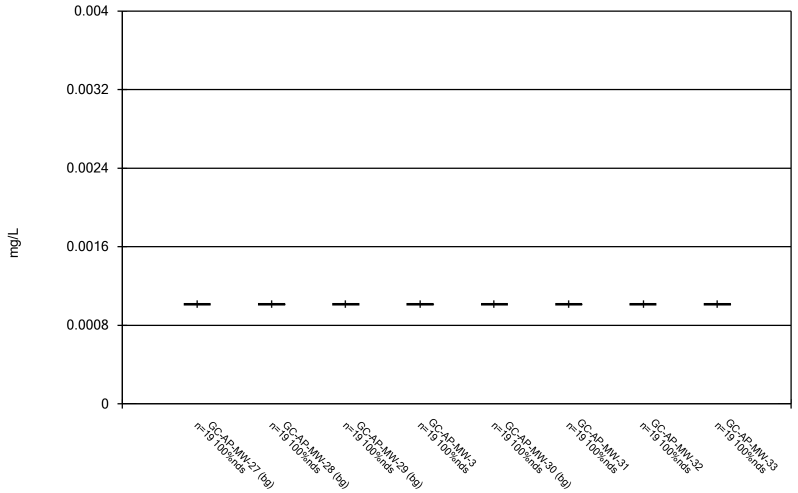
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

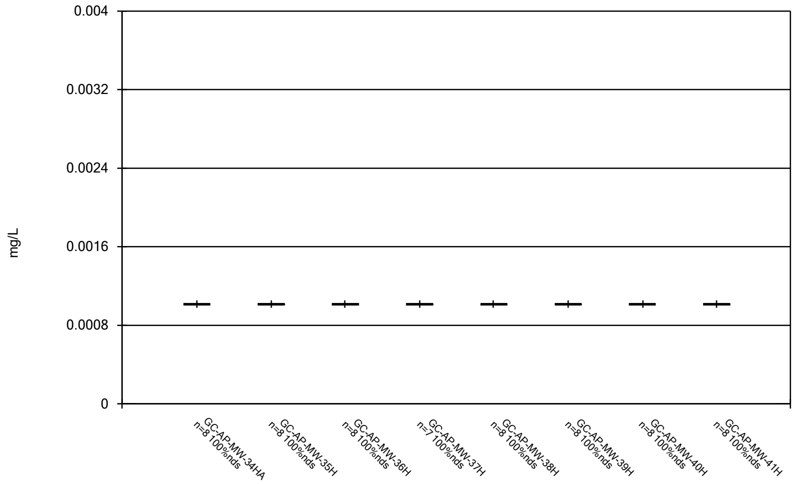
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

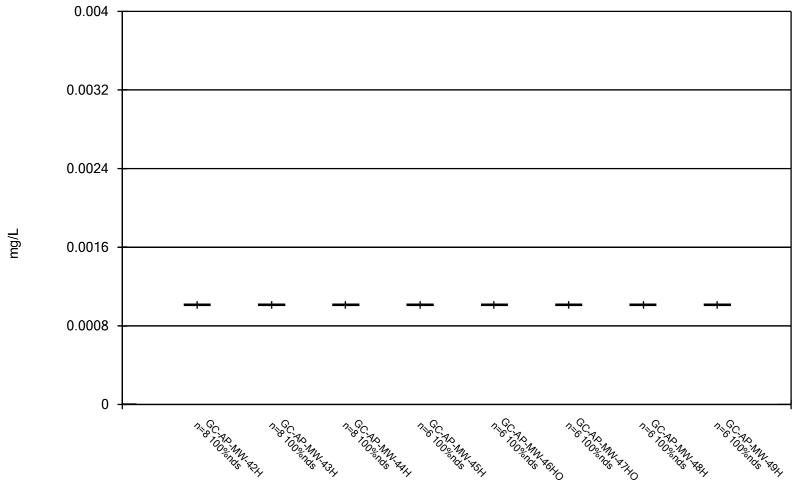
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

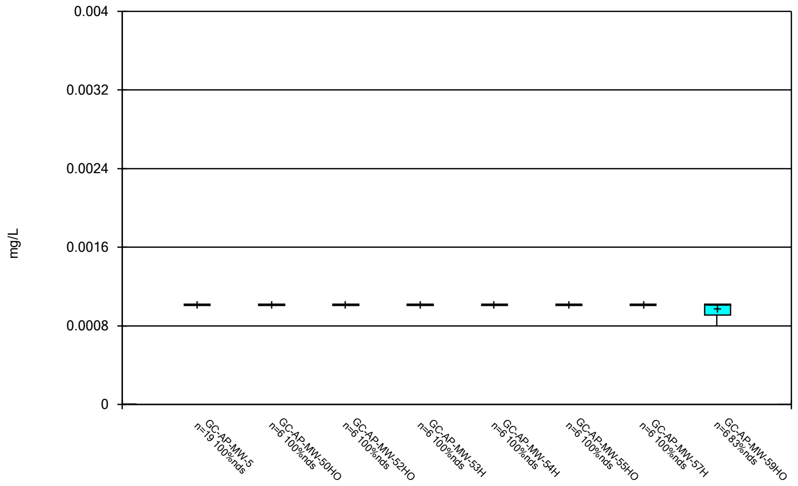
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

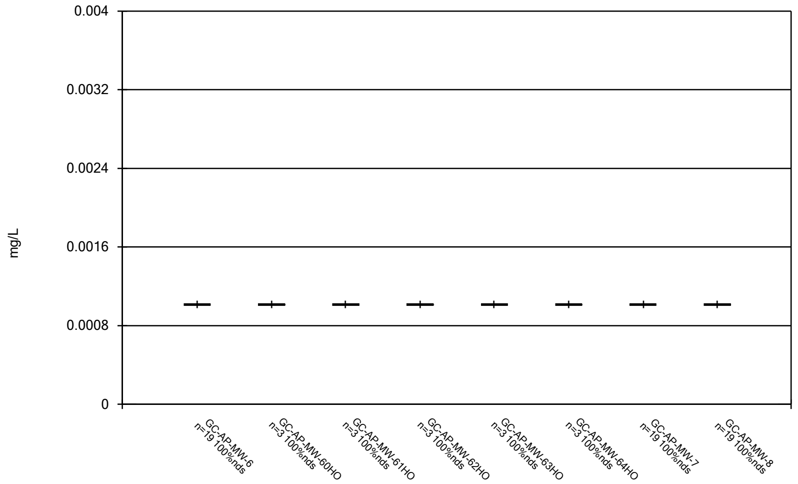
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

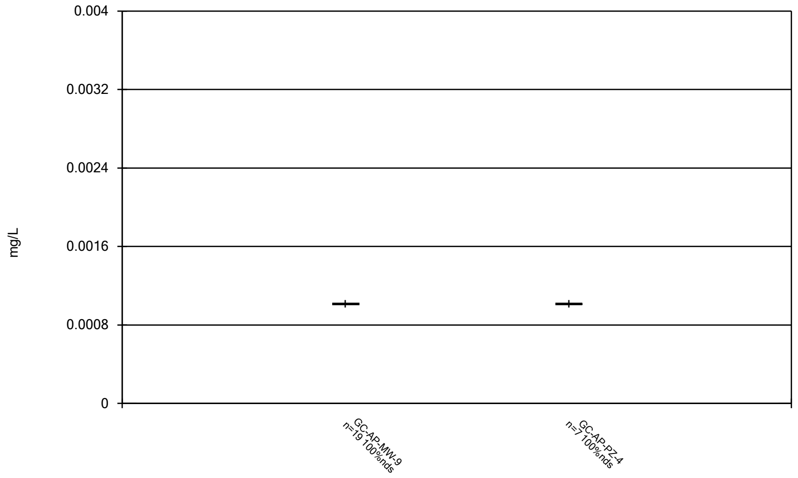
Box & Whiskers Plot



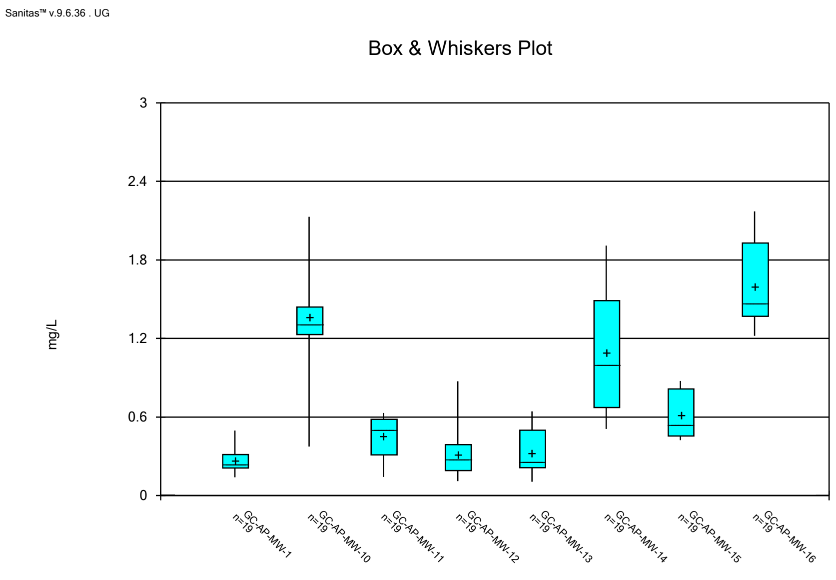
Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

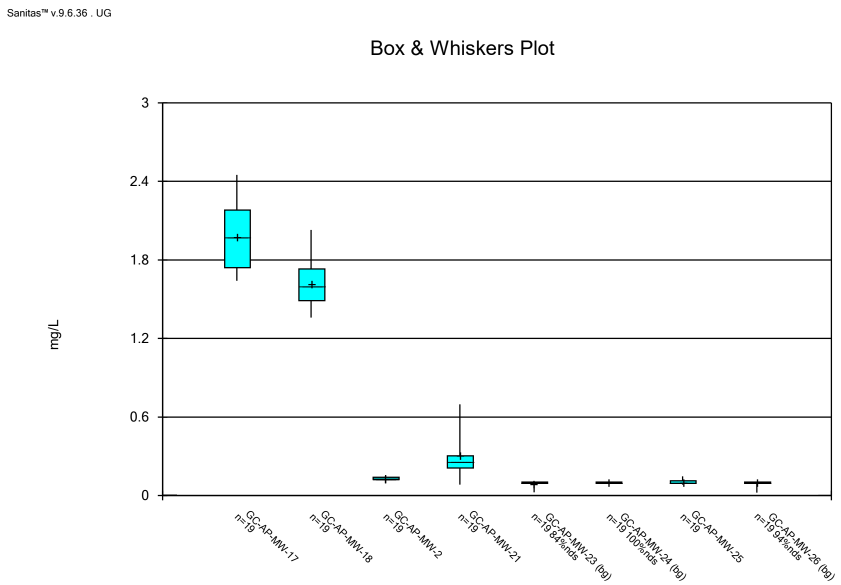
Box & Whiskers Plot



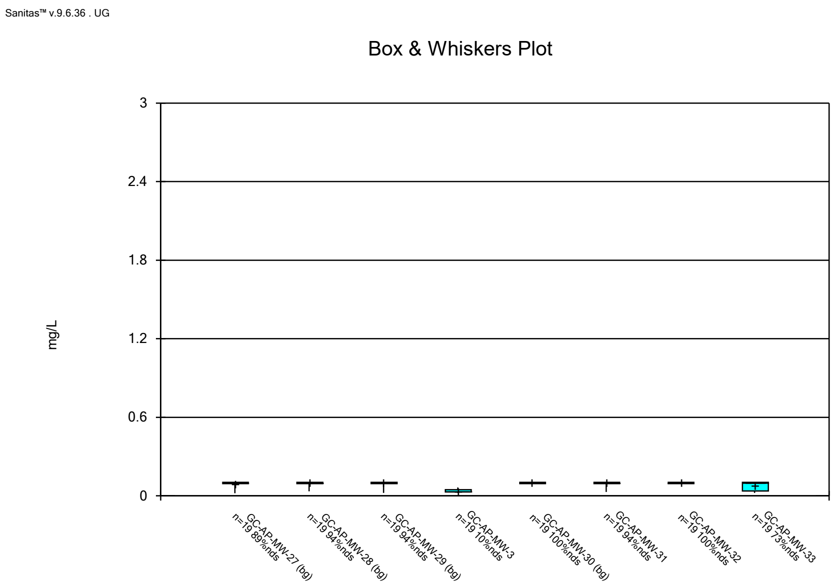
Constituent: Beryllium   Analysis Run 12/9/2022 10:31 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP



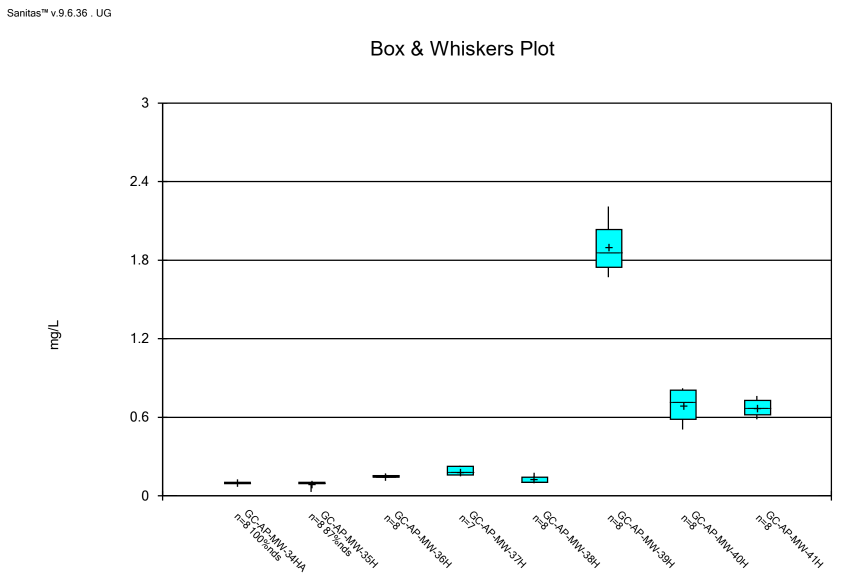
Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



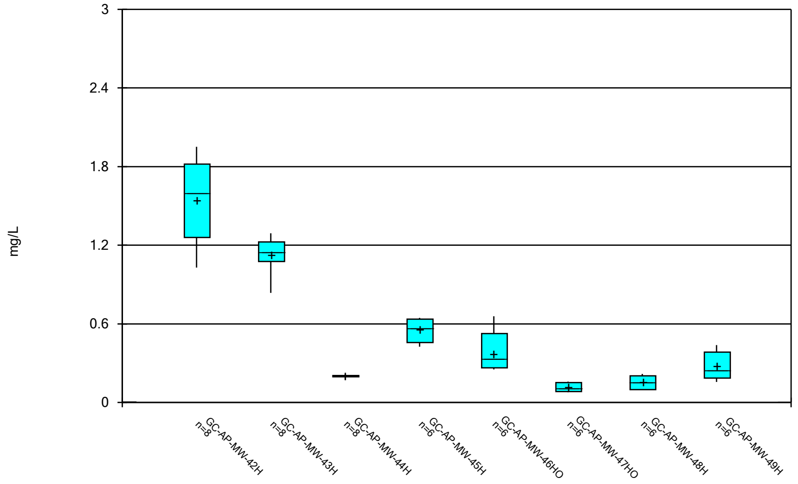
Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP



Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

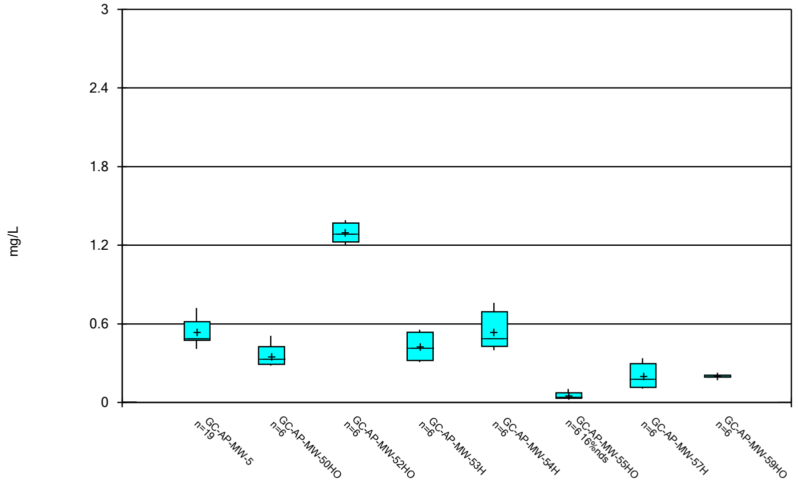
Box & Whiskers Plot



Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

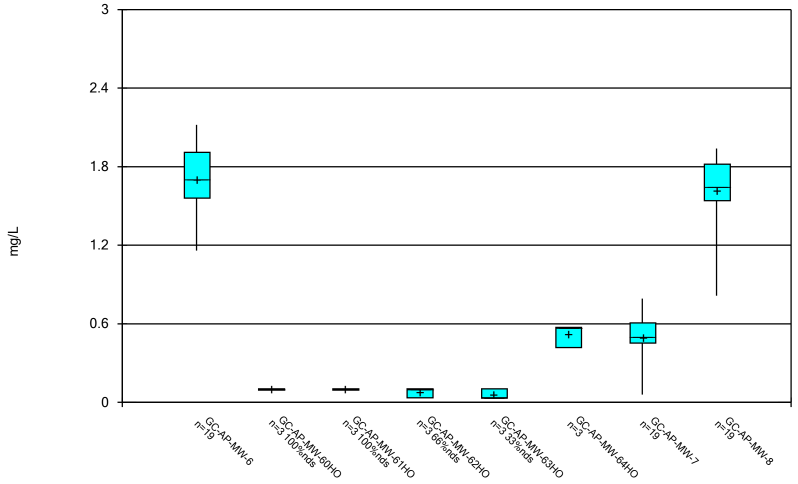
Box & Whiskers Plot



Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

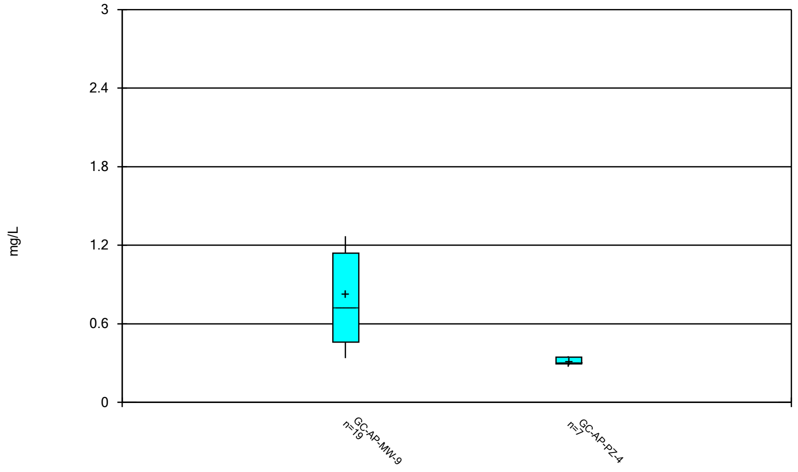
Box & Whiskers Plot



Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

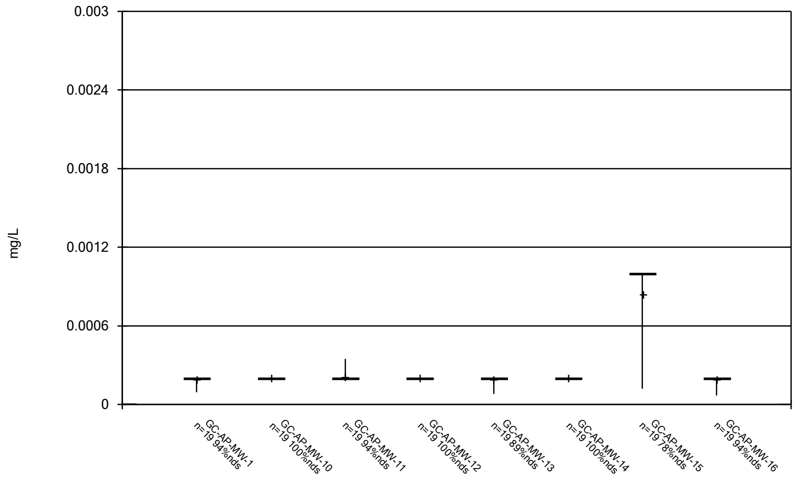
Box & Whiskers Plot



Constituent: Boron Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

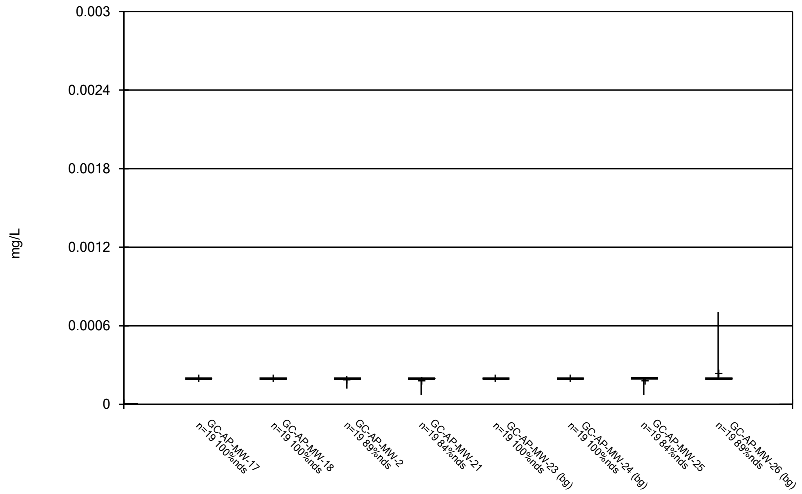
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

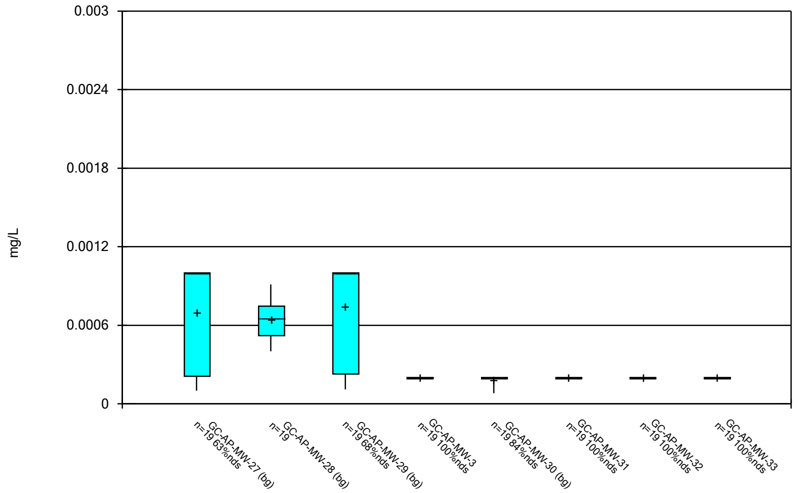
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

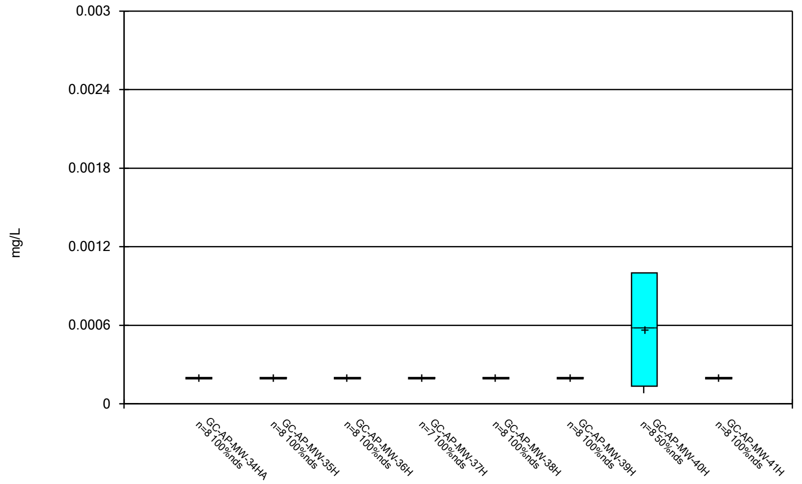
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

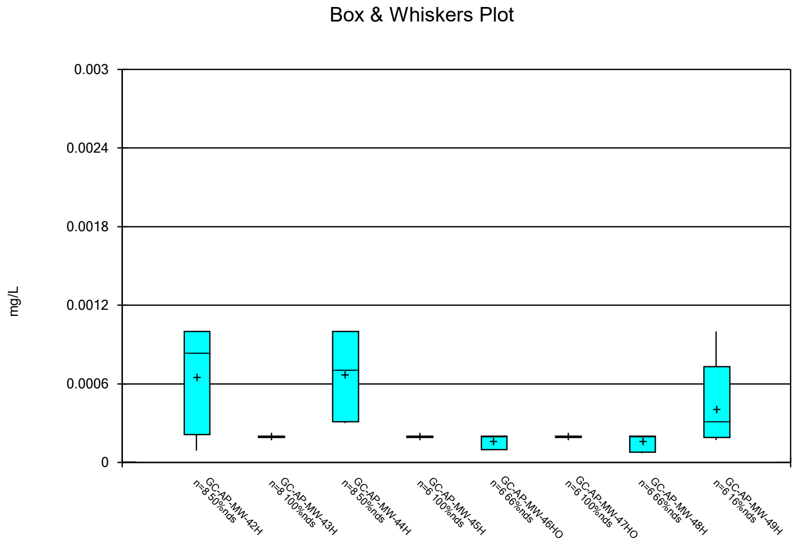
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



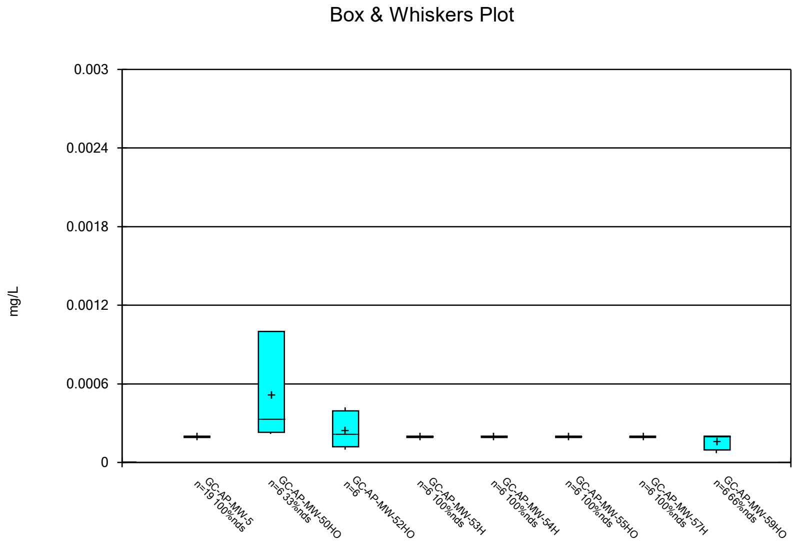
Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



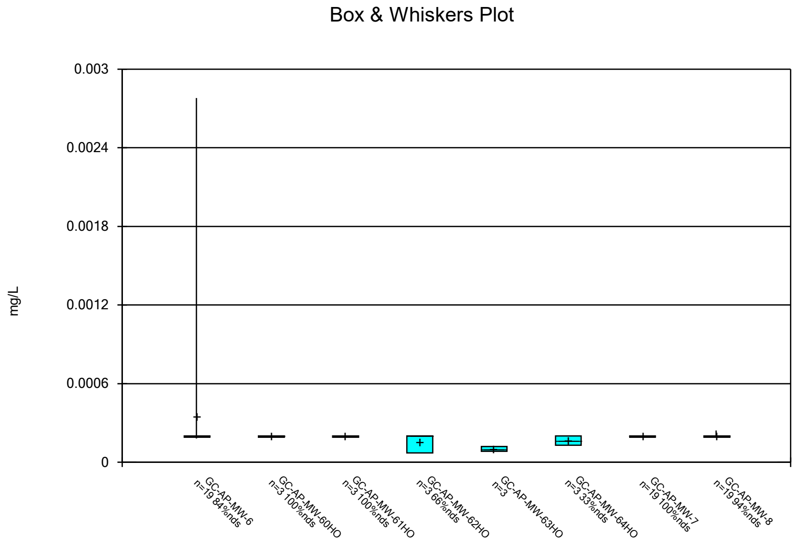
Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



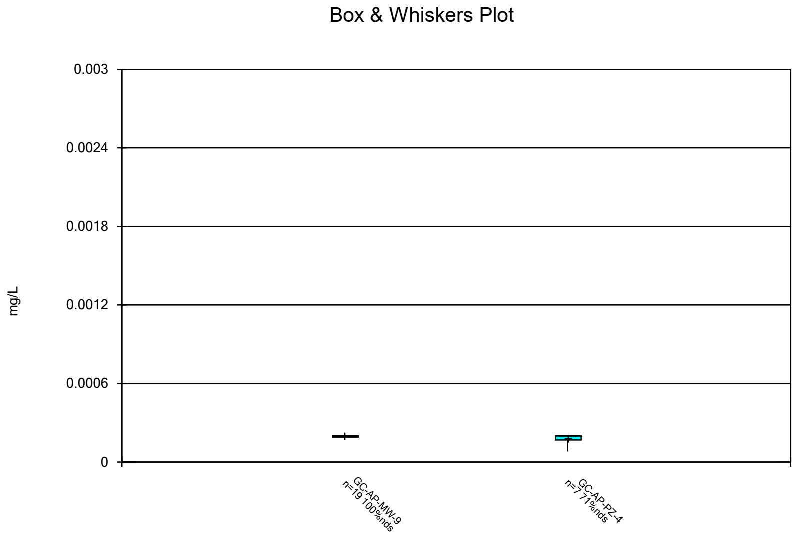
Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

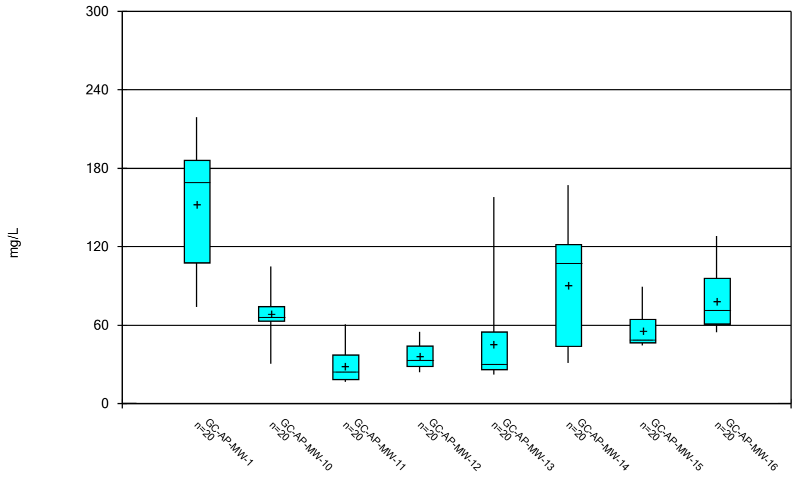
Sanitas™ v.9.6.36 . UG



Constituent: Cadmium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

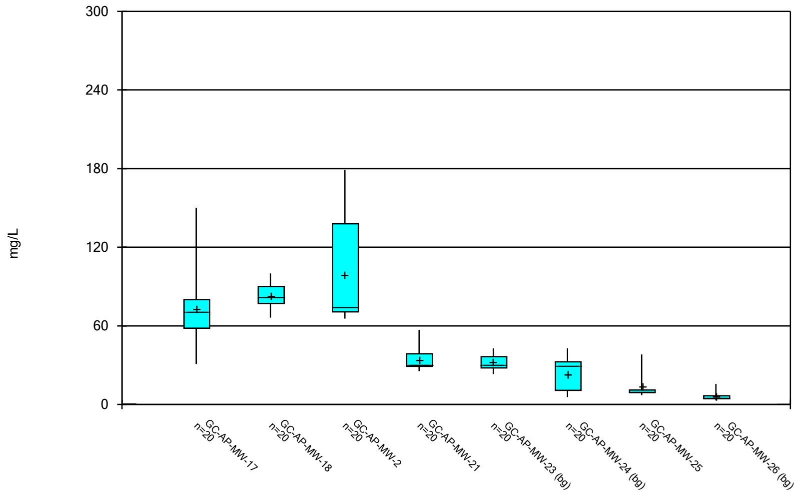
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

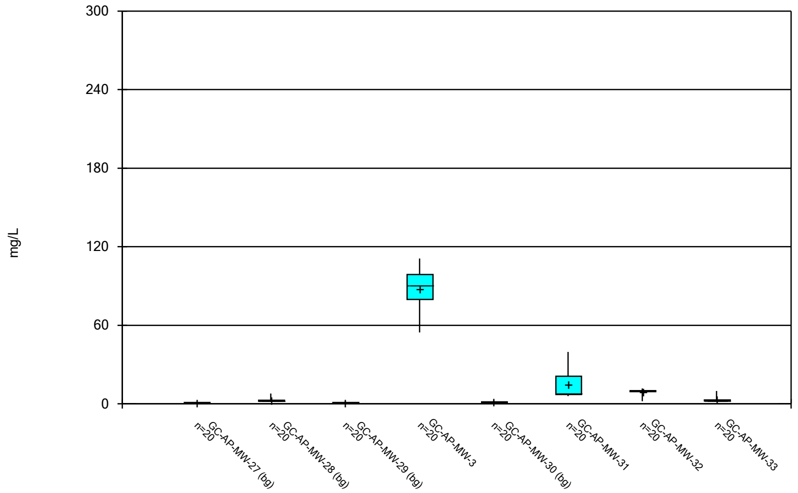
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

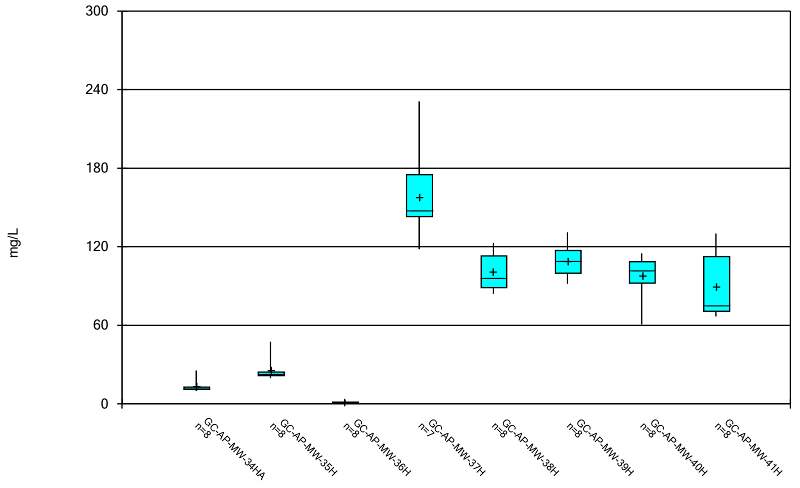
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

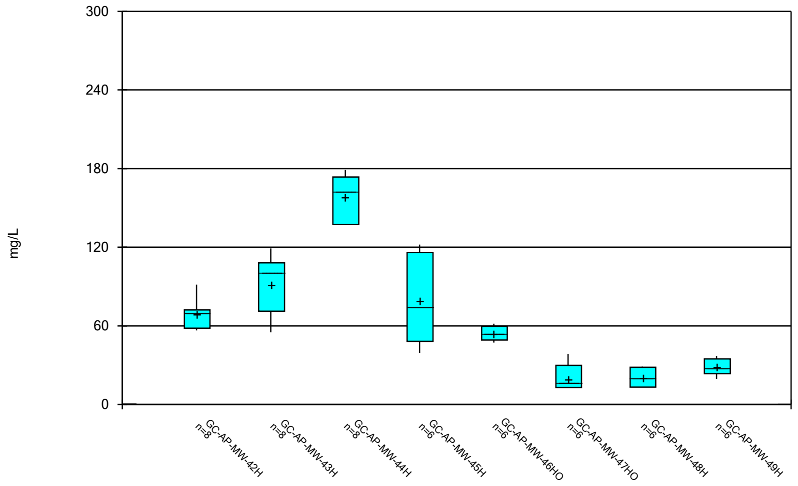
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

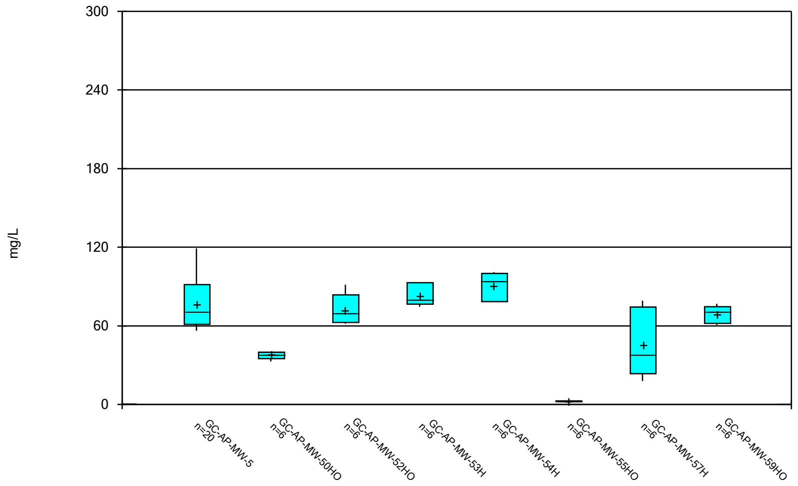
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

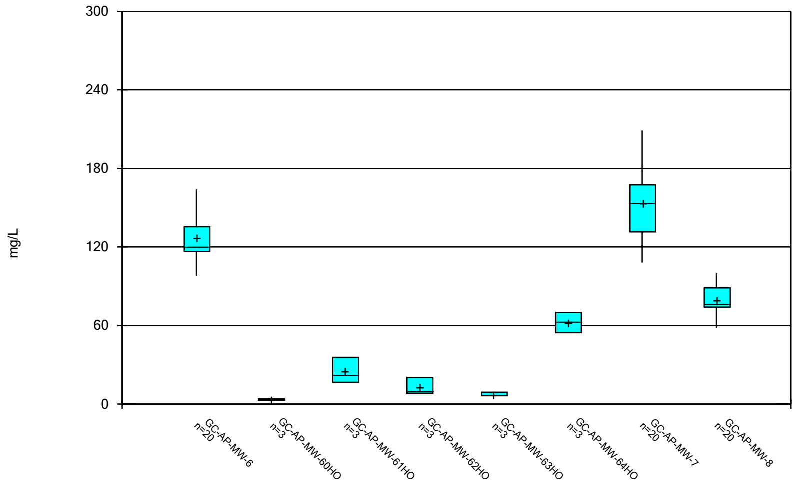
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

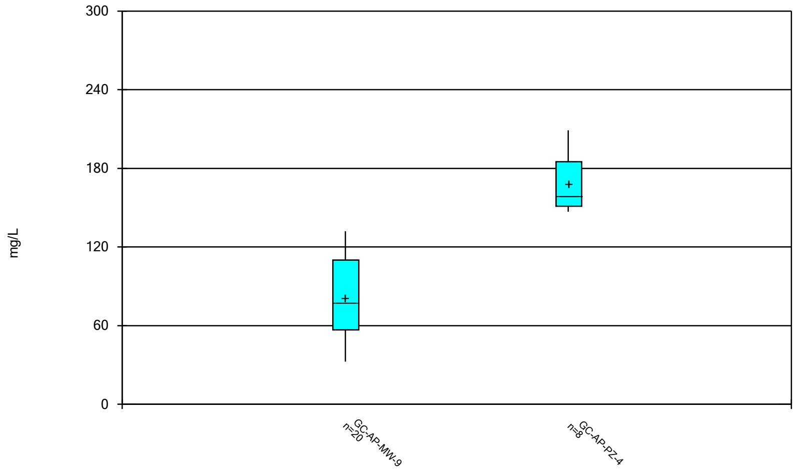
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:31 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

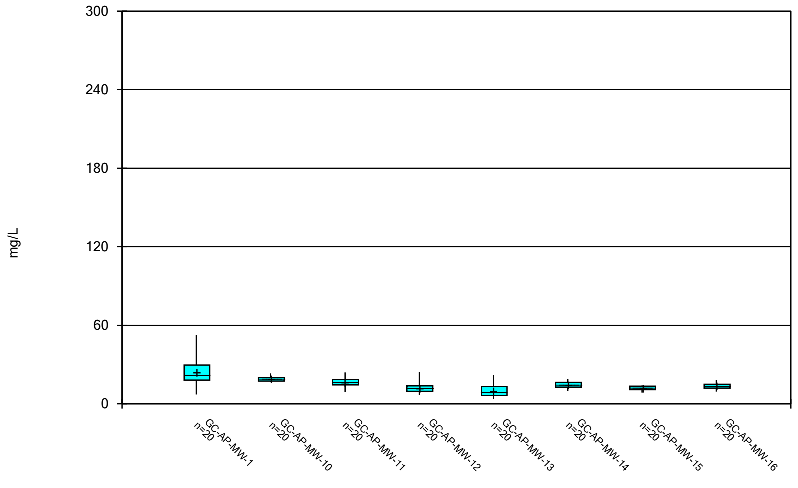
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

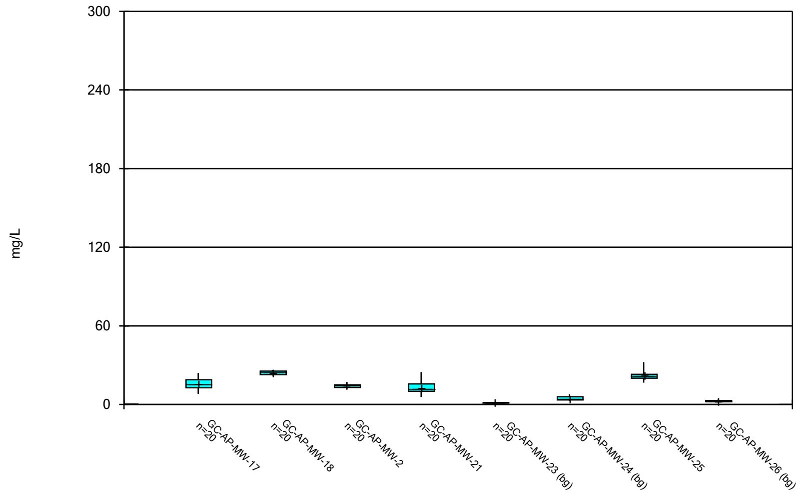
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

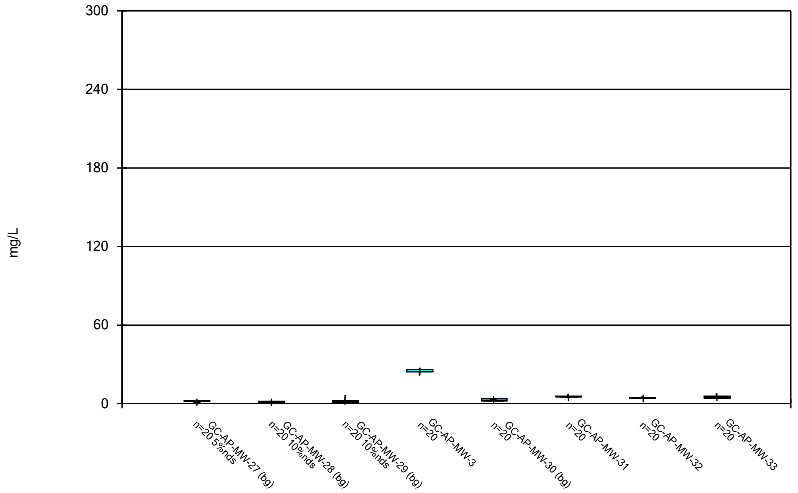
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

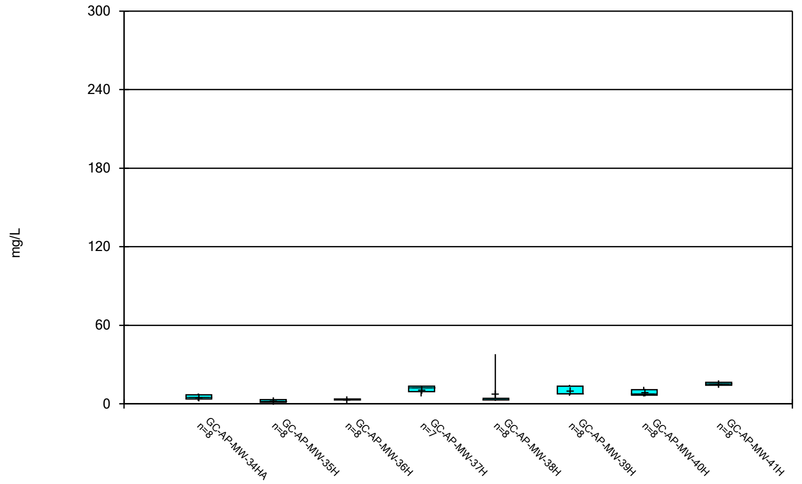
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

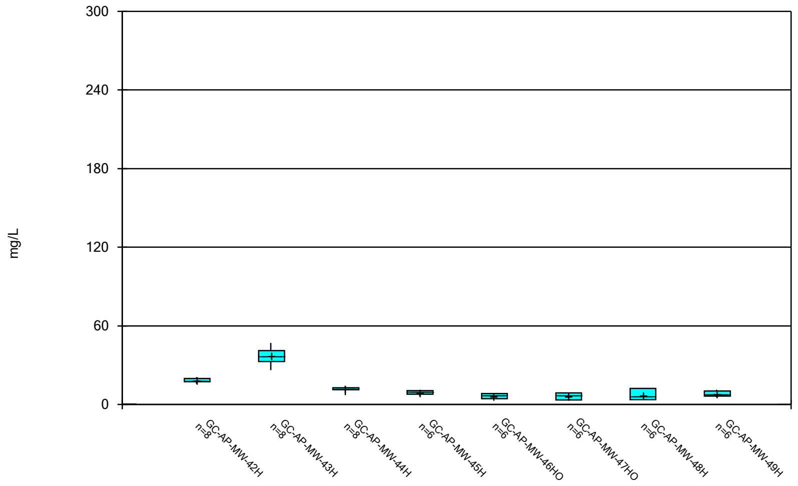
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

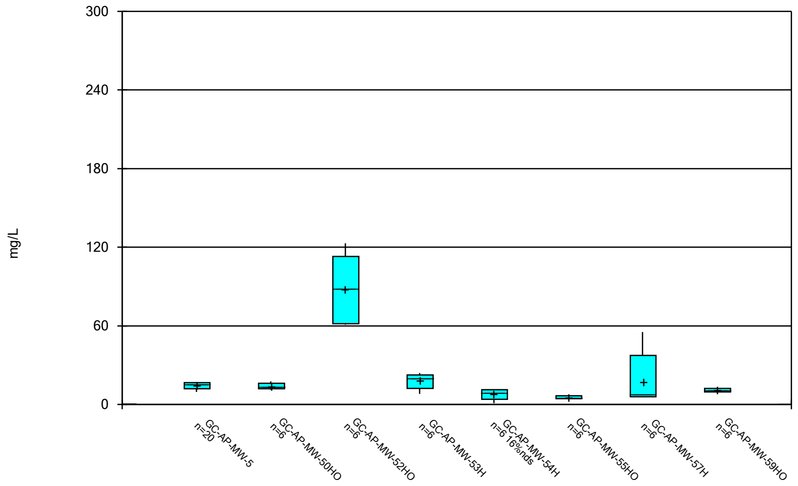
Box & Whiskers Plot



Constituent: Chloride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

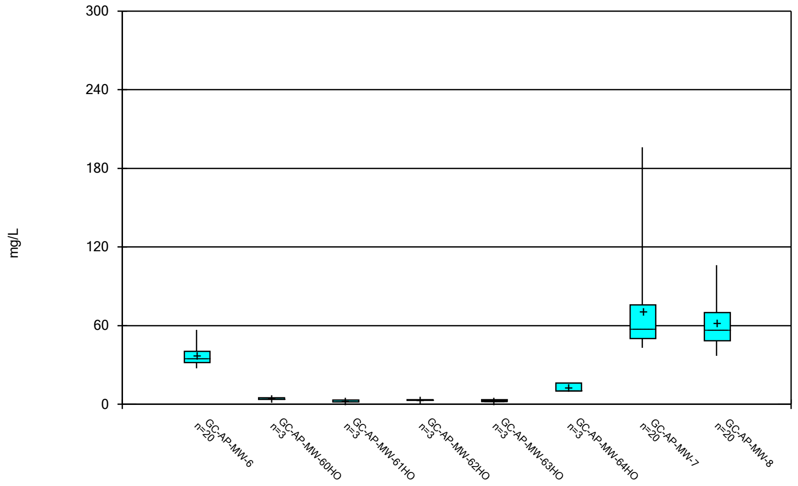
Box & Whiskers Plot



Constituent: Chloride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

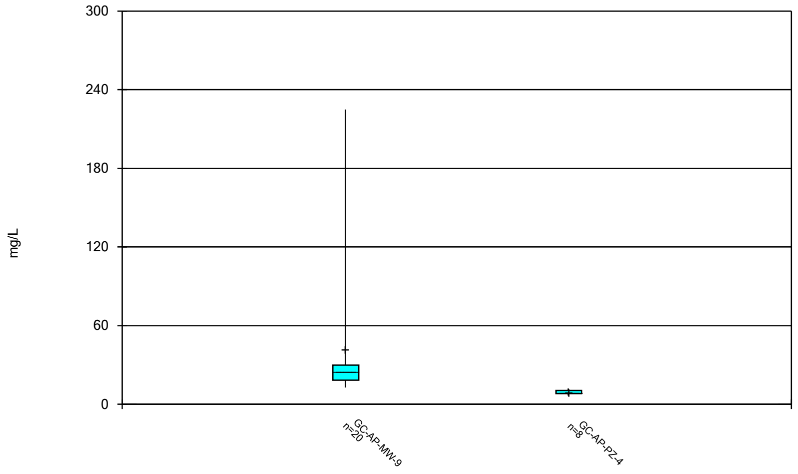
Box & Whiskers Plot



Constituent: Chloride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

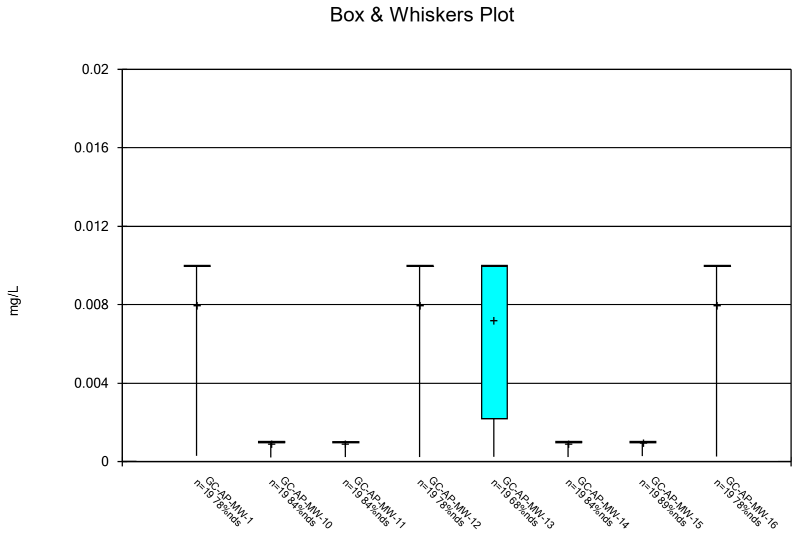
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



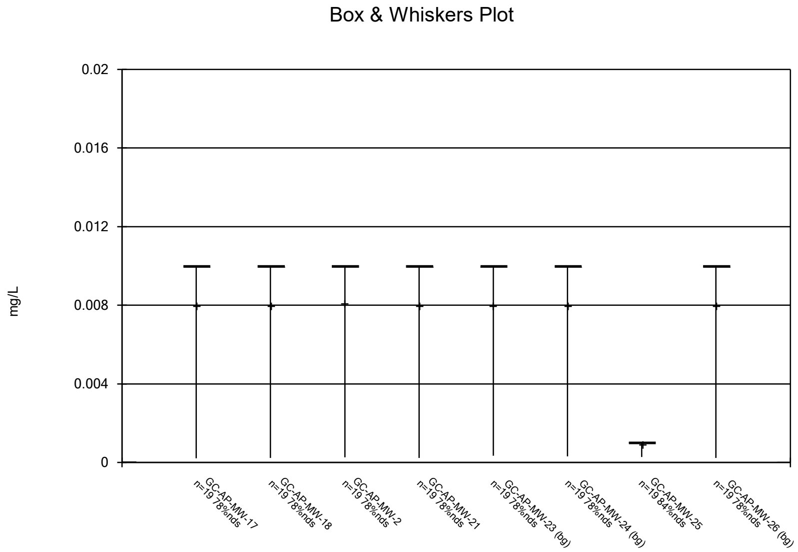
Constituent: Chloride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



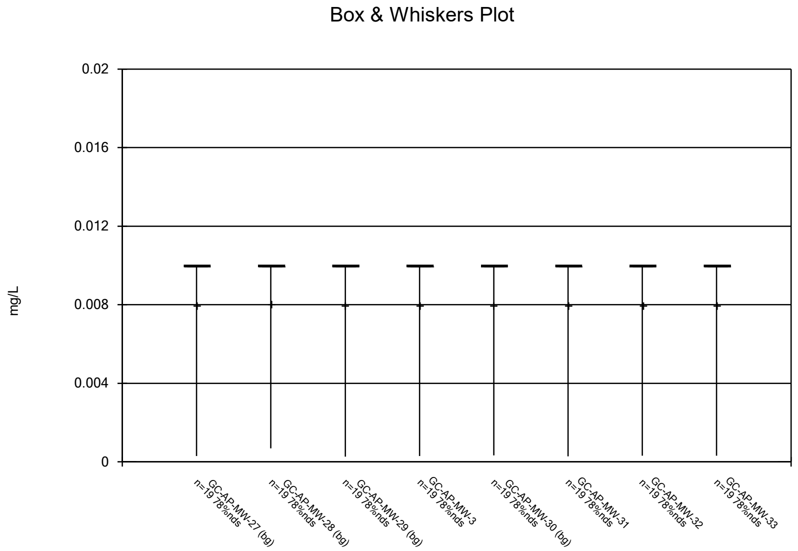
Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



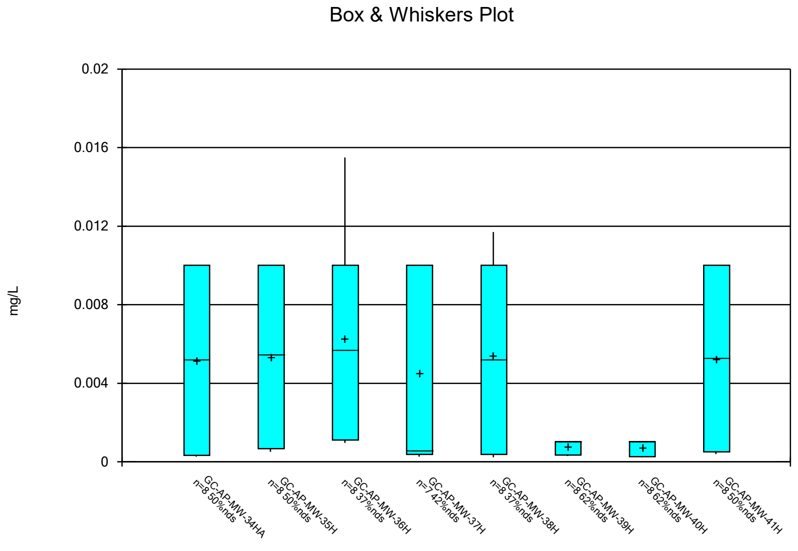
Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

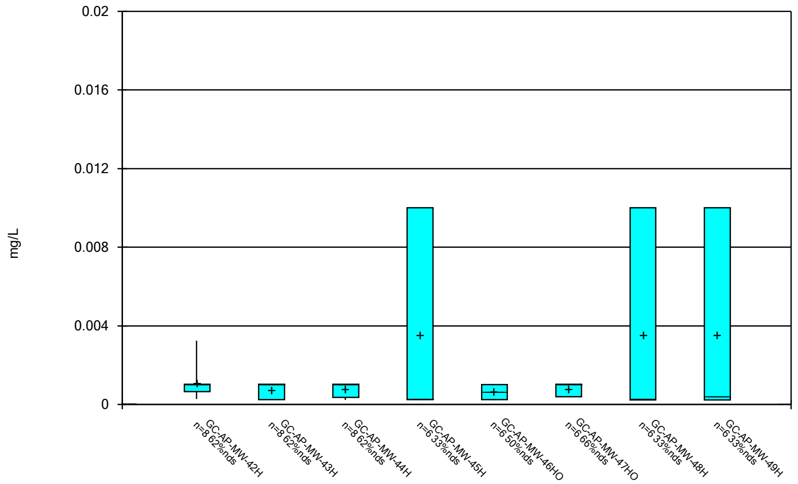
Sanitas™ v.9.6.36 . UG



Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

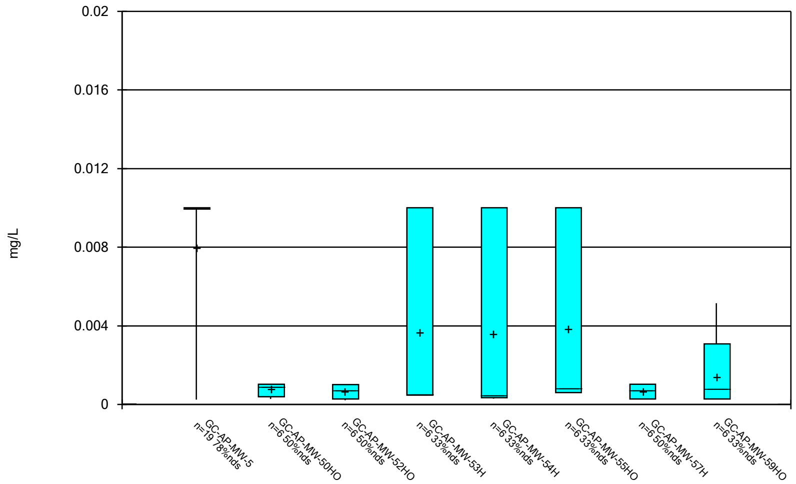
Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

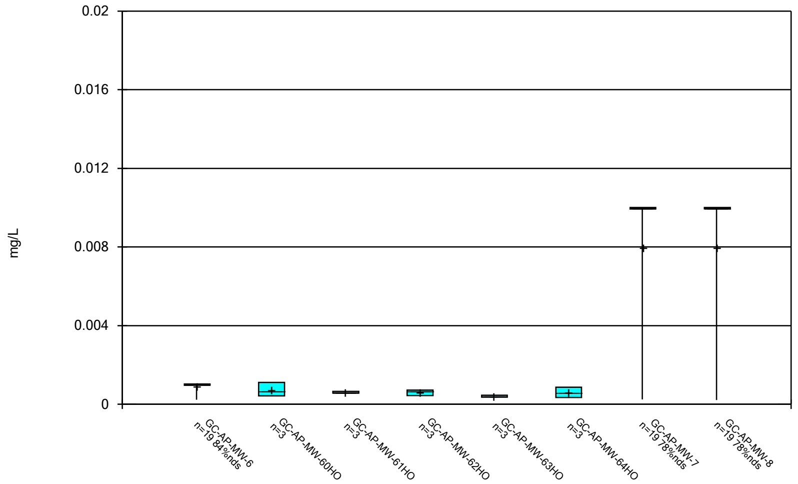
Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

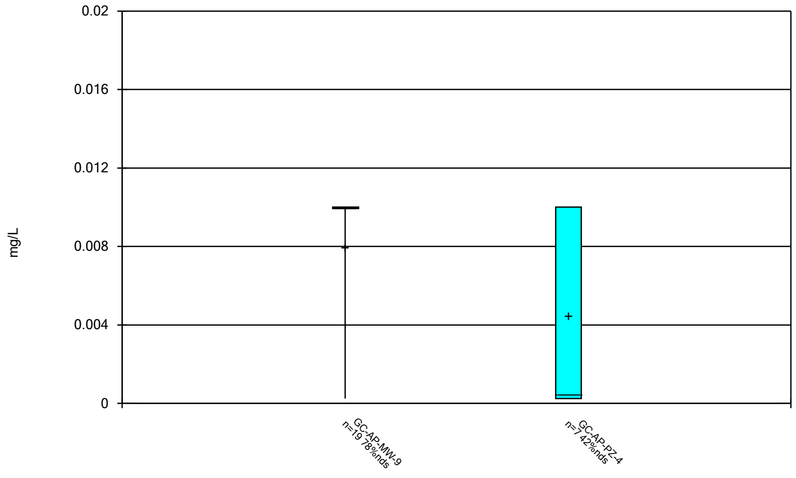
Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

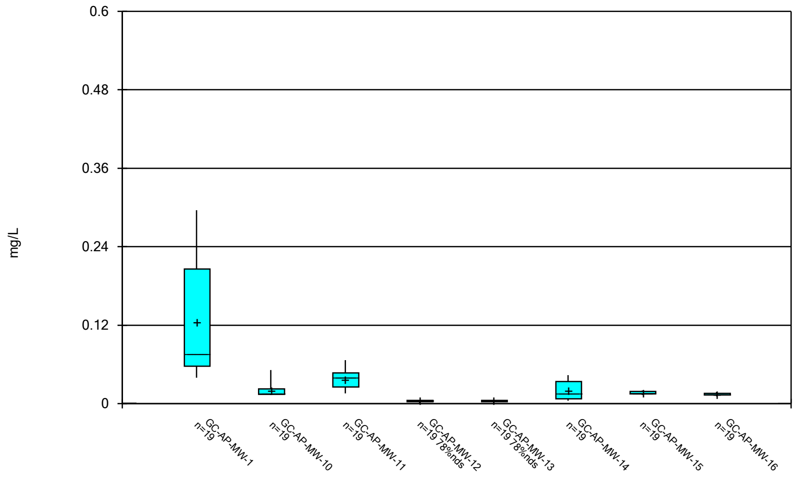
Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

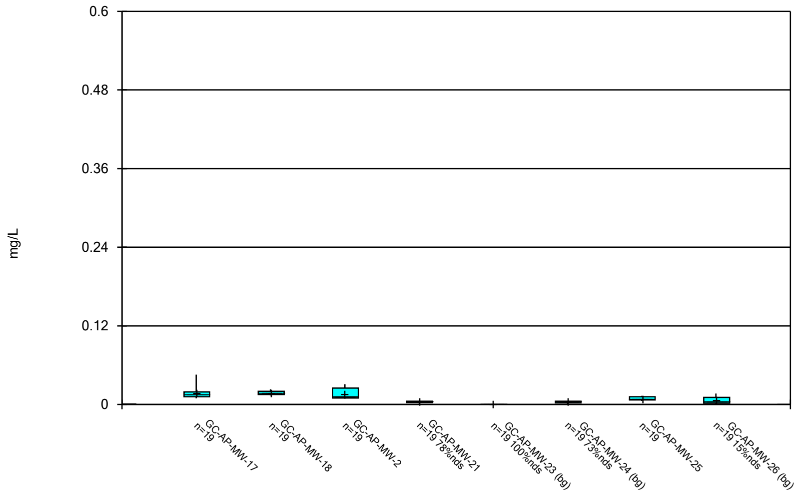
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

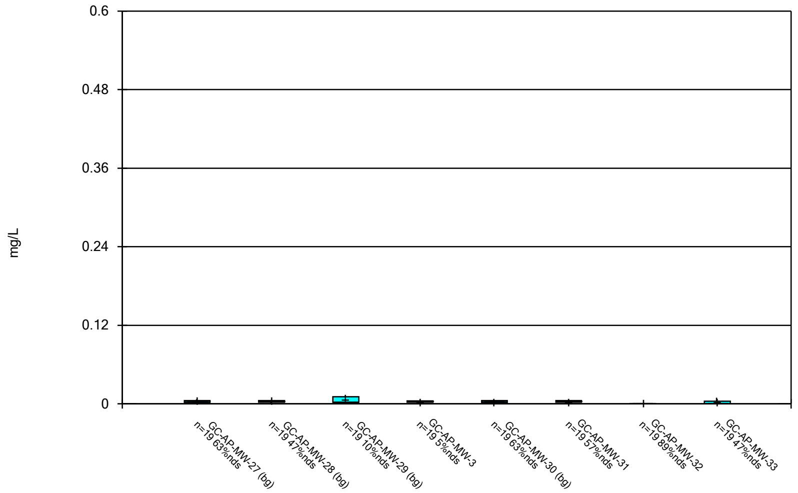
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

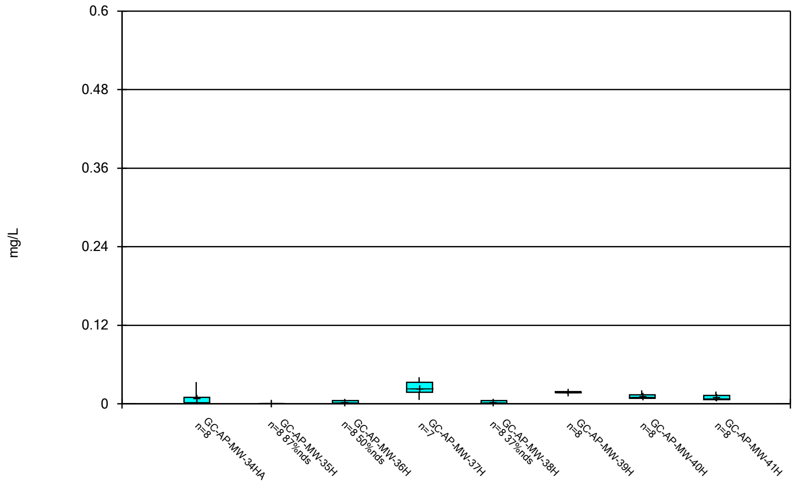
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

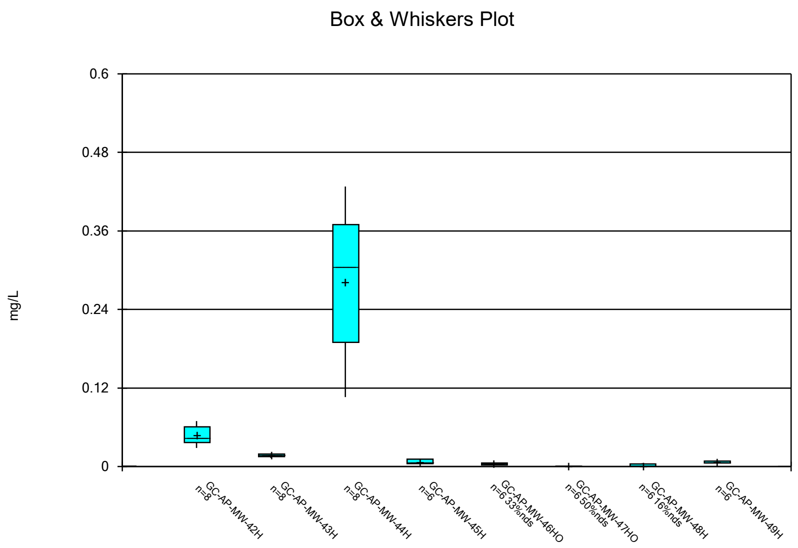
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



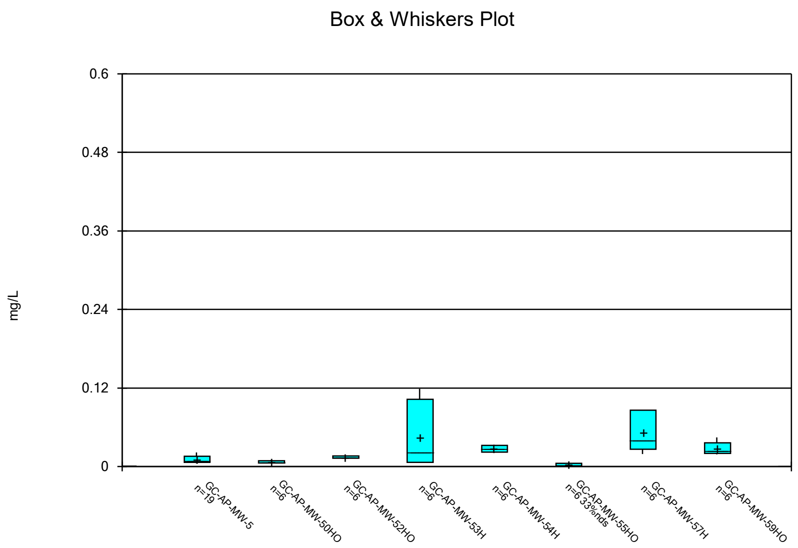
Constituent: Cobalt Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



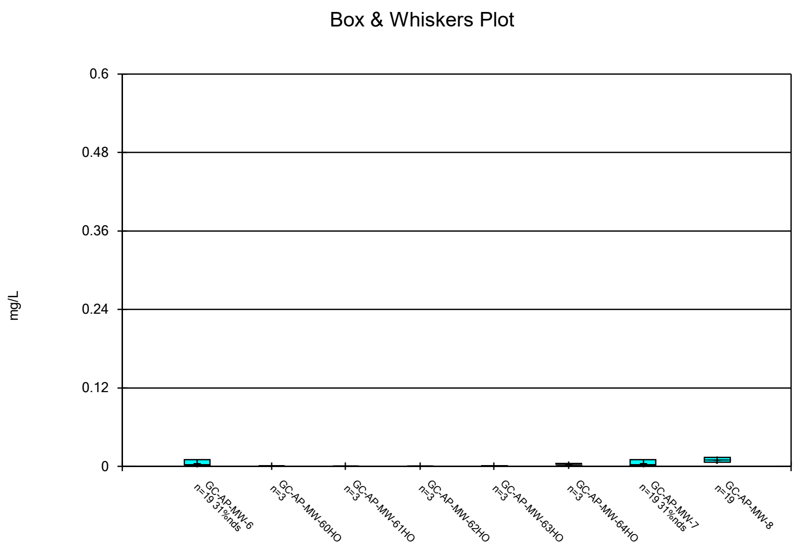
Constituent: Cobalt   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



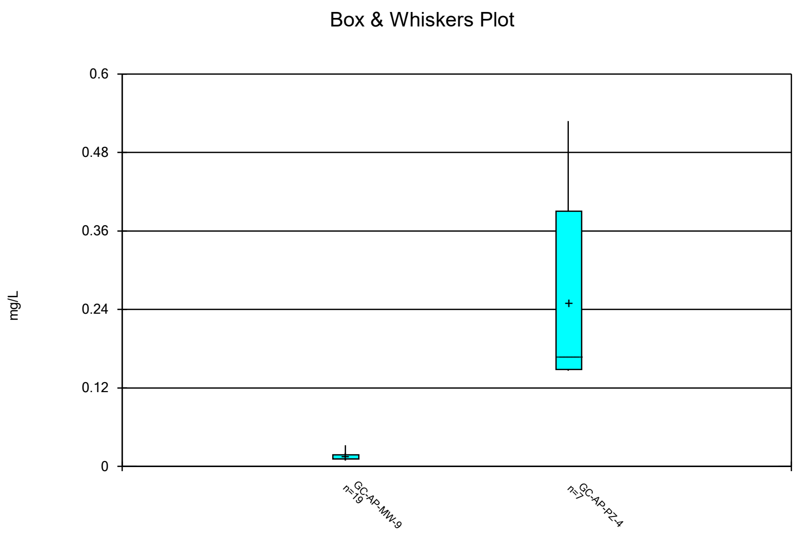
Constituent: Cobalt   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



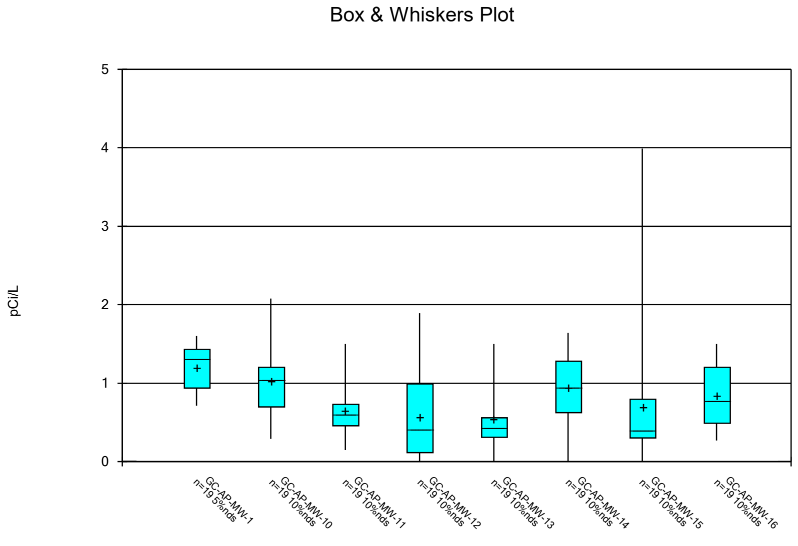
Constituent: Cobalt   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



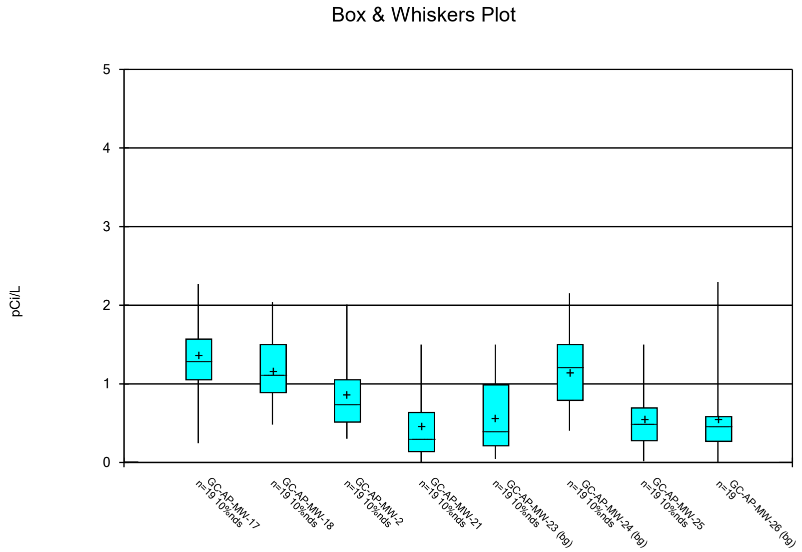
Constituent: Cobalt   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



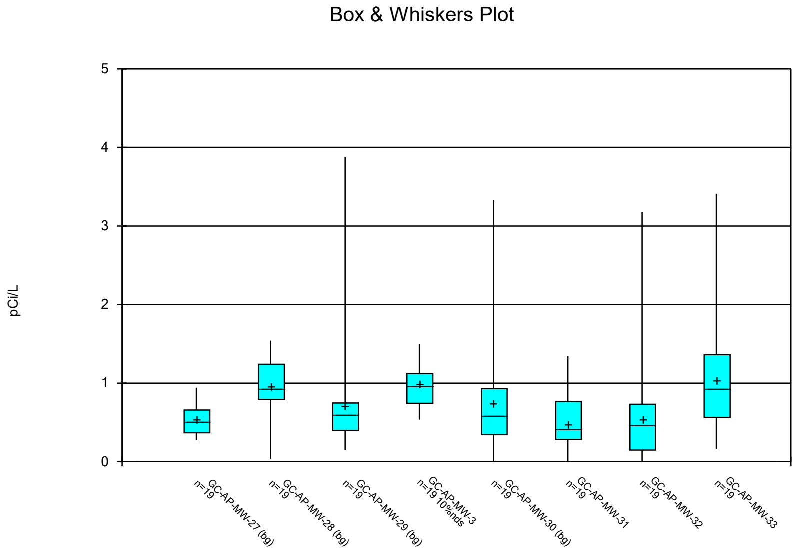
Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



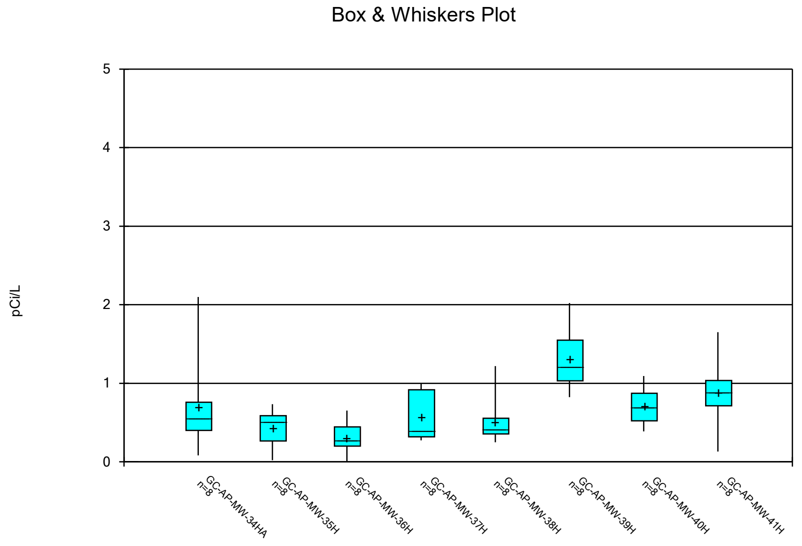
Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

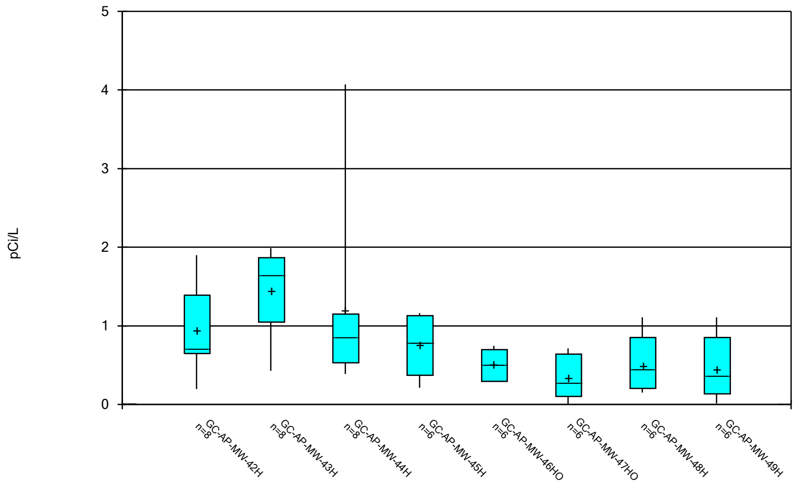
Sanitas™ v.9.6.36 . UG



Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

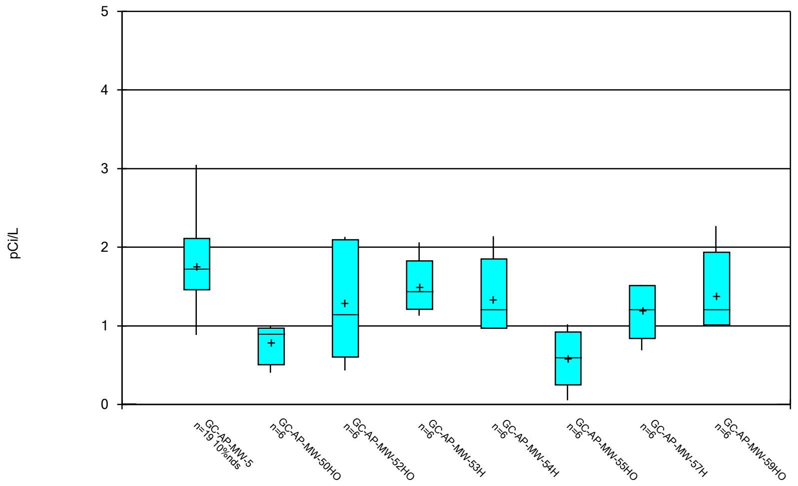
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

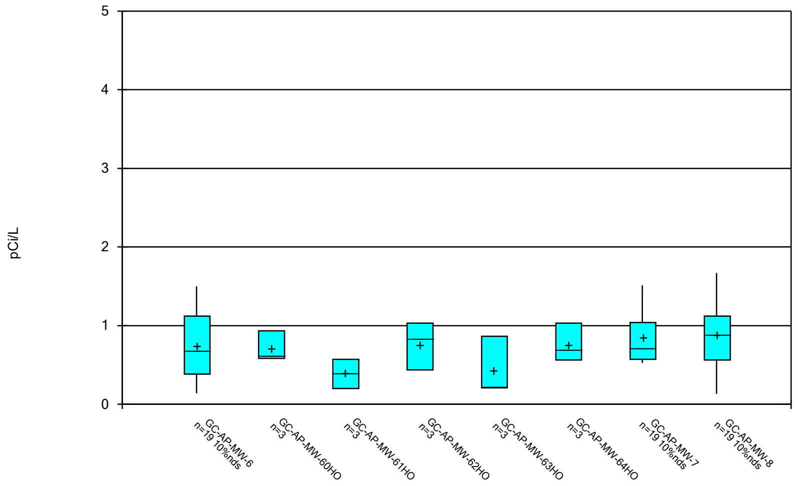
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

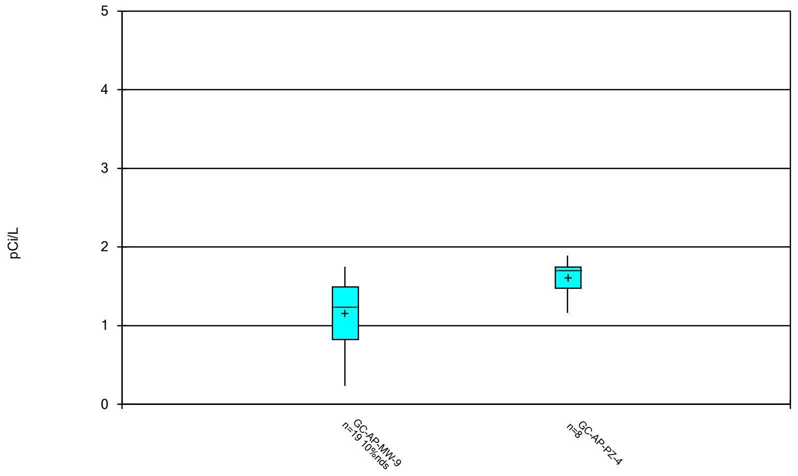
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

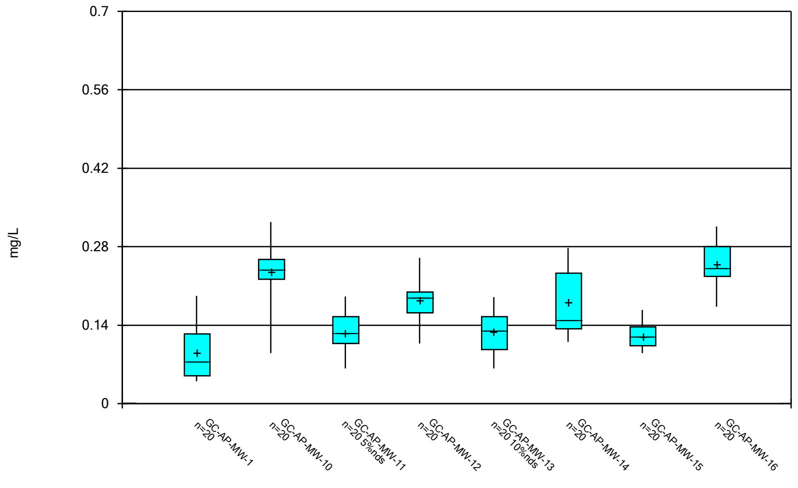
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

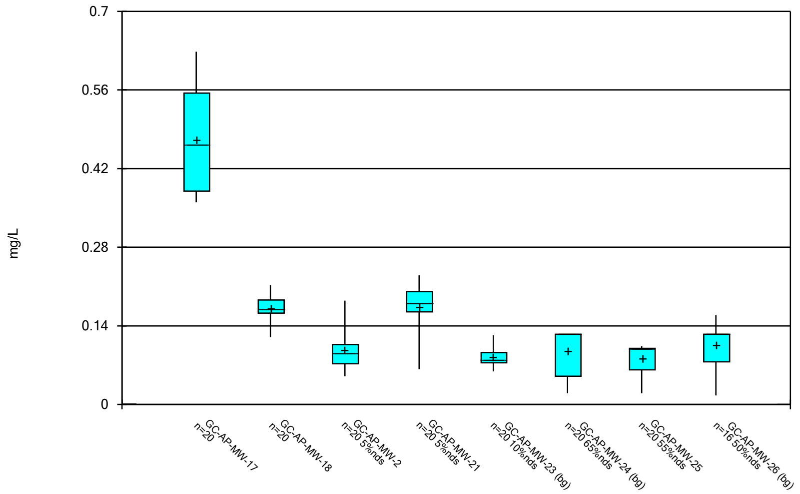


Constituent: Fluoride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

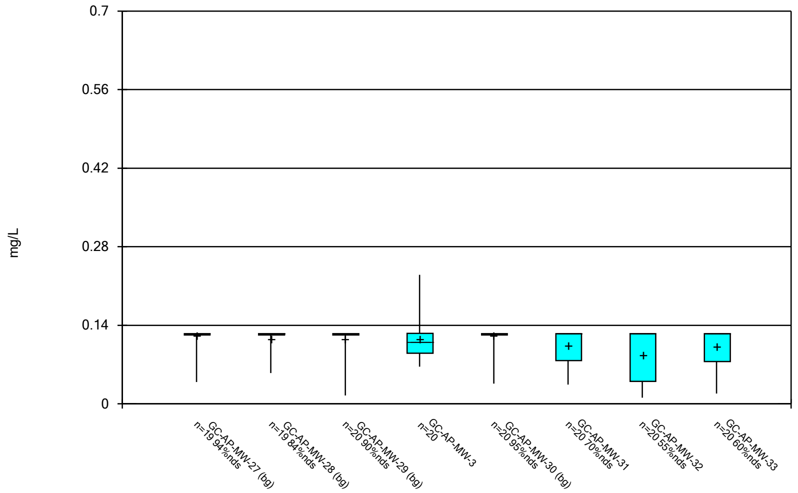


Constituent: Fluoride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

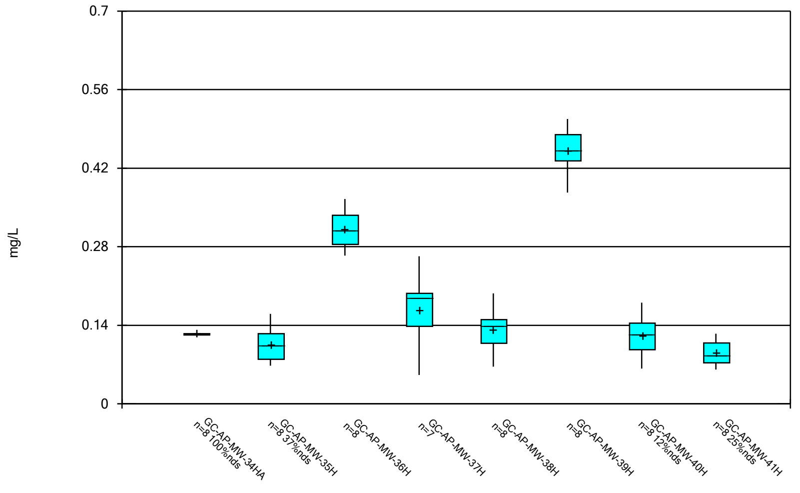


Constituent: Fluoride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

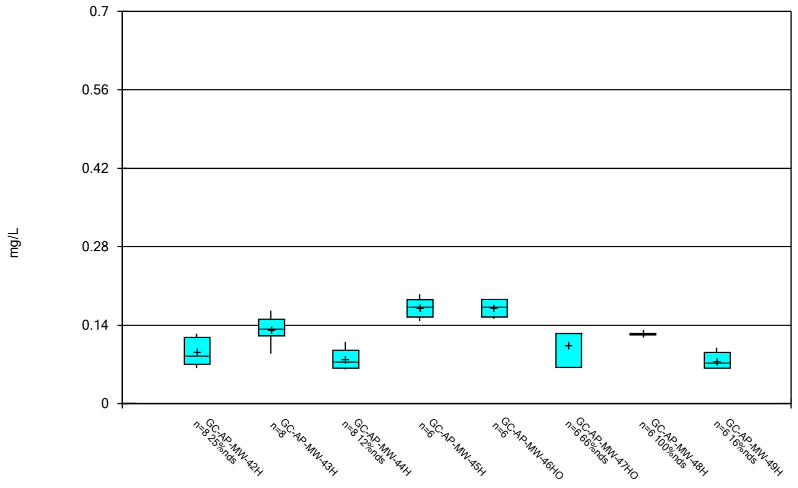


Constituent: Fluoride   Analysis Run 12/9/2022 10:32 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

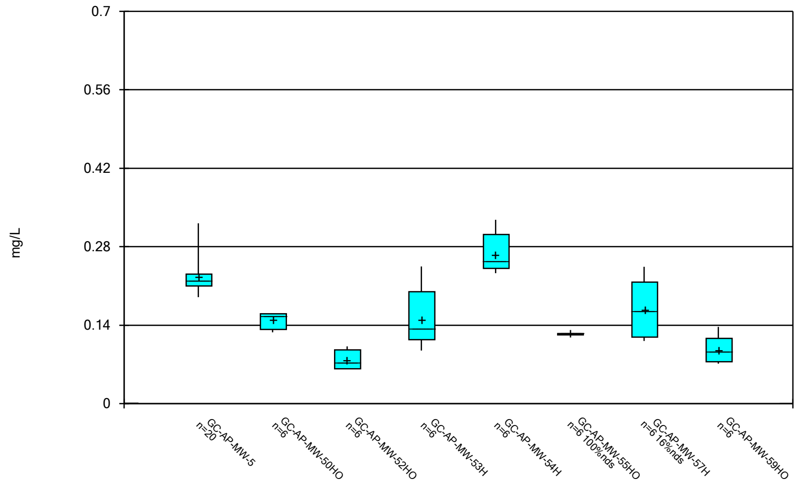
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

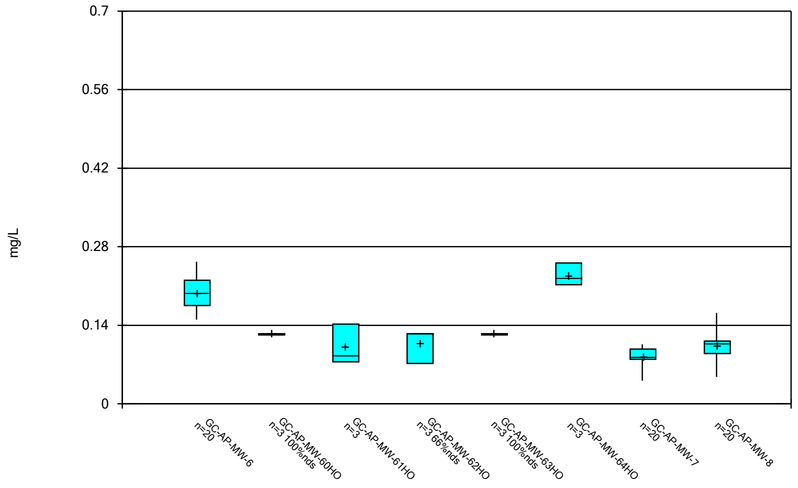
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

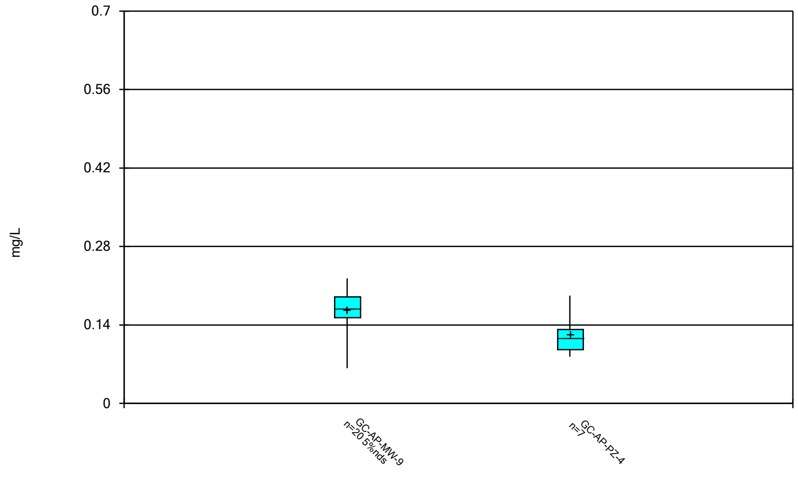
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

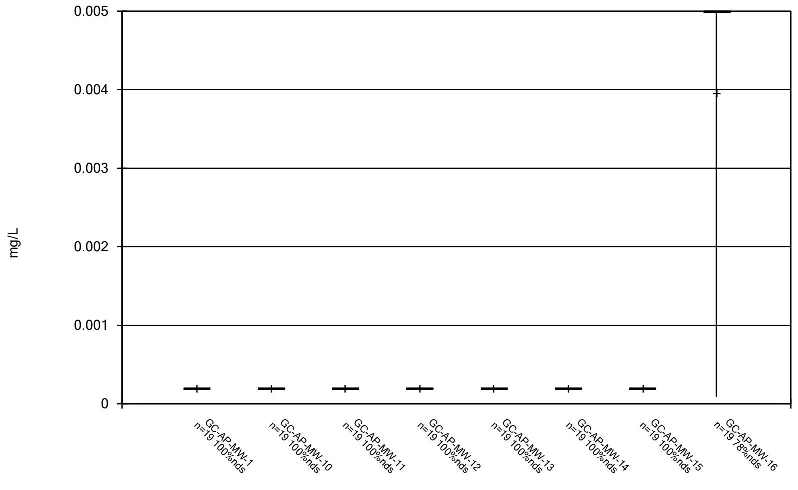
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

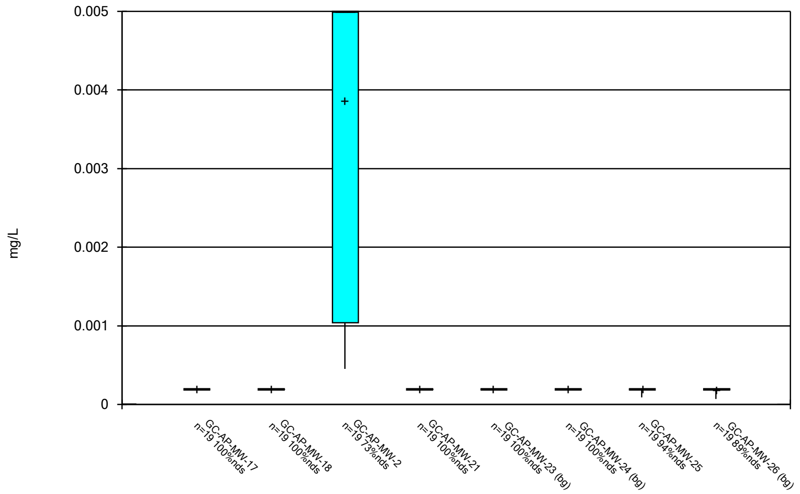
Box & Whiskers Plot



Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

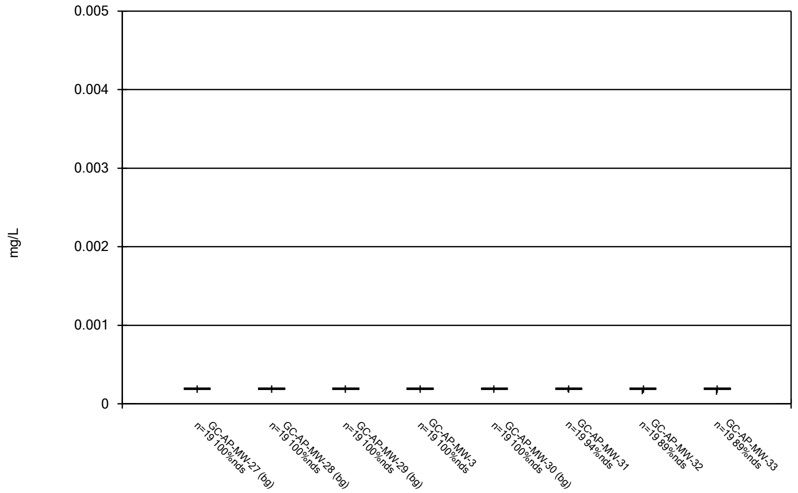
Box & Whiskers Plot



Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

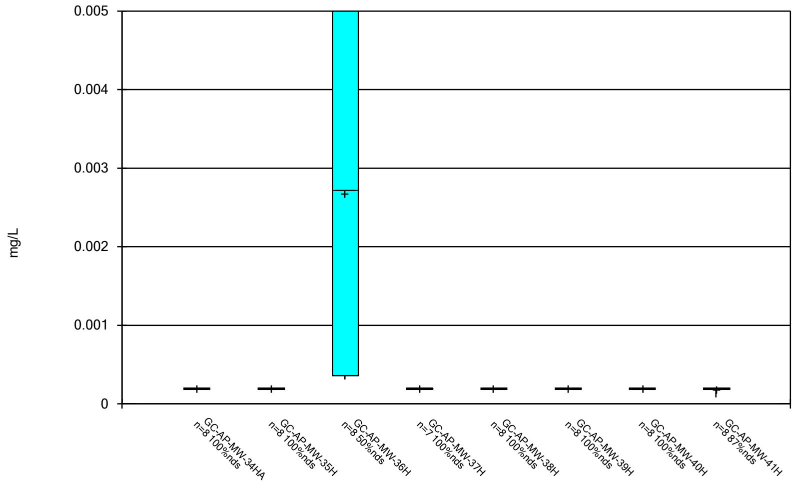
Box & Whiskers Plot



Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

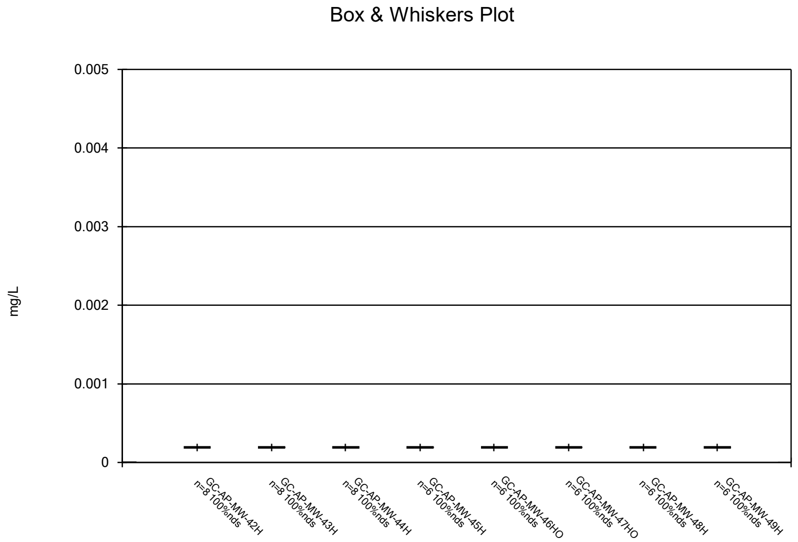
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



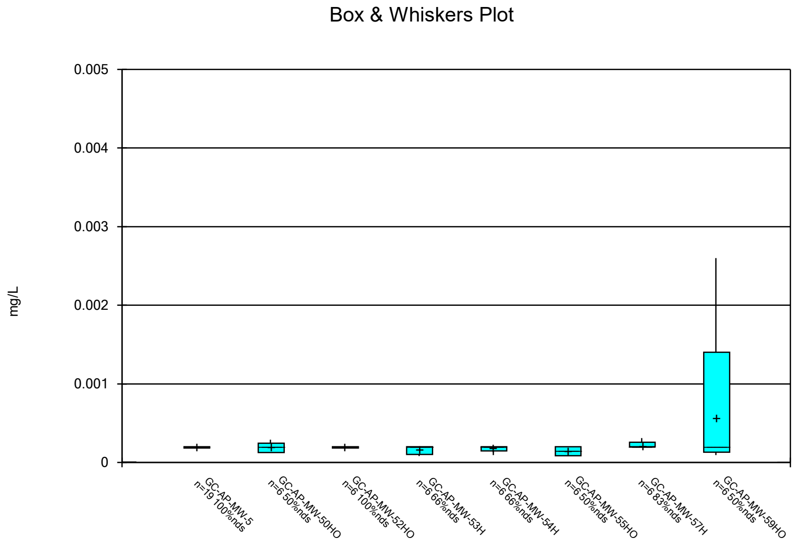
Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



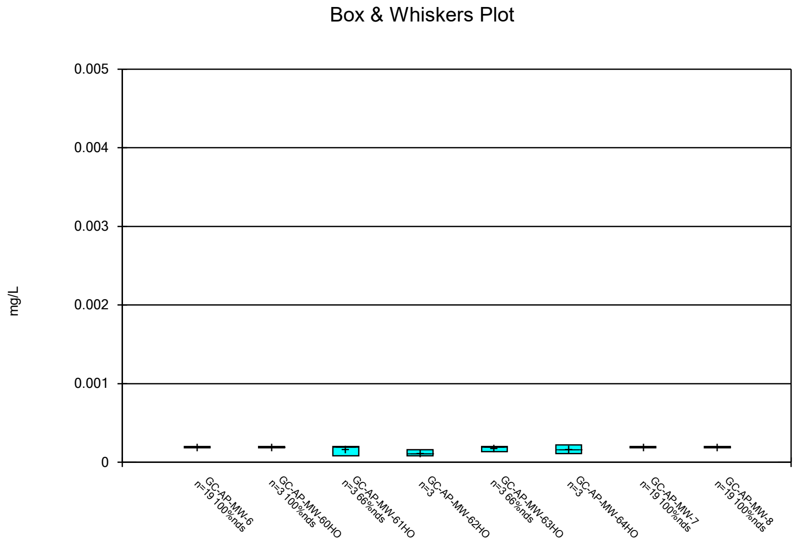
Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



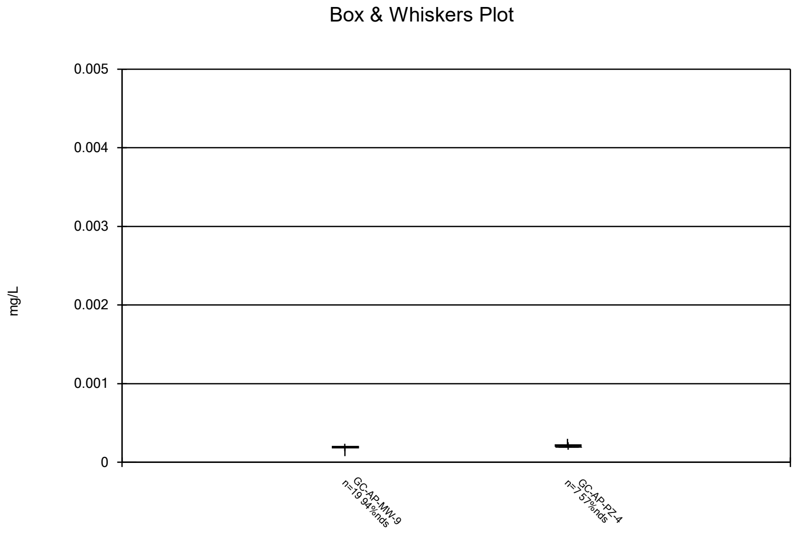
Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

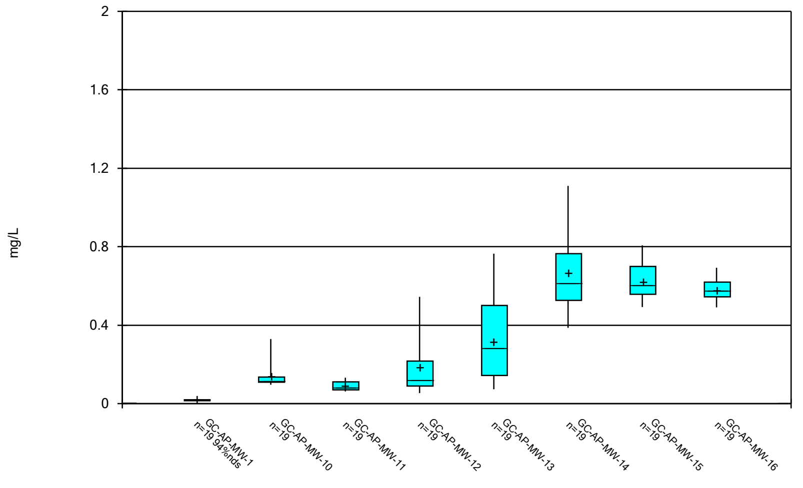
Sanitas™ v.9.6.36 . UG



Constituent: Lead   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

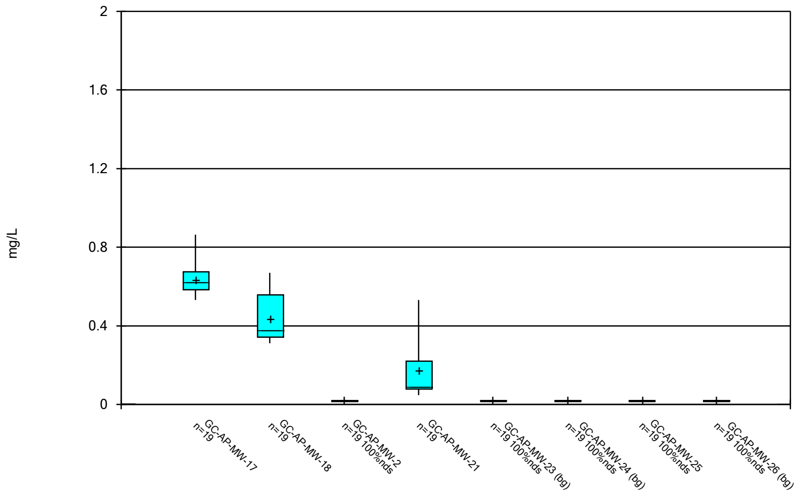
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

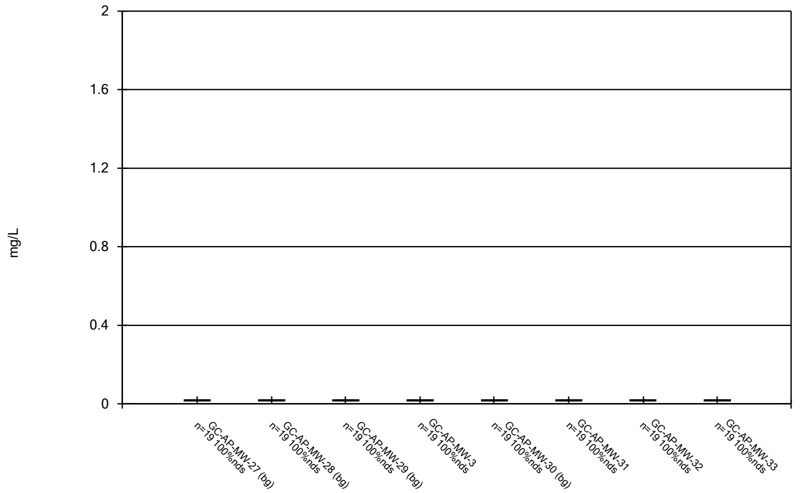
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

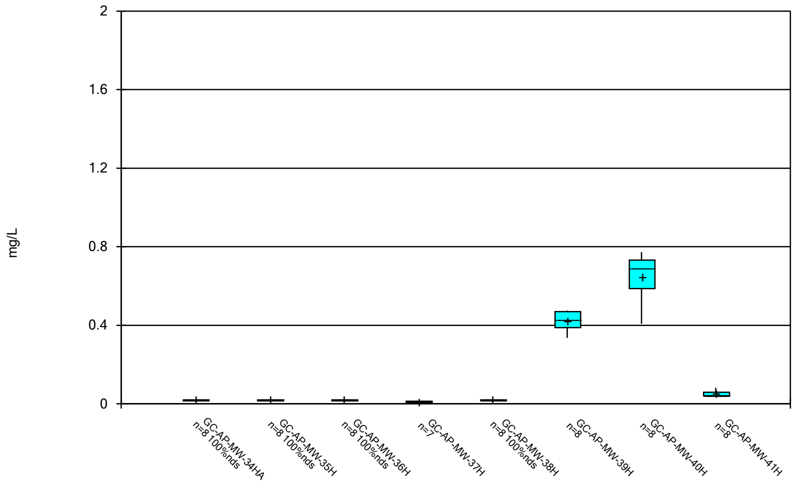
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

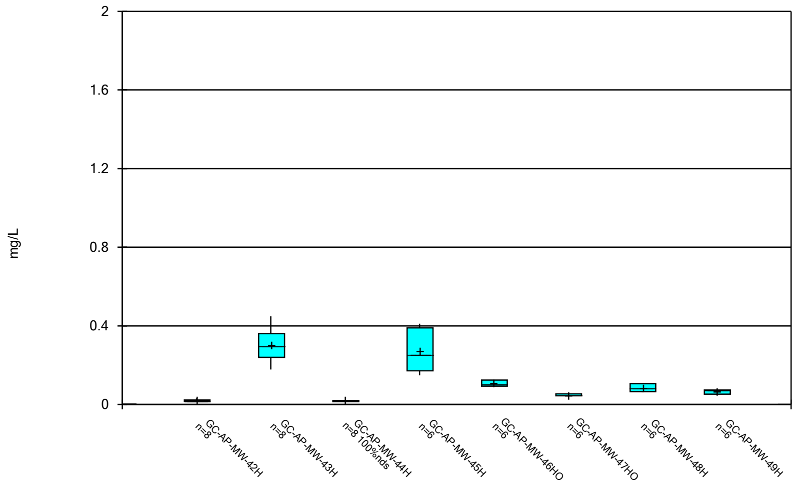
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

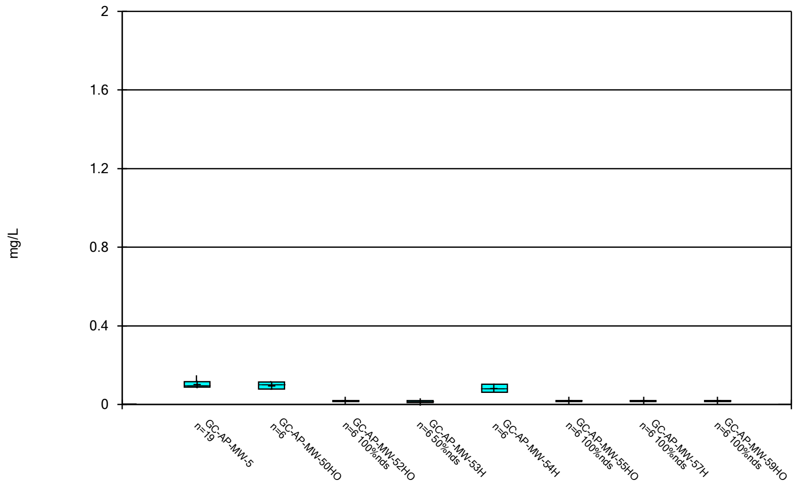
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

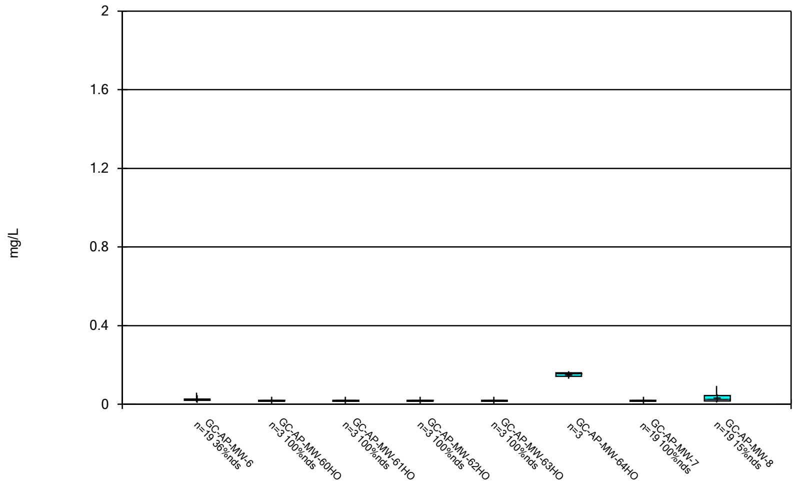
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

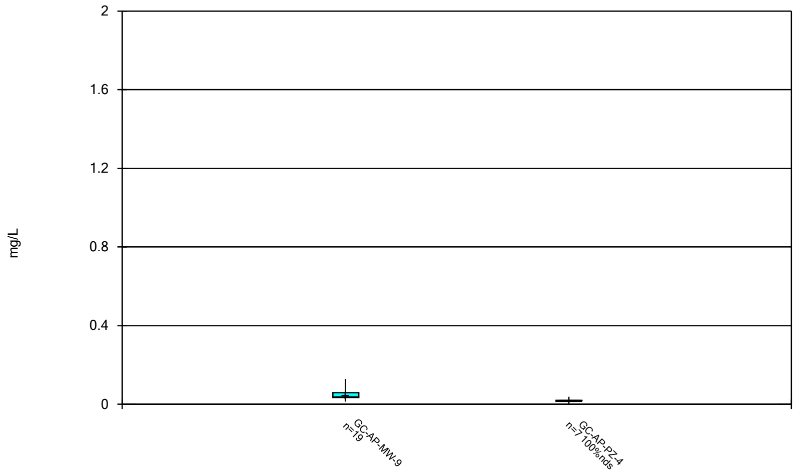
Box & Whiskers Plot



Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

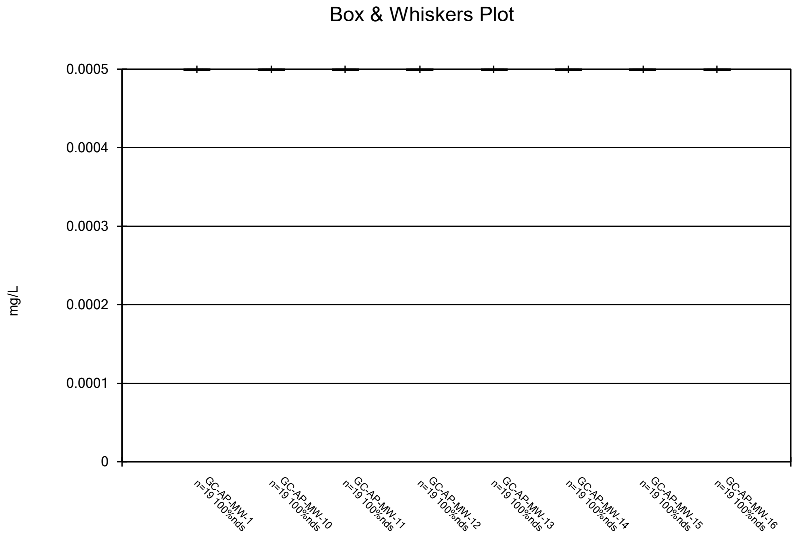
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



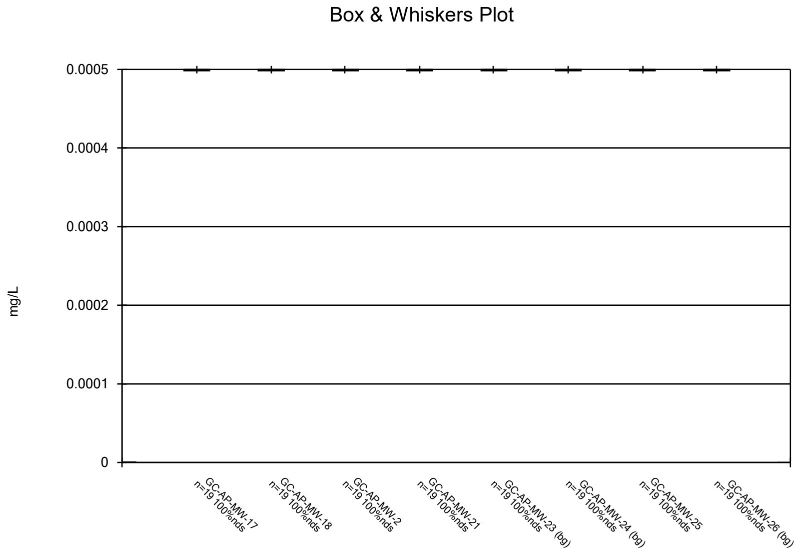
Constituent: Lithium   Analysis Run 12/9/2022 10:32 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



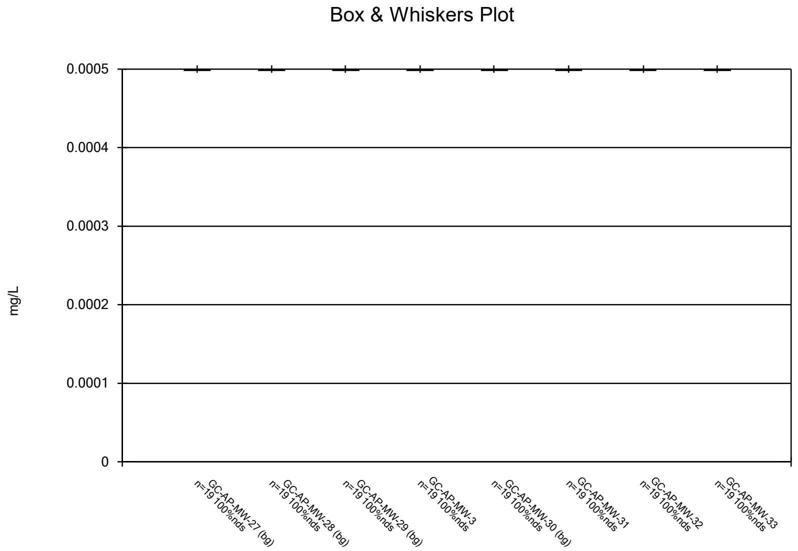
Constituent: Mercury Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



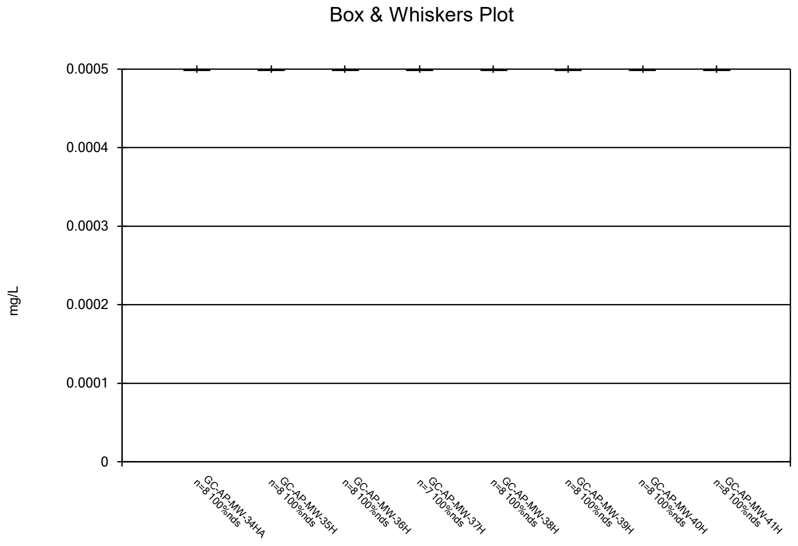
Constituent: Mercury Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



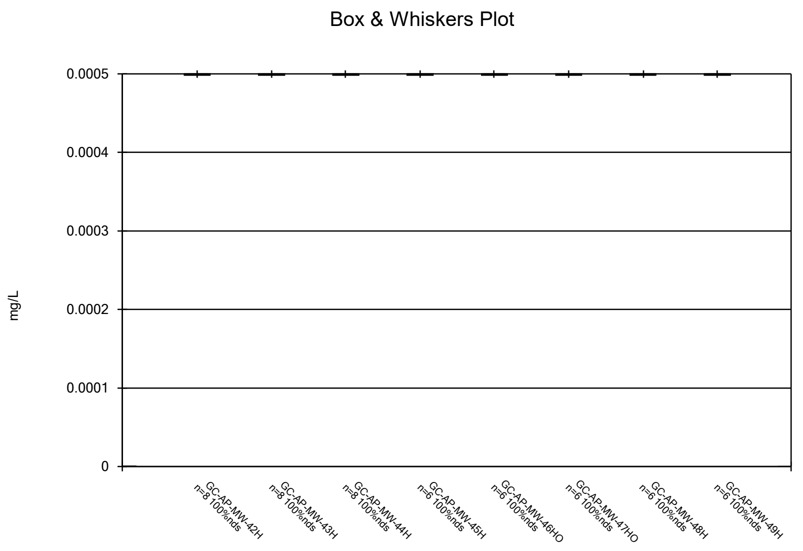
Constituent: Mercury Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



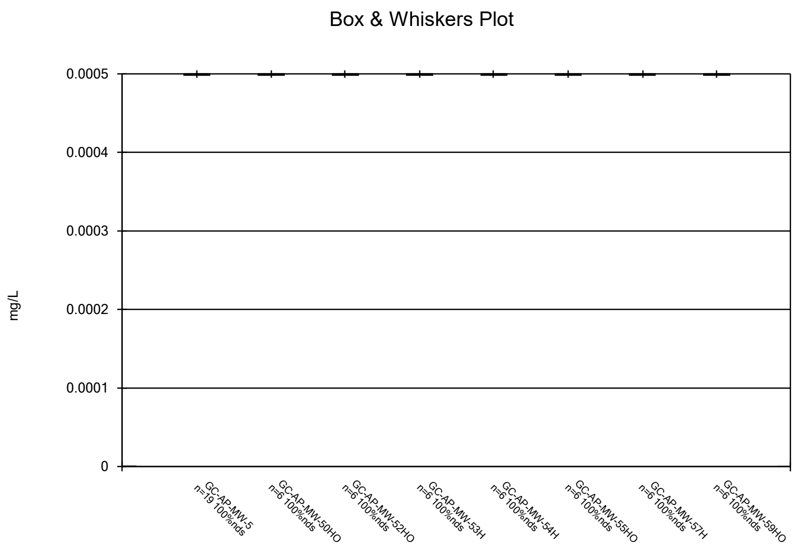
Constituent: Mercury Analysis Run 12/9/2022 10:32 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



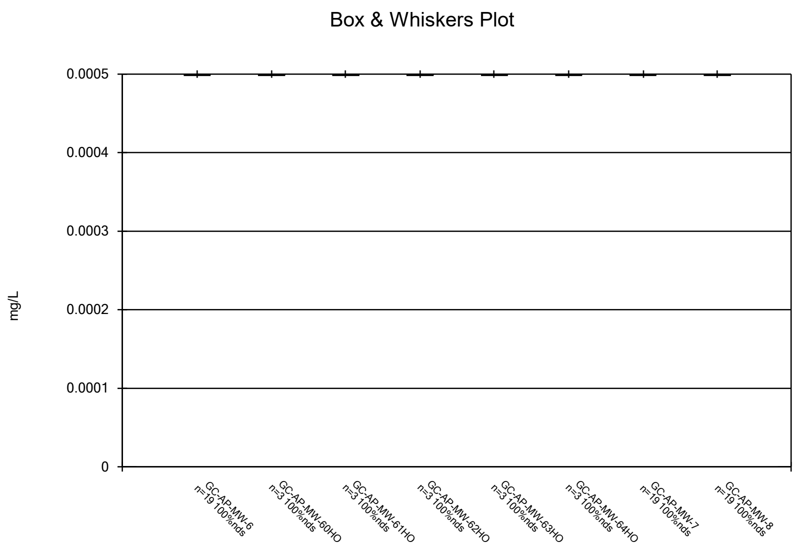
Constituent: Mercury   Analysis Run 12/9/2022 10:33 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



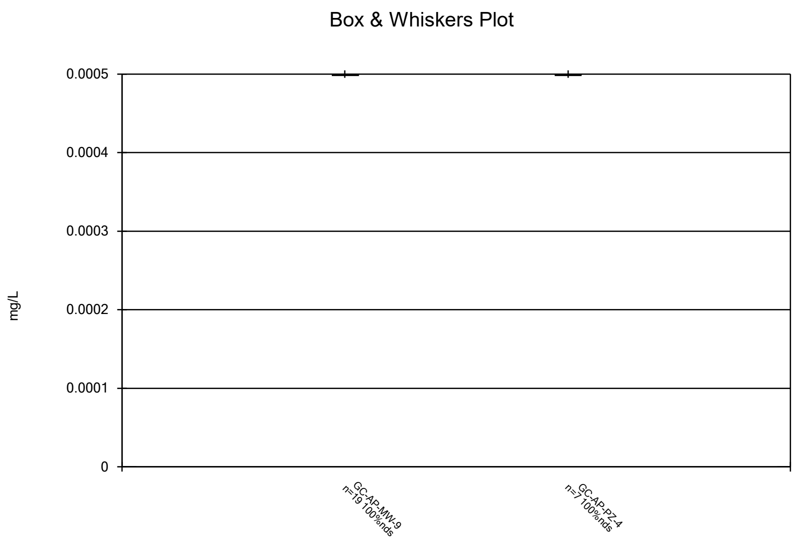
Constituent: Mercury   Analysis Run 12/9/2022 10:33 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



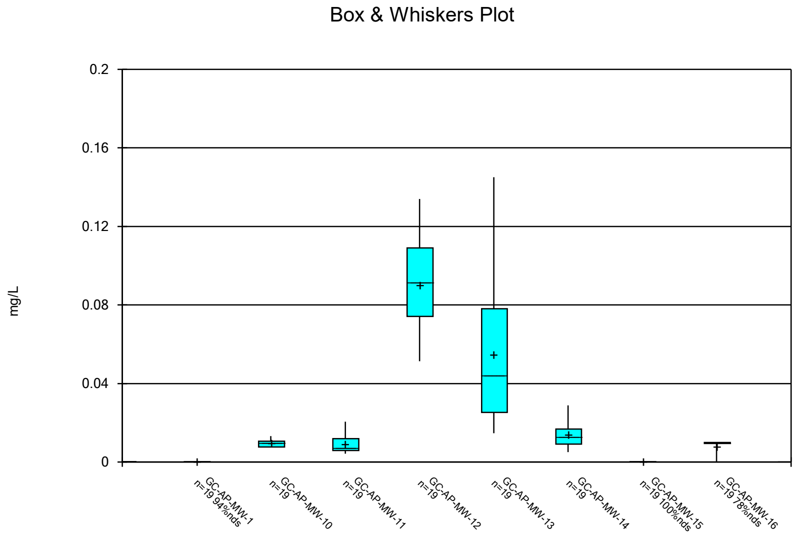
Constituent: Mercury   Analysis Run 12/9/2022 10:33 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Mercury   Analysis Run 12/9/2022 10:33 AM   View: Descriptive
Plant Greene County   Client: Southern Company   Data: Greene County AP

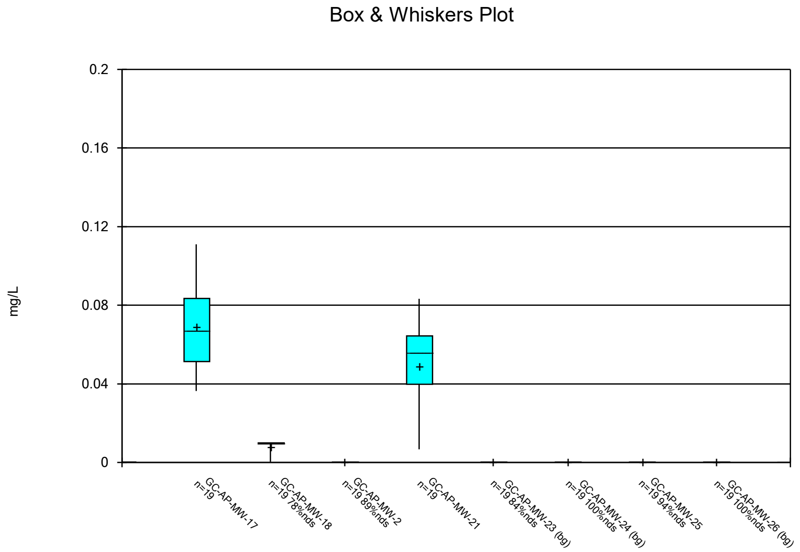
Sanitas™ v.9.6.36 . UG



Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

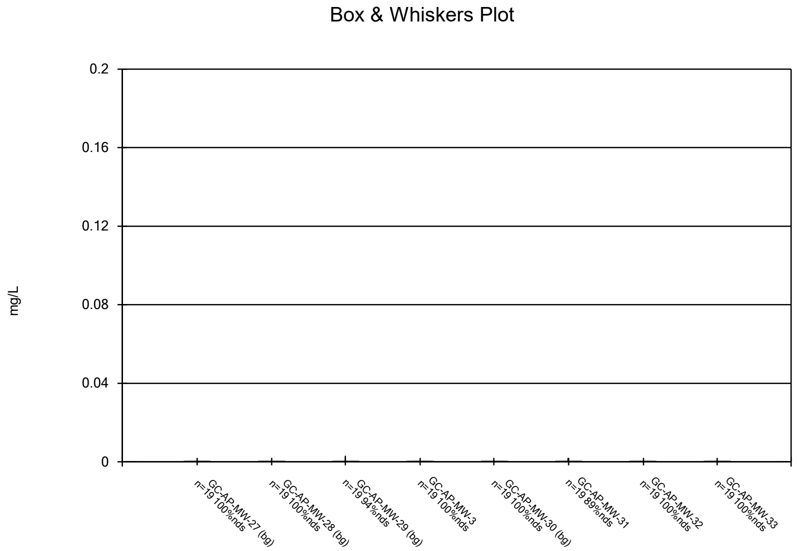
Sanitas™ v.9.6.36 . UG



Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

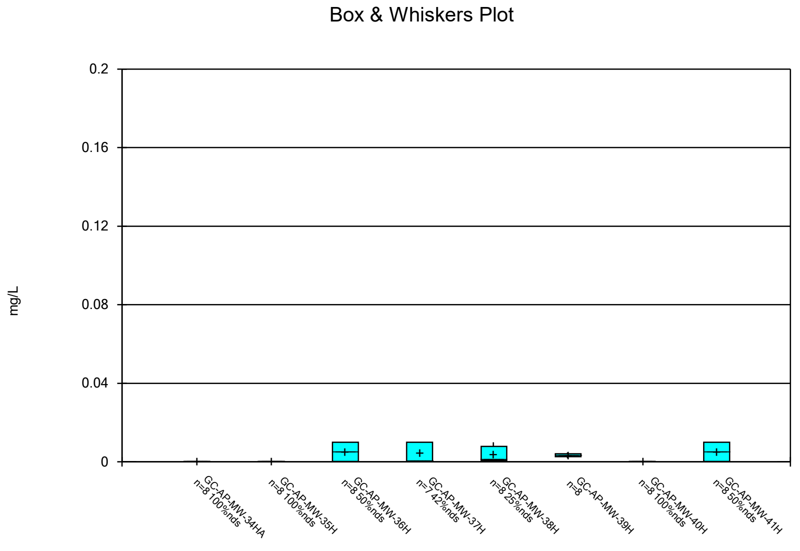
Sanitas™ v.9.6.36 . UG



Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

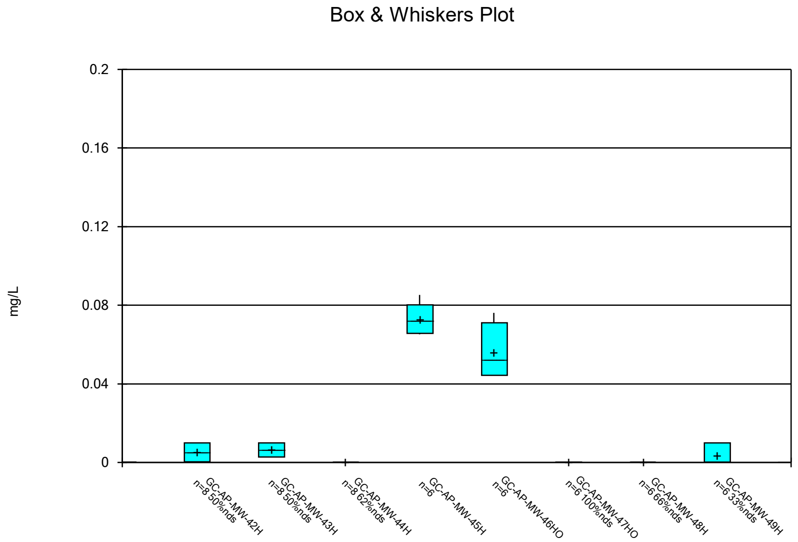
Sanitas™ v.9.6.36 . UG



Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive

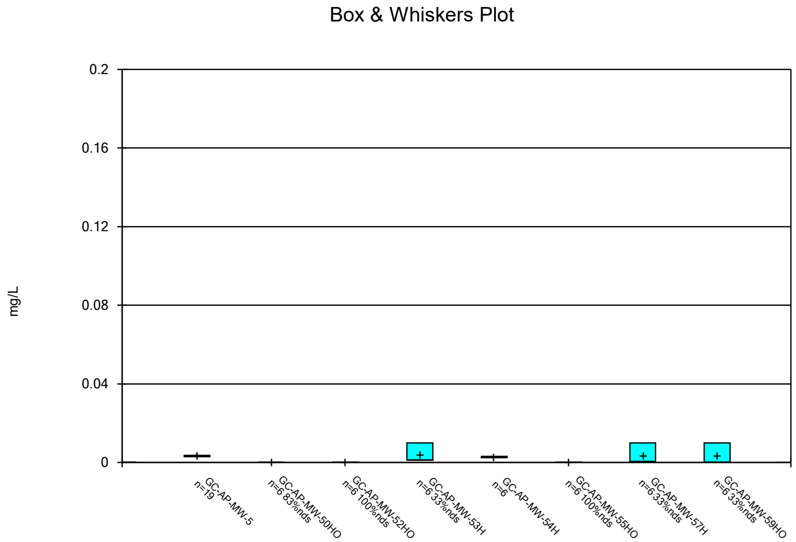
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



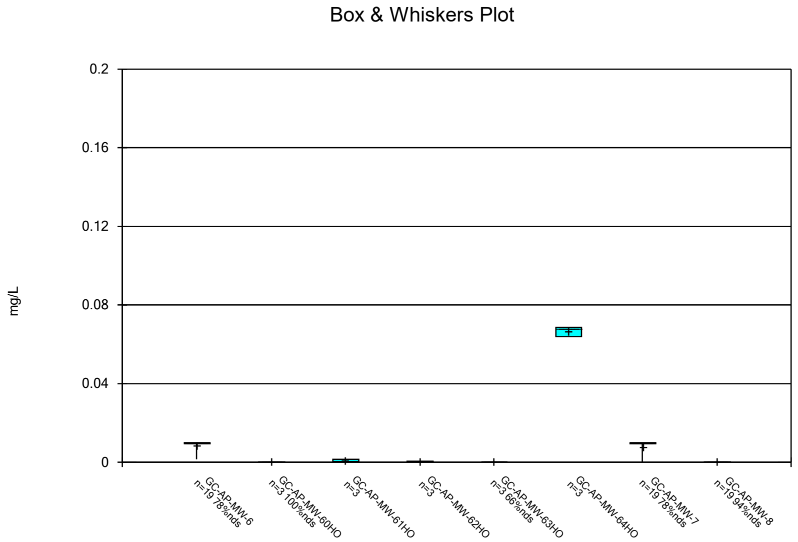
Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



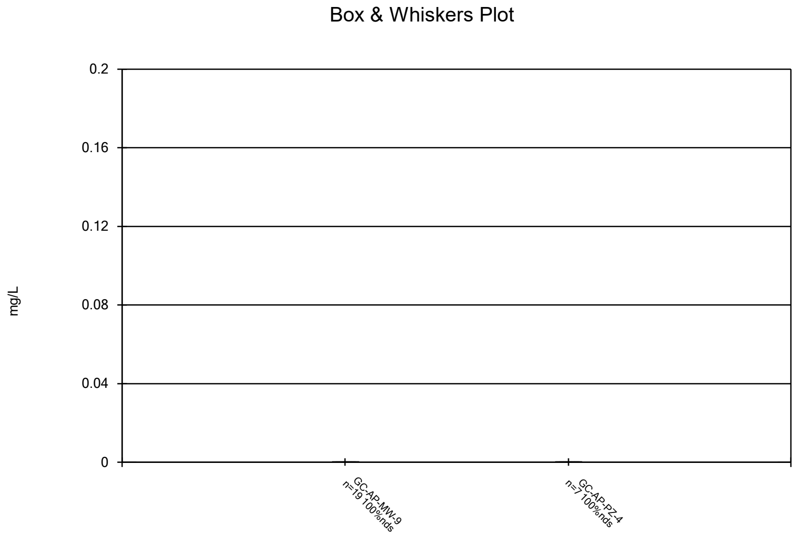
Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



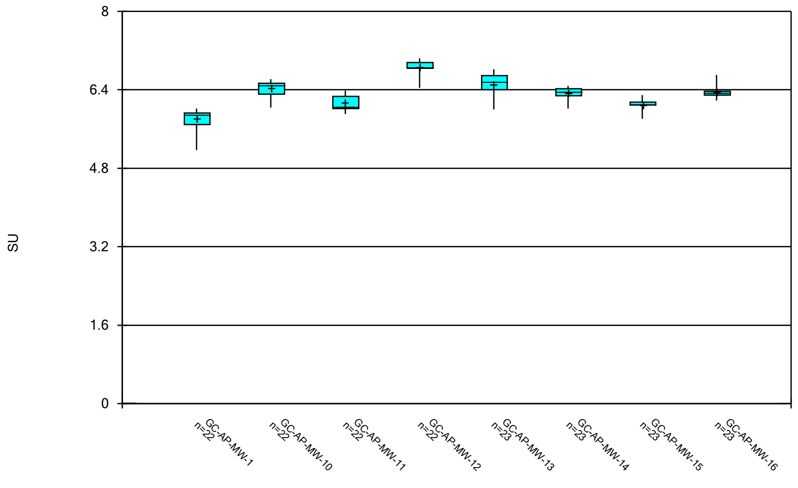
Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



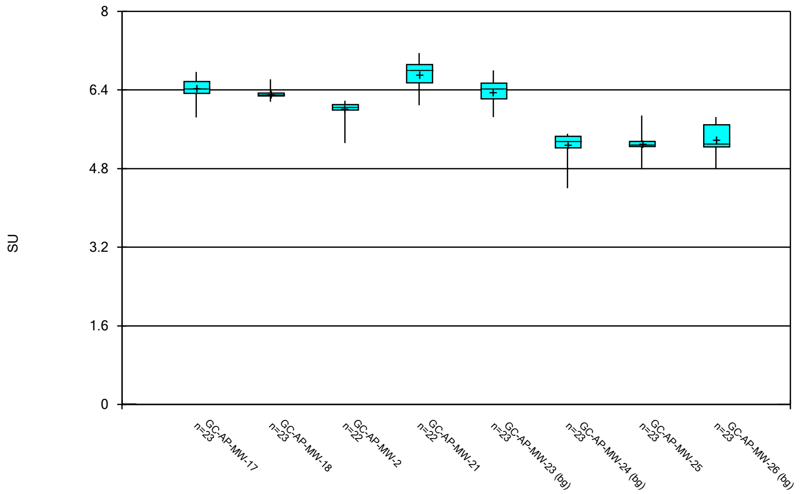
Constituent: Molybdenum Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Box & Whiskers Plot



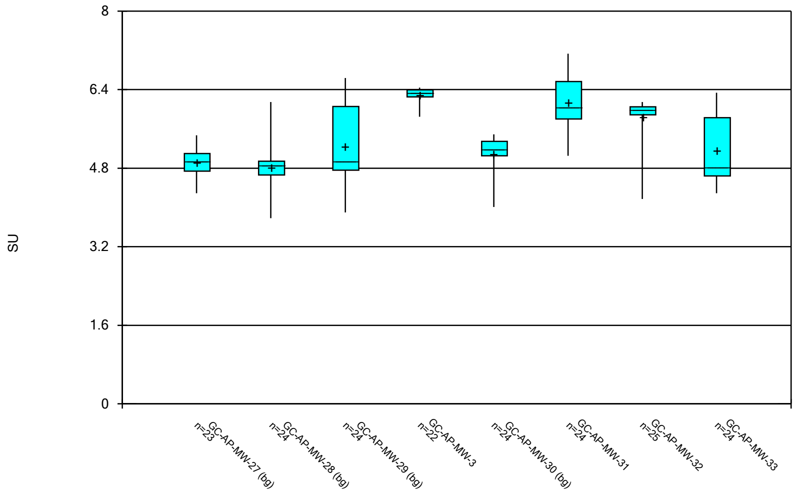
Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Box & Whiskers Plot



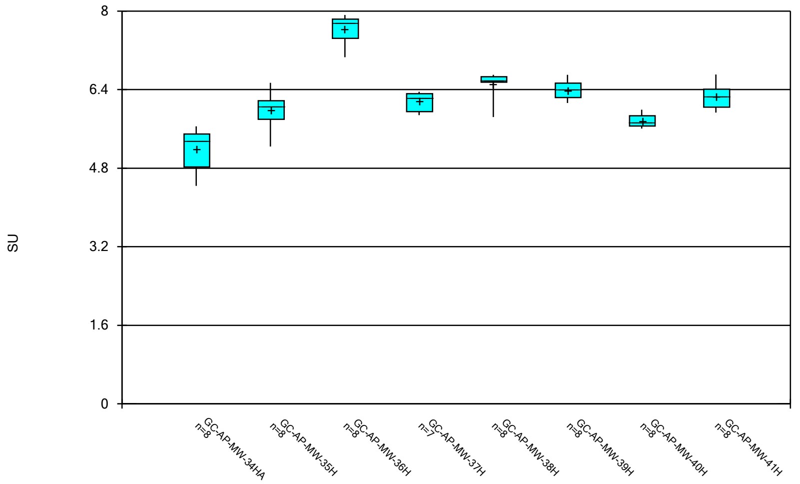
Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Box & Whiskers Plot



Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

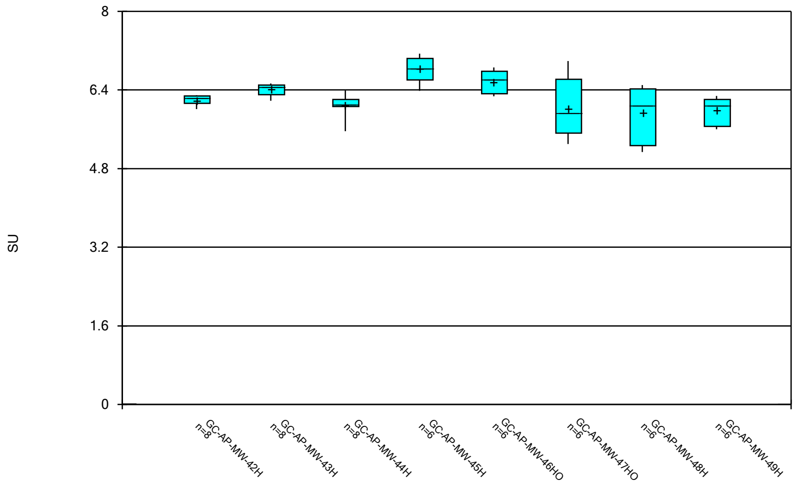
Box & Whiskers Plot



Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

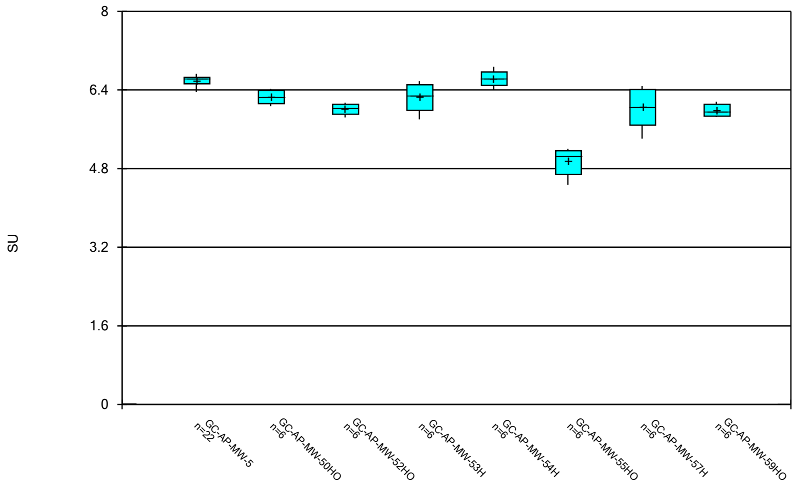
Box & Whiskers Plot



Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

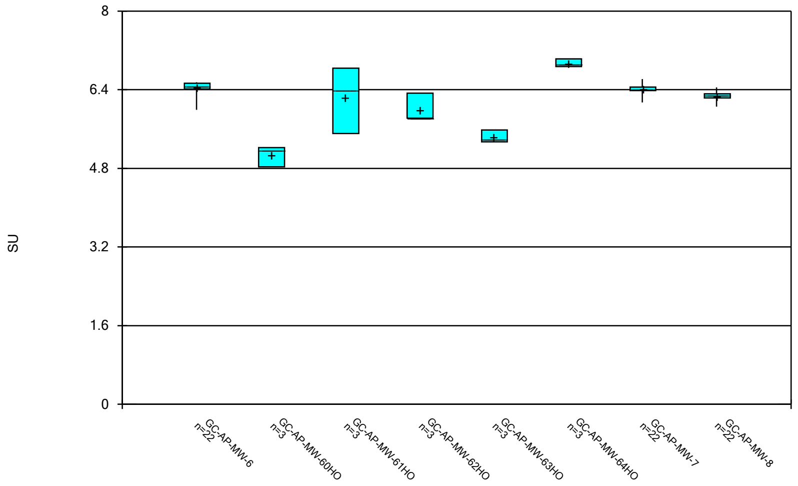
Box & Whiskers Plot



Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

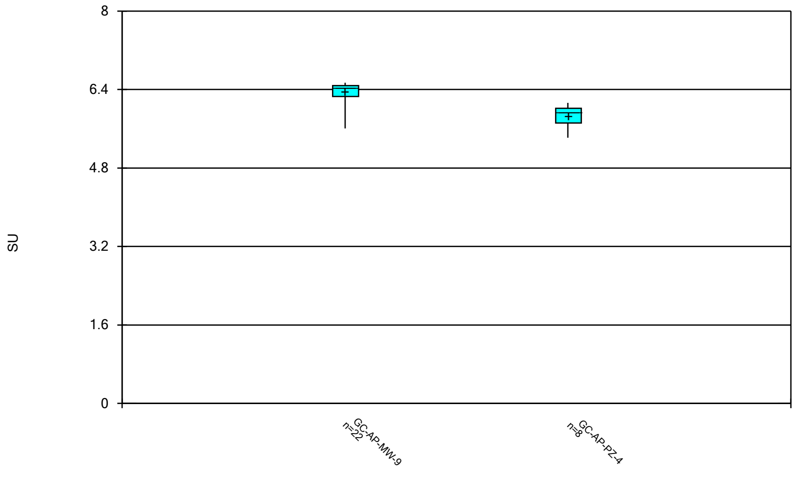
Box & Whiskers Plot



Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

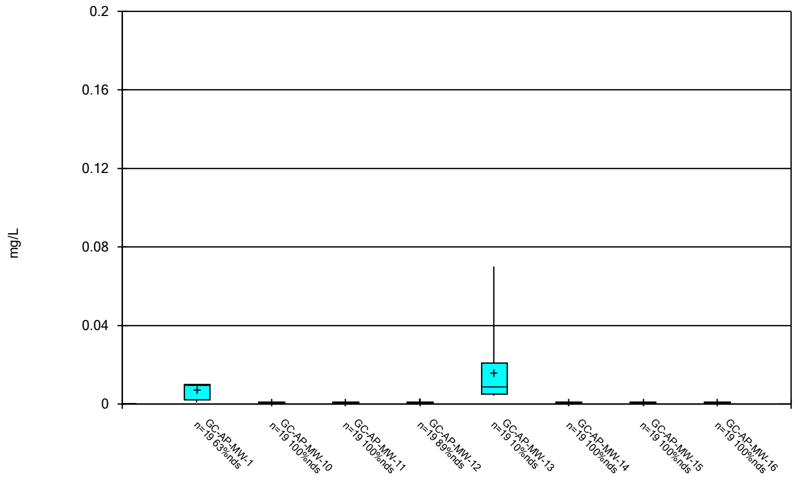
Box & Whiskers Plot



Constituent: pH Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

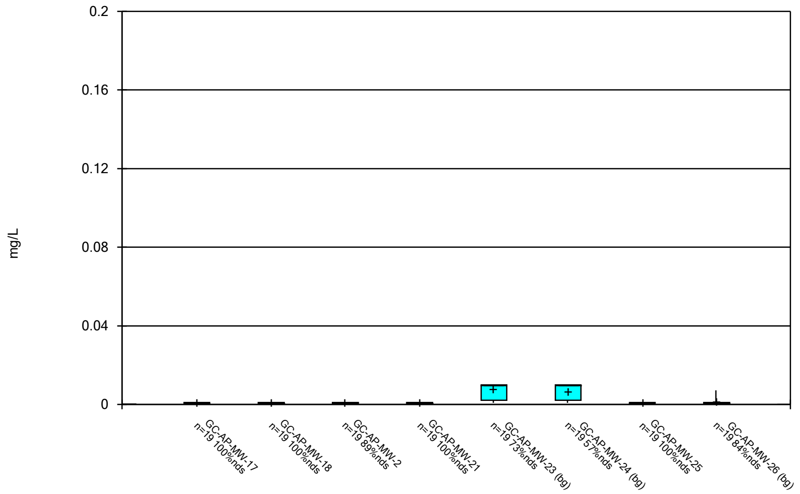


Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

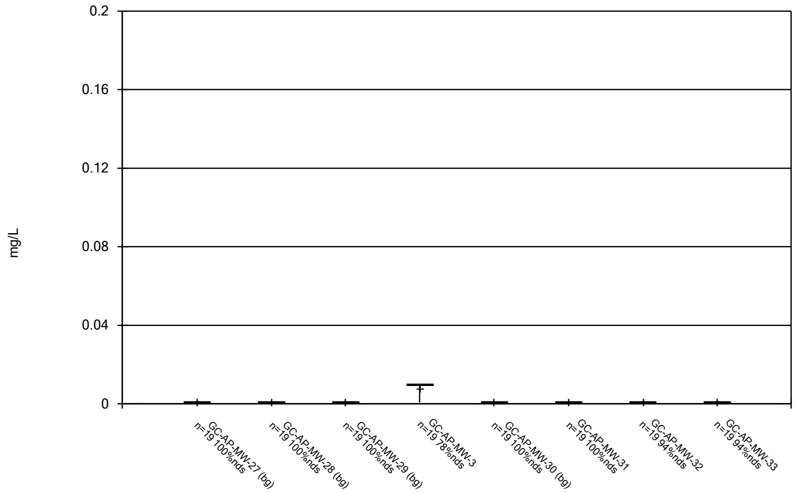


Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

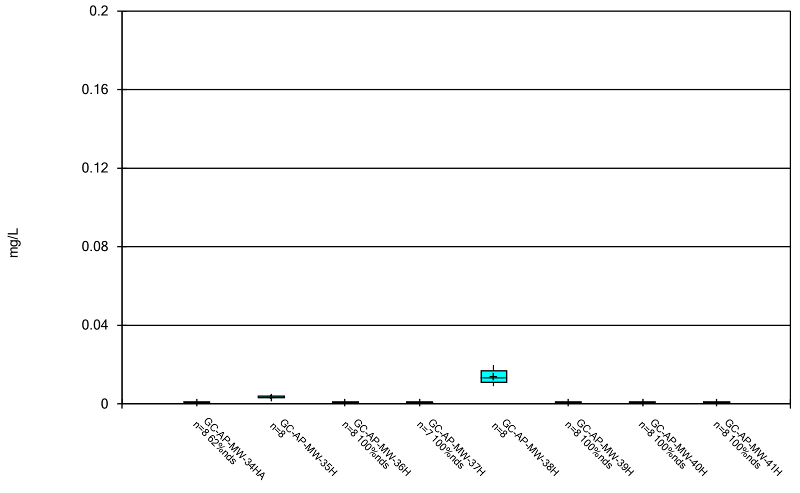


Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

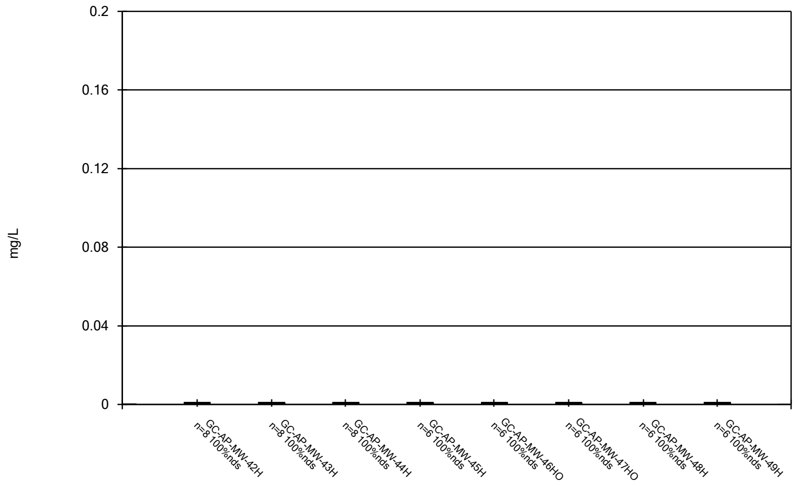


Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

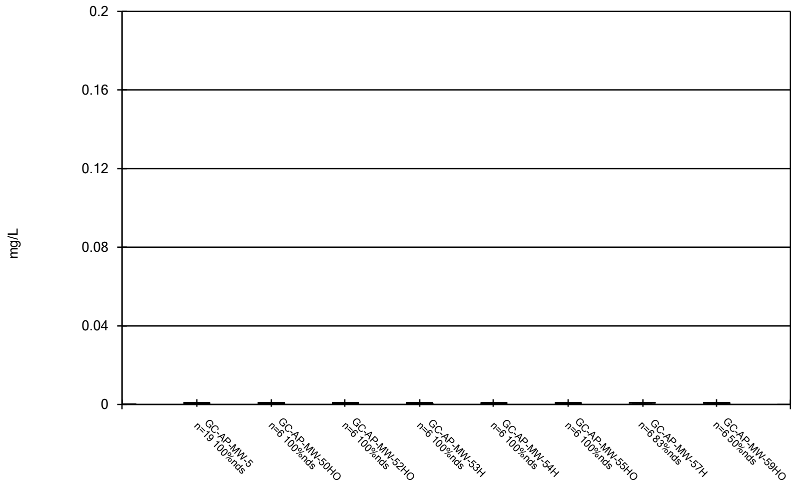
Box & Whiskers Plot



Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

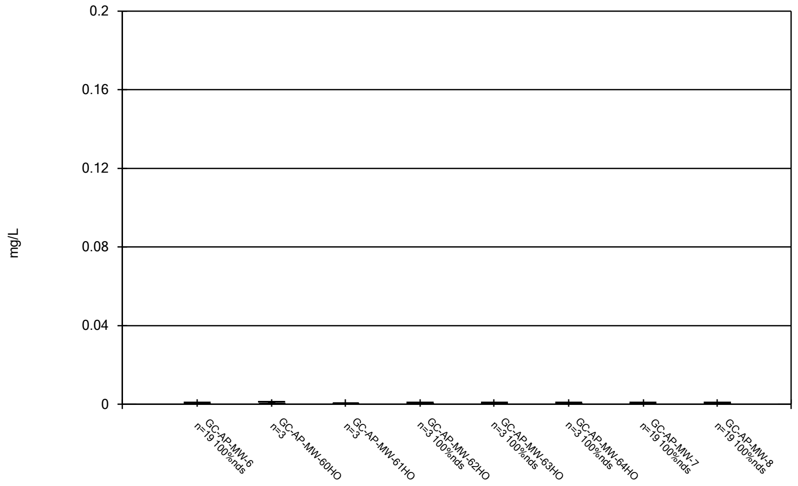
Box & Whiskers Plot



Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

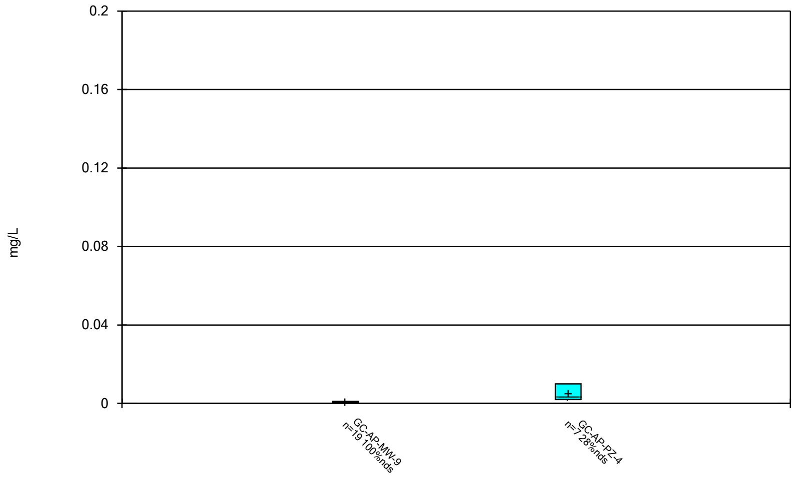
Box & Whiskers Plot



Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

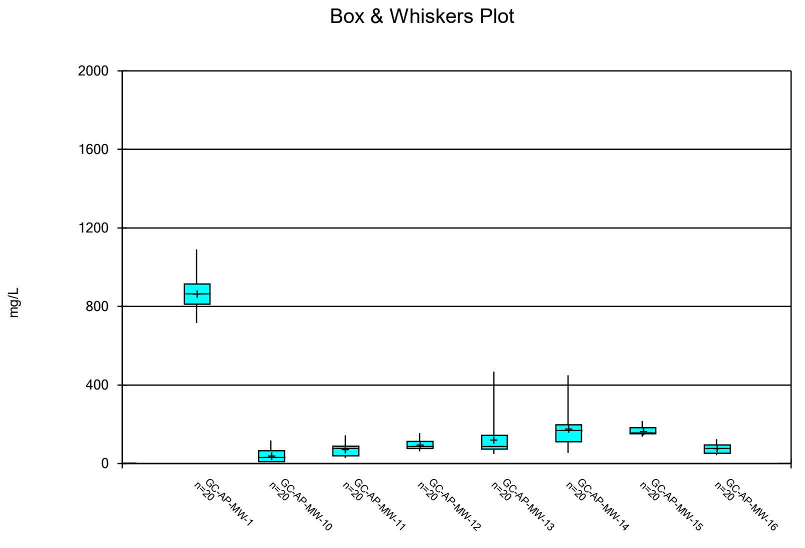
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



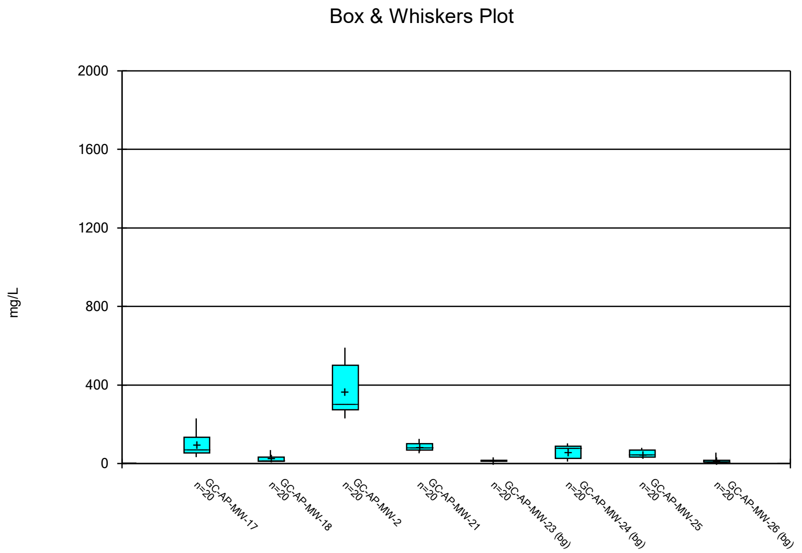
Constituent: Selenium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



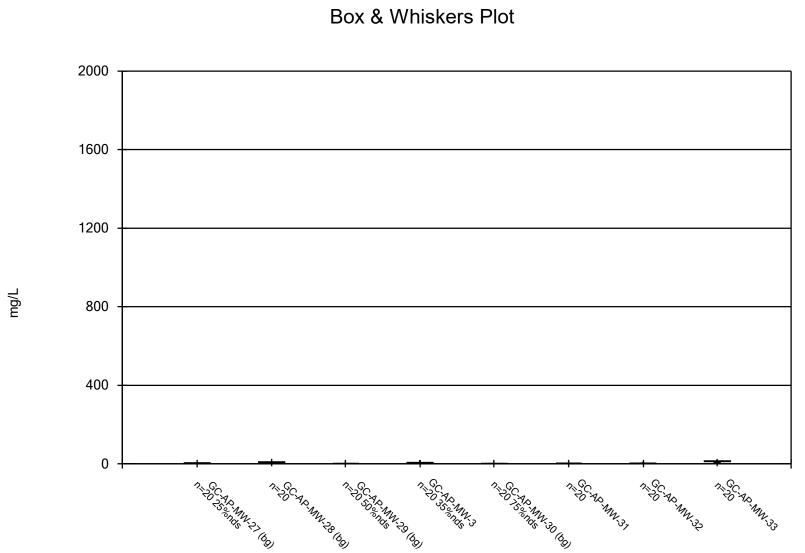
Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



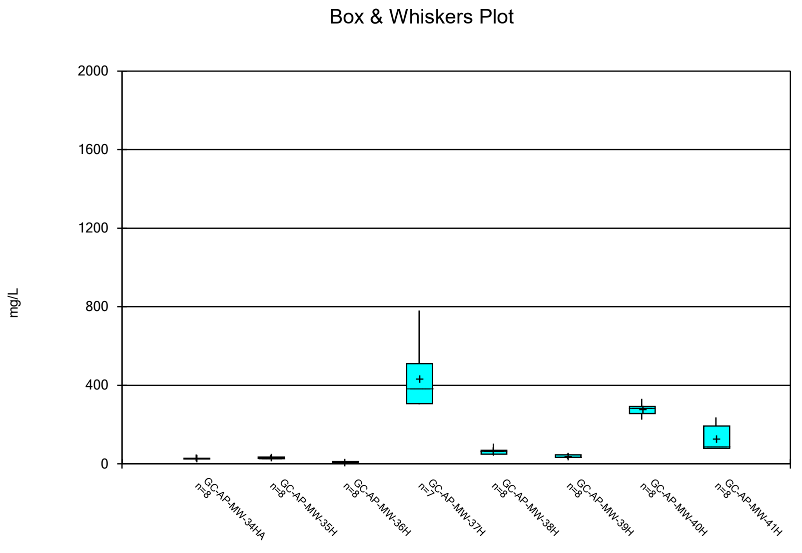
Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

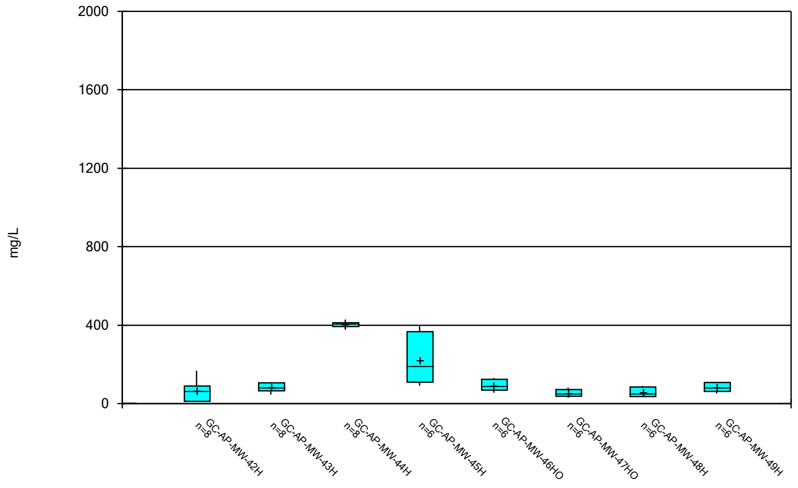
Sanitas™ v.9.6.36 . UG



Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

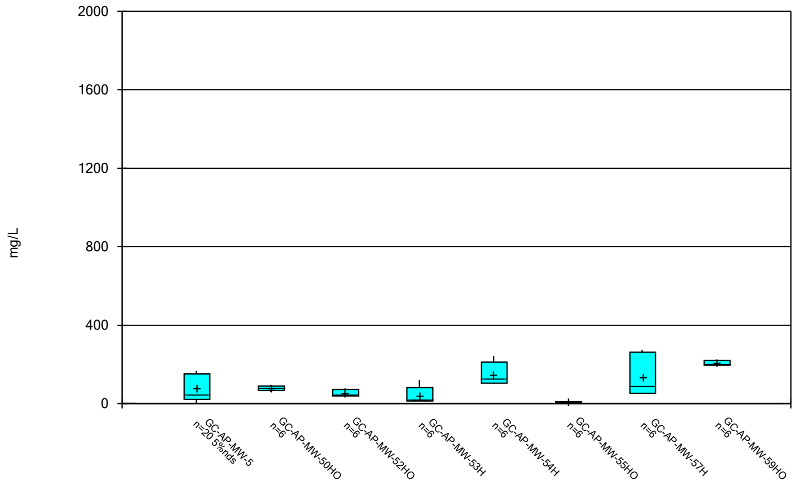
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

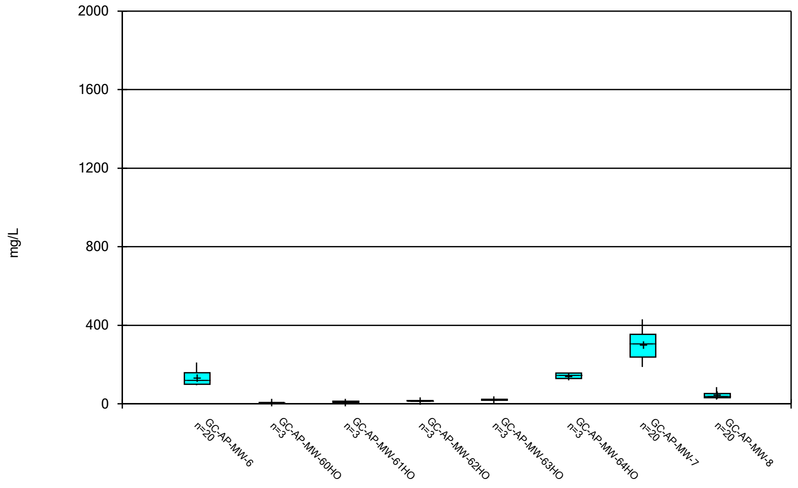
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

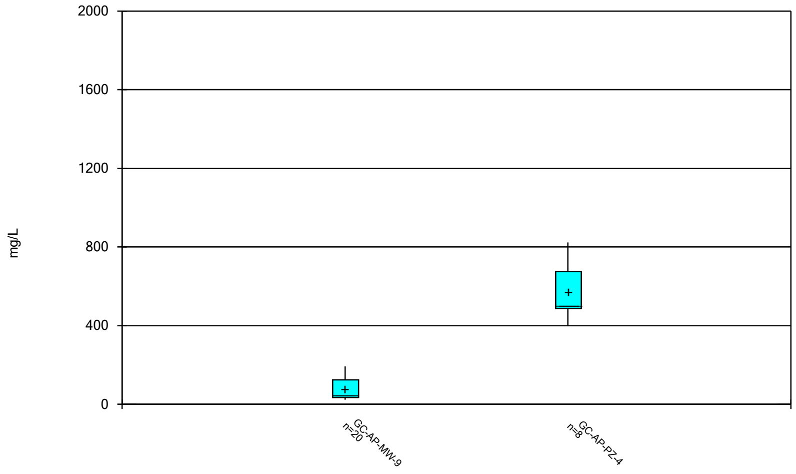
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

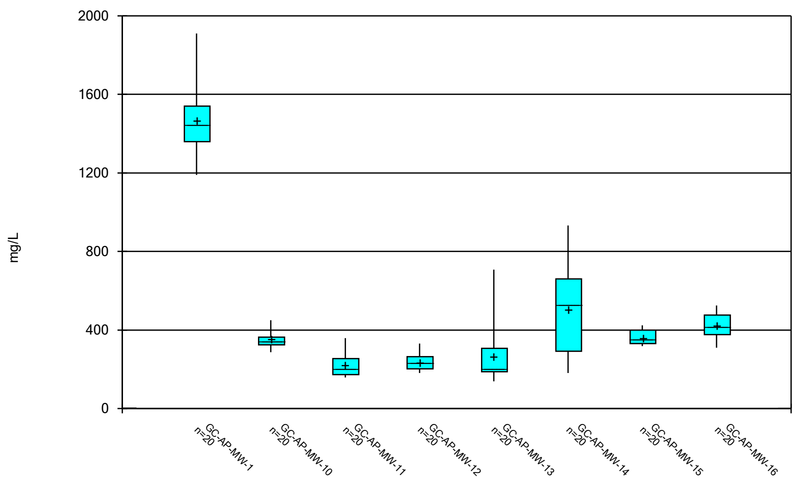
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

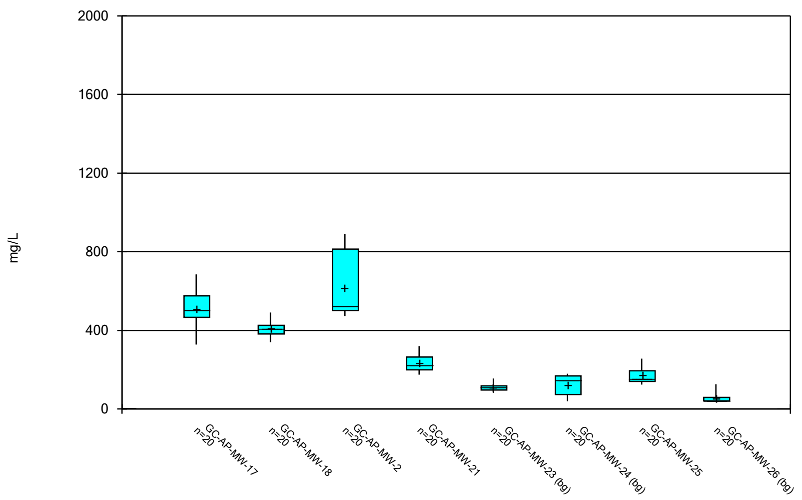


Constituent: TDS   Analysis Run 12/9/2022 10:33 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

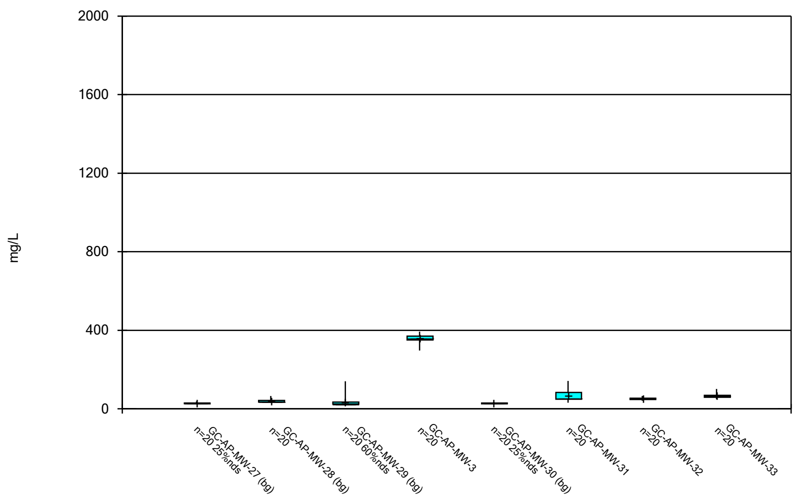


Constituent: TDS   Analysis Run 12/9/2022 10:33 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

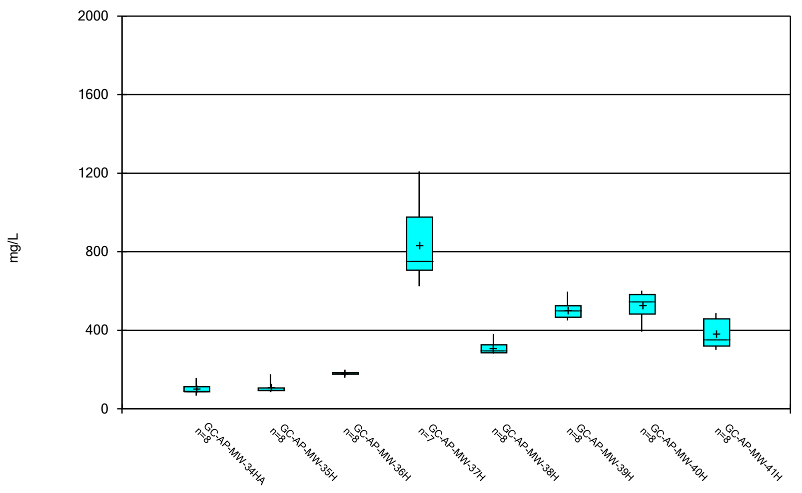


Constituent: TDS   Analysis Run 12/9/2022 10:33 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot

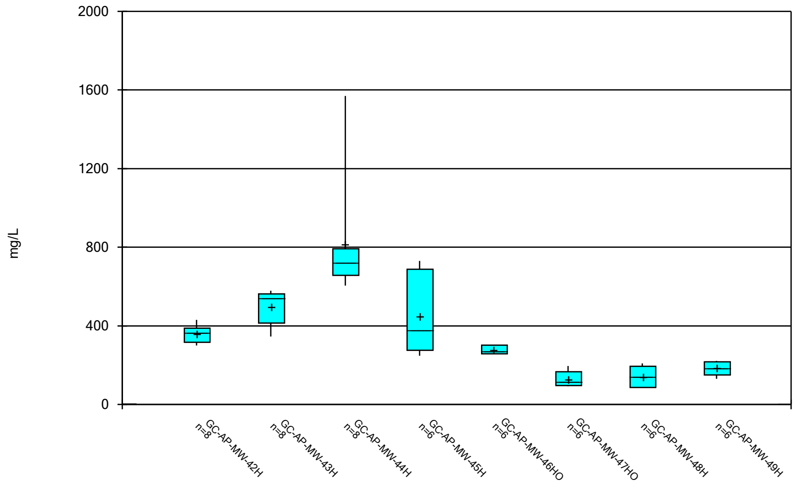


Constituent: TDS   Analysis Run 12/9/2022 10:33 AM   View: Descriptive

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

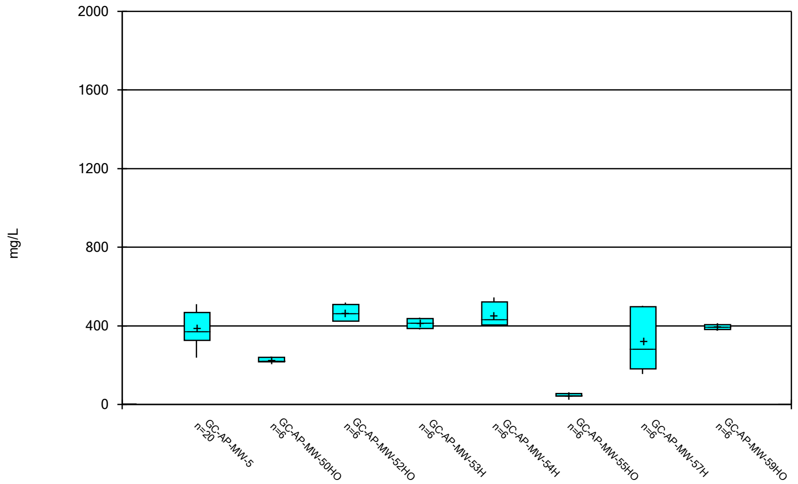
Box & Whiskers Plot



Constituent: TDS Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

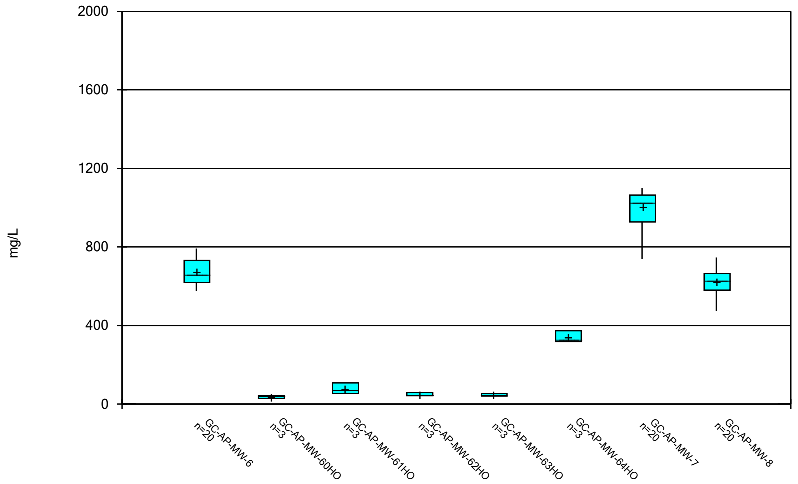
Box & Whiskers Plot



Constituent: TDS Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

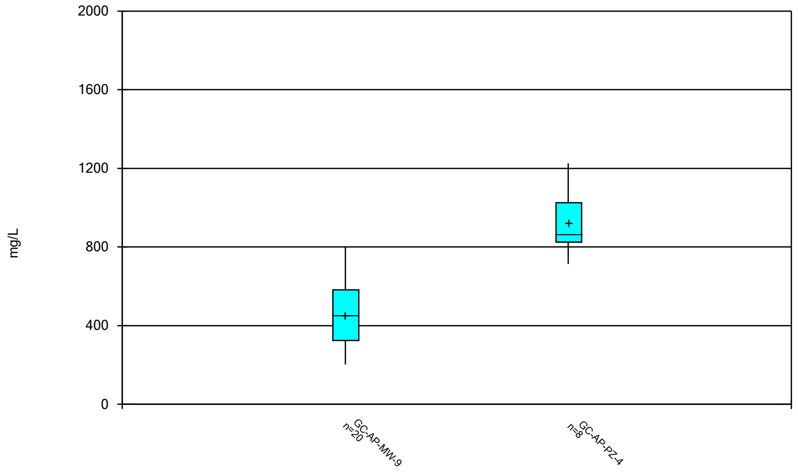
Box & Whiskers Plot



Constituent: TDS Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

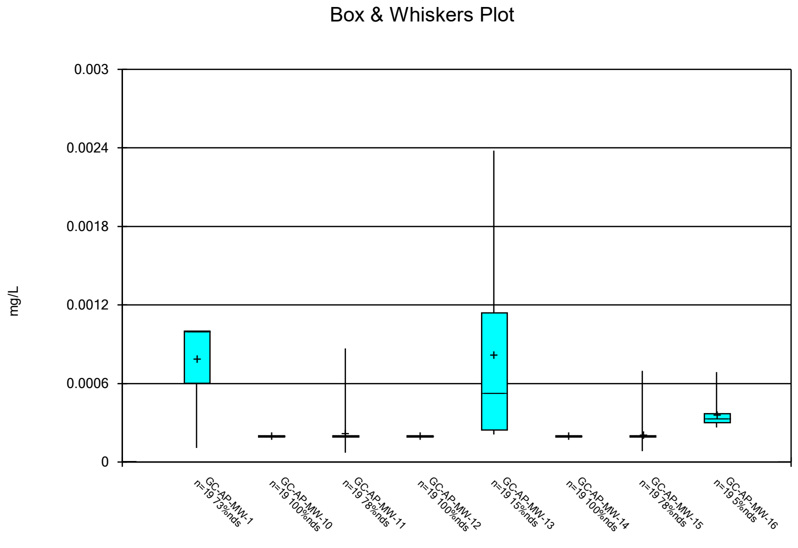
Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



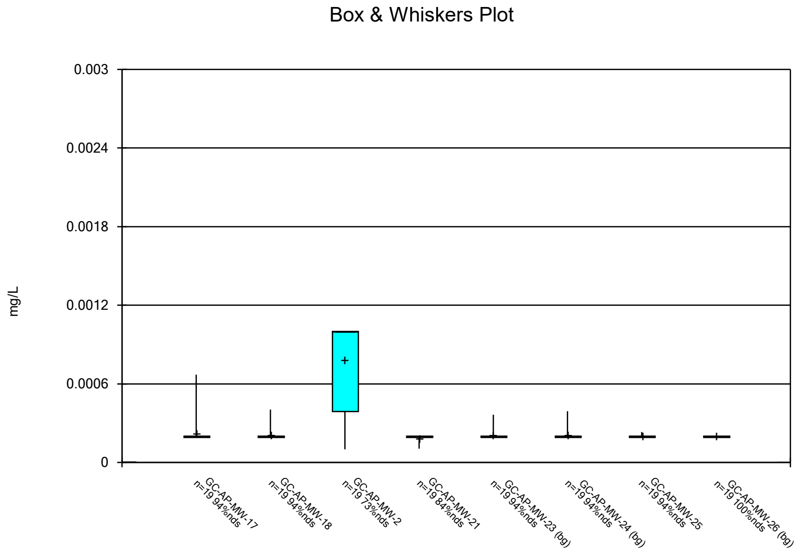
Constituent: TDS Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



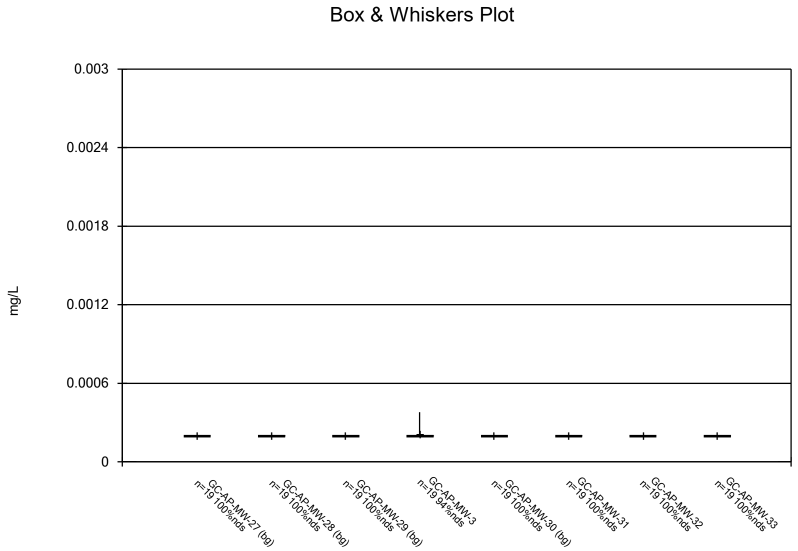
Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



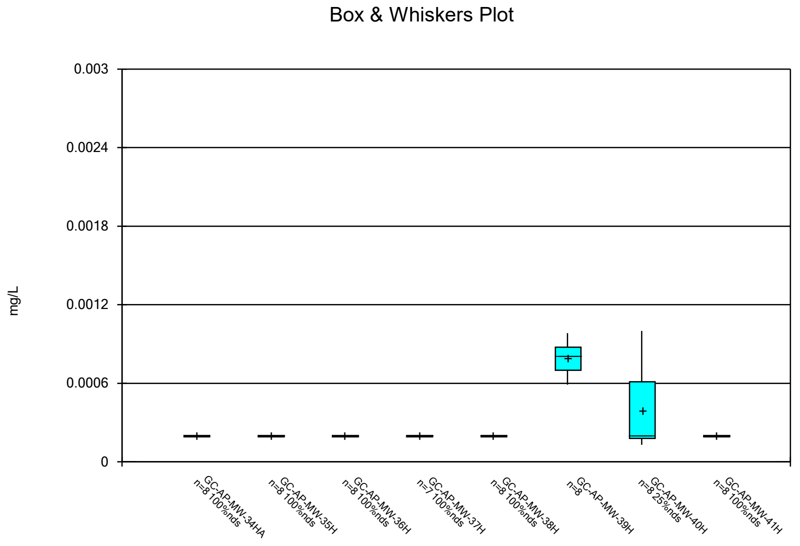
Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

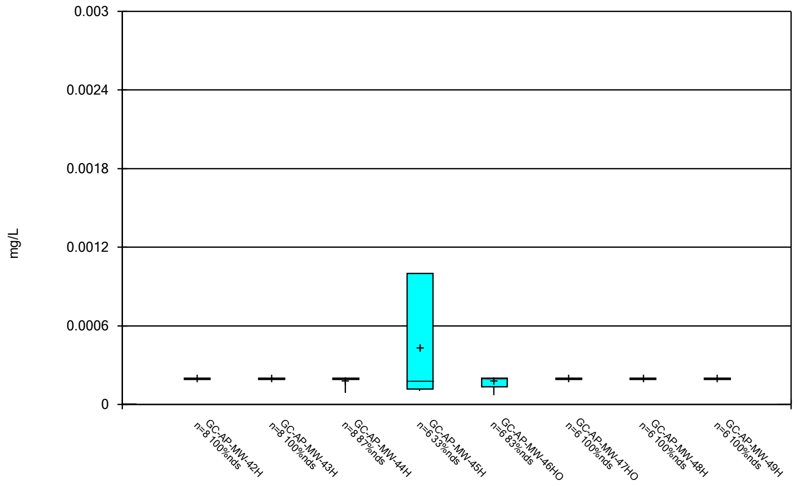
Sanitas™ v.9.6.36 . UG



Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

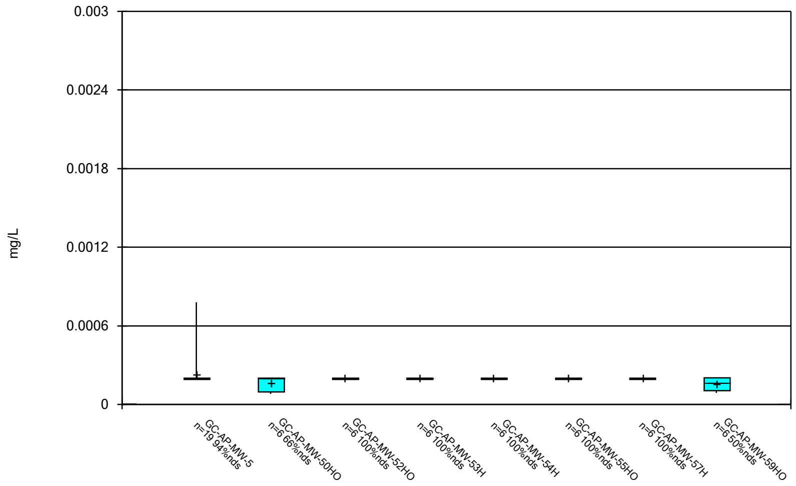
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

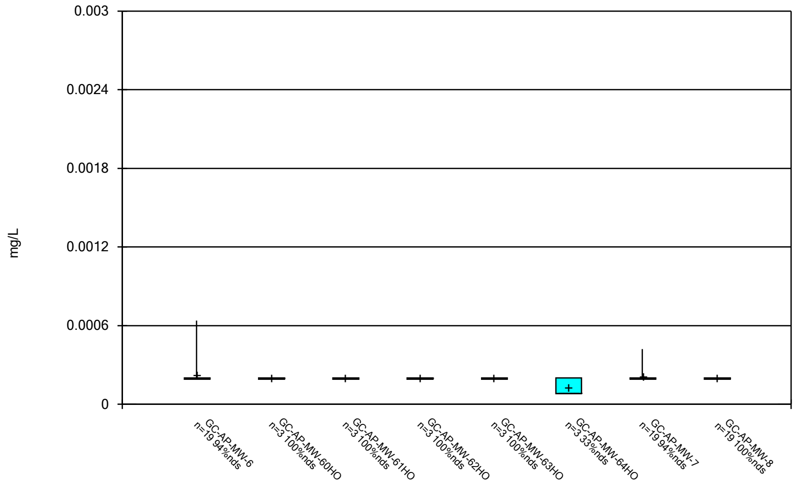
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

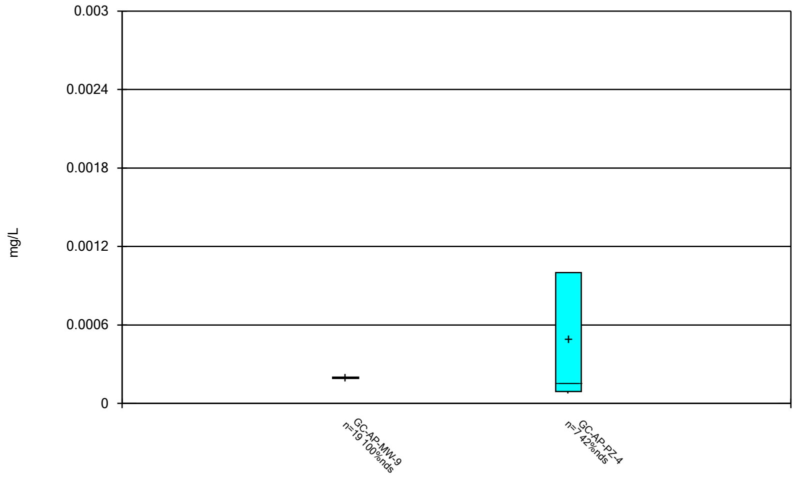
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/9/2022 10:33 AM View: Descriptive
Plant Greene County Client: Southern Company Data: Greene County AP

FIGURE C.

Outlier Summary

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 12/9/2022, 11:24 AM

	GC-AP-MW-26 Fluoride (mg/L)	GC-AP-MW-27 Fluoride (mg/L)	GC-AP-MW-28 Fluoride (mg/L)	GC-AP-MW-13 Selenium (mg/L)
9/20/2016		0.01 (o)	0.021 (o)	
3/13/2017	0.31 (o)			
5/9/2017	0.25 (o)			
6/27/2017	0.22 (o)			
8/29/2017	0.22 (o)			
4/6/2022				0.111 (o)

FIGURE D.

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.1015	n/a	10/5/2022	0.202	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.1015	n/a	10/18/2022	2.13	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-11	0.1015	n/a	10/17/2022	0.63	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-12	0.1015	n/a	10/17/2022	0.272	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.1015	n/a	10/17/2022	0.499	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.1015	n/a	10/18/2022	1.91	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.1015	n/a	10/18/2022	0.874	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.1015	n/a	10/18/2022	2.14	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.1015	n/a	10/18/2022	2.28	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.1015	n/a	10/17/2022	1.46	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.1015	n/a	10/5/2022	0.132	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-21	0.1015	n/a	10/17/2022	0.59	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.1015	n/a	10/18/2022	0.124	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.1015	n/a	10/17/2022	0.599	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.1015	n/a	10/18/2022	1.16	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.1015	n/a	10/18/2022	0.815	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.1015	n/a	10/18/2022	1.15	Yes	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.8	n/a	10/5/2022	113	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.8	n/a	10/18/2022	105	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-11	42.8	n/a	10/17/2022	60.6	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-12	42.8	n/a	10/17/2022	49.8	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.8	n/a	10/17/2022	158	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.8	n/a	10/18/2022	125	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.8	n/a	10/18/2022	89.4	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.8	n/a	10/18/2022	128	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.8	n/a	10/18/2022	150	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.8	n/a	10/17/2022	99.9	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.8	n/a	10/5/2022	179	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-21	42.8	n/a	10/17/2022	57	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.8	n/a	10/5/2022	54.5	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.8	n/a	10/17/2022	119	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.8	n/a	10/18/2022	159	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.8	n/a	10/18/2022	158	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.8	n/a	10/18/2022	93.8	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.8	n/a	10/18/2022	111	Yes	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	5.832	n/a	10/5/2022	7.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-10	5.832	n/a	10/18/2022	17.2	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-11	5.832	n/a	10/17/2022	22.4	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-12	5.832	n/a	10/17/2022	12.9	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-13	5.832	n/a	10/17/2022	12	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-14	5.832	n/a	10/18/2022	10.4	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-15	5.832	n/a	10/18/2022	8.54	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-16	5.832	n/a	10/18/2022	10.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-17	5.832	n/a	10/18/2022	10.7	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-18	5.832	n/a	10/17/2022	26	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-2	5.832	n/a	10/5/2022	12.3	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-21	5.832	n/a	10/17/2022	13	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-25	5.832	n/a	10/18/2022	32.3	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-3	5.832	n/a	10/5/2022	23.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-31	5.832	n/a	10/5/2022	7.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-5	5.832	n/a	10/17/2022	10.8	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-6	5.832	n/a	10/18/2022	45	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-7	5.832	n/a	10/18/2022	196	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-8	5.832	n/a	10/18/2022	96.1	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-9	5.832	n/a	10/18/2022	106	Yes	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.159	n/a	10/18/2022	0.248	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-12	0.159	n/a	10/17/2022	0.197	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-14	0.159	n/a	10/18/2022	0.211	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-16	0.159	n/a	10/18/2022	0.27	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-17	0.159	n/a	10/18/2022	0.544	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-18	0.159	n/a	10/17/2022	0.176	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-5	0.159	n/a	10/17/2022	0.192	Yes	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
pH (SU)	GC-AP-MW-12	6.8	3.78	10/17/2022	6.88	Yes	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-1	103	n/a	10/5/2022	737	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-10	103	n/a	10/18/2022	104	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-11	103	n/a	10/17/2022	144	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-13	103	n/a	10/17/2022	467	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-14	103	n/a	10/18/2022	185	Yes	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2

Interwell Prediction Limits - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GC-AP-MW-15**	**103**	**n/a**	**10/18/2022**	**152**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-2**	**103**	**n/a**	**10/5/2022**	**590**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**10/17/2022**	**154**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**10/18/2022**	**179**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**10/18/2022**	**256**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**10/18/2022**	**171**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**10/5/2022**	**1190**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**10/18/2022**	**449**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**10/17/2022**	**323**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**10/17/2022**	**243**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**10/17/2022**	**708**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**10/18/2022**	**662**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**10/18/2022**	**423**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**10/18/2022**	**486**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**10/18/2022**	**598**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**10/17/2022**	**382**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**10/5/2022**	**864**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**10/17/2022**	**311**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**10/18/2022**	**256**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**10/5/2022**	**319**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**10/17/2022**	**483**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**10/18/2022**	**752**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**10/18/2022**	**1040**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**10/18/2022**	**700**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**10/18/2022**	**692**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-1**	**0.1015**	**n/a**	**10/5/2022**	**0.202**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-10**	**0.1015**	**n/a**	**10/18/2022**	**2.13**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-11**	**0.1015**	**n/a**	**10/17/2022**	**0.63**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-12**	**0.1015**	**n/a**	**10/17/2022**	**0.272**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-13**	**0.1015**	**n/a**	**10/17/2022**	**0.499**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-14**	**0.1015**	**n/a**	**10/18/2022**	**1.91**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-15**	**0.1015**	**n/a**	**10/18/2022**	**0.874**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-16**	**0.1015**	**n/a**	**10/18/2022**	**2.14**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-17**	**0.1015**	**n/a**	**10/18/2022**	**2.28**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-18**	**0.1015**	**n/a**	**10/17/2022**	**1.46**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-2**	**0.1015**	**n/a**	**10/5/2022**	**0.132**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-21**	**0.1015**	**n/a**	**10/17/2022**	**0.59**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-25**	**0.1015**	**n/a**	**10/18/2022**	**0.124**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GC-AP-MW-3	0.1015	n/a	10/5/2022	0.0404J	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-31	0.1015	n/a	10/5/2022	0.1015ND	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-32	0.1015	n/a	10/5/2022	0.1015ND	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-33	0.1015	n/a	10/5/2022	0.1015ND	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GC-AP-MW-5**	**0.1015**	**n/a**	**10/17/2022**	**0.599**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-6**	**0.1015**	**n/a**	**10/18/2022**	**1.16**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GC-AP-MW-7	0.1015	n/a	10/18/2022	0.0589J	No	133	n/a	n/a	93.98	n/a	n/a	0.000111	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GC-AP-MW-8**	**0.1015**	**n/a**	**10/18/2022**	**0.815**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GC-AP-MW-9**	**0.1015**	**n/a**	**10/18/2022**	**1.15**	**Yes**	**133**	**n/a**	**n/a**	**93.98**	**n/a**	**n/a**	**0.000111**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-1**	**42.8**	**n/a**	**10/5/2022**	**113**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-10**	**42.8**	**n/a**	**10/18/2022**	**105**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-11**	**42.8**	**n/a**	**10/17/2022**	**60.6**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-12**	**42.8**	**n/a**	**10/17/2022**	**49.8**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-13**	**42.8**	**n/a**	**10/17/2022**	**158**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-14**	**42.8**	**n/a**	**10/18/2022**	**125**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-15**	**42.8**	**n/a**	**10/18/2022**	**89.4**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-16**	**42.8**	**n/a**	**10/18/2022**	**128**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-17**	**42.8**	**n/a**	**10/18/2022**	**150**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-18**	**42.8**	**n/a**	**10/17/2022**	**99.9**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-2**	**42.8**	**n/a**	**10/5/2022**	**179**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-21**	**42.8**	**n/a**	**10/17/2022**	**57**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GC-AP-MW-25	42.8	n/a	10/18/2022	38.2	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GC-AP-MW-3**	**42.8**	**n/a**	**10/5/2022**	**54.5**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GC-AP-MW-31	42.8	n/a	10/5/2022	6.69	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-32	42.8	n/a	10/5/2022	9.18	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-33	42.8	n/a	10/5/2022	2.01	No	140	n/a	n/a	0	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GC-AP-MW-5**	**42.8**	**n/a**	**10/17/2022**	**119**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-6**	**42.8**	**n/a**	**10/18/2022**	**159**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-7**	**42.8**	**n/a**	**10/18/2022**	**158**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-8**	**42.8**	**n/a**	**10/18/2022**	**93.8**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GC-AP-MW-9**	**42.8**	**n/a**	**10/18/2022**	**111**	**Yes**	**140**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GC-AP-MW-1**	**5.832**	**n/a**	**10/5/2022**	**7.1**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-10**	**5.832**	**n/a**	**10/18/2022**	**17.2**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-11**	**5.832**	**n/a**	**10/17/2022**	**22.4**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-12**	**5.832**	**n/a**	**10/17/2022**	**12.9**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-13**	**5.832**	**n/a**	**10/17/2022**	**12**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-14**	**5.832**	**n/a**	**10/18/2022**	**10.4**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-15**	**5.832**	**n/a**	**10/18/2022**	**8.54**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-16**	**5.832**	**n/a**	**10/18/2022**	**10.1**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-17**	**5.832**	**n/a**	**10/18/2022**	**10.7**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-18**	**5.832**	**n/a**	**10/17/2022**	**26**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-2**	**5.832**	**n/a**	**10/5/2022**	**12.3**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-21**	**5.832**	**n/a**	**10/17/2022**	**13**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-25**	**5.832**	**n/a**	**10/18/2022**	**32.3**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-3**	**5.832**	**n/a**	**10/5/2022**	**23.1**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-31**	**5.832**	**n/a**	**10/5/2022**	**7.1**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	GC-AP-MW-32	5.832	n/a	10/5/2022	4.04	No	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	GC-AP-MW-33	5.832	n/a	10/5/2022	5.32	No	140	0.7493	0.4779	3.571	None	ln(x)	0.000342	Param Inter 1 of 2
Chloride (mg/L)	**GC-AP-MW-5**	**5.832**	**n/a**	**10/17/2022**	**10.8**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-6**	**5.832**	**n/a**	**10/18/2022**	**45**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-7**	**5.832**	**n/a**	**10/18/2022**	**196**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-8**	**5.832**	**n/a**	**10/18/2022**	**96.1**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Chloride (mg/L)	**GC-AP-MW-9**	**5.832**	**n/a**	**10/18/2022**	**106**	**Yes**	**140**	**0.7493**	**0.4779**	**3.571**	**None**	**ln(x)**	**0.000342**	**Param Inter 1 of 2**
Fluoride (mg/L)	GC-AP-MW-1	0.159	n/a	10/5/2022	0.125	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-10**	**0.159**	**n/a**	**10/18/2022**	**0.248**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 12/9/2022, 10:45 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-11	0.159	n/a	10/17/2022	0.118J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-12**	**0.159**	**n/a**	**10/17/2022**	**0.197**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-13	0.159	n/a	10/17/2022	0.125ND	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-14**	**0.159**	**n/a**	**10/18/2022**	**0.211**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-15	0.159	n/a	10/18/2022	0.139	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-16**	**0.159**	**n/a**	**10/18/2022**	**0.27**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.159**	**n/a**	**10/18/2022**	**0.544**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**GC-AP-MW-18**	**0.159**	**n/a**	**10/17/2022**	**0.176**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-2	0.159	n/a	10/5/2022	0.124J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-21	0.159	n/a	10/17/2022	0.0988J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-25	0.159	n/a	10/18/2022	0.0955J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-3	0.159	n/a	10/5/2022	0.12J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-31	0.159	n/a	10/5/2022	0.0671J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-32	0.159	n/a	10/5/2022	0.125ND	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-33	0.159	n/a	10/5/2022	0.125ND	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**GC-AP-MW-5**	**0.159**	**n/a**	**10/17/2022**	**0.192**	**Yes**	**134**	**n/a**	**n/a**	**70.15**	**n/a**	**n/a**	**0.0001093**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	GC-AP-MW-6	0.159	n/a	10/18/2022	0.154	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-7	0.159	n/a	10/18/2022	0.0649J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-8	0.159	n/a	10/18/2022	0.0981J	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GC-AP-MW-9	0.159	n/a	10/18/2022	0.156	No	134	n/a	n/a	70.15	n/a	n/a	0.0001093	NP Inter (NDs) 1 of 2
pH (SU)	GC-AP-MW-1	6.8	3.78	10/5/2022	5.59	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-10	6.8	3.78	10/18/2022	6.62	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-11	6.8	3.78	10/17/2022	6.28	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	**GC-AP-MW-12**	**6.8**	**3.78**	**10/17/2022**	**6.88**	**Yes**	**164**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001459**	**NP Inter (normality) 1 of 2**
pH (SU)	GC-AP-MW-13	6.8	3.78	10/17/2022	6.22	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-14	6.8	3.78	10/18/2022	6.46	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-15	6.8	3.78	10/18/2022	6.29	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-16	6.8	3.78	10/18/2022	6.53	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-17	6.8	3.78	10/18/2022	6.77	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-18	6.8	3.78	10/17/2022	6.49	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-2	6.8	3.78	10/5/2022	6.01	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-21	6.8	3.78	10/17/2022	6.21	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-25	6.8	3.78	10/18/2022	5.88	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-3	6.8	3.78	10/5/2022	5.89	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-31	6.8	3.78	10/5/2022	5.49	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-32	6.8	3.78	10/5/2022	5.84	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-33	6.8	3.78	10/5/2022	4.55	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-5	6.8	3.78	10/17/2022	6.71	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-6	6.8	3.78	10/18/2022	6.38	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-7	6.8	3.78	10/18/2022	6.37	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-8	6.8	3.78	10/18/2022	6.45	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
pH (SU)	GC-AP-MW-9	6.8	3.78	10/18/2022	6.27	No	164	n/a	n/a	0	n/a	n/a	0.0001459	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-1**	**103**	**n/a**	**10/5/2022**	**737**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-10**	**103**	**n/a**	**10/18/2022**	**104**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-11**	**103**	**n/a**	**10/17/2022**	**144**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-12	103	n/a	10/17/2022	96.2	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-13**	**103**	**n/a**	**10/17/2022**	**467**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-14**	**103**	**n/a**	**10/18/2022**	**185**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-15**	**103**	**n/a**	**10/18/2022**	**152**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-16	103	n/a	10/18/2022	42.4	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-17	103	n/a	10/18/2022	64.9	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-18	103	n/a	10/17/2022	23.3	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-2**	**103**	**n/a**	**10/5/2022**	**590**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-21	103	n/a	10/17/2022	103	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-25	103	n/a	10/18/2022	70.6	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-3	103	n/a	10/5/2022	5.11	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-31	103	n/a	10/5/2022	4.08	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-32	103	n/a	10/5/2022	2.71	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-33	103	n/a	10/5/2022	12.2	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-5**	**103**	**n/a**	**10/17/2022**	**154**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-6**	**103**	**n/a**	**10/18/2022**	**179**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GC-AP-MW-7**	**103**	**n/a**	**10/18/2022**	**256**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GC-AP-MW-8	103	n/a	10/18/2022	84.8	No	140	n/a	n/a	21.43	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GC-AP-MW-9**	**103**	**n/a**	**10/18/2022**	**171**	**Yes**	**140**	**n/a**	**n/a**	**21.43**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-1**	**179**	**n/a**	**10/5/2022**	**1190**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-10**	**179**	**n/a**	**10/18/2022**	**449**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-11**	**179**	**n/a**	**10/17/2022**	**323**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-12**	**179**	**n/a**	**10/17/2022**	**243**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:45 AM

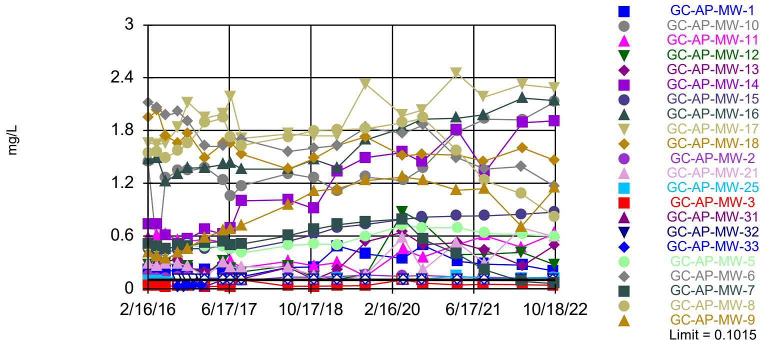
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
TDS (mg/L)	**GC-AP-MW-13**	**179**	**n/a**	**10/17/2022**	**708**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-14**	**179**	**n/a**	**10/18/2022**	**662**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-15**	**179**	**n/a**	**10/18/2022**	**423**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-16**	**179**	**n/a**	**10/18/2022**	**486**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-17**	**179**	**n/a**	**10/18/2022**	**598**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-18**	**179**	**n/a**	**10/17/2022**	**382**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-2**	**179**	**n/a**	**10/5/2022**	**864**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-21**	**179**	**n/a**	**10/17/2022**	**311**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-25**	**179**	**n/a**	**10/18/2022**	**256**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-3**	**179**	**n/a**	**10/5/2022**	**319**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GC-AP-MW-31	179	n/a	10/5/2022	40.7	No	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-32	179	n/a	10/5/2022	43.3	No	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-33	179	n/a	10/5/2022	62.7	No	140	n/a	n/a	15.71	n/a	n/a	0.00009888	NP Inter (normality) 1 of 2
TDS (mg/L)	**GC-AP-MW-5**	**179**	**n/a**	**10/17/2022**	**483**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-6**	**179**	**n/a**	**10/18/2022**	**752**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-7**	**179**	**n/a**	**10/18/2022**	**1040**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-8**	**179**	**n/a**	**10/18/2022**	**700**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GC-AP-MW-9**	**179**	**n/a**	**10/18/2022**	**692**	**Yes**	**140**	**n/a**	**n/a**	**15.71**	**n/a**	**n/a**	**0.00009888**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 133 background values. 93.98% NDs. Annual per-constituent alpha = 0.004874. Individual comparison alpha = 0.000111 (1 of 2). Comparing 22 points to limit.

Constituent: Boron Analysis Run 12/9/2022 10:43 AM View: AIII

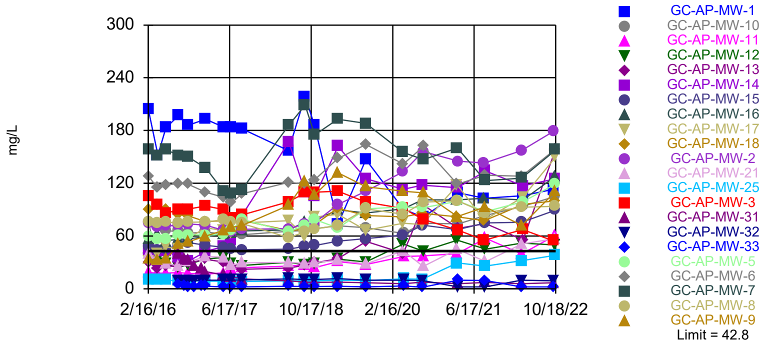
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 140 background values. Annual per-constituent alpha = 0.004341. Individual comparison alpha = 0.00009888 (1 of 2). Comparing 22 points to limit.

Constituent: Calcium Analysis Run 12/9/2022 10:43 AM View: AIII

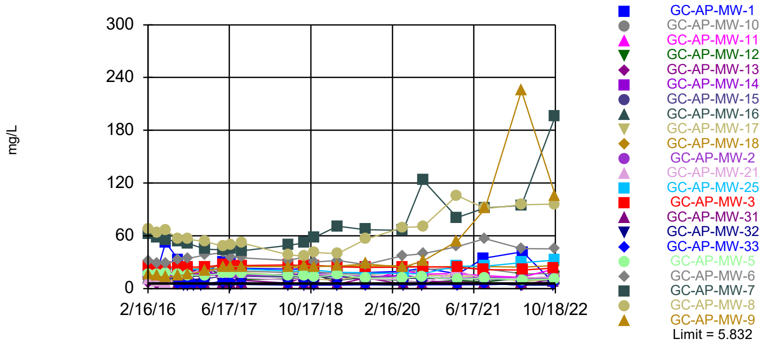
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=0.7493, Std. Dev.=0.4779, n=140, 3.571% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 10.57, critical = 14.07. Kappa = 2.122 (c=7, w=22, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000342. Comparing 22 points to limit.

Constituent: Chloride Analysis Run 12/9/2022 10:43 AM View: AIII

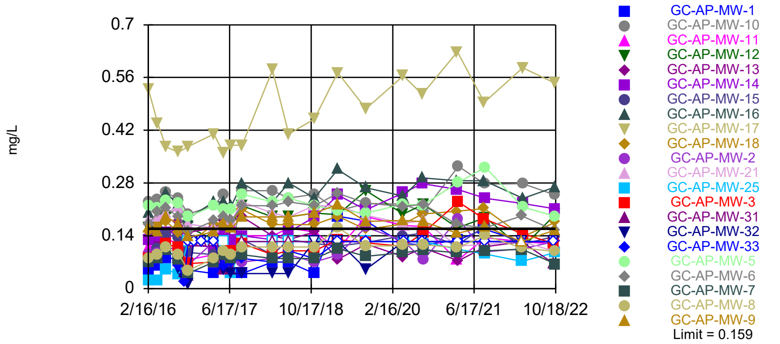
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-10, GC-AP-MW-12, GC-AP-MW-14, GC-AP-MW-16, GC-AP-MW-17, GC-AP-MW-18, GC-AP-MW-5

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 134 background values. 70.15% NDs. Annual per-constituent alpha = 0.004798. Individual comparison alpha = 0.0001093 (1 of 2). Comparing 22 points to limit.

Constituent: Fluoride Analysis Run 12/9/2022 10:43 AM View: AIII

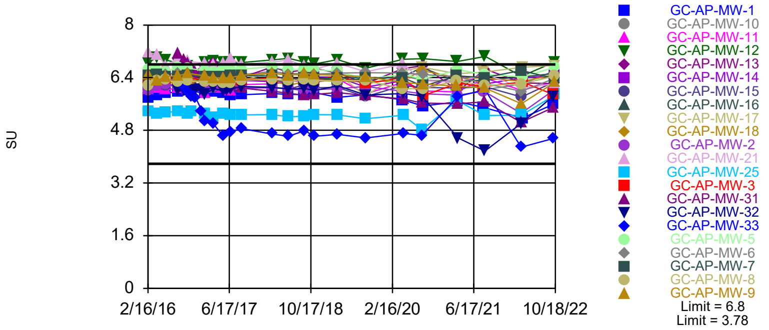
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Exceeds Limits: GC-AP-MW-12

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 164 background values. Annual per-constituent alpha = 0.006407. Individual comparison alpha = 0.0001459 (1 of 2). Comparing 22 points to limit.

Constituent: pH Analysis Run 12/9/2022 10:43 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

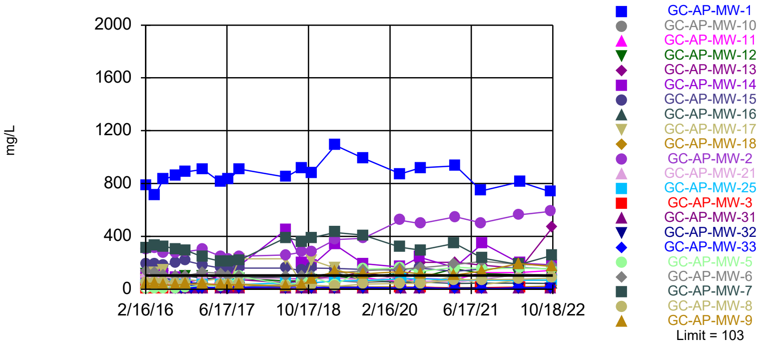
Sanitas™ v.9.6.36 . UG

Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15, GC-AP-MW-2,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 140 background values. 21.43% NDs. Annual per-constituent alpha = 0.004341. Individual comparison alpha = 0.00009888 (1 of 2). Comparing 22 points to limit.

Constituent: Sulfate Analysis Run 12/9/2022 10:43 AM View: AIII

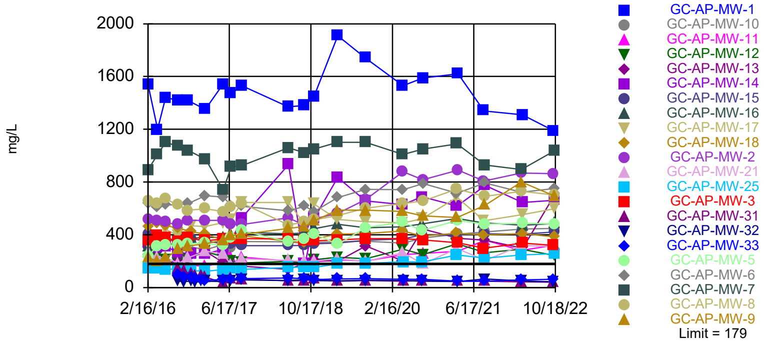
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-10, GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-13, GC-AP-MW-14, GC-AP-MW-15,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 140 background values. 15.71% NDs. Annual per-constituent alpha = 0.004341. Individual comparison alpha = 0.00009888 (1 of 2). Comparing 22 points to limit.

Constituent: TDS Analysis Run 12/9/2022 10:43 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
2/16/2016	0.286	0.739	0.26	1.44	1.54	0.273	0.412		
2/17/2016								0.0288 (J)	0.0271 (J)
4/12/2016		0.733	0.26					0.0293 (J)	<0.1015
4/13/2016	0.26			0.373	1.56	0.276	0.376		
5/31/2016		0.603	0.318	1.26		0.291			
6/1/2016	0.283				1.49		0.338	0.0279 (J)	<0.1015
8/15/2016								0.0332 (J)	
8/16/2016	0.292		0.322	1.34		0.268			<0.1015
8/17/2016		0.509			1.57		0.412		
9/19/2016									
9/20/2016									
10/11/2016								0.0328 (J)	0.024 (J)
10/12/2016	0.254	0.569	0.244	1.34	1.65	0.252	0.46		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								0.0262 (J)	0.0333 (J)
1/25/2017	0.133	0.671	0.188	1.38	1.89	0.167	0.586		
1/26/2017									
5/9/2017	0.304	0.622	0.281			0.32		0.0298 (J)	<0.1015
5/10/2017				1.23	1.94		0.661		
6/27/2017									<0.1015
6/28/2017	0.243	0.695	0.153	1.05	1.72	0.231	0.673	0.0226 (J)	
8/29/2017	0.249	1	0.112	1.17	1.63	0.191	0.723		<0.1015
8/30/2017								<0.1015	
6/4/2018								0.0296 (J)	
6/5/2018				1.31	1.73		0.954		<0.1015
6/6/2018	0.245	1.01	0.244			0.26			
11/5/2018	0.151		0.104			0.127			
11/6/2018								0.0268 (J)	
11/7/2018		0.908		1.26	1.8		1.11		<0.1015
3/26/2019	0.0834 (J)		0.213		1.81	0.111	1.14		<0.1015
3/27/2019		1.33		1.11				0.0316 (J)	
9/9/2019								0.035 (J)	
9/10/2019	0.16	1.49		1.27	1.82	0.153	1.23		<0.1015
9/11/2019			0.535						
4/20/2020			0.642					<0.1015	
4/21/2020	0.586	1.55			1.89	0.872	1.27		<0.1015
4/22/2020				1.23					
8/11/2020		1.44							
8/12/2020									<0.1015
8/17/2020								0.0636 (J)	
8/18/2020	0.211		0.501	1.37		0.748	1.24		
8/19/2020					1.94				
3/9/2021		1.81			1.57		1.12		
3/10/2021	0.528					0.389			<0.1015
3/15/2021			0.523	1.79					
3/16/2021								0.0445 (J)	
8/17/2021								0.0518 (J)	
8/18/2021									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-21	GC-AP-MW-14	GC-AP-MW-13	GC-AP-MW-10	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-9	GC-AP-MW-3	GC-AP-MW-23 (bg)
8/23/2021									
8/24/2021				1.93	1.23		1.14		<0.1015
8/25/2021	0.288	1.33	0.438			0.393			
3/28/2022									<0.1015
3/29/2022					1.08	0.416	0.71		
3/30/2022	0.696								
4/4/2022		1.89		1.92					
4/5/2022								0.0453 (J)	
4/6/2022			0.26						
10/5/2022								0.0404 (J)	
10/17/2022	0.59		0.499			0.272			<0.1015
10/18/2022		1.91		2.13	0.815		1.15		
10/19/2022									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
2/16/2016									
2/17/2016	0.581	0.146	1.94	1.66	1.47	0.503	0.454	0.478	0.0922 (J)
4/12/2016			2.03				0.444	0.467	0.0935 (J)
4/13/2016	0.61	0.125		1.64	1.48	0.478			
5/31/2016	0.615					0.452	0.424	0.443	
6/1/2016		0.114	1.74	1.66	1.22				0.0826 (J)
8/15/2016		0.128	1.66	1.83	1.31				
8/16/2016	0.554						0.438		
8/17/2016						0.492		0.477	0.092 (J)
9/19/2016									
9/20/2016									
10/11/2016		0.129					0.456	0.489	0.0976 (J)
10/12/2016	0.537		1.77	2.12	1.37	0.487			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017		0.124	1.49	1.94	1.38		0.458	0.475	0.0877 (J)
1/25/2017	0.562					0.529			
1/26/2017									
5/9/2017	0.528	0.121						0.479	0.0953 (J)
5/10/2017			1.65	1.99	1.41	0.533	0.486		
6/27/2017			1.66	2.18	1.43		0.454		
6/28/2017	0.313	0.111				0.501		0.448	0.0835 (J)
8/29/2017	0.241					0.51			0.0914 (J)
8/30/2017		0.0915 (J)	1.53	1.71	1.36		0.441	0.407	
6/4/2018		0.134							
6/5/2018	0.311		1.36	1.76	1.36	0.605	0.543	0.489	
6/6/2018									0.102
11/5/2018	0.262								
11/6/2018		0.131	1.48	1.74	1.47		0.614	0.508	0.0995 (J)
11/7/2018						0.677			
3/26/2019			1.63	1.74	1.38	0.727	0.697		
3/27/2019	0.298	0.138						0.502	0.113
9/9/2019		0.157	1.73	2.33					
9/10/2019	0.141				1.69	0.764	0.73		0.105
9/11/2019								0.595	
4/20/2020					1.83		0.791		
4/21/2020		0.14	1.51	1.97		0.793		0.72	
4/22/2020	0.447								0.104
8/11/2020				2.03	1.93				0.11
8/12/2020			1.53				0.813	0.695	
8/17/2020		0.152							
8/18/2020	0.358								
8/19/2020						0.561			
3/9/2021			1.52	2.45	1.94	0.397			
3/10/2021	0.502						0.825		0.146
3/15/2021									
3/16/2021		0.134						0.694	
8/17/2021		0.131	1.45	2.18	1.98				
8/18/2021									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-11	GC-AP-MW-2	GC-AP-MW-18	GC-AP-MW-17	GC-AP-MW-16	GC-AP-MW-7	GC-AP-MW-15	GC-AP-MW-5	GC-AP-MW-25
8/23/2021								0.628	
8/24/2021						0.216			0.115
8/25/2021	0.601						0.83		
3/28/2022		0.125							
3/29/2022						0.0842 (J)	0.848		0.122
3/30/2022	0.472								
4/4/2022				2.32				0.615	
4/5/2022									
4/6/2022			1.6		2.17				
10/5/2022		0.132							
10/17/2022	0.63		1.46					0.599	
10/18/2022				2.28	2.14	0.0589 (J)	0.874		0.124
10/19/2022									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
2/16/2016									
2/17/2016	2.12	<0.1015	0.219						
4/12/2016	2.06	<0.1015							
4/13/2016			0.211						
5/31/2016	1.97								
6/1/2016		<0.1015	0.2						
8/15/2016			0.211						
8/16/2016		<0.1015		0.0268 (J)	<0.1015	<0.1015	<0.1015	<0.1015	
8/17/2016	2.01								<0.1015
9/19/2016				0.0225 (J)	<0.1015	<0.1015			
9/20/2016							<0.1015	<0.1015	<0.1015
10/11/2016	1.91	<0.1015	0.23	0.0304 (J)	<0.1015	<0.1015	<0.1015	<0.1015	
10/12/2016									0.02 (J)
11/14/2016				0.0355 (J)	<0.1015	<0.1015			
11/15/2016							0.0229 (J)	<0.1015	<0.1015
1/3/2017				0.0304 (J)	<0.1015	<0.1015			
1/4/2017							<0.1015	<0.1015	<0.1015
1/23/2017								<0.1015	0.0287 (J)
1/24/2017	1.62	<0.1015	0.218		<0.1015	0.0282 (J)			
1/25/2017				<0.1015					
1/26/2017							<0.1015		
5/9/2017			0.235				<0.1015	<0.1015	<0.1015
5/10/2017	1.62	<0.1015		<0.1015	<0.1015	<0.1015			
6/27/2017			0.206	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
6/28/2017	1.71	<0.1015							
8/29/2017	1.7	<0.1015							<0.1015
8/30/2017			0.138	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	
6/4/2018			0.242						
6/5/2018	1.56	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
6/6/2018									
11/5/2018					<0.1015				
11/6/2018			0.247	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015
11/7/2018	1.6	<0.1015							
3/26/2019	1.63	<0.1015					<0.1015	<0.1015	<0.1015
3/27/2019			0.488	<0.1015	<0.1015	<0.1015			
9/9/2019									
9/10/2019	1.83	<0.1015	0.398						
9/11/2019				<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
4/20/2020									
4/21/2020	1.77		0.347				<0.1015	<0.1015	<0.1015
4/22/2020		<0.1015		<0.1015	<0.1015	<0.1015			
8/11/2020						<0.1015			
8/12/2020		<0.1015		<0.1015	<0.1015				
8/17/2020			0.496						
8/18/2020							<0.1015	<0.1015	<0.1015
8/19/2020	1.86								
3/9/2021	1.49								
3/10/2021		<0.1015							
3/15/2021				<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
3/16/2021			0.313						
8/17/2021			0.281						
8/18/2021							<0.1015	<0.1015	<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-27 (bg)
8/23/2021				<0.1015	<0.1015	<0.1015			
8/24/2021	1.36	<0.1015							
8/25/2021									
3/28/2022				<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
3/29/2022	1.39								
3/30/2022									
4/4/2022		<0.1015	0.269						
4/5/2022									
4/6/2022									
10/5/2022			0.202	<0.1015	<0.1015	<0.1015			
10/17/2022		<0.1015							
10/18/2022	1.16								
10/19/2022							<0.1015	<0.1015	<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	<0.1015	<0.1015
9/19/2016		
9/20/2016	<0.1015	<0.1015
10/11/2016		
10/12/2016	<0.1015	<0.1015
11/14/2016		
11/15/2016	<0.1015	<0.1015
1/3/2017		
1/4/2017	<0.1015	<0.1015
1/23/2017		0.0217 (J)
1/24/2017	0.0331 (J)	
1/25/2017		
1/26/2017		
5/9/2017	<0.1015	<0.1015
5/10/2017		
6/27/2017	<0.1015	<0.1015
6/28/2017		
8/29/2017		<0.1015
8/30/2017	<0.1015	
6/4/2018		
6/5/2018	<0.1015	<0.1015
6/6/2018		
11/5/2018		
11/6/2018	<0.1015	<0.1015
11/7/2018		
3/26/2019	<0.1015	<0.1015
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	<0.1015	<0.1015
4/20/2020		
4/21/2020	<0.1015	<0.1015
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	<0.1015	<0.1015
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	<0.1015	<0.1015
3/16/2021		
8/17/2021		
8/18/2021	<0.1015	<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-28 (bg)	GC-AP-MW-26 (bg)
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	<0.1015	
3/29/2022		
3/30/2022		
4/4/2022		<0.1015
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	<0.1015	<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
2/16/2016	34.6	75.9	44.4	76.3	33.9	29.8	40.4		
2/17/2016								204	47.7
4/12/2016			43.2			23.3			44.4
4/13/2016	32.2	74.1		30.5	32.5		32.2	152	
5/31/2016	28.8		43	65.9		25.9			45.3
6/1/2016		76.4			33.9		29.3	183	
8/15/2016								197	
8/16/2016	24			65.6		25.5	25.4		49.4
8/17/2016		74.2	35.9		50.3				
9/19/2016									
9/20/2016									
10/11/2016								186	52.7
10/12/2016	27.8	75.7	31.1	63.4	53.3	29.5	30.7		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								193	49.4
1/25/2017	33.7	76.1	42.7	64.2	59.9	33.6	36.8		
1/26/2017									
5/9/2017	35.5		48.1			30.4	36.1	184	
5/10/2017		78.6		62.6	66.5				47.4
6/27/2017								184	44.9
6/28/2017	28	76.4	55	60.8	69.8	26	26.9		
8/29/2017	26.4	74.1	83.6	61.4	72	22.3	29.4		
8/30/2017								182	44.4
6/4/2018								157	
6/5/2018		58		65.5	95.1				45.1
6/6/2018	30.1		167			23.7	30.2		
9/10/2018							28.8	219	
9/11/2018	27.4	64.9		66.1	122	26.8			48.5
9/12/2018			109						
11/5/2018	28.8					29.4	29.7		
11/6/2018								186	49.2
11/7/2018		68.1	105	68.5	107				
3/26/2019	33.7	72			132	34.1	32.4		54
3/27/2019			162	71.8				73.8	
9/9/2019									
9/10/2019	30.5	91	125	69.3	116		28.4	147	57.2
9/11/2019						53.9			
4/20/2020						40.3			61
4/21/2020	51	84.8	113		111		43.1	90.5	
4/22/2020				62.9					
8/11/2020			118						
8/12/2020									72.2
8/17/2020								81.5	
8/18/2020	42.9			74.4	109	95.3	25.5		
8/19/2020		98.6							
3/9/2021		100	115		82.1				
3/10/2021	55.1						44.9		67.4
3/15/2021				73.8		68.9			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
3/16/2021								109	
8/17/2021								103	
8/18/2021									
8/23/2021									
8/24/2021		86.4		83.4	93.1				
8/25/2021	45.2		134			74.2	31		74.8
3/28/2022									
3/29/2022	52	92.8			72.1				75.7
3/30/2022							51		
4/4/2022			117	93.7				106	
4/5/2022									
4/6/2022						55.5			
10/5/2022								113	
10/17/2022	49.799999					158	57		
10/18/2022		93.800003	125	105	111				89.400002
10/19/2022									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
2/16/2016									
2/17/2016	30.7	89.6	18.6	59.8	106	57	75	128	38.7
4/12/2016		96.2		56.1	95.2			115	42.7
4/13/2016	39.5		17.8			62.5	70.2		
5/31/2016			17.7	56.6				118	
6/1/2016	47.7	90.2			86.1	54.4	71.2		41.8
8/15/2016	45.6	84.4			89.7	56.2	72.2		
8/16/2016			18.4						40.9
8/17/2016				61				120	
9/19/2016									
9/20/2016									
10/11/2016				61.3	90.6		73.8	119	38.1
10/12/2016	57.6	82.9	17.3			56.6			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	69.4	76.4		61	94.2	59.1	72.2	110	27.7
1/25/2017			16.6						
1/26/2017									
5/9/2017			18	61.7	90.3		66.4		29.3
5/10/2017	66.2	77.4				62.5		104	
6/27/2017	63.8	75.4				63.6			28.6
6/28/2017			22.6	66.1	80.7		65.4	98	
8/29/2017			23.9					108	32.3
8/30/2017	75.1	78		78.9	84	65.7	67.8		
6/4/2018					98.8		68.3		
6/5/2018	77.4	66.3	25.7	64.8		66.8		121	34.5
6/6/2018									
9/10/2018			27.2				73.9		
9/11/2018				72.2				119	32
9/12/2018	58.9	67.8			109	76.3			
11/5/2018			24.1						
11/6/2018	81.6	72.7		78.9	110	77.4	75.1		
11/7/2018								124	30.3
3/26/2019	84.7	91.5				90		148	31.3
3/27/2019			31	69.1	111		96.1		
9/9/2019	66.4	83.2			98.5		111		
9/10/2019			27.7			86.3		164	30.7
9/11/2019				90.8					
4/20/2020					91.2	90.8			
4/21/2020	74.4	81.8		93			133	142	30.8
4/22/2020			36.7						
8/11/2020	73					101			
8/12/2020		85.9		92.2					28
8/17/2020					78.9		156		
8/18/2020			37.6						
8/19/2020								162	
3/9/2021	118	82				101		119	
3/10/2021			39.9						26.6
3/15/2021									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
3/16/2021				99.7	66.6		145		
8/17/2021	78.3	77.4			55.4	103	143		
8/18/2021									
8/23/2021				87.6					
8/24/2021								129	26.3
8/25/2021			57.6						
3/28/2022							157		26
3/29/2022								128	
3/30/2022			39.6						
4/4/2022	104			98.8					
4/5/2022					67.4				
4/6/2022		96.1				101			
10/5/2022					54.5		179		
10/17/2022		99.900002	60.599998	119					23.1
10/18/2022	150					128		159	
10/19/2022									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-29 (bg)	GC-AP-MW-31	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-26 (bg)
2/16/2016									
2/17/2016	158	6.54	10.2						
4/12/2016		6.15	10						
4/13/2016	151								
5/31/2016	158								
6/1/2016		5.7	9.87						
8/15/2016									
8/16/2016		6.77		2.02	39.5	5.54	9.33	1.24	
8/17/2016	152		8.88						5.88
9/19/2016					34.5	3.01	9.26		
9/20/2016				1.22				1.11	5.95
10/11/2016		8.84	9.22	1.48	32.4	2.74	9.31	1.22	
10/12/2016	150								6.1
11/14/2016					26.5	2.47	9.17		
11/15/2016				1.36				1.34	6.28
1/3/2017					22.6	2.94	9.66		
1/4/2017				1.11				2.39	4.97
1/23/2017								1.83	5.17
1/24/2017		12.8	8.72		19.5		9.67		
1/25/2017	137					2.91			
1/26/2017				1.03					
5/9/2017			8.56	0.289 (J)				0.823	15.7
5/10/2017	111	12.4			15.7	2.27	9.81		
6/27/2017				0.292 (J)	13.8	2.2	9.88	0.956	14.2
6/28/2017	108	17.9	7.16						
8/29/2017	113	19	8.32						11.1
8/30/2017				0.336 (J)	11.1	2.26	10.3	1.04	
6/4/2018									
6/5/2018	186	30		0.2 (J)	9.12	2.97	11.4	1.18	3.93
6/6/2018			9.05						
9/10/2018									
9/11/2018	209	28.7		0.171 (J)	7.5	2.6	10.5	1.5	3.76
9/12/2018			8.98						
11/5/2018							10.5		
11/6/2018			9.21	0.193 (J)	7.39	2.42		1.64	4.81
11/7/2018	175	30.7							
3/26/2019	193	32.3		0.223 (J)				1.33	3.18
3/27/2019			9.77		7.65	2.75	11.6		
9/9/2019									
9/10/2019	188	32.8	9.28						
9/11/2019				0.158 (J)	6.96	2.17	9.95	0.925	3.98
4/20/2020									
4/21/2020	155			0.287 (J)				0.864	3.83
4/22/2020		31.4	11.3		5.92	3.15	9.87		
8/11/2020			10.7		7.46				
8/12/2020		35.8				1.78	9.48		
8/17/2020									
8/18/2020				0.231 (J)				0.926	4.58
8/19/2020	147								
3/9/2021	160								
3/10/2021		42.8	29.3						
3/15/2021				0.239 (J)	5.9	9.77	2.02	0.646	4.67

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-29 (bg)	GC-AP-MW-31	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-26 (bg)
3/16/2021									
8/17/2021									
8/18/2021				0.283 (J)				0.716	4.84
8/23/2021					7.11	9.48	2.16		
8/24/2021	123	36.5	25.9						
8/25/2021									
3/28/2022				0.172 (J)	5.95	2.21	9.61	0.542	
3/29/2022	126		31.9						
3/30/2022									
4/4/2022		37							6.7
4/5/2022									
4/6/2022									
10/5/2022					6.69	2.01	9.18		
10/17/2022		31.6							
10/18/2022	158		38.200001						
10/19/2022				0.158 (J)				0.602	7.91

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	1.1	7.74
9/19/2016		
9/20/2016	0.771	2.43
10/11/2016		
10/12/2016	0.711	2.46
11/14/2016		
11/15/2016	0.641	2.28
1/3/2017		
1/4/2017	0.797	2.7
1/23/2017	0.655	
1/24/2017		4.19
1/25/2017		
1/26/2017		
5/9/2017	0.538	3.28
5/10/2017		
6/27/2017	0.413 (J)	3.76
6/28/2017		
8/29/2017	0.504	
8/30/2017		2.31
6/4/2018		
6/5/2018	0.339 (J)	2.76
6/6/2018		
9/10/2018		
9/11/2018	0.776	2.04
9/12/2018		
11/5/2018		
11/6/2018	0.746	2
11/7/2018		
3/26/2019	0.526	2.13
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	0.638	1.98
4/20/2020		
4/21/2020	1.15	2.41
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	0.884	2.23
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	0.745	1.73

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
3/16/2021		
8/17/2021		
8/18/2021	1.11	1.94
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	1.37	1.94
3/29/2022		
3/30/2022		
4/4/2022		
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	1.02	1.83

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
2/16/2016	10.8	67.9	16.4	18.4	15.6	6.52	9.95		
2/17/2016								16	11.8
4/12/2016			15.9			4.47			12.6
4/13/2016	8.2	64.1		19	14.3		7.33	21.5	
5/31/2016	7.74		13.6	19.2		10.8			12.9
6/1/2016		66.3			12.6		6.97	52.5	
8/15/2016								33.3	
8/16/2016	12.5			17.7		16.6	12		10.2
8/17/2016		56.7	12.8		14.4				
9/19/2016									
9/20/2016									
10/11/2016								22.2	10.2
10/12/2016	15.7	56.1	16.3	16.8	16.4	18.5	15.4		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								18.4	11.2
1/25/2017	24.4	53.6	16.4	18.6	20	22	24.7		
1/26/2017									
5/9/2017	15		19			10	17	30	
5/10/2017		48		22	24				14
6/27/2017								29	14
6/28/2017	12	49	17	20	25	9.4	11		
8/29/2017	10	52	17	20	25	9.3	12		
8/30/2017								23	14
6/4/2018								22	
6/5/2018		38		18	25				13
6/6/2018	11		14			6.1	9.7		
9/10/2018							12	22	
9/11/2018	12	37		19	26	14			14
9/12/2018			14						
11/5/2018	17					18	16		
11/6/2018								17	14
11/7/2018		41	15	19	25				
3/26/2019	14.5	39.7			25.3	4.7	17.2		13
3/27/2019			14.9	17.1				18	
9/9/2019									
9/10/2019	10.9	56.1	13.5	16.5	28		11	18.1	12.8
9/11/2019						12.3			
4/20/2020						4.7			12
4/21/2020	9.49	69.5	14.8		24.2		10.1	19.5	
4/22/2020				17.6					
8/11/2020			12.7						
8/12/2020									11.4
8/17/2020								23.2	
8/18/2020	6.46			21.3	31.4	8.24	5.54		
8/19/2020		70.5							
3/9/2021		106	10.4		53.9				
3/10/2021	9.3						20.4		11.9
3/15/2021				23.2		7.68			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
3/16/2021								16.6	
8/17/2021								34.4	
8/18/2021									
8/23/2021									
8/24/2021		90.8		22.4	90.7				
8/25/2021	7.43		11.5			6.37	10.4		10.3
3/28/2022									
3/29/2022	11.8	95.4			225				10.3
3/30/2022							12.1		
4/4/2022			9.875 (D)	16.8 (D)				41.75 (D)	
4/5/2022									
4/6/2022						3.71			
10/5/2022								7.1	
10/17/2022	12.9					12	13		
10/18/2022		96.099998	10.4	17.200001	106				8.54
10/19/2022									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
2/16/2016									
2/17/2016	14.6	22.3	16.6	16.4	25.2	12.5	14.7	31.8	1.54
4/12/2016		22.1		16.6	24.6			28.9	1.51
4/13/2016	14.9		17			13.6	14.3		
5/31/2016			19	16.8				28.7	
6/1/2016	15.9	22			24.5	14.2	14.6		1.46
8/15/2016	19.5	22.4			24.2	13.6	14.7		
8/16/2016			17						1.5
8/17/2016				16.4				32.2	
9/19/2016									
9/20/2016									
10/11/2016				15.2	24.4		14.8	34.2	1.52
10/12/2016	18.5	22.1	16.2			13.8			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	19	23.2		15.1	24.6	14.2	15	38.1	1.38
1/25/2017			18						
1/26/2017									
5/9/2017			23	17	27		16		2.4
5/10/2017	24	26				18		41	
6/27/2017	24	25				17			2.1
6/28/2017			24	17	26		15	36	
8/29/2017			15					35	2.4
8/30/2017	18	25		17	26	16	15		
6/4/2018					27		16		
6/5/2018	15	25	16	15		15		32	1.7 (J)
6/6/2018									
9/10/2018			13				17		
9/11/2018				14				36	1.5 (J)
9/12/2018	23	23			26	17			
11/5/2018			13						
11/6/2018	11	26		13	26	15	17		
11/7/2018								30	1.4 (J)
3/26/2019	9.52	25.4				9.27		31.9	1.23
3/27/2019			14.2	16.1	24.8		14.8		
9/9/2019	15.4	25.6			23.8		14		
9/10/2019			8.88			12.7		27.3	1.38
9/11/2019				11.6					
4/20/2020					24.5	12.1			
4/21/2020	11.1	26.3		12.3			12.3	37.4	1.08
4/22/2020			20.5						
8/11/2020	15.4					12.1			
8/12/2020		24.5		13					1.28
8/17/2020					24.6		13.1		
8/18/2020			16.2						
8/19/2020								39.6	
3/9/2021	14.3	25.2				12		47.5	
3/10/2021			17.1						1.3
3/15/2021									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
3/16/2021				10.9	24.4		11.6		
8/17/2021	14.3	25.1			21.3	10.4	12.7		
8/18/2021									
8/23/2021				11.6					
8/24/2021								56.6	1.19
8/25/2021			14.4						
3/28/2022							11.5		1.09
3/29/2022								45.3	
3/30/2022			12.7						
4/4/2022	8.06 (D)			9.63					
4/5/2022					21.1 (D)				
4/6/2022		24.35 (D)				11.8 (D)			
10/5/2022					23.1		12.3		
10/17/2022		26	22.4	10.8					0.973 (J)
10/18/2022	10.7					10.1		45	
10/19/2022									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-29 (bg)	GC-AP-MW-31	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-26 (bg)
2/16/2016									
2/17/2016	62.7	3.3	22.9						
4/12/2016		3.25	22.2						
4/13/2016	57.8								
5/31/2016	55.6								
6/1/2016		3.55	22.3						
8/15/2016									
8/16/2016		3.45		2.21	5.32	4.88	4.24	2.54	
8/17/2016	53.3		22.1						2.44
9/19/2016					5.29	4.45	4.13		
9/20/2016				2.12				2.51	2.54
10/11/2016		3.78	21.8	2.24	5.26	4.36	4.07	2.34	
10/12/2016	51.2								2.67
11/14/2016					5.28	4.42	4.08		
11/15/2016				6.65				2.1	2.94
1/3/2017					5.18	5.18	4.06		
1/4/2017				2.15				2.44	2.92
1/23/2017								2.37	3.21
1/24/2017		4.61	21.8		5.41		4.4		
1/25/2017	44.8					5.66			
1/26/2017				2.31					
5/9/2017			23	2.3				2.8	2.5
5/10/2017	44	5.9			5.8	8	4.4		
6/27/2017				2.1	5.4	7.2	4	2.1	3
6/28/2017	45	5.7	22						
8/29/2017	43	6.8	22						3.6
8/30/2017				2.8	6	6.9	4.8	3	
6/4/2018									
6/5/2018	49	7.9		1.8 (J)	5.2	4.2	3.8	2.3	2.2
6/6/2018			20						
9/10/2018									
9/11/2018	52	6.1		<2	5.5	4.2	4.1	1.5 (J)	1.5 (J)
9/12/2018			20						
11/5/2018							3.9		
11/6/2018			21	<2	5.1	4.5		1.4 (J)	2.5
11/7/2018	58	5.2							
3/26/2019	71	6.92		1.07				2.42	2
3/27/2019			18.4		5.26	4.33	3.9		
9/9/2019									
9/10/2019	67	4.39	17.7						
9/11/2019				1.19	5.31	4.16	4.21	3.72	2.34
4/20/2020									
4/21/2020	66.2			1.09				3.89	2.04
4/22/2020		2.75	17.1		5.37	5.66	4		
8/11/2020			16.7		5.45				
8/12/2020		4.14				4.46	4.17		
8/17/2020									
8/18/2020				1.05				3.8	2.16
8/19/2020	123								
3/9/2021	80.7								
3/10/2021		3.51	25.3						
3/15/2021				1.25	5.47	4.18	5.57	4.38	2.83

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-29 (bg)	GC-AP-MW-31	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-26 (bg)
3/16/2021									
8/17/2021									
8/18/2021				1.42				4.46	2.97
8/23/2021					6.37	4.33	5.61		
8/24/2021	91.7	3.42	25.3						
8/25/2021									
3/28/2022				1.24	6	5.47	3.98	4.12	
3/29/2022	94.7		29.6						
3/30/2022									
4/4/2022		3.09							2.93
4/5/2022									
4/6/2022									
10/5/2022					7.1	5.32	4.04		
10/17/2022		3.19							
10/18/2022	196		32.299999						
10/19/2022				1.08				3.7	2.84

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	1.78	1.77
9/19/2016		
9/20/2016	1.61	1.56
10/11/2016		
10/12/2016	1.51	1.54
11/14/2016		
11/15/2016	1.5	1.53
1/3/2017		
1/4/2017	1.53	1.58
1/23/2017	1.62	
1/24/2017		1.71
1/25/2017		
1/26/2017		
5/9/2017	2.2	2.1
5/10/2017		
6/27/2017	1.9 (J)	2
6/28/2017		
8/29/2017	2	
8/30/2017		1.5 (J)
6/4/2018		
6/5/2018	1.9 (J)	1.2 (J)
6/6/2018		
9/10/2018		
9/11/2018	<2	<2
9/12/2018		
11/5/2018		
11/6/2018	1.9 (J)	<2
11/7/2018		
3/26/2019	2.18	1.2
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	1.7	1.26
4/20/2020		
4/21/2020	1.9	1.32
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	1.63	1.38
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	2.46	1.27

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
3/16/2021		
8/17/2021		
8/18/2021	2.45	1.42
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	1.96	1.35
3/29/2022		
3/30/2022		
4/4/2022		
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	2.01	1.23

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-14	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-9	GC-AP-MW-10	GC-AP-MW-21	GC-AP-MW-16	GC-AP-MW-25
2/16/2016	0.13 (J)	0.08 (J)	0.16 (J)	0.14 (J)	0.16 (J)	0.23 (J)	0.18 (J)		
2/17/2016								0.2 (J)	0.02 (J)
4/12/2016	0.137 (J)			0.119 (J)					0.021 (J)
4/13/2016		0.088 (J)	0.163 (J)		0.15 (J)	0.236 (J)	0.191 (J)	0.173 (J)	
5/31/2016	0.149 (J)		0.19 (J)	0.132 (J)		0.255 (J)			
6/1/2016		0.109 (J)			0.19 (J)		0.201 (J)	0.253 (J)	0.051 (J)
8/15/2016								0.224 (J)	
8/16/2016			0.219 (J)	0.177 (J)		0.238 (J)	0.218 (J)		
8/17/2016	0.147 (J)	0.089 (J)			0.171 (J)				0.037 (J)
9/19/2016									
9/20/2016									
10/11/2016									<0.125
10/12/2016	0.115 (J)	0.048 (J)	0.163 (J)	0.149 (J)	0.137 (J)	0.198 (J)	0.171 (J)	0.187 (J)	
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
3/13/2017									
3/14/2017	0.11							0.23	<0.125
3/15/2017		0.08 (J)	0.13	0.16	0.15	0.22	0.16		
5/9/2017	0.14		0.15	0.18			0.17		<0.125
5/10/2017		0.1			0.17	0.25		0.23	
6/27/2017								0.22	
6/28/2017	0.13	0.09 (J)	0.17	0.18	0.16	0.09 (J)	0.18		0.04 (J)
8/29/2017	0.14	0.11	0.22	0.19	0.19	0.26	0.23		<0.125
8/30/2017								0.28	
2/27/2018	0.13	0.11			0.19	0.26			
2/28/2018			0.19	0.14			0.2	0.23	<0.125
6/4/2018									
6/5/2018		0.11			0.19	0.24		0.28	
6/6/2018	0.15		0.19	0.13			0.19		<0.125
11/5/2018			0.2	0.15			0.22		
11/6/2018								0.24	<0.125
11/7/2018	0.19	0.11			0.2	0.25			
3/26/2019		0.162	0.196	0.0775 (J)	0.223		0.219	0.316	
3/27/2019	0.248					0.206			<0.125
9/9/2019									
9/10/2019	0.209	0.113	0.26		0.178	0.226	0.194	0.267	<0.125
9/11/2019				0.118					
4/20/2020				0.0844 (J)				0.245	
4/21/2020	0.254	0.114	0.198		0.181		0.173		
4/22/2020						0.224			<0.125
8/11/2020	0.278							0.294	<0.125
8/12/2020									
8/17/2020									
8/18/2020			0.223	0.108	0.177	0.203	0.18		
8/19/2020		0.116							
3/9/2021	0.263	0.109			0.147			0.286	
3/10/2021			0.161				0.113		0.104
3/15/2021				0.0737 (J)		0.324			
3/16/2021									
8/17/2021								0.286	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-14	GC-AP-MW-8	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-9	GC-AP-MW-10	GC-AP-MW-21	GC-AP-MW-16	GC-AP-MW-25
8/18/2021									
8/23/2021									
8/24/2021		0.141			0.164	0.277			0.0914 (J)
8/25/2021	0.239		0.188	0.111			0.117		
3/28/2022									
3/29/2022		0.108 (J)	0.107 (J)		<0.125				0.0724 (J)
3/30/2022							<0.125		
4/4/2022	0.226 (D)					0.2785 (D)			
4/5/2022									
4/6/2022				<0.125				0.2395 (D)	
10/5/2022									
10/17/2022			0.197	<0.125			0.0988 (J)		
10/18/2022	0.211	0.0981 (J)			0.156	0.248		0.27	0.0955 (J)
10/19/2022									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-7	GC-AP-MW-3	GC-AP-MW-23 (bg)	GC-AP-MW-17	GC-AP-MW-5	GC-AP-MW-11	GC-AP-MW-6	GC-AP-MW-2
2/16/2016									
2/17/2016	0.09 (J)	0.07 (J)	0.08 (J)	0.08 (J)	0.53	0.22 (J)	0.11 (J)	0.17 (J)	0.09 (J)
4/12/2016	0.107 (J)		0.083 (J)	0.077 (J)		0.214 (J)		0.203 (J)	
4/13/2016		0.081 (J)			0.437		0.119 (J)		0.092 (J)
5/31/2016	0.145 (J)	0.103 (J)				0.232 (J)	0.134 (J)	0.212 (J)	
6/1/2016			0.118 (J)	0.101 (J)	0.376				0.108 (J)
8/15/2016			0.109 (J)		0.362				0.105 (J)
8/16/2016	0.135 (J)			0.093 (J)			0.116 (J)		
8/17/2016		0.078 (J)				0.225 (J)		0.19 (J)	
9/19/2016									
9/20/2016									
10/11/2016	0.096 (J)		0.066 (J)	0.059 (J)		0.19 (J)		0.15 (J)	0.062 (J)
10/12/2016		0.041 (J)			0.377		0.076 (J)		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
3/13/2017									
3/14/2017	0.09 (J)	0.07 (J)	0.07 (J)	0.07 (J)	0.41	0.22	0.09 (J)	0.18	<0.125
3/15/2017									
5/9/2017			0.09 (J)	0.08 (J)		0.21	0.11		0.07 (J)
5/10/2017	0.11	0.09 (J)			0.36			0.19	
6/27/2017	0.1			0.08 (J)	0.38				
6/28/2017		0.08 (J)	0.1			0.21	0.17	0.18	0.09 (J)
8/29/2017		0.09 (J)		0.1			0.14	0.22	
8/30/2017	0.13		0.12		0.38	0.25			0.07 (J)
2/27/2018		0.08 (J)	0.09 (J)	0.08 (J)		0.23	0.14	0.22	0.08 (J)
2/28/2018	0.09 (J)				0.58				
6/4/2018			0.1						0.09 (J)
6/5/2018	0.13	0.08 (J)		0.09 (J)	0.41	0.24	0.16	0.23	
6/6/2018									
11/5/2018							0.15		
11/6/2018	0.12		0.1		0.45	0.22			0.07 (J)
11/7/2018		0.08 (J)		0.08 (J)				0.22	
3/26/2019	0.113	0.106		0.123	0.573			0.253	
3/27/2019			0.13			0.208	0.104		0.089 (J)
9/9/2019			0.121		0.477				0.163
9/10/2019	0.122	0.086 (J)		0.0914 (J)			0.191	0.227	
9/11/2019						0.2			
4/20/2020	0.14		0.112						
4/21/2020		0.0951 (J)		0.095 (J)	0.565	0.224		0.218	0.126
4/22/2020							0.167		
8/11/2020					0.515				
8/12/2020	0.147			0.0867 (J)		0.221			
8/17/2020			0.148						0.0753 (J)
8/18/2020							0.165		
8/19/2020		0.103						0.223	
3/9/2021		0.0949 (J)			0.628			0.17	
3/10/2021	0.115			0.085 (J)			0.0749 (J)		
3/15/2021									
3/16/2021			0.23			0.282			0.185
8/17/2021			0.184		0.494				0.0974 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-15	GC-AP-MW-7	GC-AP-MW-3	GC-AP-MW-23 (bg)	GC-AP-MW-17	GC-AP-MW-5	GC-AP-MW-11	GC-AP-MW-6	GC-AP-MW-2
8/18/2021									
8/23/2021						0.322			
8/24/2021		0.1		0.0713 (J)				0.161	
8/25/2021	0.167						0.135		
3/28/2022				<0.125					0.105 (J)
3/29/2022	0.117 (J)	0.104 (J)						0.193	
3/30/2022							<0.125		
4/4/2022					0.5855 (D)	0.216			
4/5/2022			0.146 (JD)						
4/6/2022									
10/5/2022			0.12 (J)						0.124 (J)
10/17/2022				<0.125		0.192	0.118 (J)		
10/18/2022	0.139	0.0649 (J)			0.544			0.154	
10/19/2022									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-18	GC-AP-MW-30 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-33	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-26 (bg)
2/16/2016									
2/17/2016	0.02 (J)	0.05 (J)	0.15 (J)						
4/12/2016	0.026 (J)		0.168 (J)						
4/13/2016		0.061 (J)							
5/31/2016									
6/1/2016	0.057 (J)	0.079 (J)	0.178 (J)						
8/15/2016		0.081 (J)	0.149 (J)						
8/16/2016	0.046 (J)			0.036 (J)	0.05 (J)	0.061 (J)	0.087 (J)	0.054 (J)	
8/17/2016									0.159 (J)
9/19/2016						0.018 (J)	0.045 (J)	0.023 (J)	
9/20/2016				<0.125	0.015 (J)				0.126 (J)
10/11/2016	<0.125	0.049 (J)		<0.125	<0.125	<0.125	0.034 (J)	0.011 (J)	
10/12/2016			0.12 (J)						0.1 (J)
11/14/2016						<0.125	<0.125	<0.125	
11/15/2016				<0.125	<0.125				0.016 (J)
1/3/2017						<0.125	<0.125	<0.125	
1/4/2017				<0.125	<0.125				<0.125
3/13/2017					<0.125				0.31 (o)
3/14/2017	<0.125	0.04 (J)	0.17	<0.125		<0.125	<0.125	<0.125	
3/15/2017									
5/9/2017		0.05 (J)		<0.125	<0.125				0.25 (o)
5/10/2017	<0.125		0.17			0.06 (J)	0.05 (J)	0.05 (J)	
6/27/2017		0.04 (J)	0.18	<0.125	<0.125	0.07 (J)	0.05 (J)	0.04 (J)	0.22 (o)
6/28/2017	<0.125								
8/29/2017	0.04 (J)								0.22 (o)
8/30/2017		0.04 (J)	0.21	<0.125	<0.125	0.08 (J)	<0.125	0.04 (J)	
2/27/2018	<0.125	0.07 (J)		<0.125	<0.125	0.07 (J)	<0.125	0.04 (J)	0.08 (J)
2/28/2018			0.17						
6/4/2018		0.07 (J)							
6/5/2018	0.04 (J)		0.17	<0.125	<0.125	0.1	<0.125	0.04 (J)	0.07 (J)
6/6/2018									
11/5/2018								<0.125	
11/6/2018		0.04 (J)	0.17	<0.125	<0.125	0.08 (J)	<0.125		0.07 (J)
11/7/2018	<0.125								
3/26/2019	<0.125		0.192	<0.125	<0.125				<0.125
3/27/2019		0.192				<0.125	<0.125	<0.125	
9/9/2019			0.157						
9/10/2019	0.0545 (J)	0.179							
9/11/2019				<0.125	<0.125	<0.125	<0.125	0.0518 (J)	0.0716 (J)
4/20/2020									
4/21/2020		0.12	0.171	<0.125	<0.125				<0.125
4/22/2020	<0.125					<0.125	<0.125	<0.125	
8/11/2020							<0.125		
8/12/2020	<0.125		0.198			<0.125		<0.125	
8/17/2020		0.115							
8/18/2020				<0.125	<0.125				<0.125
8/19/2020									
3/9/2021			0.205						
3/10/2021	<0.125								
3/15/2021				<0.125	<0.125	<0.125	<0.125	<0.125	<0.125
3/16/2021		0.129							
8/17/2021		0.158	0.212						

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-24 (bg)	GC-AP-MW-1	GC-AP-MW-18	GC-AP-MW-30 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-33	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-26 (bg)
8/18/2021				<0.125	<0.125				<0.125
8/23/2021						<0.125	<0.125	<0.125	
8/24/2021	<0.125								
8/25/2021									
3/28/2022				<0.125	<0.125	<0.125	<0.125	<0.125	
3/29/2022									
3/30/2022									
4/4/2022	<0.125	0.124 (JD)							<0.125
4/5/2022									
4/6/2022			0.1385 (JD)						
10/5/2022		0.125				<0.125	0.0671 (J)	<0.125	
10/17/2022	<0.125		0.176						
10/18/2022									
10/19/2022				<0.125	<0.125				<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	0.039 (J)	0.055 (J)
9/19/2016		
9/20/2016	0.01 (o)	0.021 (o)
10/11/2016		
10/12/2016	<0.125	<0.125
11/14/2016		
11/15/2016	<0.125	<0.125
1/3/2017		
1/4/2017	<0.125	<0.125
3/13/2017		
3/14/2017	<0.125	<0.125
3/15/2017		
5/9/2017	<0.125	<0.125
5/10/2017		
6/27/2017	<0.125	<0.125
6/28/2017		
8/29/2017	<0.125	
8/30/2017		<0.125
2/27/2018	<0.125	<0.125
2/28/2018		
6/4/2018		
6/5/2018	<0.125	<0.125
6/6/2018		
11/5/2018		
11/6/2018	<0.125	<0.125
11/7/2018		
3/26/2019	<0.125	<0.125
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	<0.125	0.0649 (J)
4/20/2020		
4/21/2020	<0.125	<0.125
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	<0.125	<0.125
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	<0.125	<0.125
3/16/2021		
8/17/2021		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
8/18/2021	<0.125	<0.125
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	<0.125	<0.125
3/29/2022		
3/30/2022		
4/4/2022		
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	<0.125	0.0698 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (SU)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-8	GC-AP-MW-10	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-21	GC-AP-MW-9	GC-AP-MW-1	GC-AP-MW-18
2/16/2016	6.16	6.29	6.84	6.4	6.21	7.15	6.5		
2/17/2016								5.8	6.23
4/12/2016				6.41	6.37				6.3
4/13/2016	6.29	6.21	7.03			7.1	6.32	5.85	
5/31/2016		6.45	6.94	6.22	6.42				
6/1/2016	6.33					6.76	6.43	5.92	6.24
8/15/2016								5.99	6.25
8/16/2016		6.58	6.84	6.41		6.99			
8/17/2016	6.27				6.42		6.46		
9/19/2016									
9/20/2016									
10/11/2016								6.02	
10/12/2016	6.3	6.6	6.75	6.42	6.38	6.89	6.53		6.26
10/31/2016									
11/1/2016				6.55	6.33				
11/2/2016									6.3
11/14/2016									
11/15/2016									
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								5.92	6.3
1/25/2017	6.27	6.47	6.87	6.76	6.37	6.84	6.45		
1/26/2017									
3/13/2017									
3/14/2017					6.3			5.96	6.31
3/15/2017	6.27	6.54	6.9	6.82		6.78	6.39		
5/9/2017			6.85	6.7	6.43	6.83		5.93	
5/10/2017	6.25	6.53					6.39		6.34
5/31/2017									
6/27/2017								5.86	6.32
6/28/2017	6.25	6.49	6.85	6.58	6.4	6.98	6.4		
8/29/2017	6.32	6.49	6.86	6.4	6.32	6.8	6.47		
8/30/2017								5.88	6.38
2/27/2018	6.36	6.59			6.28		6.54	5.92	
2/28/2018			6.94	6.72		6.87			6.31
6/4/2018								5.89	
6/5/2018	6.3	6.52					6.47		6.16
6/6/2018			6.99	6.57	6.25	6.94			
9/10/2018						6.74		5.89	
9/11/2018	6.36	6.53	6.87	6.64			6.53		
9/12/2018					6.42				6.29
11/5/2018			6.81	6.69		6.66			
11/6/2018								5.95	6.31
11/7/2018	6.31	6.51			6.42		6.49		
3/26/2019	6.32		6.95	6.54		6.84	6.47		6.3
3/27/2019		6.53			6.41			5.8	
9/9/2019									6.28
9/10/2019	6.31	6.33	6.69		6.11	6.58	6.43	5.88	
9/11/2019				6.22					

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-8	GC-AP-MW-10	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-21	GC-AP-MW-9	GC-AP-MW-1	GC-AP-MW-18
4/20/2020				6.68					
4/21/2020	6.06		6.96		6.31	6.81	6.25	5.72	6.31
4/22/2020		6.44							
8/11/2020					6.02				
8/12/2020									6.62
8/17/2020								5.54	
8/18/2020		6.33	6.98	6.76		6.31	6.21		
8/19/2020	6.06								
3/9/2021	6.31				6.48		6.14		6.39
3/10/2021			6.89			6.26			
3/15/2021		6.29		6					
3/16/2021								5.67	
8/17/2021								5.49	6.38
8/18/2021									
8/23/2021									
8/24/2021	6.16	6.04					6.08		
8/25/2021			7.04	6.66	6.21	6.51			
3/28/2022									
3/29/2022	6.21		6.44				5.61		
3/30/2022						6.09			
4/4/2022		6.21 (D)			6.39 (D)			5.17 (D)	
4/5/2022									
4/6/2022				6.24					6.29 (D)
10/5/2022								5.59	
10/17/2022			6.88	6.22		6.21			6.49
10/18/2022	6.45	6.62			6.46		6.27		
10/19/2022									

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-15	GC-AP-MW-17	GC-AP-MW-5	GC-AP-MW-24 (bg)	GC-AP-MW-11	GC-AP-MW-25
2/16/2016									
2/17/2016	6.18	6.01	6.46	6.02	6.32	6.63	5.39	6.04	5.36
4/12/2016			6.45	6.17		6.59	5.29		5.31
4/13/2016	6.28	6.17			6.44			6.07	
5/31/2016			6.51	6.15		6.57		6.03	
6/1/2016	6.36	6.18			6.24		5.39		5.35
8/15/2016	6.37	6.12			6.34				
8/16/2016				6.21			5.51	6.09	
8/17/2016			6.54			6.72			5.38
9/19/2016									
9/20/2016									
10/11/2016		6.09	6.53	6.14		6.69	5.44		5.31
10/12/2016	6.32				6.42			6.06	
10/31/2016									
11/1/2016				6.15					
11/2/2016	6.33				6.48		5.49		5.39
11/14/2016									
11/15/2016									
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	6.29	6.04	6.44	6.11	6.53	6.61	5.44		5.29
1/25/2017								5.94	
1/26/2017									
3/13/2017									
3/14/2017	6.27	6.11	6.4	6.09	6.43	6.55	5.48	6.08	5.19
3/15/2017									
5/9/2017		6.1				6.65		6.07	5.29
5/10/2017	6.3		6.4	6.11	6.33		5.43		
5/31/2017									
6/27/2017	6.28			6.09	6.38				
6/28/2017		6.09	6.46			6.66	5.49	6.02	5.27
8/29/2017			6.47				5.46	6.19	5.27
8/30/2017	6.34	6.07		6.1	6.31	6.66			
2/27/2018		6.09	6.53			6.73	5.48	6.21	
2/28/2018	6.33			6.11	6.57				5.28
6/4/2018		6.07							
6/5/2018	6.29		6.49	6.05	6.21	6.63	5.31	6.27	
6/6/2018									5.21
9/10/2018		6						6.33	
9/11/2018			6.48	6.18		6.65	5.36		
9/12/2018	6.36				6.43				5.23
11/5/2018								6.26	
11/6/2018	6.37	6.04		6.09	6.47	6.65			5.28
11/7/2018			6.48				5.34		
3/26/2019	6.34		6.54	6.1	6.52		5.32		
3/27/2019		6.06				6.59		6.37	5.27
9/9/2019		6.13			5.84				
9/10/2019	6.35		6.55	5.82			4.9	5.91	5.15
9/11/2019						6.36			

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-15	GC-AP-MW-17	GC-AP-MW-5	GC-AP-MW-24 (bg)	GC-AP-MW-11	GC-AP-MW-25
4/20/2020	6.43			6.16					
4/21/2020		5.99	6.54		6.61	6.5			
4/22/2020							5.3	6.26	5.26
8/11/2020	6.7				6.71				4.81
8/12/2020				6.1		6.36	5.04		
8/17/2020		5.91							
8/18/2020								6	
8/19/2020			6.49						
3/9/2021	6.29		6.43		6.52				
3/10/2021				6.08			5.14	5.97	5.71
3/15/2021									
3/16/2021		5.87				6.64			
8/17/2021	6.33	5.99			6.57				
8/18/2021									
8/23/2021						6.5			
8/24/2021			6.22				5.16		5.25
8/25/2021				6.12				6.38	
3/28/2022		5.32							
3/29/2022			5.99	5.81					5.26
3/30/2022								6.02	
4/4/2022					6.71 (D)	6.42 (D)	4.4 (D)		
4/5/2022									
4/6/2022	6.42 (D)								
10/5/2022		6.01							
10/17/2022						6.71	5.22	6.28	
10/18/2022	6.53		6.38	6.29	6.77				5.88
10/19/2022									

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-3	GC-AP-MW-23 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-30 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-28 (bg)
2/16/2016									
2/17/2016	6.45	6.29	6.8						
4/12/2016		6.33	6.54						
4/13/2016	6.49								
5/31/2016	6.43								
6/1/2016		6.4	6.49						
8/15/2016		6.36							
8/16/2016			6.57	7.13	6	6.34	5.39	6.21	
8/17/2016	6.43								6.15
9/19/2016				6.94	6	6.11			
9/20/2016							5.37	6.05	4.99
10/11/2016		6.38	6.54	6.82	6.02	5.99	5.39	6.2	
10/12/2016	6.46								4.88
10/31/2016							5.36	6.61	4.87
11/1/2016				6.71	5.97	5.84			
11/2/2016			6.54						
11/14/2016				6.57	5.98	5.83			
11/15/2016							5.33	6.64	4.81
11/28/2016				6.57	6	5.79			
11/29/2016							5.33	6.39	4.84
1/3/2017				6.56	6.03	5.39			
1/4/2017							5.49	6.06	4.88
1/23/2017							5.48		
1/24/2017		6.34	6.42	6.41	5.9				5.4
1/25/2017	6.43					5.09			
1/26/2017								6.02	
3/13/2017								5.68	
3/14/2017	6.41	6.42	6.59	6.37	6.07	4.99	5.17		5.13
3/15/2017									
5/9/2017		6.35	6.42				5.11	5.05	4.96
5/10/2017	6.41			6.41	6	4.63			
5/31/2017					6.02				
6/27/2017			6.44	6.14	6.05	4.76	5.29	4.9	5.34
6/28/2017	6.46	6.32							
8/29/2017	6.46		6.43						
8/30/2017		6.32		6.08	6.13	4.85	5.09	4.73	4.69
2/27/2018	6.45	6.39	6.49	5.99	6.1	4.69	5.25	4.87	4.91
2/28/2018									
6/4/2018		6.4							
6/5/2018	6.36		6.43	5.93	6.05	4.62	5.12	4.89	4.87
6/6/2018									
9/10/2018									
9/11/2018	6.38		6.35	5.86	6.07	4.79	5.19	4.88	4.65
9/12/2018		6.35							
11/5/2018					6.01				
11/6/2018		6.34		5.89		4.62	5.12	4.86	4.67
11/7/2018	6.37		6.37						
3/26/2019	6.39		6.46				5.16	4.97	4.92
3/27/2019		6.44		5.95	6.15	4.68			
9/9/2019		6.22							
9/10/2019	6.39		5.85						
9/11/2019				5.85	5.87	4.57	4.11	3.96	4.33

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-3	GC-AP-MW-23 (bg)	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-30 (bg)	GC-AP-MW-29 (bg)	GC-AP-MW-28 (bg)
4/20/2020		6.4							
4/21/2020	6.39		6.26				4.44	3.9	4.07
4/22/2020				5.75	5.92	4.71			
8/11/2020				5.63					
8/12/2020			6.03		5.84	4.65			
8/17/2020		5.85							
8/18/2020							4.76	4.22	4.59
8/19/2020	6.14								
3/9/2021	6.45								
3/10/2021			6.17						
3/15/2021				5.61	4.57	5.83	5.02	4.79	4.45
3/16/2021		6.23							
8/17/2021		6.13							
8/18/2021							4.01	3.94	3.78
8/23/2021				5.67	4.17	6.04			
8/24/2021	6.4		6.09						
8/25/2021									
3/28/2022			6.08	5.05	5.01	4.29	4.93	4.67	4.69
3/29/2022	6.62								
3/30/2022									
4/4/2022									
4/5/2022		6.27 (D)							
4/6/2022									
10/5/2022		5.89		5.49	5.84	4.55			
10/17/2022			6.22						
10/18/2022	6.37								
10/19/2022							5.29	5.01	4.87

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-26 (bg)	GC-AP-MW-27 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	5.85	5.47
9/19/2016		
9/20/2016	5.82	5.22
10/11/2016		
10/12/2016	5.76	5.1
10/31/2016		
11/1/2016		
11/2/2016		
11/14/2016		
11/15/2016	5.79	5.07
11/28/2016		
11/29/2016	5.73	5.1
1/3/2017		
1/4/2017	5.69	5.3
1/23/2017	5.45	5.12
1/24/2017		
1/25/2017		
1/26/2017		
3/13/2017	4.8	
3/14/2017		4.74
3/15/2017		
5/9/2017	4.82	4.83
5/10/2017		
5/31/2017		
6/27/2017	5.27	4.87
6/28/2017		
8/29/2017	5.28	4.71
8/30/2017		
2/27/2018	5.11	4.96
2/28/2018		
6/4/2018		
6/5/2018	5.24	5
6/6/2018		
9/10/2018		
9/11/2018	5.28	4.94
9/12/2018		
11/5/2018		
11/6/2018	5.54	4.9
11/7/2018		
3/26/2019	5.4	4.96
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	5.53	4.85

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-26 (bg)	GC-AP-MW-27 (bg)
4/20/2020		
4/21/2020	5.3	4.29
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	4.79	4.75
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	5.32	4.73
3/16/2021		
8/17/2021		
8/18/2021	5.25	4.52
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022		4.73
3/29/2022		
3/30/2022		
4/4/2022	5.2 (D)	
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	5.55	5.02

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
2/16/2016	119	49.4	108	9.03	45.2	113	125		
2/17/2016								785	187
4/12/2016			114			86.7			188
4/13/2016	122	51.7		10.7	43.9		119	715	
5/31/2016	94.3		114	10.2		83.1			183
6/1/2016		51.2			32		99.2	832	
8/15/2016								862	
8/16/2016	67.1			9.1		59.3	71.9		196
8/17/2016		42.9	85.4		31.9				
9/19/2016									
9/20/2016									
10/11/2016								888	216
10/12/2016	94.1	39.5	53.5	7.24	39.6	99.3	93.9		
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								906	183
1/25/2017	101	31.3	75.4	9.71	44	113	103		
1/26/2017									
5/9/2017	91		84			74	100	810	
5/10/2017		30		11	32				160
6/27/2017								830	150
6/28/2017	71	35	120	10	34	71	69		
8/29/2017	80	40	180	14	34	72	77		
8/30/2017								910	160
6/4/2018								850	
6/5/2018		25		39	22				160
6/6/2018	62		450			48	81		
9/10/2018							64	920	
9/11/2018	63	23		29	33	62			140
9/12/2018			200						
11/5/2018	74					81	68		
11/6/2018								880	160
11/7/2018		30	180	45	76				
3/26/2019	92.3	21.6			138	92.4	92		157
3/27/2019			335	66.2				1090	
9/9/2019									
9/10/2019	89.3	37.4	193	50.5	115		63.1	992	150
9/11/2019						128			
4/20/2020						76.5			142
4/21/2020	121	43.3	168		133		99	874	
4/22/2020				63.2					
8/11/2020			242						
8/12/2020									160
8/17/2020								919	
8/18/2020	89			58.6	115	203	63.4		
8/19/2020		44.5							
3/9/2021		71.7	165		107				
3/10/2021	155						51.7		136
3/15/2021				68.5		204			

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
3/16/2021								933	
8/17/2021								745	
8/18/2021									
8/23/2021									
8/24/2021		71.4		71.6	139				
8/25/2021	118		346			181	76.1		153
3/28/2022									
3/29/2022	108	75.3			193				165
3/30/2022							115		
4/4/2022			195.5 (D)	116.5 (D)				812.5 (D)	
4/5/2022									
4/6/2022						157			
10/5/2022								737	
10/17/2022	96.199997					467	103		
10/18/2022		84.800003	185	104	171				152
10/19/2022									

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
2/16/2016									
2/17/2016	72.3	60.2	40.2	<1	<1	87.4	304	132	14.7
4/12/2016		68.2		0.483 (J)	0.49 (J)			130	20
4/13/2016	123		33.1			92.7	307		
5/31/2016			28.1	0.518 (J)				111	
6/1/2016	144	61.4			0.544 (J)	111	273		20.1
8/15/2016	50.1	56			0.332 (J)	98.3	275		
8/16/2016			38.5						19.1
8/17/2016				3.63				95.8	
9/19/2016									
9/20/2016									
10/11/2016				15.6	<1		284	101	18.4
10/12/2016	72.6	36.6	38.3			99.3			
11/14/2016									
11/15/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	63.4	12.3		28.9	<1	85.4	302	129	15
1/25/2017			32						
1/26/2017									
5/9/2017			44	25	2.1 (J)		250		14
5/10/2017	82	10				74		120	
6/27/2017	44	9.7				75			14
6/28/2017			88	45	<1		230	100	
8/29/2017			110					95	16
8/30/2017	230	7.8		96	<1	87	250		
6/4/2018					1.4 (J)		260		
6/5/2018	230	13	79	36		87		98	14
6/6/2018									
9/10/2018			80				280		
9/11/2018				48				100	13
9/12/2018	33	28			<1	63			
11/5/2018			81						
11/6/2018	220	11		93	<1	97	280		
11/7/2018								97	14
3/26/2019	161	21.3				123		120	12.3
3/27/2019			83.2	33.4	6.64		375		
9/9/2019	57.3	17.8			6.56		385		
9/10/2019			87.2			68		140	12.4
9/11/2019				149					
4/20/2020					10.5	49.6			
4/21/2020	78	19.2		163			522	153	10.2
4/22/2020			58.7						
8/11/2020	46.7					55			
8/12/2020		13.8		132					10.2
8/17/2020					17.3		497		
8/18/2020			81.1						
8/19/2020								163	
3/9/2021	95.8	11.6				43.9		187	
3/10/2021			73.2						11.8
3/15/2021									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
3/16/2021				167	7.62		548		
8/17/2021	32.8	12.2			12	46.6	502		
8/18/2021									
8/23/2021				155					
8/24/2021								210	11.6
8/25/2021			126						
3/28/2022							563		11.8
3/29/2022								190	
3/30/2022			125						
4/4/2022	68.9 (D)			160					
4/5/2022					14.95 (D)				
4/6/2022		16.05 (D)				45.3 (D)			
10/5/2022					5.11		590		
10/17/2022		23.299999	144	154					9.72
10/18/2022	64.900002					42.400002		179	
10/19/2022									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-29 (bg)	GC-AP-MW-31	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-26 (bg)
2/16/2016									
2/17/2016	311	10.4	28.7						
4/12/2016		11.3	32.5						
4/13/2016	330								
5/31/2016	324								
6/1/2016		10.4	31.9						
8/15/2016									
8/16/2016		12.2		0.894 (J)	1.78	9.33	2.06	0.702 (J)	
8/17/2016	306		30.5						16.2
9/19/2016					2.06	11.2	1.44		
9/20/2016				<1				<1	14.9
10/11/2016		19.8	32.3	<1	2.33	12.6	1.38	<1	
10/12/2016	296								12.4
11/14/2016					2.31	12.4	1.15		
11/15/2016				1.19				<1	8.6
1/3/2017					2.81	14.3	1.57		
1/4/2017				<1				<1	12.2
1/23/2017								0.493 (J)	16
1/24/2017		30.7	33.5		3.34		2.06		
1/25/2017	243					15.2			
1/26/2017				0.6 (J)					
5/9/2017			33	<1				<1	55
5/10/2017	210	33			2.9 (J)	12	2.1 (J)		
6/27/2017				<1	3.4 (J)	13	2.7 (J)	<1	45
6/28/2017	210	56	35						
8/29/2017	220	61	37						37
8/30/2017				<1	3.7 (J)	15	2.6 (J)	<1	
6/4/2018									
6/5/2018	390	97		1.4 (J)	3.7 (J)	17	3.1 (J)	<1	9.3
6/6/2018			47						
9/10/2018									
9/11/2018	360	83		<1	2.2 (J)	16	1.6 (J)	<1	7.8
9/12/2018			41						
11/5/2018							2.4 (J)		
11/6/2018			48	<1	3.1 (J)	15		<1	6
11/7/2018	390	91							
3/26/2019	430	103		0.594 (J)				<1	6.86
3/27/2019			62.4		3.55	15.1	3.24		
9/9/2019									
9/10/2019	409	83.4	66						
9/11/2019				<1	3.83	14.5	2.66	<1	5.29
4/20/2020									
4/21/2020	318			0.694 (J)				<1	6.28
4/22/2020		84.7	76.1		3.78	9.64	2.51		
8/11/2020			79.5		4.33				
8/12/2020		82.2				13.6	2.54		
8/17/2020									
8/18/2020				0.608 (J)				<1	9.57
8/19/2020	296								
3/9/2021	347								
3/10/2021		99.9	70.3						
3/15/2021				<1	3.74	2.76	8.5	<1	7.66

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-29 (bg)	GC-AP-MW-31	GC-AP-MW-33	GC-AP-MW-32	GC-AP-MW-30 (bg)	GC-AP-MW-26 (bg)
3/16/2021									
8/17/2021									
8/18/2021				0.86 (J)				0.754 (J)	7.07
8/23/2021					4	2.44	9.18		
8/24/2021	234	81.8	66.6						
8/25/2021									
3/28/2022				1.29 (J)	3.34	11.8	2.55	0.951 (J)	
3/29/2022	187		68.6						
3/30/2022									
4/4/2022		90.2							12.5
4/5/2022									
4/6/2022									
10/5/2022					4.08	12.2	2.71		
10/17/2022		79.599998							
10/18/2022	256		70.599998						
10/19/2022				1.37 (J)				1.27 (J)	12.5

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	0.928 (J)	6.46
9/19/2016		
9/20/2016	0.478 (J)	8.3
10/11/2016		
10/12/2016	0.727 (J)	8.36
11/14/2016		
11/15/2016	0.448 (J)	8.75
1/3/2017		
1/4/2017	0.627 (J)	7.85
1/23/2017	1.34	
1/24/2017		6.62
1/25/2017		
1/26/2017		
5/9/2017	<1	5.6
5/10/2017		
6/27/2017	<1	5.3
6/28/2017		
8/29/2017	<1	
8/30/2017		8.2
6/4/2018		
6/5/2018	2.1 (J)	8.3
6/6/2018		
9/10/2018		
9/11/2018	<1	8.9
9/12/2018		
11/5/2018		
11/6/2018	<1	8.6
11/7/2018		
3/26/2019	1.66	10.1
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	1.29	10.6
4/20/2020		
4/21/2020	2.21	9.4
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	1.57	10.3
8/19/2020		
3/9/2021		
3/10/2021		
3/15/2021	2.5	10.4

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-27 (bg)	GC-AP-MW-28 (bg)
3/16/2021		
8/17/2021		
8/18/2021	3.18	10.1
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022	6.24	11.2
3/29/2022		
3/30/2022		
4/4/2022		
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	3.95	8.96

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
2/16/2016	264	656	340	312	226	242	264		
2/17/2016								1540	408
4/12/2016			298			176			334
4/13/2016	238	634		324	202		226	1200	
5/31/2016	206		309	333		189			351
6/1/2016		672			224		231	1440	
8/15/2016								1420	
8/16/2016	180			327		192	181		367
8/17/2016		624	269		290				
9/19/2016									
9/20/2016									
10/11/2016								1420	
10/12/2016	223	586		312	315		225		
10/31/2016									
11/1/2016			252			244			372
11/2/2016									
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017								1350	354
1/25/2017	271	596	259	286	332	274	277		
1/26/2017									
5/9/2017	236		285			191	255	1540	
5/10/2017		576		326	361				332
6/27/2017								1470	331
6/28/2017	198	612	348	304	396	176	175		
8/29/2017	187	640	528	348	402	163	218		
8/30/2017								1530	317
6/4/2018								1370	
6/5/2018		474		346	448				318
6/6/2018	199		932			138	207		
9/10/2018							197	1380	
9/11/2018	184	496		335	462	185			321
9/12/2018			180						
11/5/2018	210					208	200		
11/6/2018								1450	331
11/7/2018		514	528	342	506				
3/26/2019	230	546			586	198	218		338 (D)
3/27/2019			834	347				1910	
9/9/2019									
9/10/2019	218 (D)	601 (D)	658	351	586		198	1740	358
9/11/2019						316			
4/20/2020						201			369
4/21/2020	291	638	628		578		265	1530	
4/22/2020				338					
8/11/2020			688						
8/12/2020									401
8/17/2020								1590	
8/18/2020	250			376	542	444	179		
8/19/2020		658							

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-8	GC-AP-MW-14	GC-AP-MW-10	GC-AP-MW-9	GC-AP-MW-13	GC-AP-MW-21	GC-AP-MW-1	GC-AP-MW-15
3/9/2021		746	618		532				
3/10/2021	331						296		397
3/15/2021				406		374			
3/16/2021								1620	
8/17/2021								1340	
8/18/2021									
8/23/2021									
8/24/2021		690		423	624				
8/25/2021	263		774			359	207		407
3/28/2022									
3/29/2022	290	730			800				406
3/30/2022							320		
4/4/2022			644 (D)	443.5 (D)				1310 (D)	
4/5/2022									
4/6/2022						298			
10/5/2022								1190	
10/17/2022	243					708	311		
10/18/2022		700	662	449	692				423
10/19/2022									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
2/16/2016									
2/17/2016	328	464	158	238	358	310	516	640	142
4/12/2016		491		316	393			610	155
4/13/2016	373		161			372	508		
5/31/2016			173	320				626	
6/1/2016	442	468			381	360	494		148
8/15/2016	392	454			348	366	476		
8/16/2016			173						132
8/17/2016				325				628	
9/19/2016									
9/20/2016									
10/11/2016				333	379		508	636	
10/12/2016			173						
10/31/2016									
11/1/2016									
11/2/2016	469	422				374			115
11/28/2016									
11/29/2016									
1/3/2017									
1/4/2017									
1/23/2017									
1/24/2017	464	408		336	354	380	510	696	107
1/25/2017			161						
1/26/2017									
5/9/2017			195	317	368		510		80.7
5/10/2017	492	358				381		687	
6/27/2017	516	382				404			96.7
6/28/2017			227	373	368		480	622	
8/29/2017			229					616	120
8/30/2017	646	392		432	370	420	478		
6/4/2018					369		528		
6/5/2018	644	352	200	347		408		582	113
6/6/2018									
9/10/2018			183				472		
9/11/2018				370				616	108
9/12/2018	476	339			354	415			
11/5/2018			193						
11/6/2018	634	368		409	354	447	522		
11/7/2018								576	96.7
3/26/2019	516	406				481		682	103
3/27/2019			211	328	362		562		
9/9/2019	500	409 (D)			371		666		
9/10/2019			201			453		744	107
9/11/2019				455					
4/20/2020					371	461			
4/21/2020	490	429		494			878	742	107
4/22/2020			249						
8/11/2020	522					482			
8/12/2020		390		433					96
8/17/2020					361		818		
8/18/2020			260						
8/19/2020								788	

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-11	GC-AP-MW-5	GC-AP-MW-3	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-6	GC-AP-MW-23 (bg)
3/9/2021	684	412				524		716	
3/10/2021			274						105
3/15/2021									
3/16/2021				510	340		890		
8/17/2021	506	397			297	490	808		
8/18/2021									
8/23/2021				481					
8/24/2021								792	96.7
8/25/2021			358						
3/28/2022							868		96
3/29/2022								722	
3/30/2022			280						
4/4/2022	553 (D)			488					
4/5/2022					338 (D)				
4/6/2022		408.5 (D)				472 (D)			
10/5/2022					319		864		
10/17/2022		382	323	483					83.300003
10/18/2022	598					486		752	
10/19/2022									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2022 10:45 AM View: AIII

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-33	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-32	GC-AP-MW-28 (bg)
2/16/2016									
2/17/2016	892	53	144						
4/12/2016		38.7	140						
4/13/2016	1010								
5/31/2016	1100								
6/1/2016		46	139						
8/15/2016									
8/16/2016		48		101	142	41.3	<25	49.3	
8/17/2016	1070		142						65.3
9/19/2016				80	121			44.7	
9/20/2016						42.7	26.7		44
10/11/2016									
10/12/2016	1040								
10/31/2016						140	25.3		38.7
11/1/2016				78	103			48	
11/2/2016		66.7	128						
11/28/2016				68.7	84			40.7	
11/29/2016						78	<25		34
1/3/2017				60.7	89.3			49.3	
1/4/2017						34	34.7		42
1/23/2017							33.3		
1/24/2017		78.7	124		83.3			48.7	45.3
1/25/2017	972			54.7					
1/26/2017						32.7			
5/9/2017			136			<25	<25		49.3
5/10/2017	740	92.7		60.7	31.3			46.7	
6/27/2017				58	67.3	30.7	<25	55.3	46
6/28/2017	914	118	145						
8/29/2017	924	128	139						
8/30/2017				66.7	64	25.3	28	57.3	38.7
6/4/2018									
6/5/2018	1060	171		71.3	50	<25	28.7	52.7	34.7
6/6/2018			153						
9/10/2018									
9/11/2018	1020	170		66.7	53.3	<25	29.3	60	34.7
9/12/2018			156						
11/5/2018								53.3	
11/6/2018			153	61.3	66	<25	<25		36
11/7/2018	1050	163							
3/26/2019	1100	174				<25	26.15 (D)		30
3/27/2019			178	65.3	48.7			51.35 (D)	
9/9/2019									
9/10/2019	1100	167	182						
9/11/2019				68.3 (D)	52.7	<25	34	55.3	40
4/20/2020									
4/21/2020	1010					<25	26.7		36
4/22/2020		162	195	62.7	49.3			52.7	
8/11/2020			193		52				
8/12/2020		165		62				49.3	
8/17/2020									
8/18/2020						<25	30		35.3
8/19/2020	1050								

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-7	GC-AP-MW-24 (bg)	GC-AP-MW-25	GC-AP-MW-33	GC-AP-MW-31	GC-AP-MW-29 (bg)	GC-AP-MW-30 (bg)	GC-AP-MW-32	GC-AP-MW-28 (bg)
3/9/2021	1090								
3/10/2021		179	246						
3/15/2021				48	49.3	<25	30	46	30
3/16/2021									
8/17/2021									
8/18/2021						<25	28.7		32
8/23/2021				48.7	49.3			64.7	
8/24/2021	930	167	224						
8/25/2021									
3/28/2022				57.3	43.3	<25	27.3	51.3	38.7
3/29/2022	894		247						
3/30/2022									
4/4/2022		155							
4/5/2022									
4/6/2022									
10/5/2022				62.700001	40.700001			43.299999	
10/17/2022		134							
10/18/2022	1040		256						
10/19/2022						<25	28		28.700001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-26 (bg)	GC-AP-MW-27 (bg)
2/16/2016		
2/17/2016		
4/12/2016		
4/13/2016		
5/31/2016		
6/1/2016		
8/15/2016		
8/16/2016		
8/17/2016	64	36.7
9/19/2016		
9/20/2016	60	25.3
10/11/2016		
10/12/2016	54.7	<25
10/31/2016		
11/1/2016		
11/2/2016		
11/28/2016		
11/29/2016	42	<25
1/3/2017		
1/4/2017	56	27.3
1/23/2017	50.7	<25
1/24/2017		
1/25/2017		
1/26/2017		
5/9/2017	126	28.7
5/10/2017		
6/27/2017	93.3	27.3
6/28/2017		
8/29/2017	84	30.7
8/30/2017		
6/4/2018		
6/5/2018	38.7	26
6/6/2018		
9/10/2018		
9/11/2018	35.3	<25
9/12/2018		
11/5/2018		
11/6/2018	40.7	26
11/7/2018		
3/26/2019	36.7	<25
3/27/2019		
9/9/2019		
9/10/2019		
9/11/2019	40.7	27.3
4/20/2020		
4/21/2020	39.3	30.7
4/22/2020		
8/11/2020		
8/12/2020		
8/17/2020		
8/18/2020	42	27.3
8/19/2020		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 12/9/2022 10:45 AM   View: AIII
Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-26 (bg)	GC-AP-MW-27 (bg)
3/9/2021		
3/10/2021		
3/15/2021	42.7	30.7
3/16/2021		
8/17/2021		
8/18/2021	43.3	28.7
8/23/2021		
8/24/2021		
8/25/2021		
3/28/2022		32.7
3/29/2022		
3/30/2022		
4/4/2022	40.7	
4/5/2022		
4/6/2022		
10/5/2022		
10/17/2022		
10/18/2022		
10/19/2022	54	26

FIGURE E.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-14**	**0.206**	**122**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.0757**	**142**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1293**	**106**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08548**	**90**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.04679**	**-85**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**115**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-5**	**0.02723**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.09777**	**-102**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-9**	**0.1767**	**123**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-15.85**	**-90**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**3.46**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-11**	**4.667**	**150**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-12**	**3.12**	**82**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-13**	**7.712**	**112**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**16.15**	**111**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**5.214**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.582**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**10.46**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-2**	**14.94**	**119**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.362**	**-126**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.327**	**160**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1678**	**-113**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1732**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-30 (bg)**	**-0.1071**	**-90**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-5**	**7.816**	**158**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-9**	**15.67**	**114**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8806**	**-96**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-18**	**0.4942**	**87**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.0804**	**-107**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-5**	**-1.011**	**-122**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-7**	**7.525**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-9**	**6.497**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02112**	**106**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.0129**	**95**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.0291**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-23 (bg)**	**-0.08277**	**-165**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-24 (bg)**	**-0.05605**	**-125**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-27 (bg)**	**-0.08876**	**-128**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-28 (bg)**	**-0.1309**	**-129**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-29 (bg)**	**-0.4524**	**-180**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-30 (bg)**	**-0.1119**	**-164**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-10**	**13.78**	**154**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**14.84**	**110**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-14**	**22.19**	**86**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-6.528**	**-92**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**45.13**	**100**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.275**	**-144**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**15.55**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.5669**	**106**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-5**	**27.92**	**148**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-9**	**20.57**	**97**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-10**	**18.59**	**133**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**22.62**	**146**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-14**	**71.29**	**87**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-16**	**25.7**	**164**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**27.57**	**105**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-2**	**58.86**	**104**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.6**	**-113**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**23.79**	**107**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**17.86**	**140**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-28 (bg)**	**-2.253**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-1.905**	**-110**	**-81**	**Yes**	**20**	**60**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-5**	**32.23**	**140**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-9**	**83.53**	**165**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.0138	62	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-10	0.1018	56	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-11	-0.02022	-33	-74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-12	0.01798	17	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-13	0.03214	31	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-14**	**0.206**	**122**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-15**	**0.0757**	**142**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-16**	**0.1293**	**106**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-17**	**0.08548**	**90**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-18**	**-0.04679**	**-85**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-2	0.001404	36	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-21	0.01081	21	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-23 (bg)	0	37	74	No	19	84.21	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-24 (bg)	0	0	74	No	19	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-25**	**0.00546**	**115**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-26 (bg)	0	8	74	No	19	94.74	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-27 (bg)	0	23	74	No	19	89.47	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-28 (bg)	0	8	74	No	19	94.74	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-29 (bg)	0	12	74	No	19	94.74	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-30 (bg)	0	0	74	No	19	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-5**	**0.02723**	**94**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-6**	**-0.09777**	**-102**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-8	0.01402	10	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-9**	**0.1767**	**123**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-1**	**-15.85**	**-90**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-10**	**3.46**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-11**	**4.667**	**150**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-12**	**3.12**	**82**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-13**	**7.712**	**112**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-14**	**16.15**	**111**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-15**	**5.214**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-16**	**9.582**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**10.46**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-18	0.05155	1	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-2**	**14.94**	**119**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-21	1.07	38	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-23 (bg)**	**-2.362**	**-126**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (bg)**	**6.327**	**160**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-26 (bg)	-0.2357	-26	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-27 (bg)	0.05223	36	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-28 (bg)**	**-0.1678**	**-113**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (bg)**	**-0.1732**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-3	-4.786	-58	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-30 (bg)**	**-0.1071**	**-90**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-5**	**7.816**	**158**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-6	4.254	74	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-7	0	1	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-8	2.803	72	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-9**	**15.67**	**114**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-1	-0.9924	-25	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-10	0	-3	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-11	-0.4972	-37	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-12	-0.2997	-25	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-13	-0.6371	-41	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-14**	**-0.8806**	**-96**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-15	-0.2702	-37	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-16	-0.4752	-69	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-17	-1.028	-69	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-18**	**0.4942**	**87**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-2	-0.3859	-52	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-21	0.2201	24	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-23 (bg)**	**-0.0804**	**-107**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-24 (bg)	-0.03819	-14	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-25	-0.4577	-22	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-26 (bg)	-0.01424	-7	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-27 (bg)	0.08264	74	81	No	20	5	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-28 (bg)	-0.06416	-68	-81	No	20	10	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-29 (bg)	-0.2146	-81	-81	No	20	10	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	GC-AP-MW-3	-0.2928	-60	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-30 (bg)	0.3373	71	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-31	0.09504	72	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-5**	**-1.011**	**-122**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-6	2.1	81	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-7**	**7.525**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-8	3.973	35	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-9**	**6.497**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-10	0.004303	36	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-12	0.004453	36	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GC-AP-MW-14**	**0.02112**	**106**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-16**	**0.0129**	**95**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GC-AP-MW-17**	**0.0291**	**90**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GC-AP-MW-18	0.004567	62	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-23 (bg)	-0.0006627	-13	-81	No	20	10	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-24 (bg)	0	67	81	No	20	65	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-26 (bg)	0	7	58	No	16	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-27 (bg)	0	18	74	No	19	94.74	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-28 (bg)	0	-3	-74	No	19	84.21	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-29 (bg)	0	35	81	No	20	90	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-30 (bg)	0	19	81	No	20	95	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-5	0.0002578	6	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	GC-AP-MW-12	0.00648	25	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	**GC-AP-MW-23 (bg)**	**-0.08277**	**-165**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-24 (bg)**	**-0.05605**	**-125**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GC-AP-MW-26 (bg)	-0.09944	-88	-98	No	23	0	n/a	n/a	0.01	NP
pH (SU)	**GC-AP-MW-27 (bg)**	**-0.08876**	**-128**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-28 (bg)**	**-0.1309**	**-129**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-29 (bg)**	**-0.4524**	**-180**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GC-AP-MW-30 (bg)**	**-0.1119**	**-164**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-1	10.48	34	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-10**	**13.78**	**154**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-11**	**14.84**	**110**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-13	14.26	65	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-14**	**22.19**	**86**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-15**	**-6.528**	**-92**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-2**	**45.13**	**100**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-23 (bg)**	**-1.275**	**-144**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (bg)**	**15.55**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-26 (bg)	-1.339	-57	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-27 (bg)	0.4243	74	81	No	20	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-28 (bg)**	**0.5669**	**106**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-29 (bg)	0	7	81	No	20	50	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-30 (bg)	0	15	81	No	20	75	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-5**	**27.92**	**148**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-6	11.33	74	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-7	-4.017	-13	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-9**	**20.57**	**97**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-1	0	1	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-10**	**18.59**	**133**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11**	**22.62**	**146**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-12	8.496	50	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-13	24.02	79	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-14**	**71.29**	**87**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-15	9.251	55	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-16**	**25.7**	**164**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**27.57**	**105**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-18	-9.61	-53	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-2**	**58.86**	**104**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-21	3.383	12	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-23 (bg)**	**-6.6**	**-113**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (bg)**	**23.79**	**107**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-25**	**17.86**	**140**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-26 (bg)	-2.73	-48	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-27 (bg)	0.3739	41	81	No	20	25	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-28 (bg)**	**-2.253**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-29 (bg)**	**-1.905**	**-110**	**-81**	**Yes**	**20**	**60**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-3	-6.092	-75	-81	No	20	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

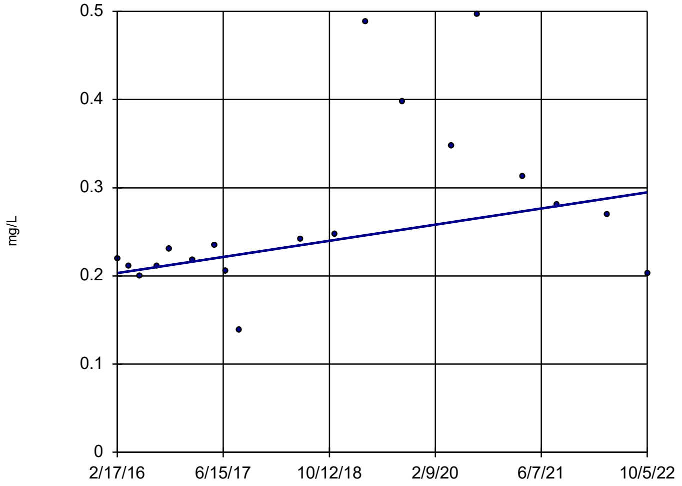
Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 12/9/2022, 10:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
TDS (mg/L)	GC-AP-MW-30 (bg)	0.4363	42	81	No	20	25	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-5**	**32.23**	**140**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-6	20.83	75	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-7	3.995	14	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-8	12.2	42	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-9**	**83.53**	**165**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-1



n = 19

Slope = 0.0138 units per year.

Mann-Kendall statistic = 62 critical = 74

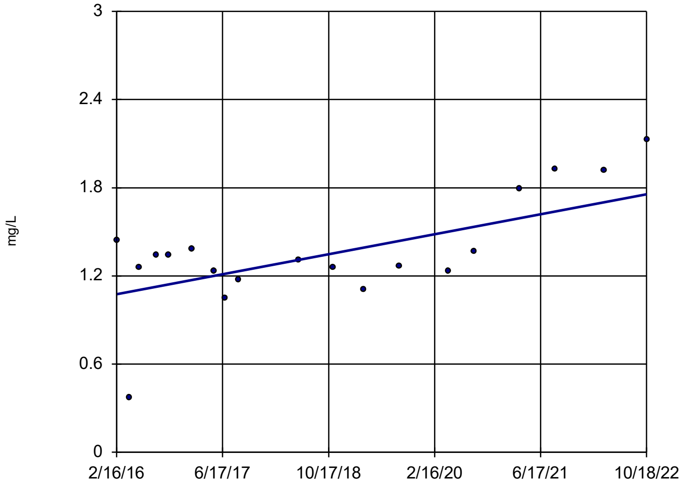
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 19

Slope = 0.1018 units per year.

Mann-Kendall statistic = 56 critical = 74

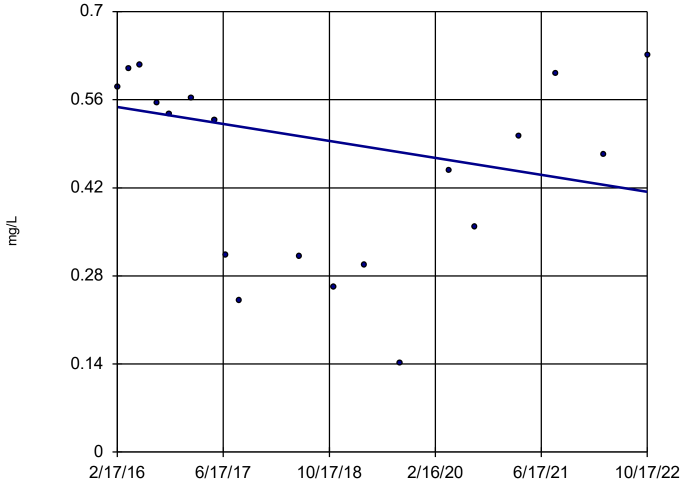
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 19

Slope = -0.02022 units per year.

Mann-Kendall statistic = -33 critical = -74

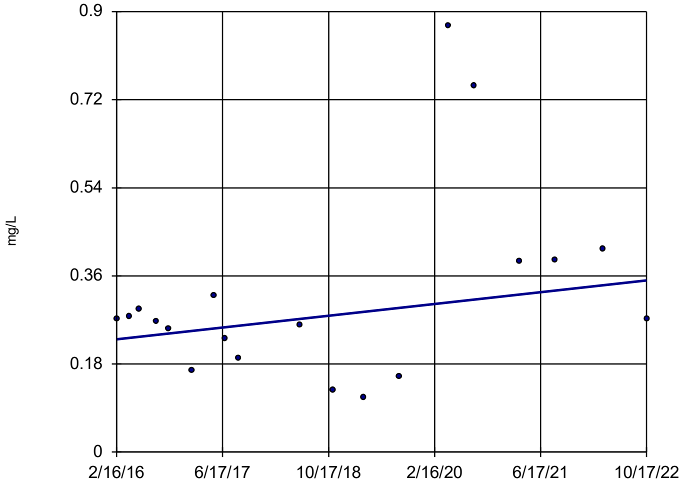
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 19

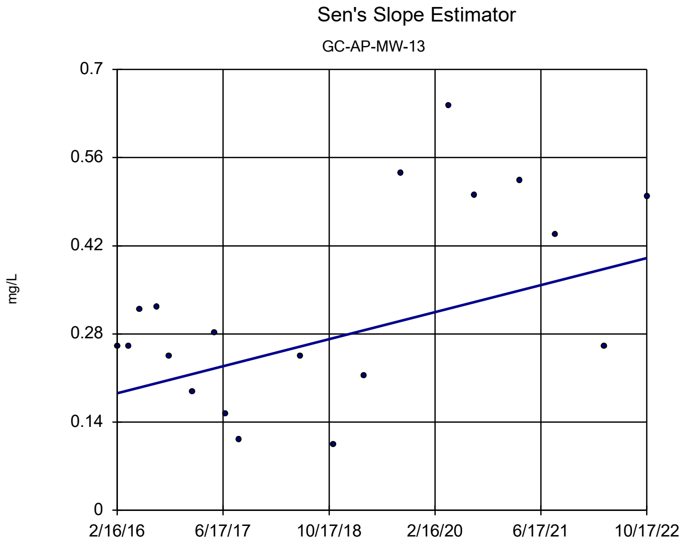
Slope = 0.01798 units per year.

Mann-Kendall statistic = 17 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 19

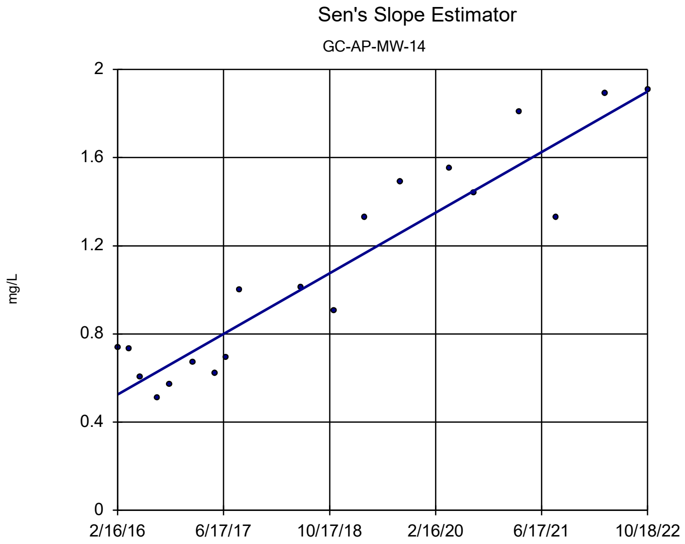
Slope = 0.03214 units per year.

Mann-Kendall statistic = 31 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 19

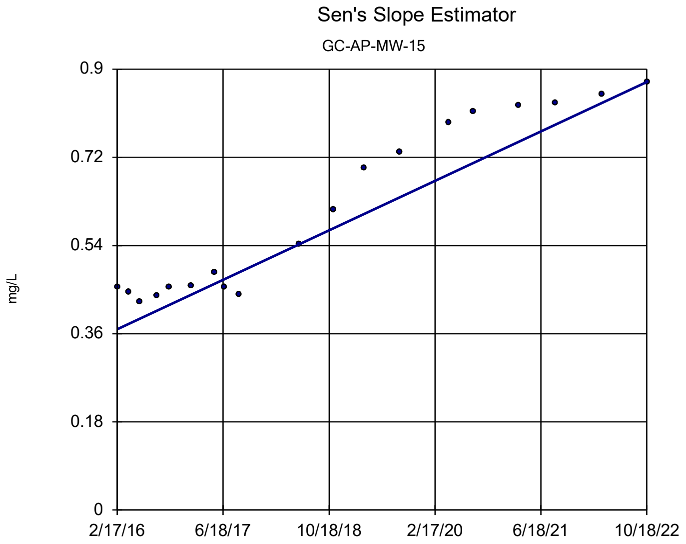
Slope = 0.206 units per year.

Mann-Kendall statistic = 122 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 19

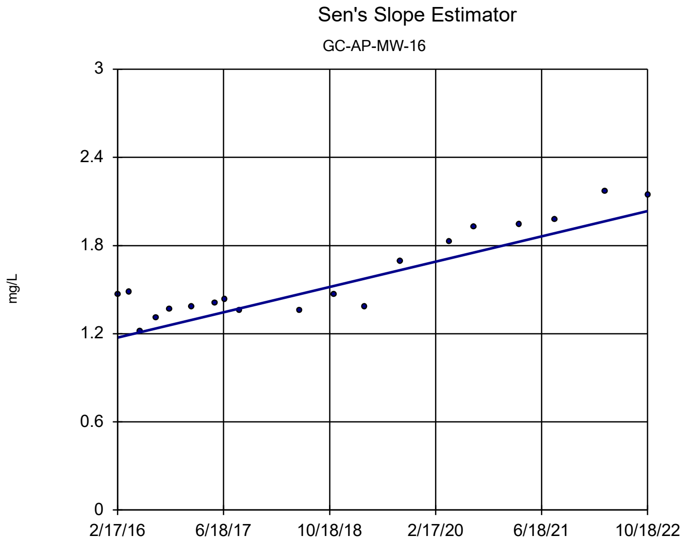
Slope = 0.0757 units per year.

Mann-Kendall statistic = 142 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 19

Slope = 0.1293 units per year.

Mann-Kendall statistic = 106 critical = 74

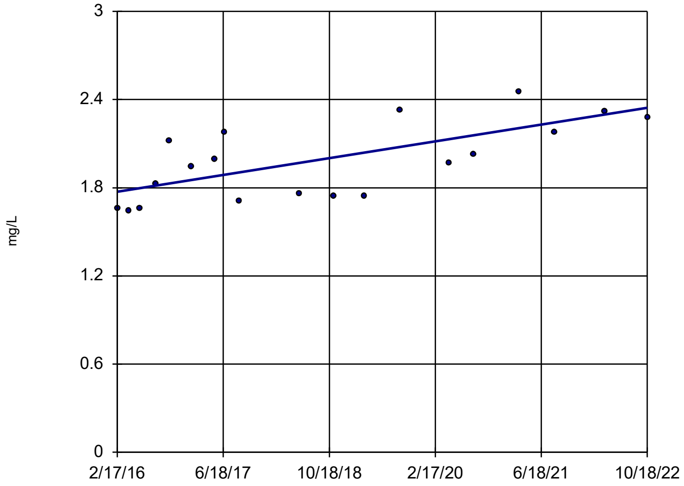
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-17



n = 19

Slope = 0.08548 units per year.

Mann-Kendall statistic = 90 critical = 74

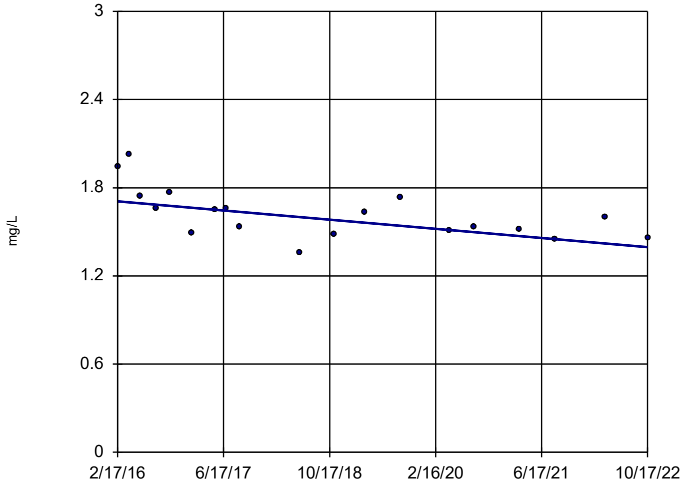
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-18



n = 19

Slope = -0.04679 units per year.

Mann-Kendall statistic = -85 critical = -74

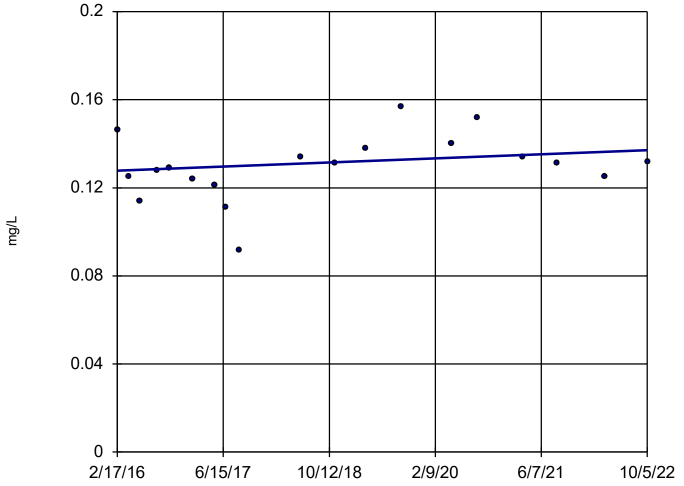
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 19

Slope = 0.001404 units per year.

Mann-Kendall statistic = 36 critical = 74

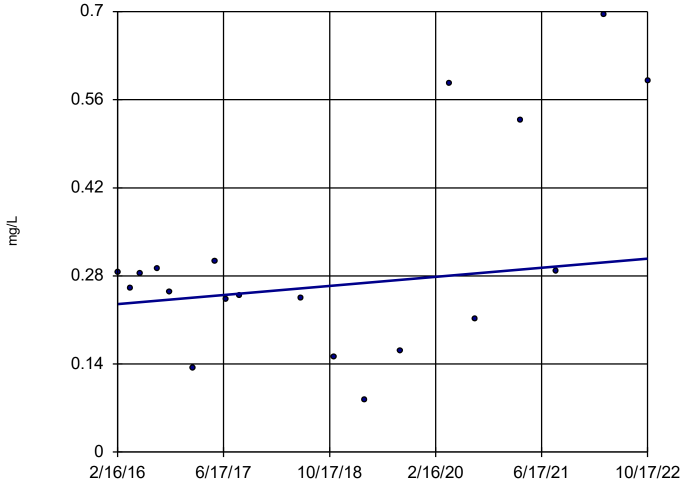
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 19

Slope = 0.01081 units per year.

Mann-Kendall statistic = 21 critical = 74

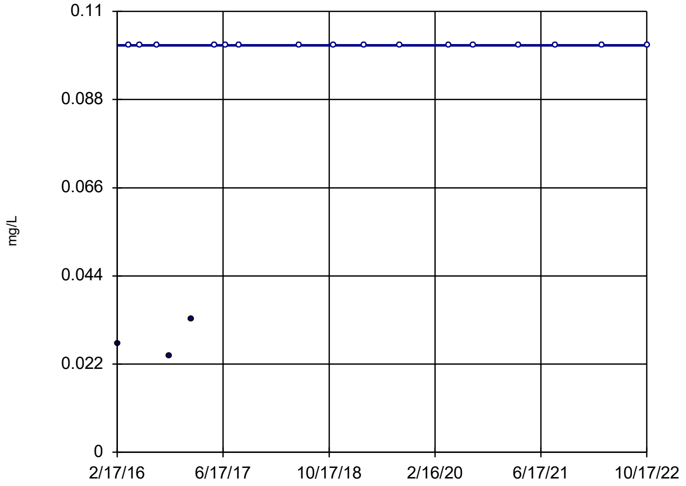
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 37
critical = 74

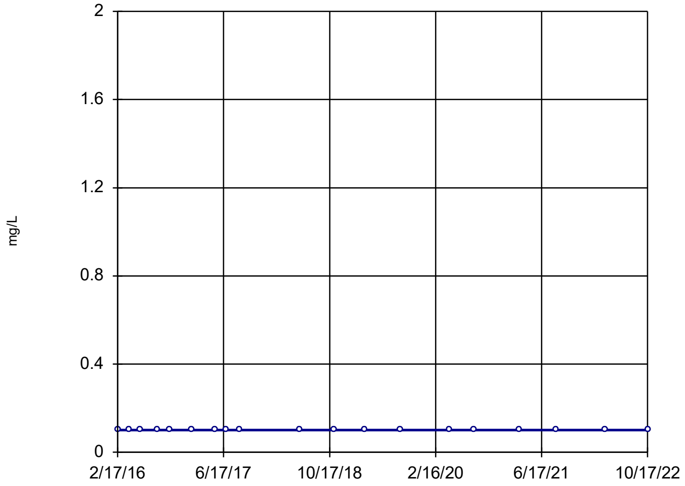
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 12/9/2022 10:49 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 74

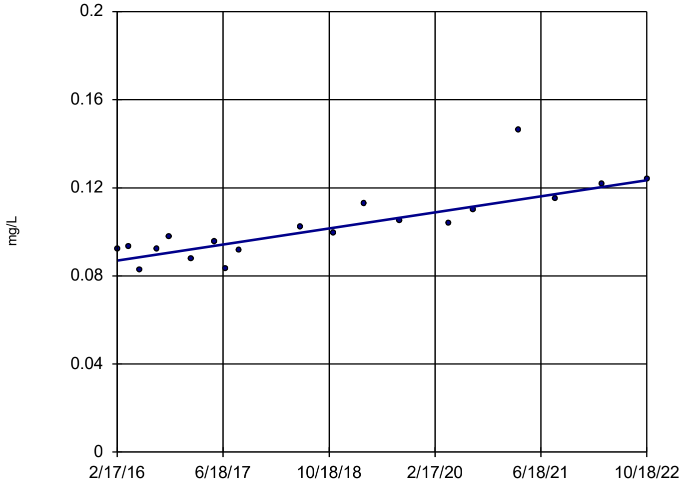
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 12/9/2022 10:49 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-25



n = 19

Slope = 0.00546
units per year.

Mann-Kendall
statistic = 115
critical = 74

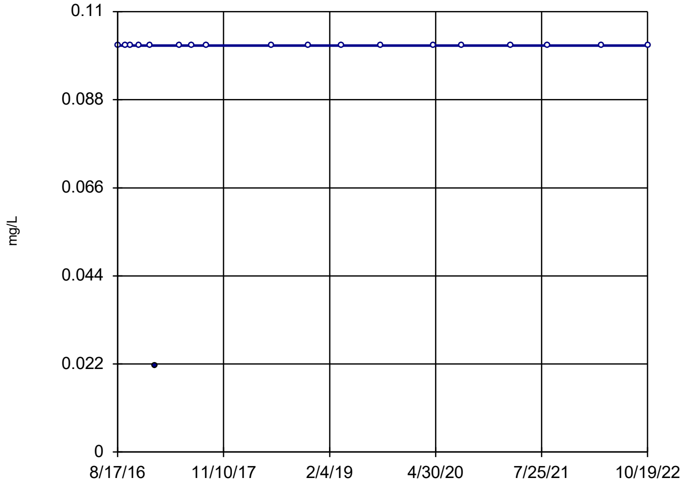
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 12/9/2022 10:49 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 19

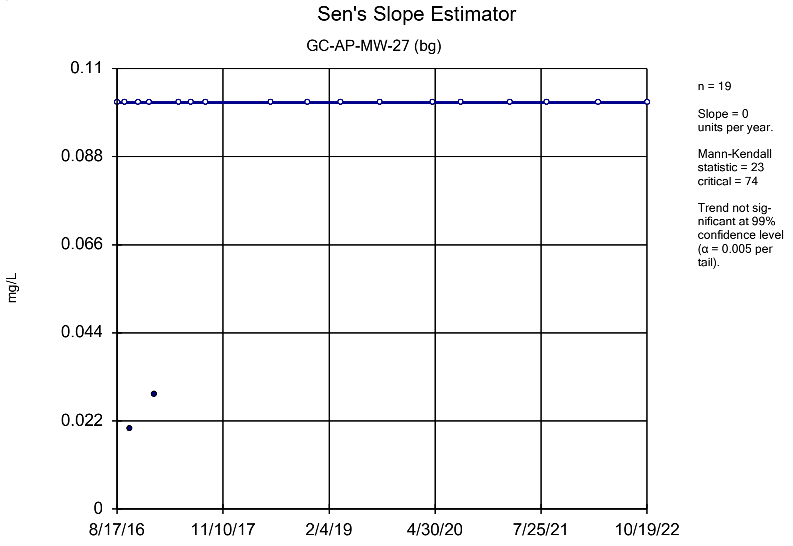
Slope = 0
units per year.

Mann-Kendall
statistic = 8
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 12/9/2022 10:49 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



n = 19

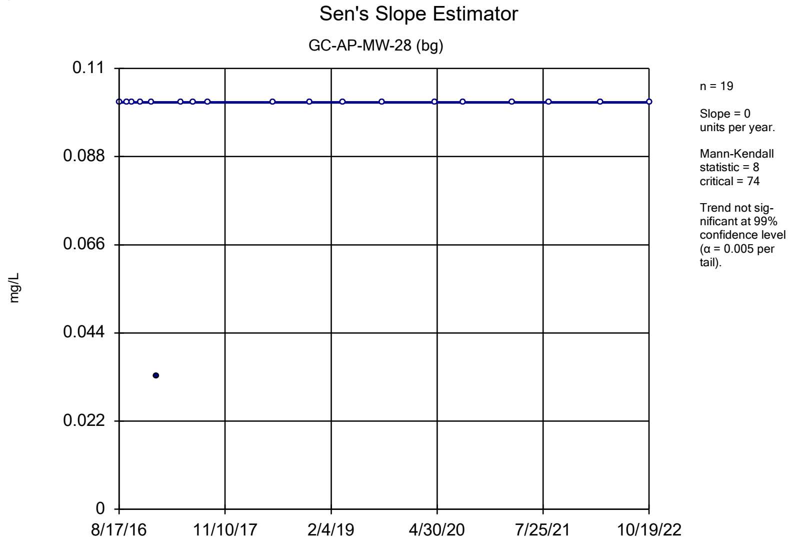
Slope = 0
units per year.

Mann-Kendall
statistic = 23
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



n = 19

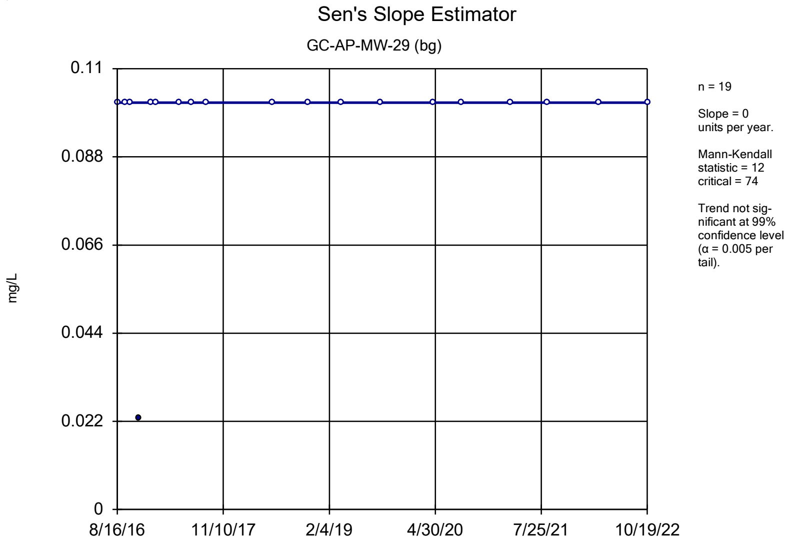
Slope = 0
units per year.

Mann-Kendall
statistic = 8
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



n = 19

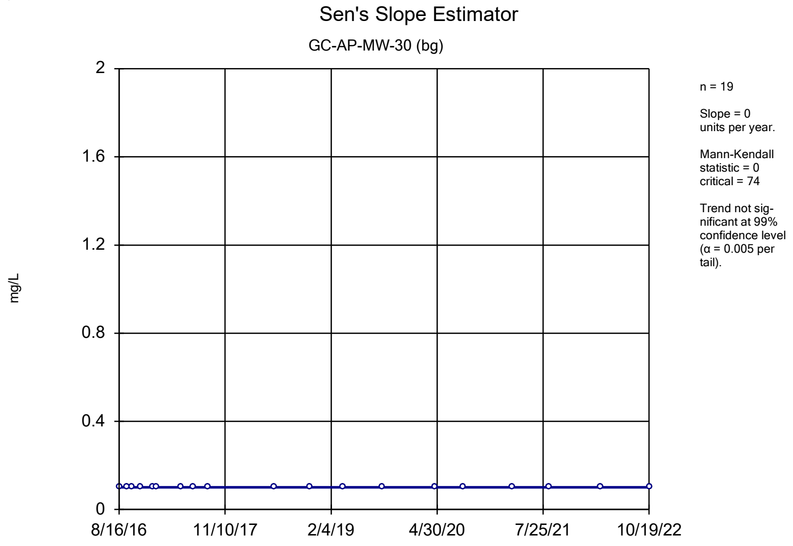
Slope = 0
units per year.

Mann-Kendall
statistic = 12
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 74

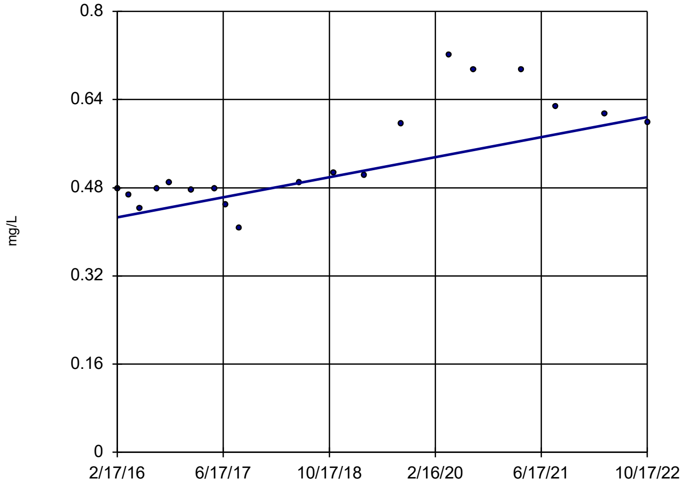
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 19

Slope = 0.02723 units per year.

Mann-Kendall statistic = 94 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

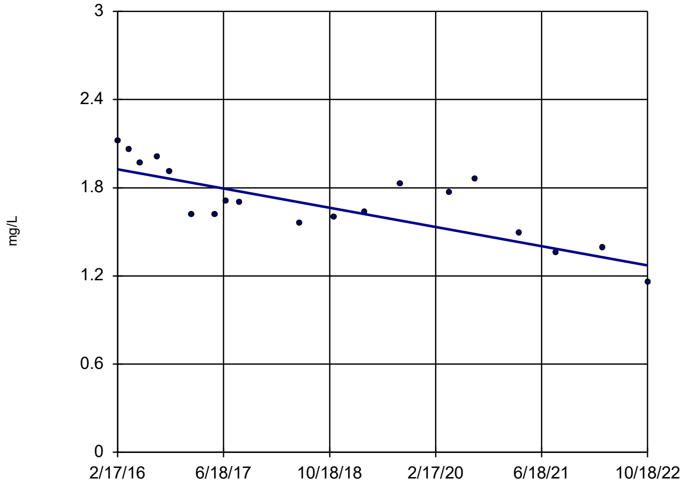
Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-6



n = 19

Slope = -0.09777 units per year.

Mann-Kendall statistic = -102 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

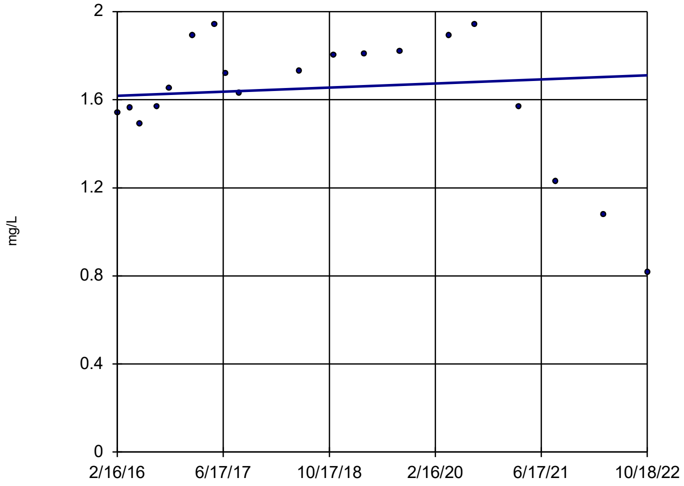
Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-8



n = 19

Slope = 0.01402 units per year.

Mann-Kendall statistic = 10 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

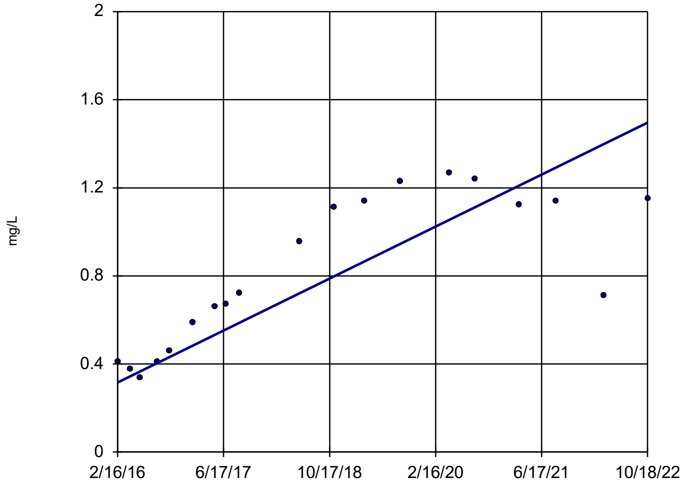
Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-9



n = 19

Slope = 0.1767 units per year.

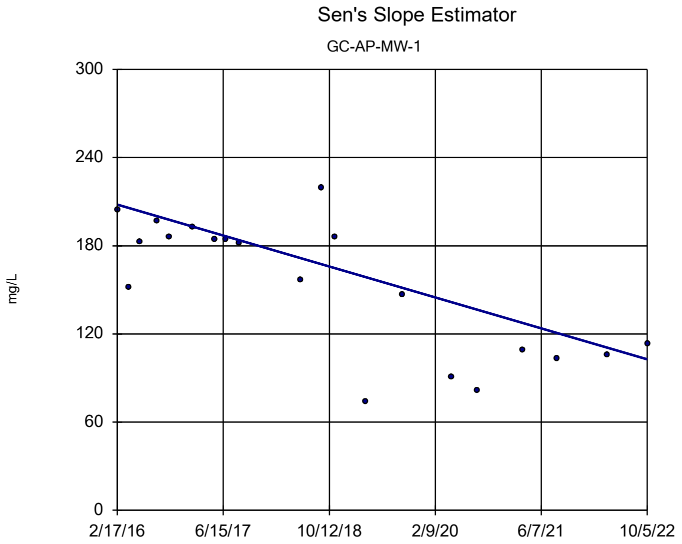
Mann-Kendall statistic = 123 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2022 10:49 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = -15.85 units per year.

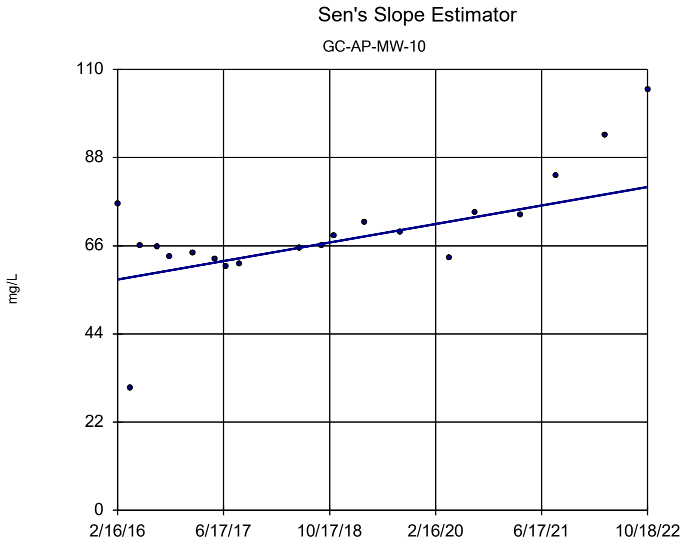
Mann-Kendall statistic = -90 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/9/2022 10:49 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = 3.46 units per year.

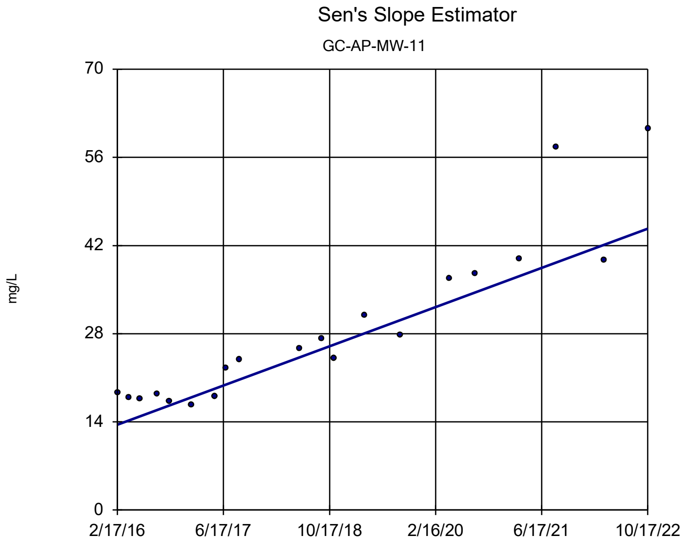
Mann-Kendall statistic = 94 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = 4.667 units per year.

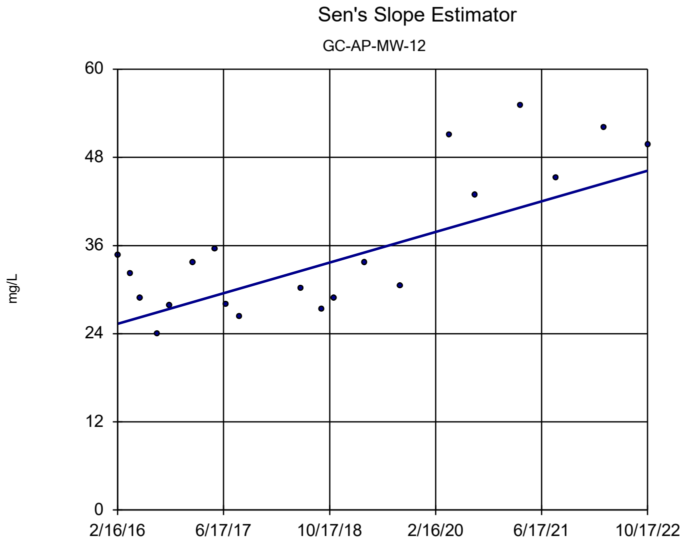
Mann-Kendall statistic = 150 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = 3.12 units per year.

Mann-Kendall statistic = 82 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

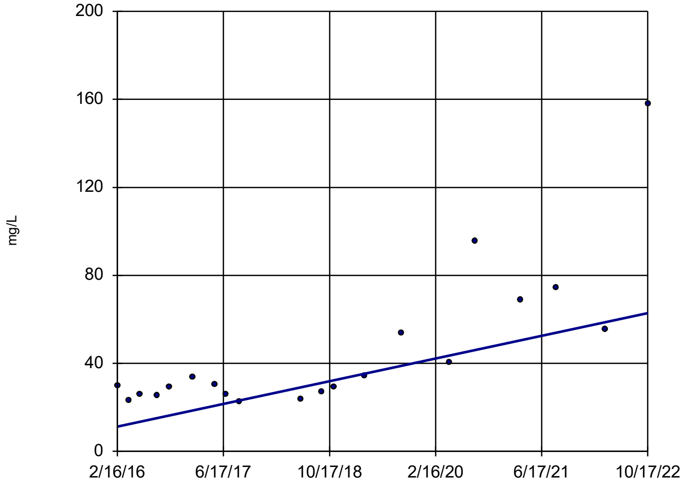
Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-13



n = 20

Slope = 7.712
units per year.

Mann-Kendall
statistic = 112
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

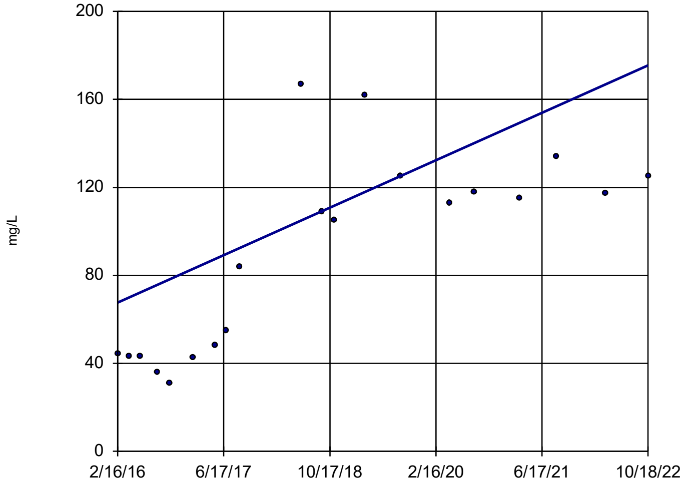
Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 20

Slope = 16.15
units per year.

Mann-Kendall
statistic = 111
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

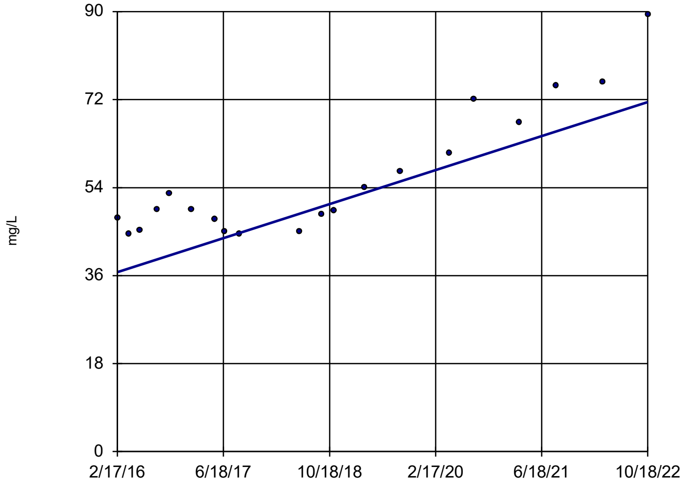
Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-15



n = 20

Slope = 5.214
units per year.

Mann-Kendall
statistic = 122
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

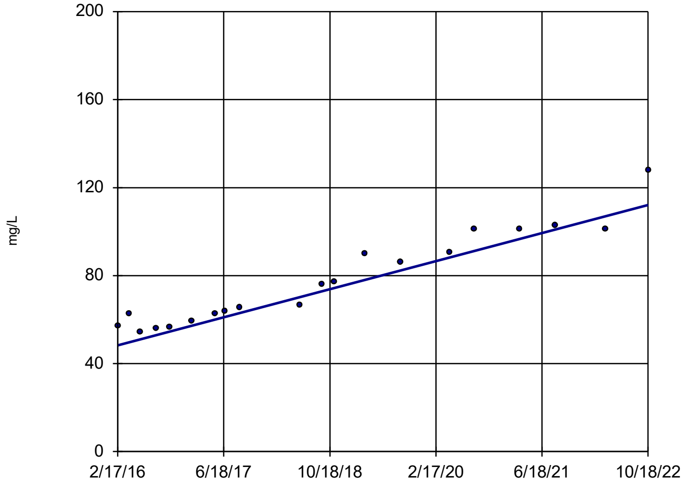
Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-16



n = 20

Slope = 9.582
units per year.

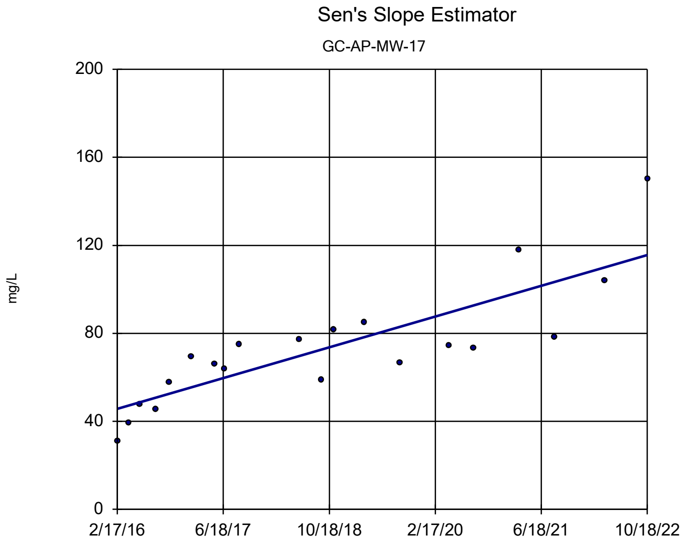
Mann-Kendall
statistic = 168
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

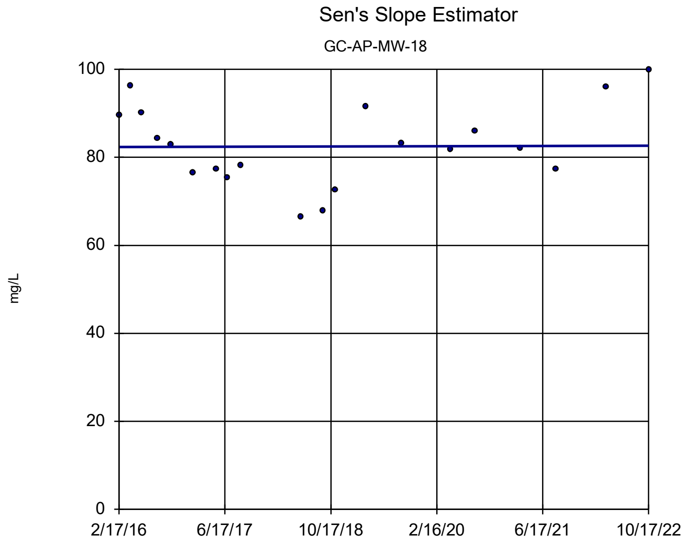
Slope = 10.46
units per year.

Mann-Kendall
statistic = 136
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

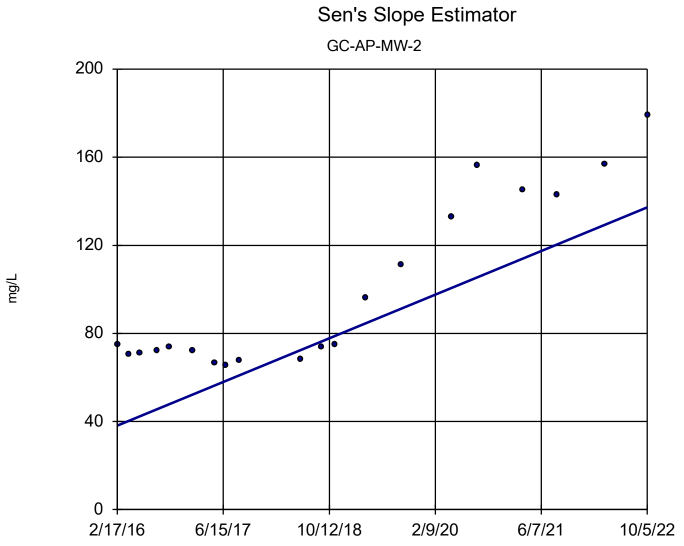
Slope = 0.05155
units per year.

Mann-Kendall
statistic = 1
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

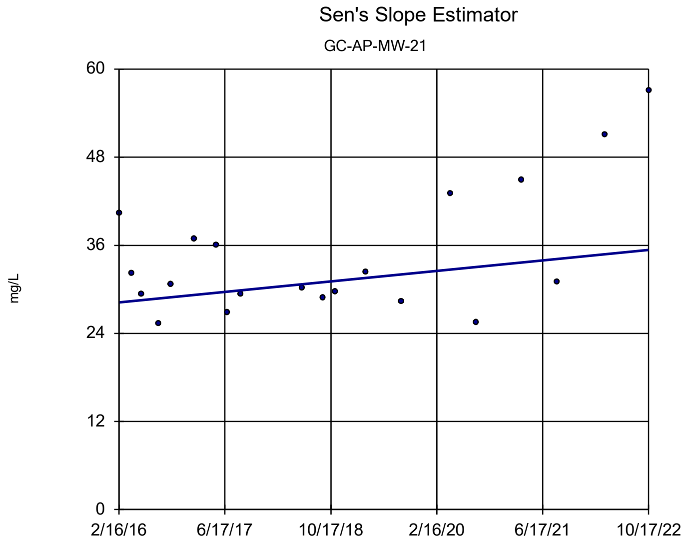
Slope = 14.94
units per year.

Mann-Kendall
statistic = 119
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = 1.07
units per year.

Mann-Kendall
statistic = 38
critical = 81

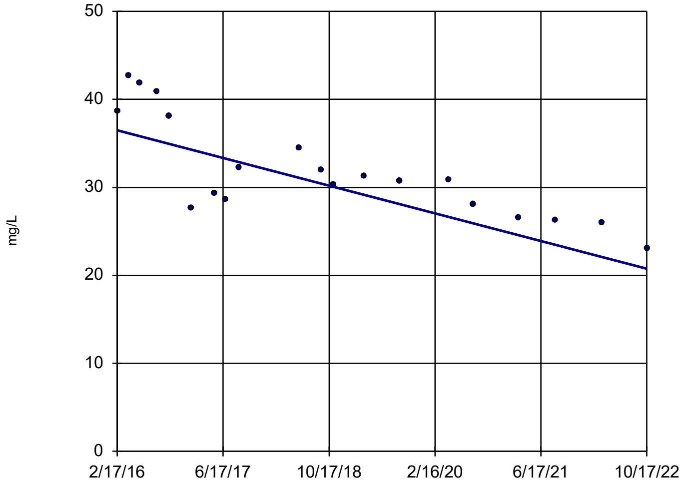
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 20

Slope = -2.362
units per year.

Mann-Kendall
statistic = -126
critical = -81

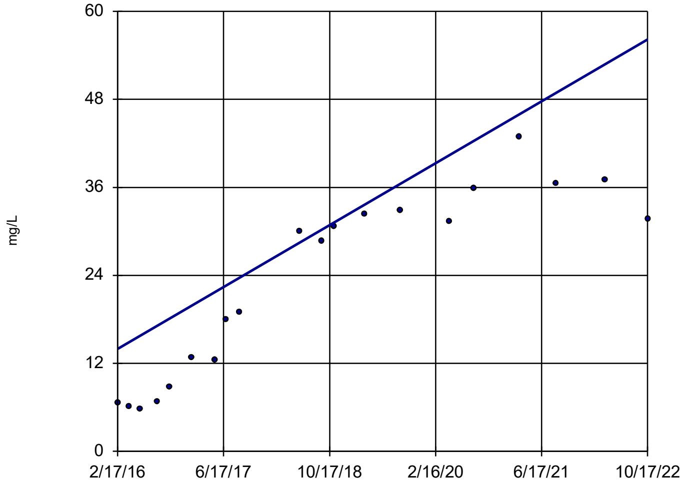
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 20

Slope = 6.327
units per year.

Mann-Kendall
statistic = 160
critical = 81

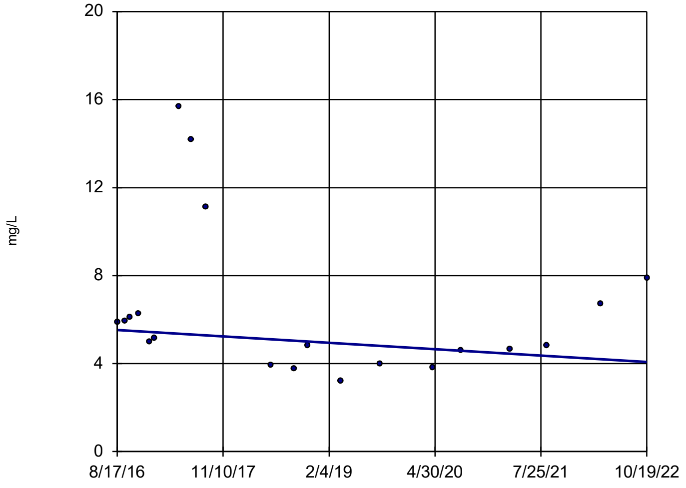
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 20

Slope = -0.2357
units per year.

Mann-Kendall
statistic = -26
critical = -81

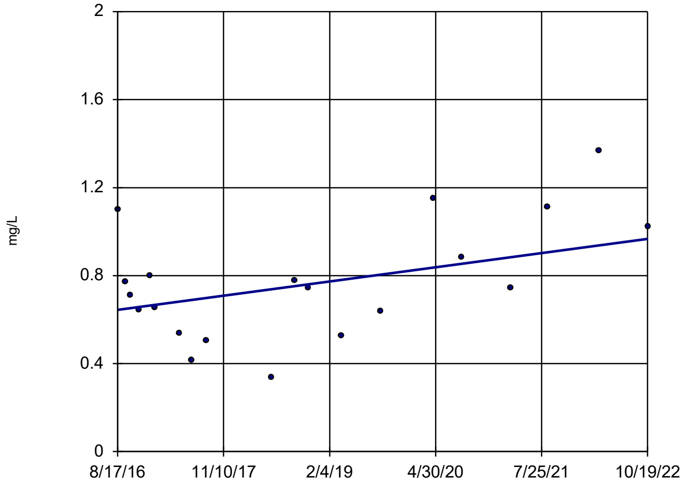
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 20

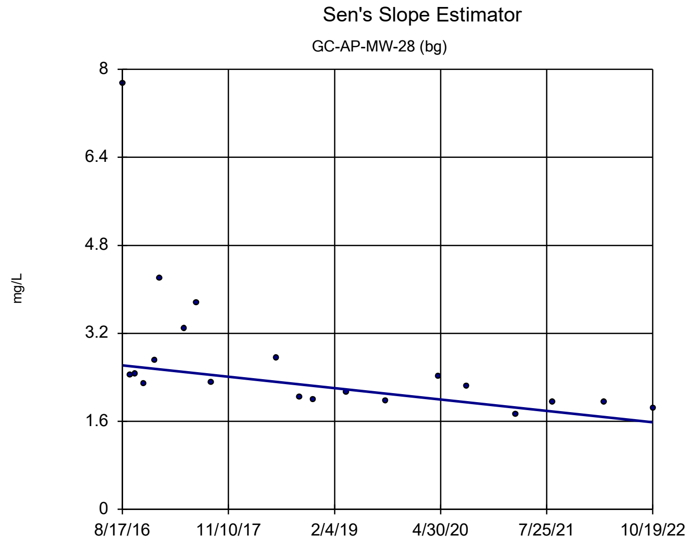
Slope = 0.05223
units per year.

Mann-Kendall
statistic = 36
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-28 (bg)

n = 20

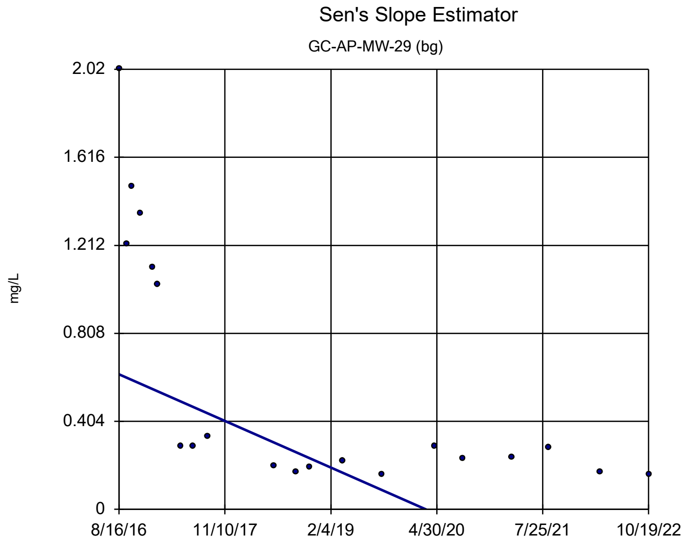
Slope = -0.1678
units per year.

Mann-Kendall
statistic = -113
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-29 (bg)

n = 20

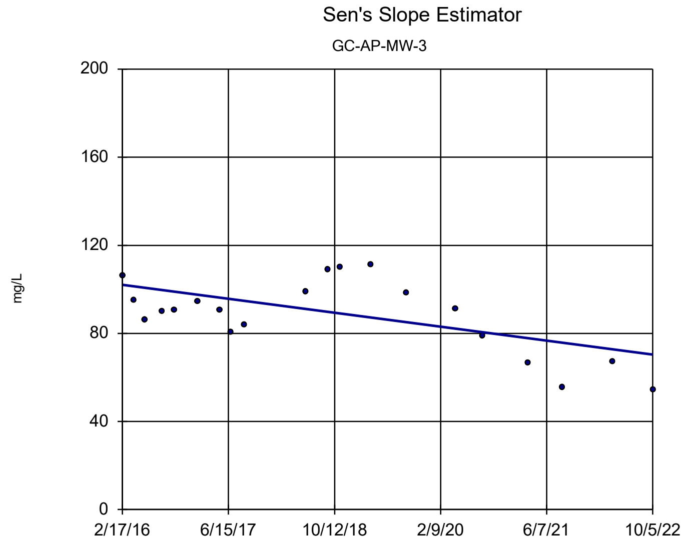
Slope = -0.1732
units per year.

Mann-Kendall
statistic = -121
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-3

n = 20

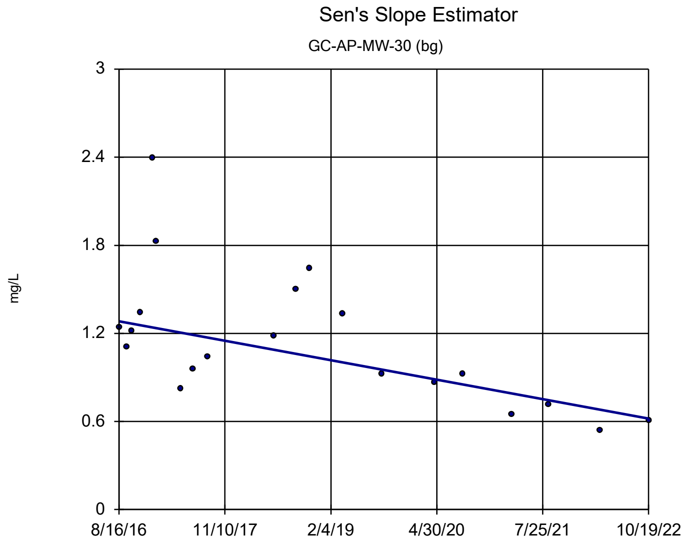
Slope = -4.786
units per year.

Mann-Kendall
statistic = -58
critical = -81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-30 (bg)

n = 20

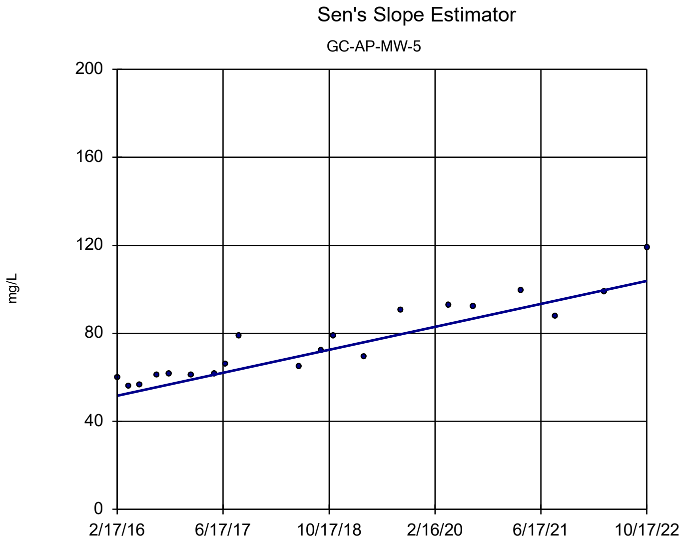
Slope = -0.1071
units per year.

Mann-Kendall
statistic = -90
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

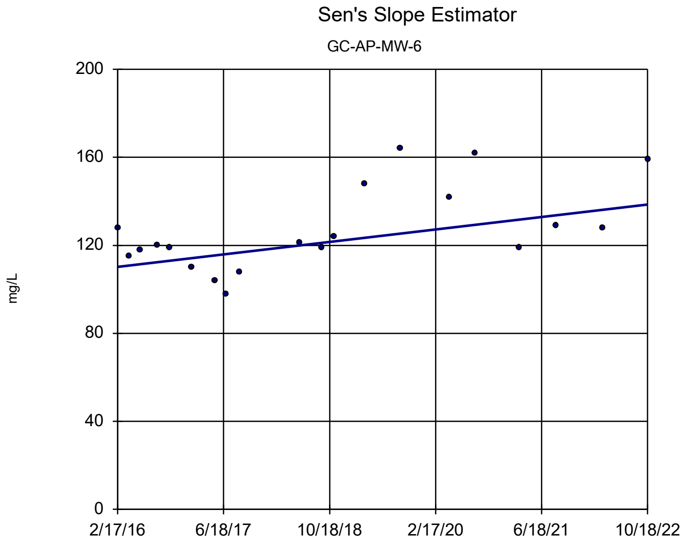
Slope = 7.816
units per year.

Mann-Kendall
statistic = 158
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

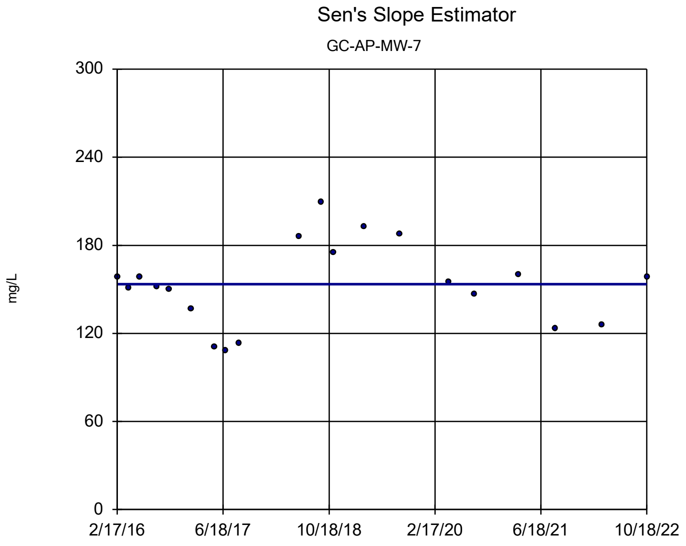
Slope = 4.254
units per year.

Mann-Kendall
statistic = 74
critical = 81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

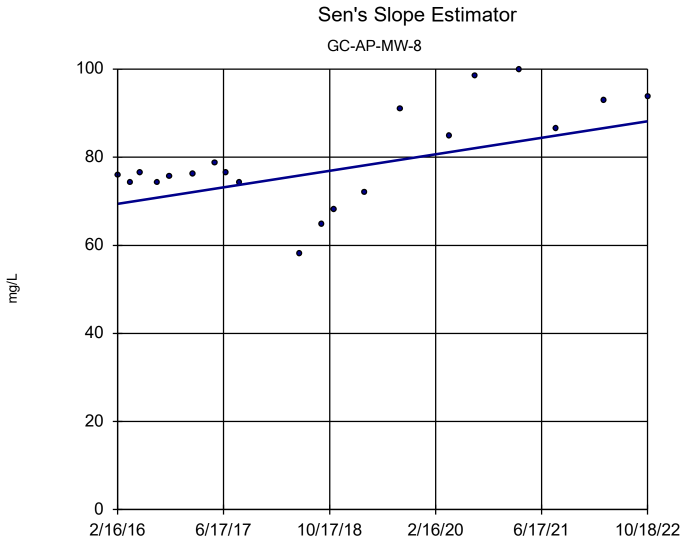
Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = 2.803
units per year.

Mann-Kendall
statistic = 72
critical = 81

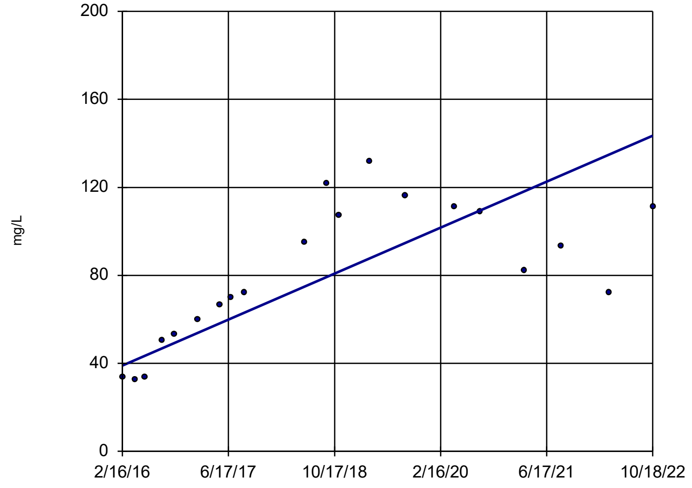
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-9



n = 20

Slope = 15.67
units per year.

Mann-Kendall
statistic = 114
critical = 81

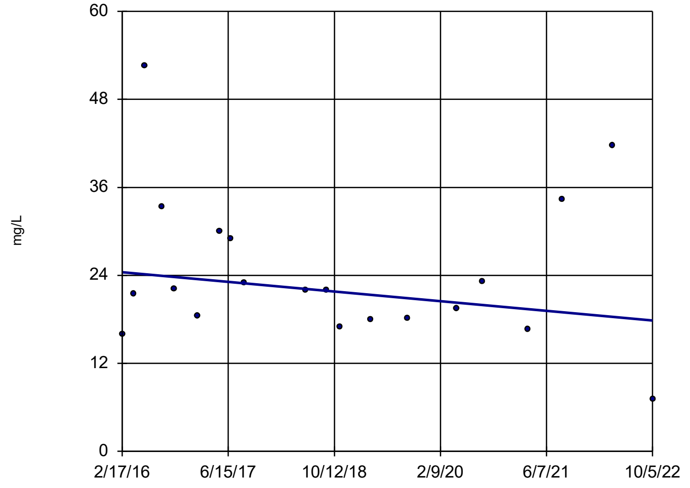
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-1



n = 20

Slope = -0.9924
units per year.

Mann-Kendall
statistic = -25
critical = -81

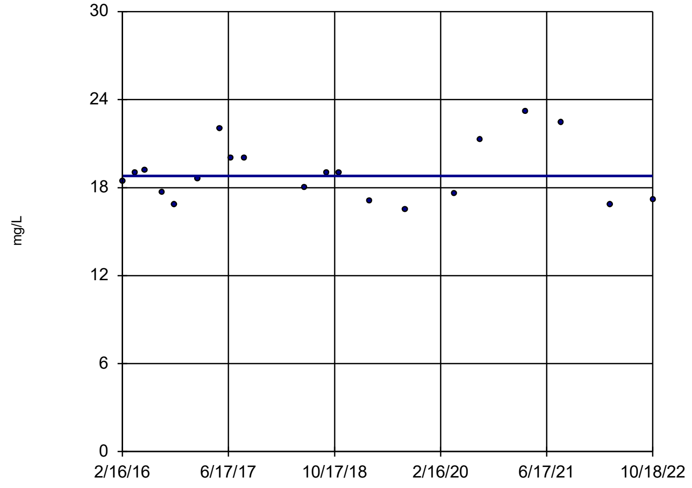
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = -3
critical = -81

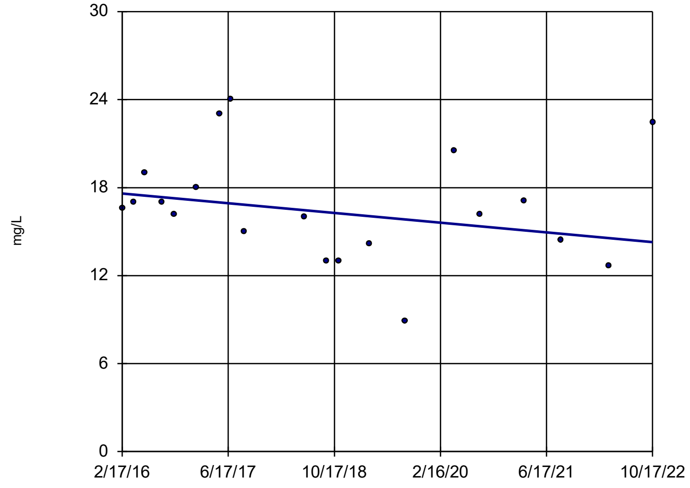
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 20

Slope = -0.4972
units per year.

Mann-Kendall
statistic = -37
critical = -81

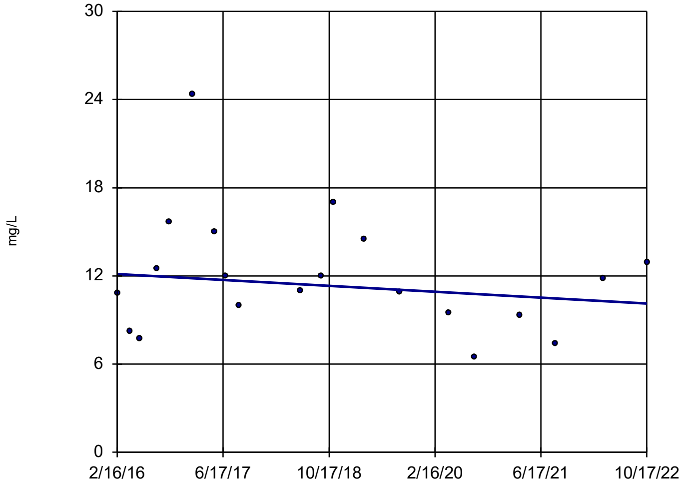
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 20

Slope = -0.2997 units per year.

Mann-Kendall statistic = -25 critical = -81

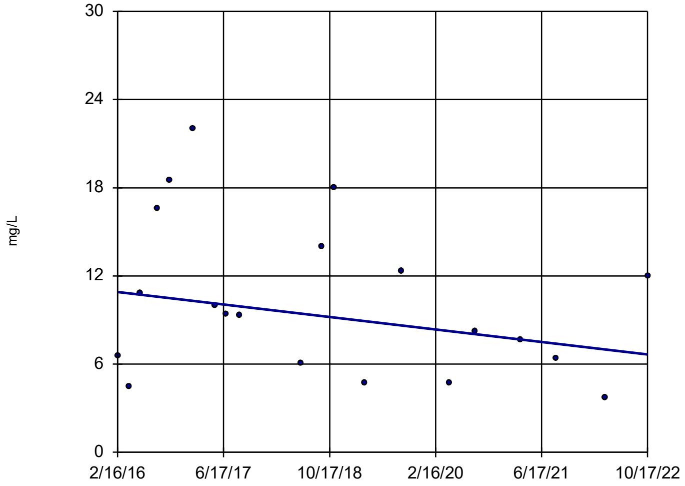
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-13



n = 20

Slope = -0.6371 units per year.

Mann-Kendall statistic = -41 critical = -81

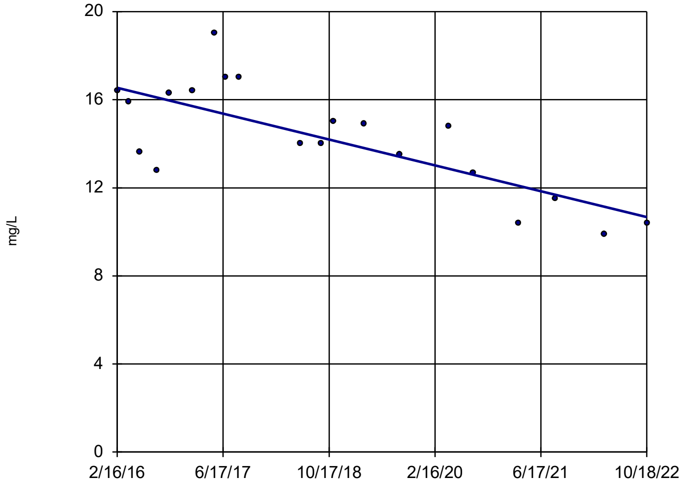
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 20

Slope = -0.8806 units per year.

Mann-Kendall statistic = -96 critical = -81

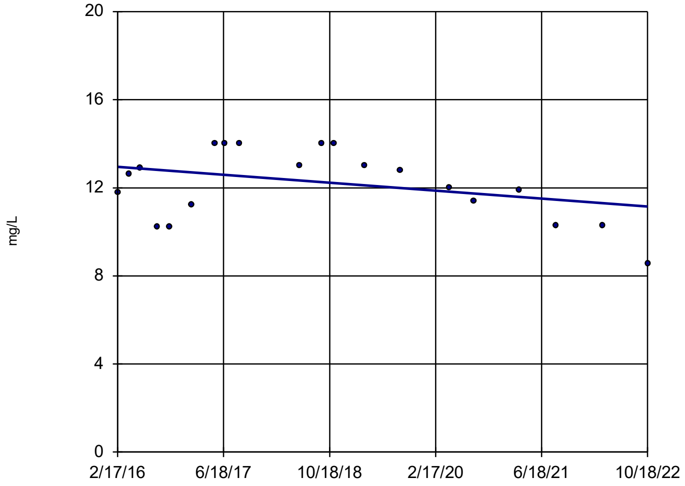
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-15



n = 20

Slope = -0.2702 units per year.

Mann-Kendall statistic = -37 critical = -81

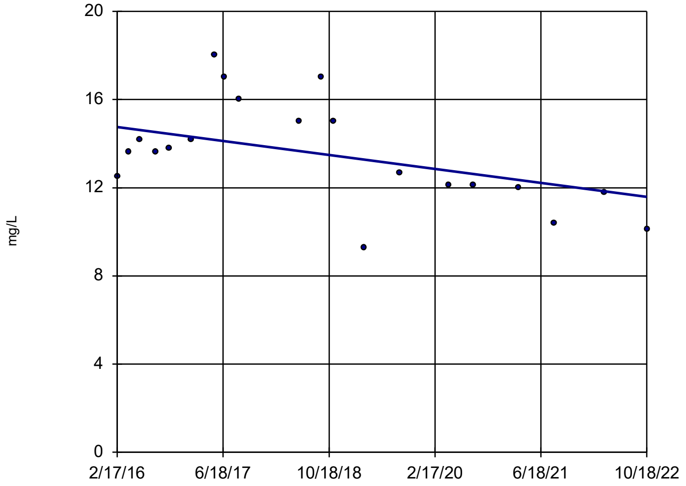
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-16



n = 20

Slope = -0.4752 units per year.

Mann-Kendall statistic = -69 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

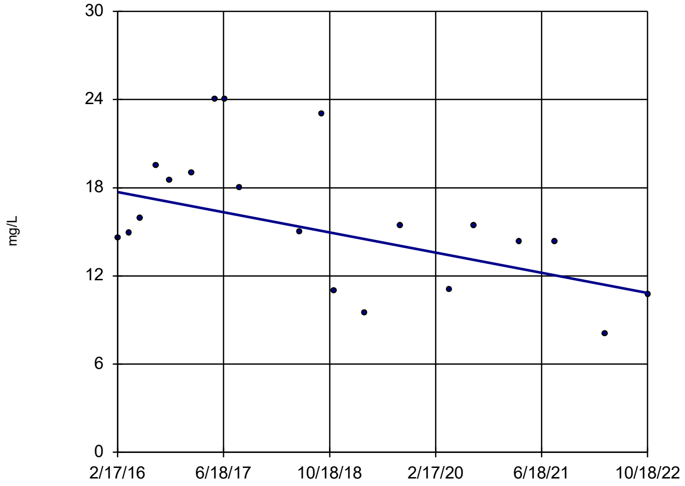
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-17



n = 20

Slope = -1.028 units per year.

Mann-Kendall statistic = -69 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

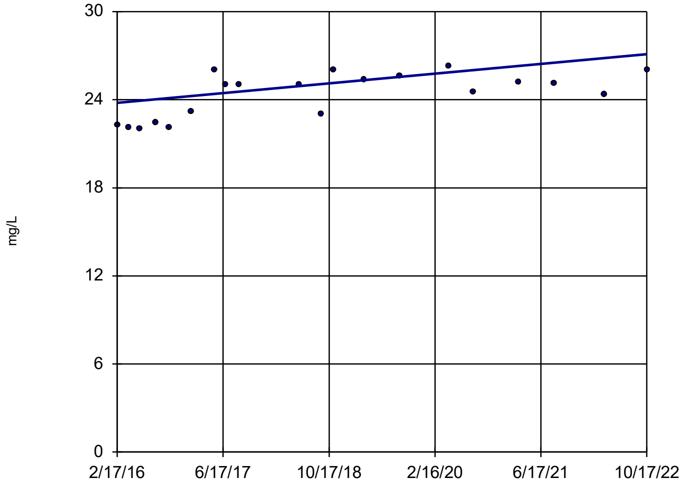
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-18



n = 20

Slope = 0.4942 units per year.

Mann-Kendall statistic = 87 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

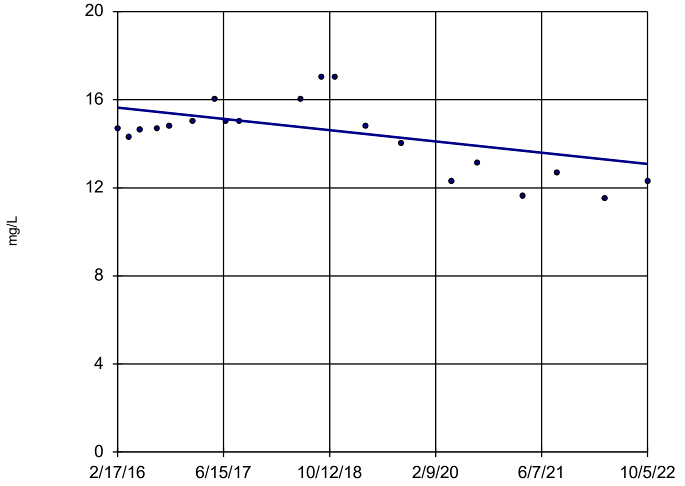
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 20

Slope = -0.3859 units per year.

Mann-Kendall statistic = -52 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

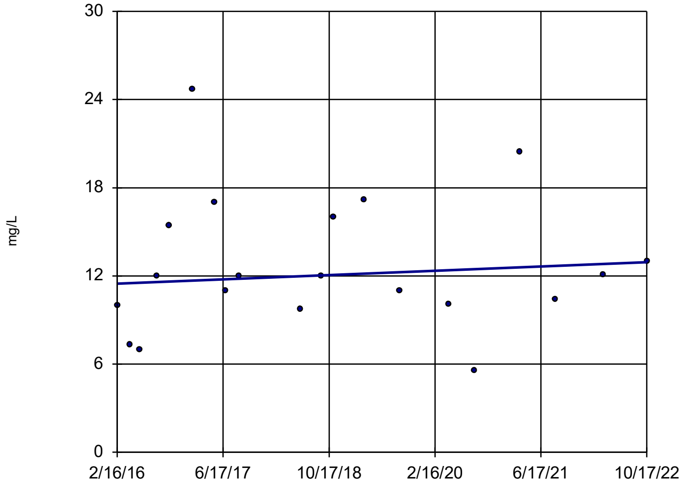
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 20

Slope = 0.2201
units per year.

Mann-Kendall
statistic = 24
critical = 81

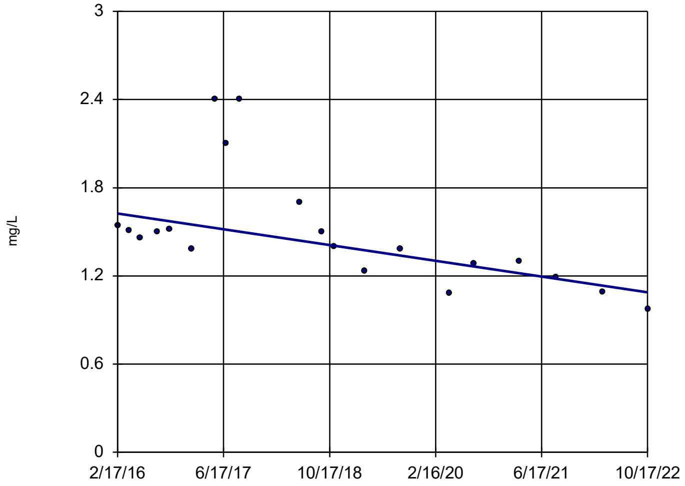
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 20

Slope = -0.0804
units per year.

Mann-Kendall
statistic = -107
critical = -81

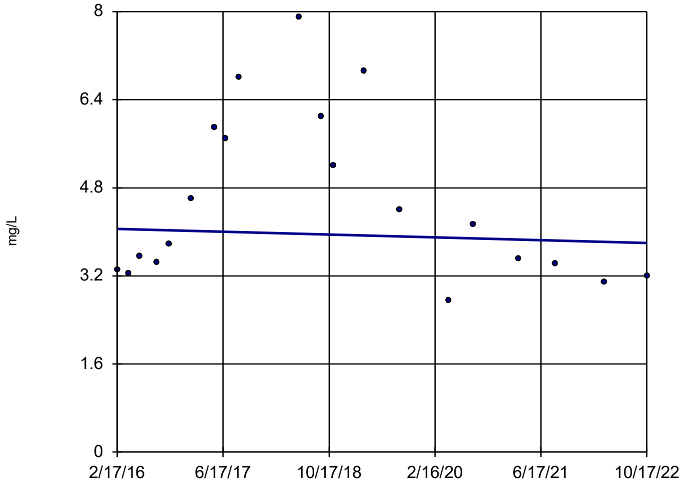
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 20

Slope = -0.03819
units per year.

Mann-Kendall
statistic = -14
critical = -81

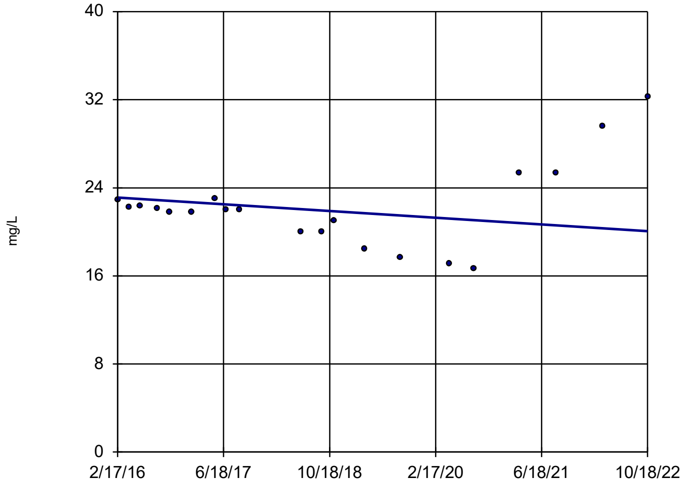
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-25



n = 20

Slope = -0.4577
units per year.

Mann-Kendall
statistic = -22
critical = -81

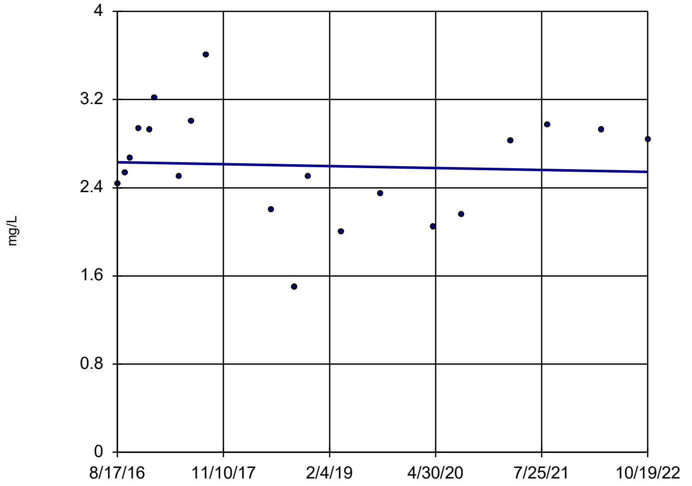
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 20

Slope = -0.01424 units per year.

Mann-Kendall statistic = -7 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

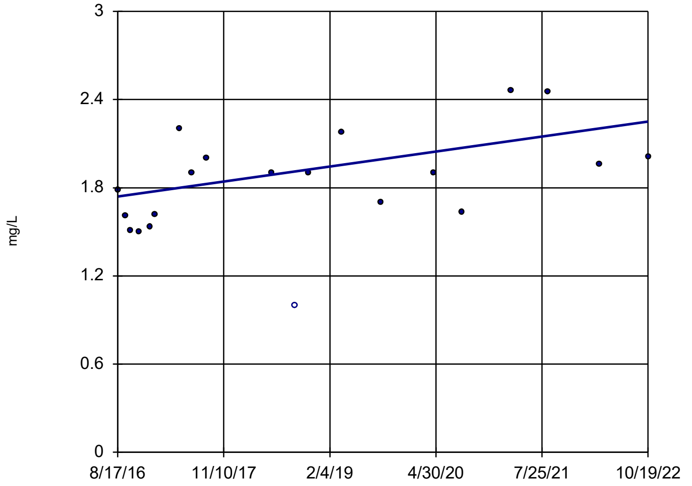
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 20

Slope = 0.08264 units per year.

Mann-Kendall statistic = 74 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

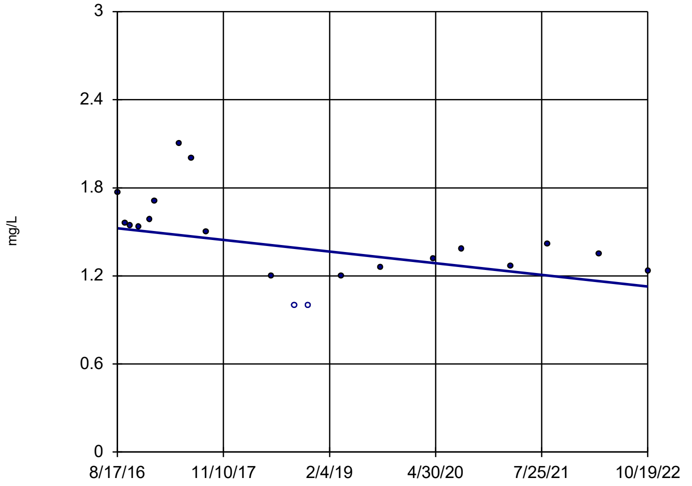
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 20

Slope = -0.06416 units per year.

Mann-Kendall statistic = -68 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

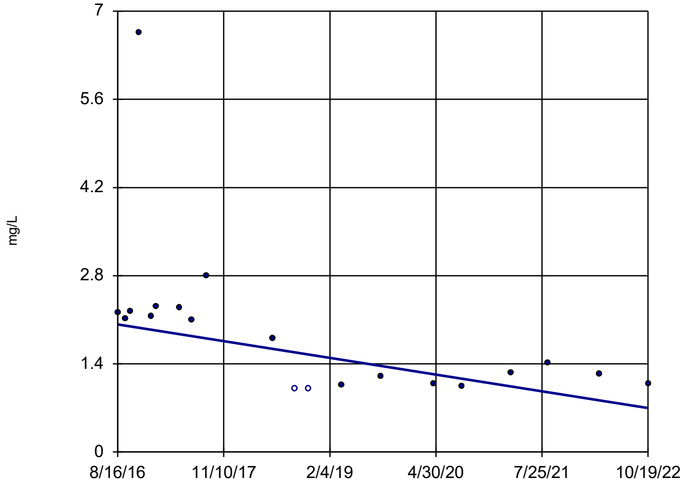
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 20

Slope = -0.2146 units per year.

Mann-Kendall statistic = -81 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

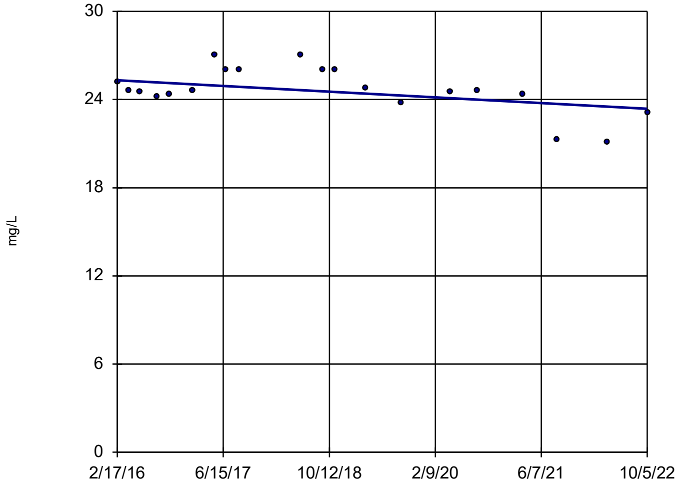
Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-3



n = 20

Slope = -0.2928 units per year.

Mann-Kendall statistic = -60 critical = -81

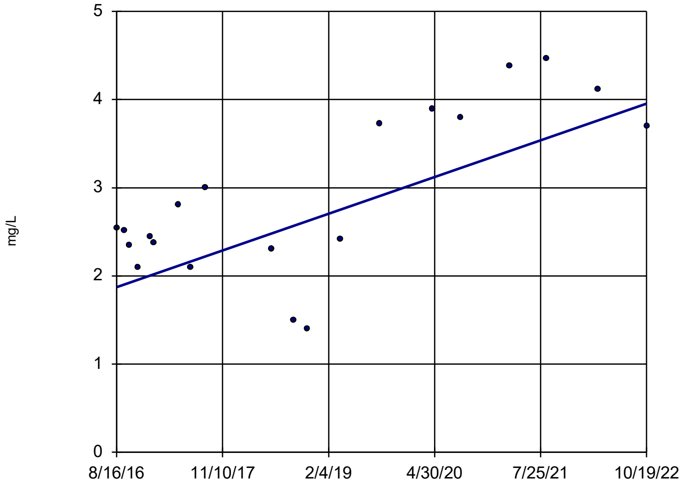
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-30 (bg)



n = 20

Slope = 0.3373 units per year.

Mann-Kendall statistic = 71 critical = 81

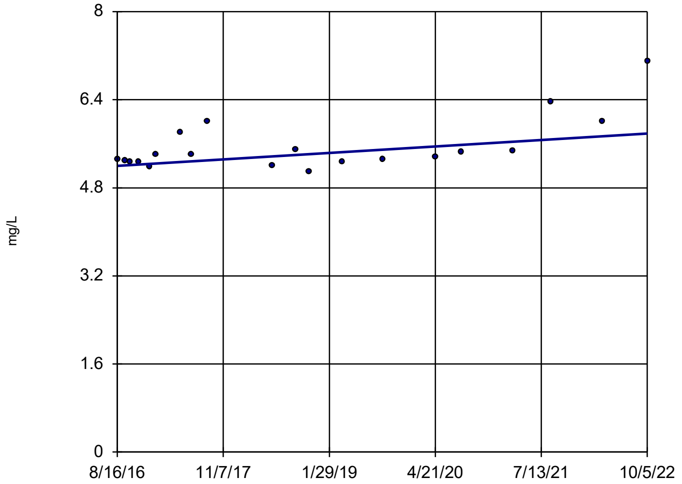
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-31



n = 20

Slope = 0.09504 units per year.

Mann-Kendall statistic = 72 critical = 81

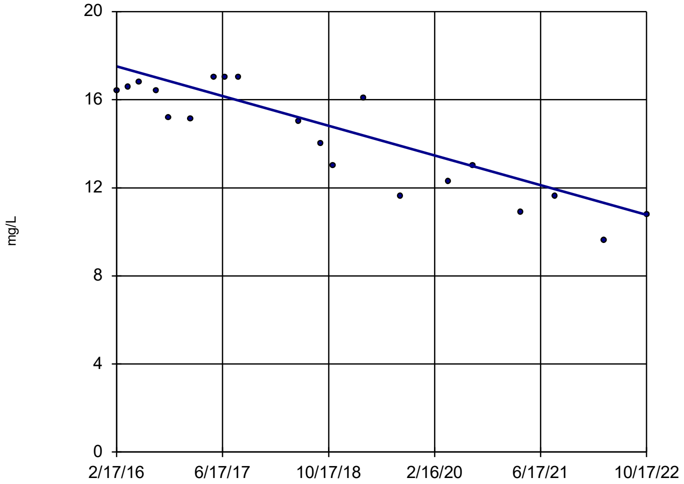
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 20

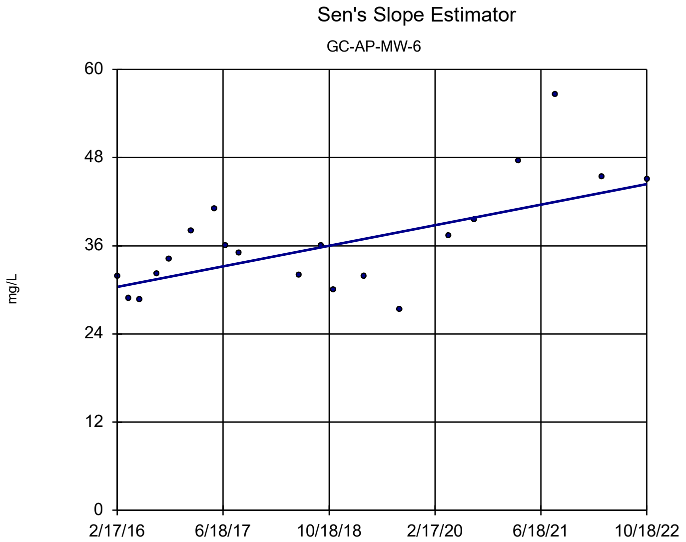
Slope = -1.011 units per year.

Mann-Kendall statistic = -122 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

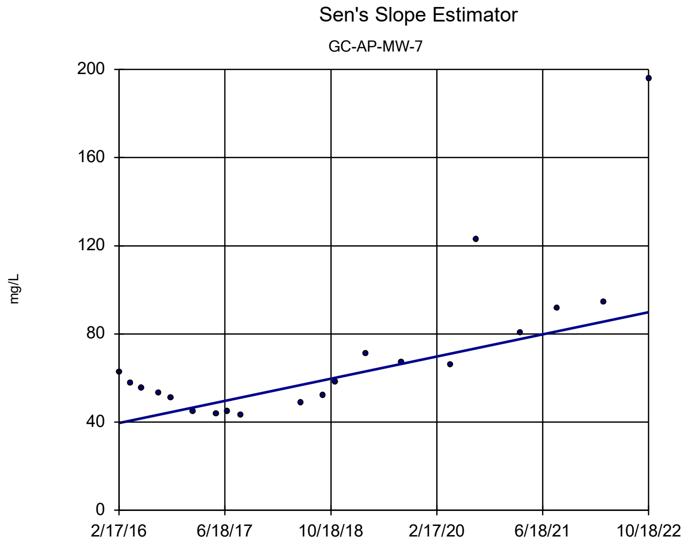
Slope = 2.1 units per year.

Mann-Kendall statistic = 81 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

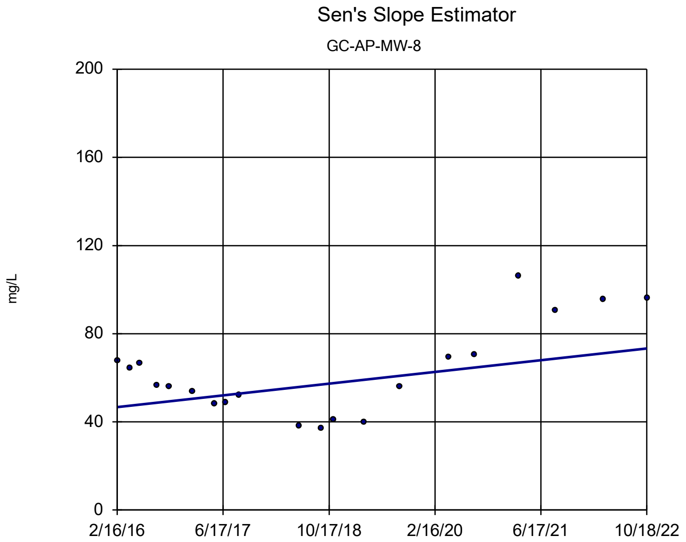
Slope = 7.525 units per year.

Mann-Kendall statistic = 90 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

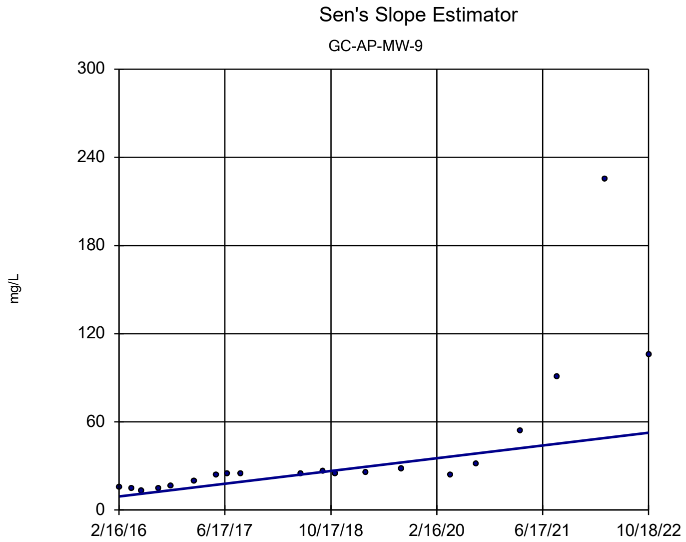
Slope = 3.973 units per year.

Mann-Kendall statistic = 35 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 20

Slope = 6.497 units per year.

Mann-Kendall statistic = 156 critical = 81

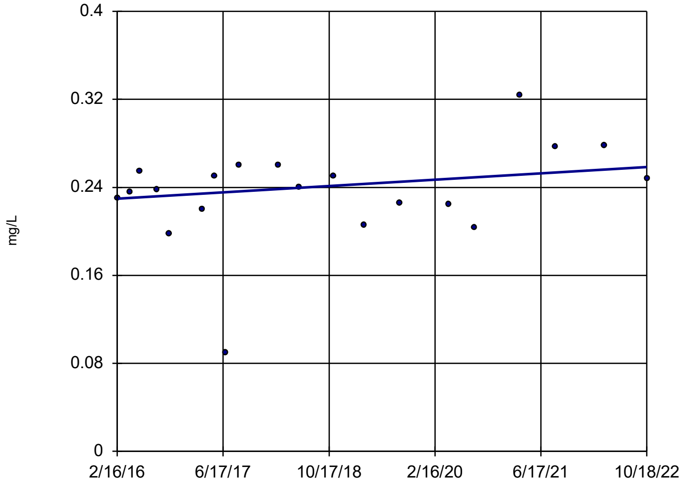
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 20

Slope = 0.004303
units per year.

Mann-Kendall
statistic = 36
critical = 81

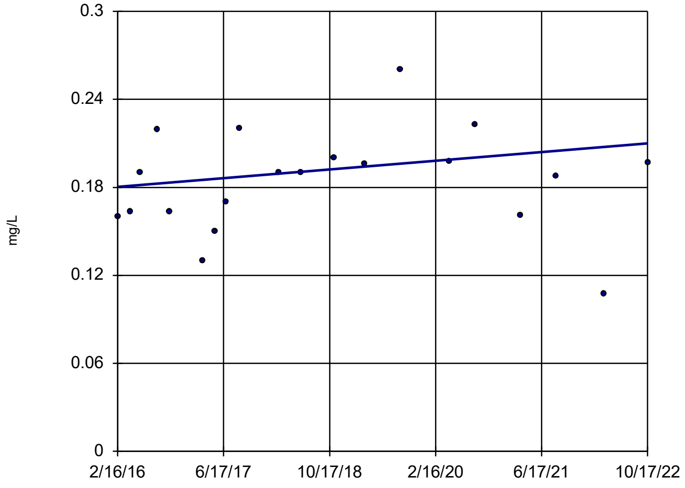
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 20

Slope = 0.004453
units per year.

Mann-Kendall
statistic = 36
critical = 81

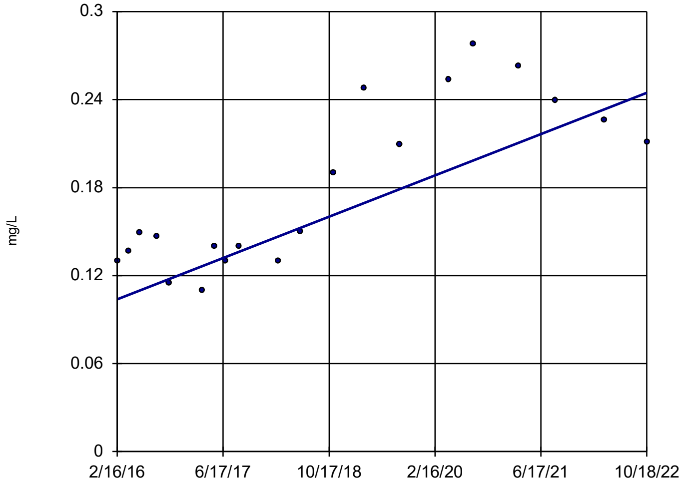
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 20

Slope = 0.02112
units per year.

Mann-Kendall
statistic = 106
critical = 81

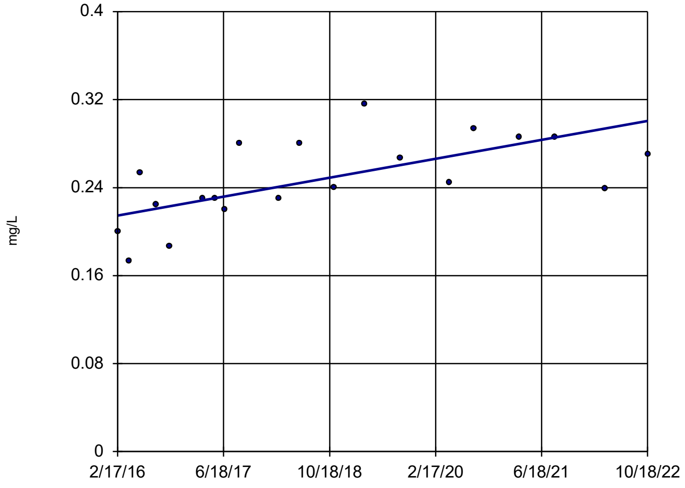
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-16



n = 20

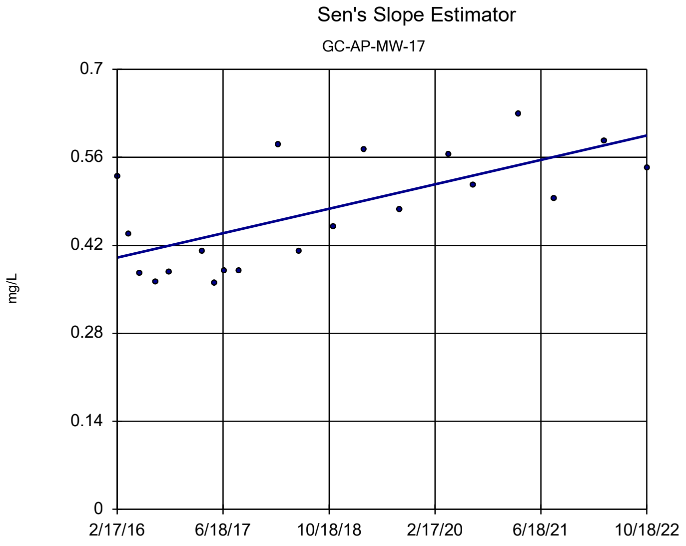
Slope = 0.0129
units per year.

Mann-Kendall
statistic = 95
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride   Analysis Run 12/9/2022 10:50 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-17

n = 20

Slope = 0.0291
units per year.

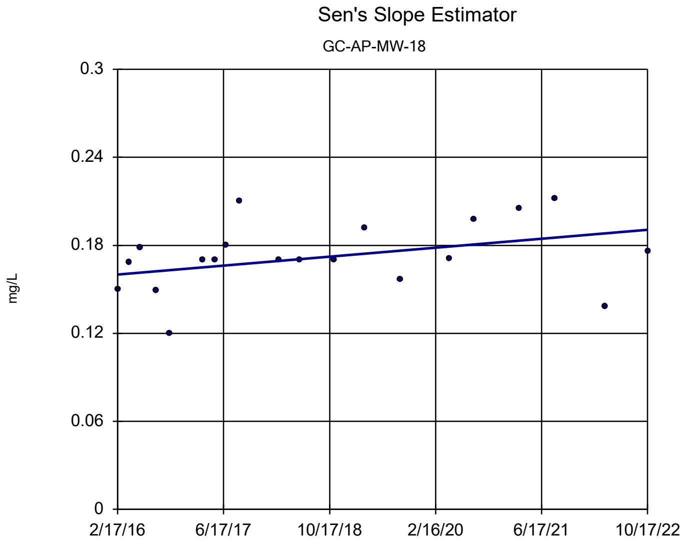
Mann-Kendall
statistic = 90
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-18

n = 20

Slope = 0.004567
units per year.

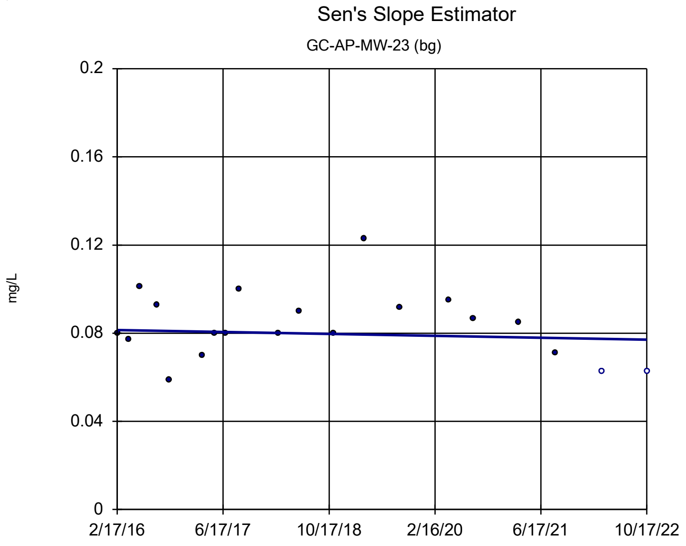
Mann-Kendall
statistic = 62
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Sen's Slope Estimator

GC-AP-MW-23 (bg)

n = 20

Slope = -0.0006627
units per year.

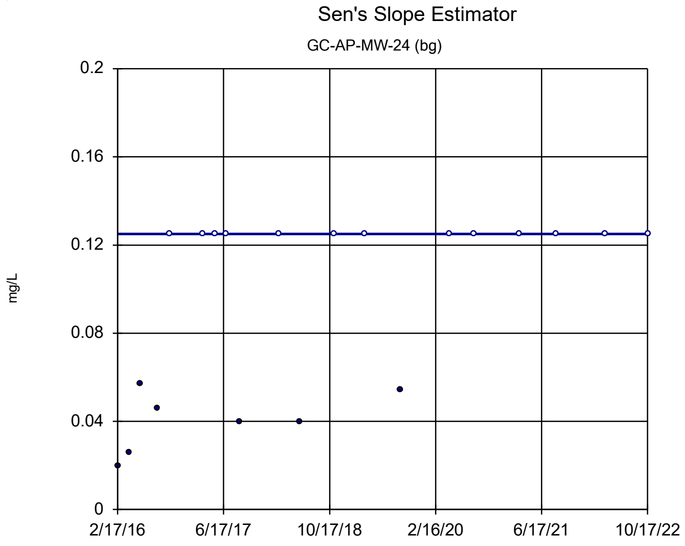
Mann-Kendall
statistic = -13
critical = -81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.



Sen's Slope Estimator

GC-AP-MW-24 (bg)

n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 67
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

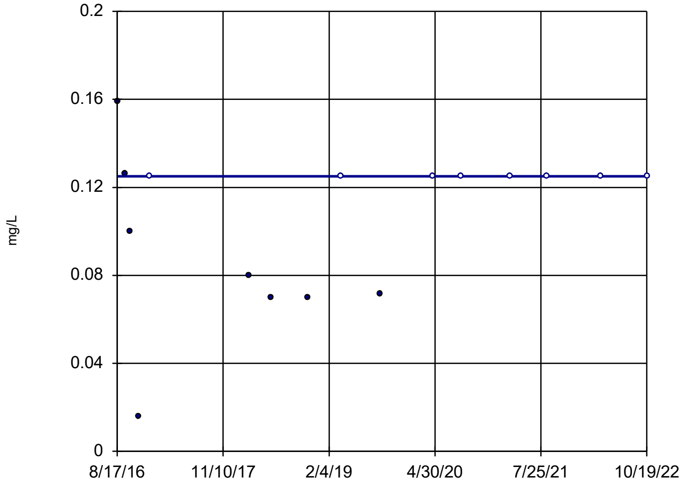
Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 7
critical = 58

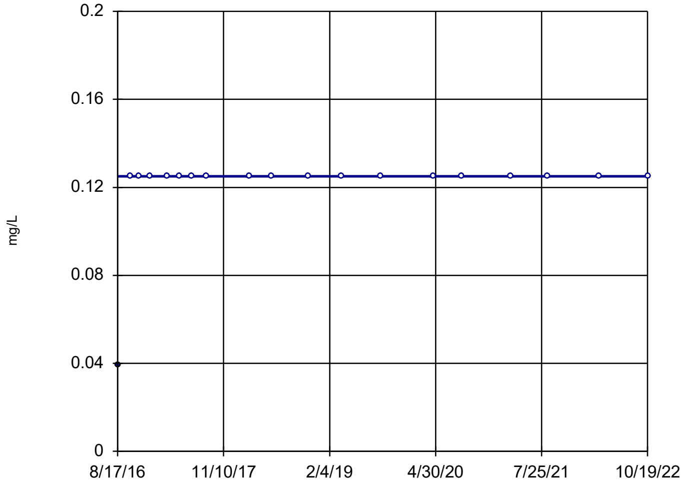
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 18
critical = 74

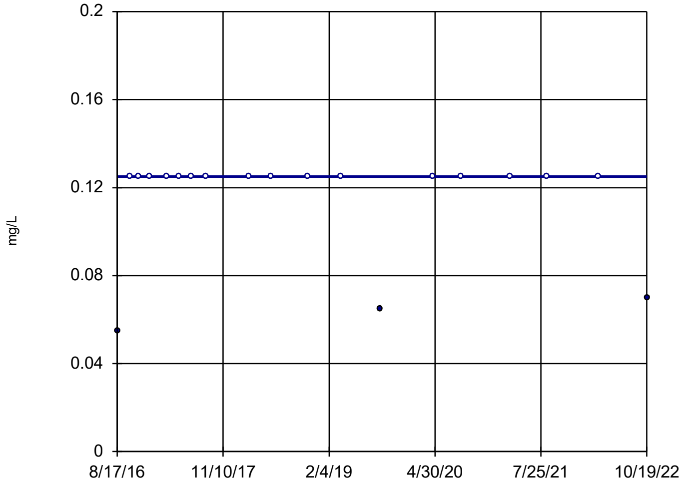
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = -3
critical = -74

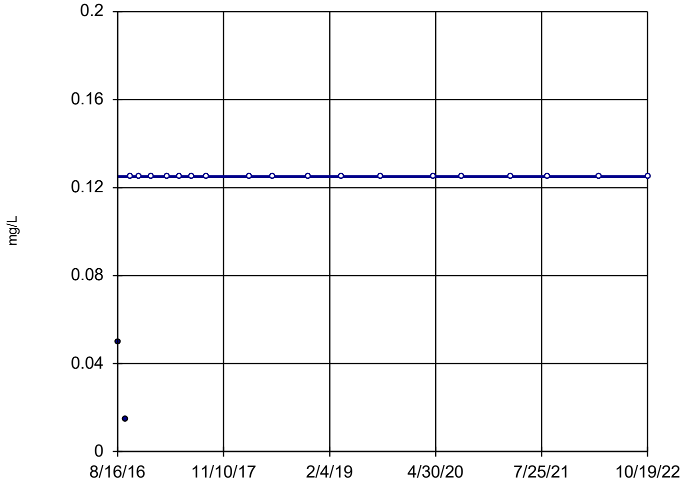
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 35
critical = 81

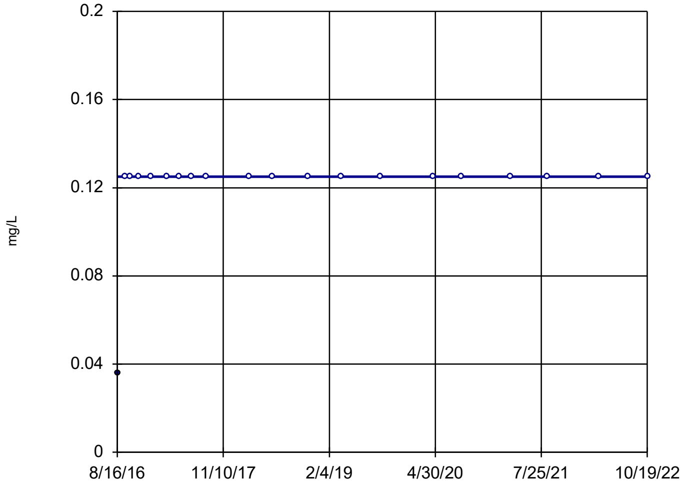
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-30 (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 19
critical = 81

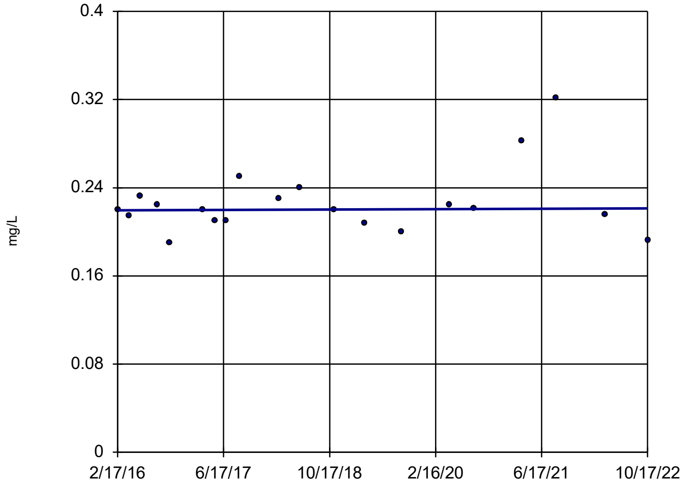
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 20

Slope = 0.0002578
units per year.

Mann-Kendall
statistic = 6
critical = 81

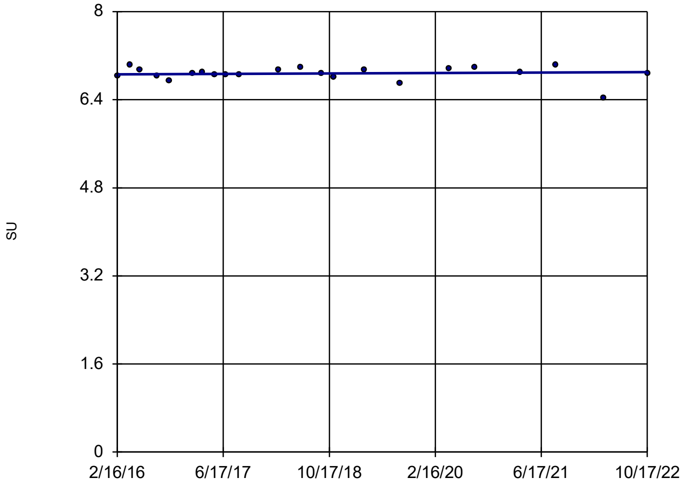
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-12



n = 22

Slope = 0.00648
units per year.

Mann-Kendall
statistic = 25
critical = 92

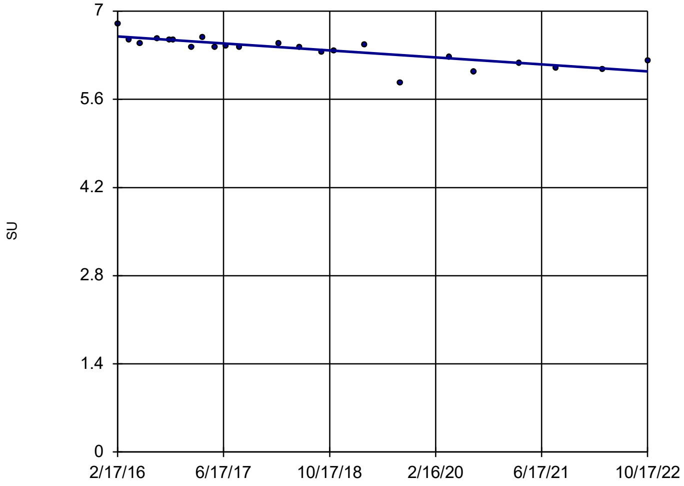
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 23

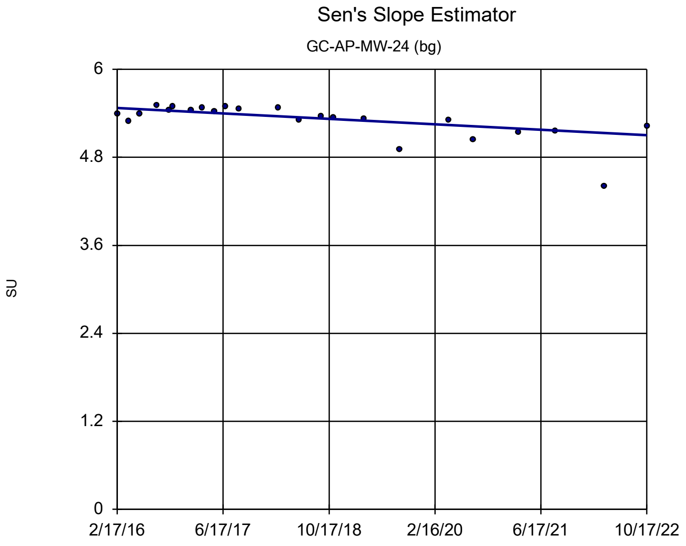
Slope = -0.08277
units per year.

Mann-Kendall
statistic = -165
critical = -98

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 23

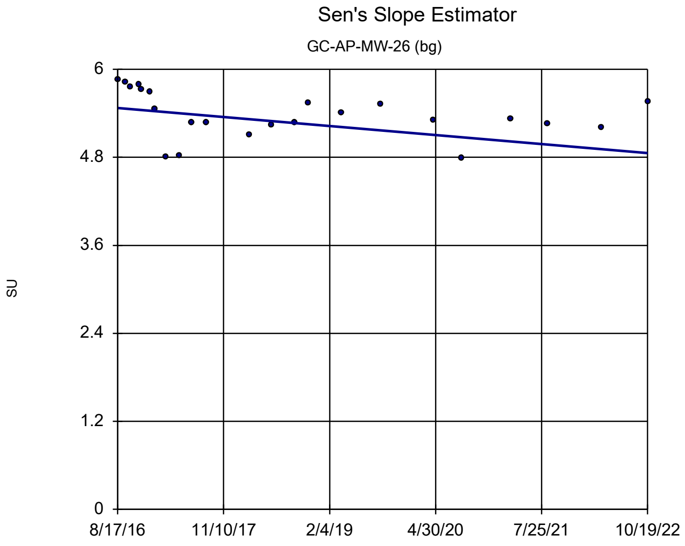
Slope = -0.05605
units per year.

Mann-Kendall
statistic = -125
critical = -98

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 23

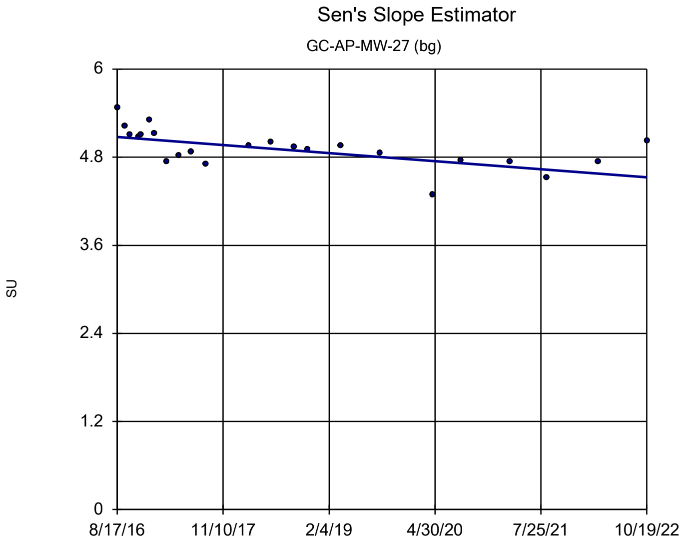
Slope = -0.09944
units per year.

Mann-Kendall
statistic = -88
critical = -98

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



n = 23

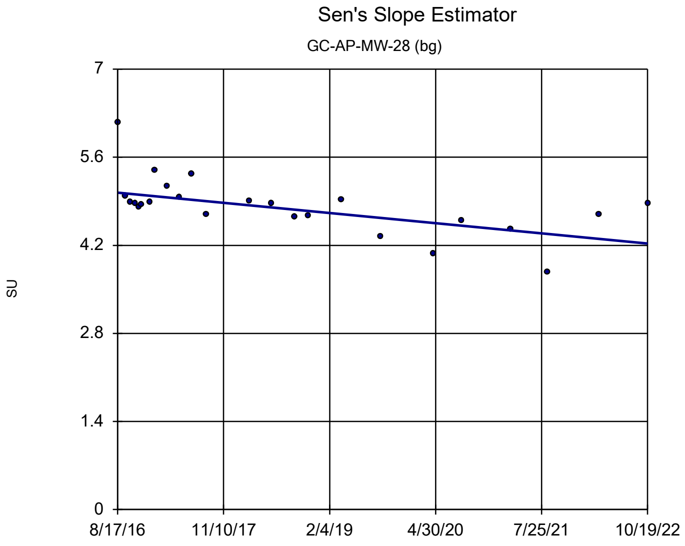
Slope = -0.08876
units per year.

Mann-Kendall
statistic = -128
critical = -98

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 12/9/2022 10:50 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



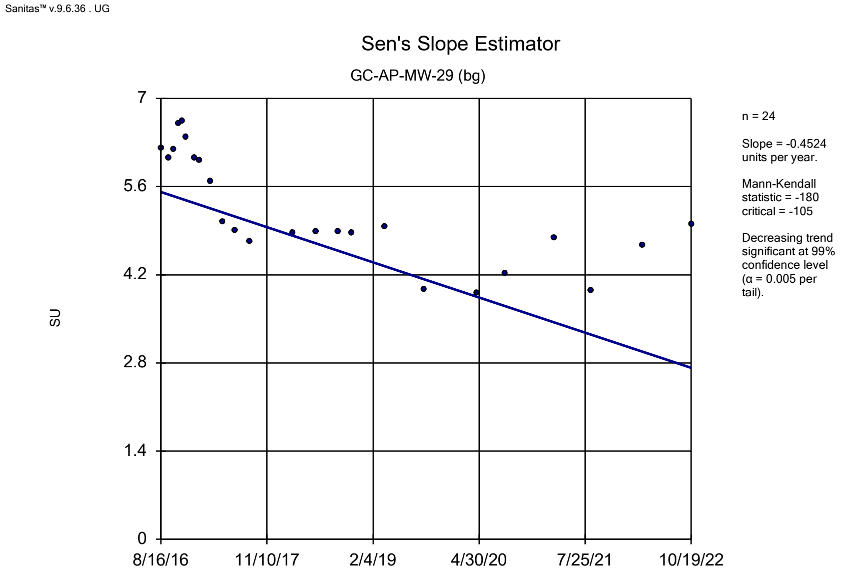
n = 24

Slope = -0.1309
units per year.

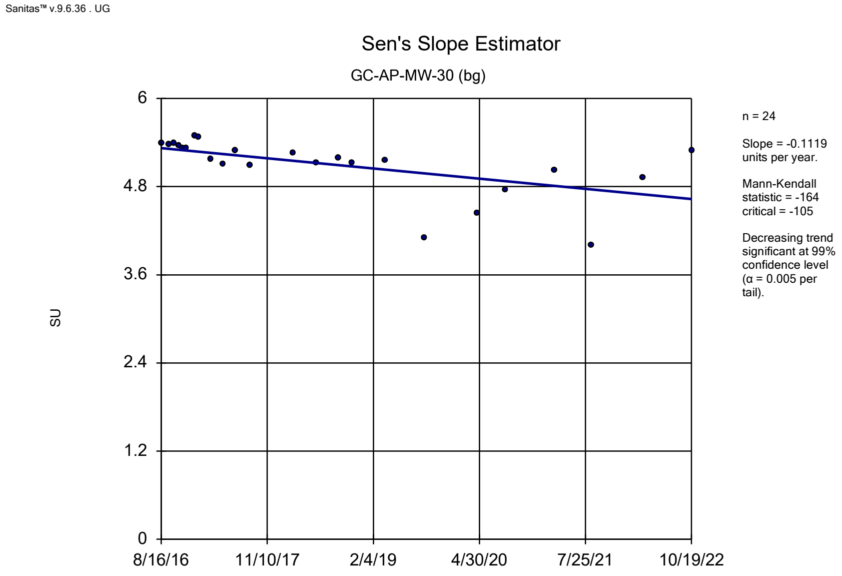
Mann-Kendall
statistic = -129
critical = -105

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

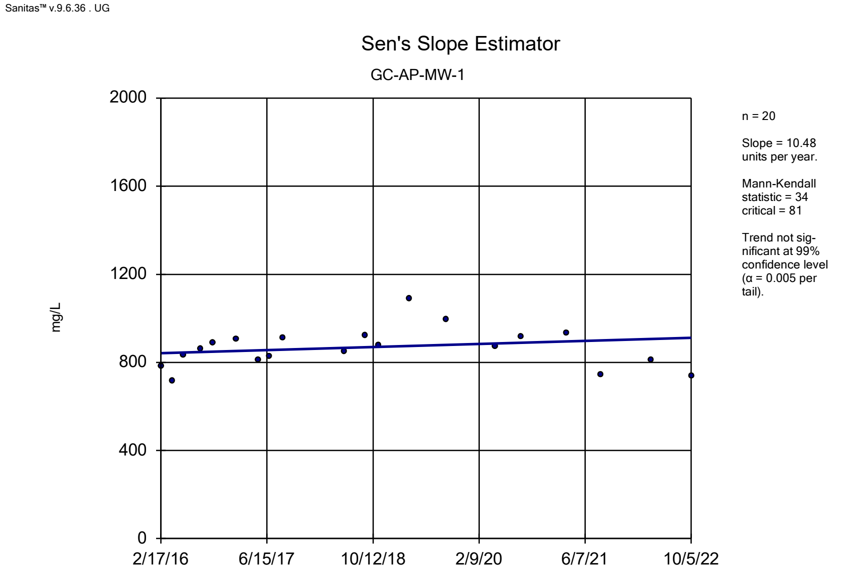
Constituent: pH Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP



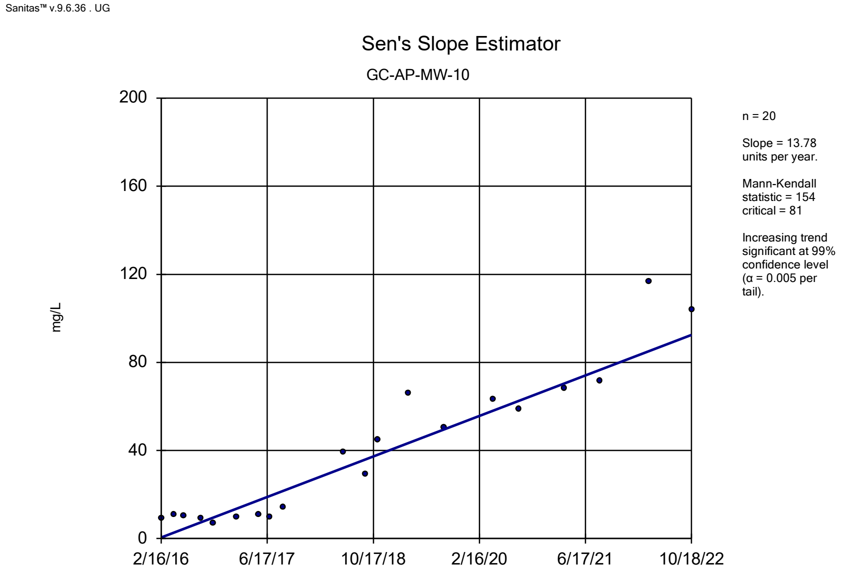
Constituent: pH   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP



Constituent: pH   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP



Constituent: Sulfate   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

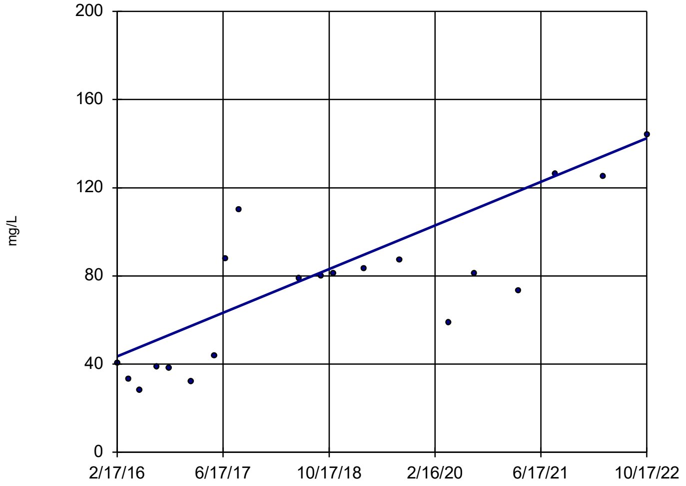


Constituent: Sulfate   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 20

Slope = 14.84
units per year.

Mann-Kendall
statistic = 110
critical = 81

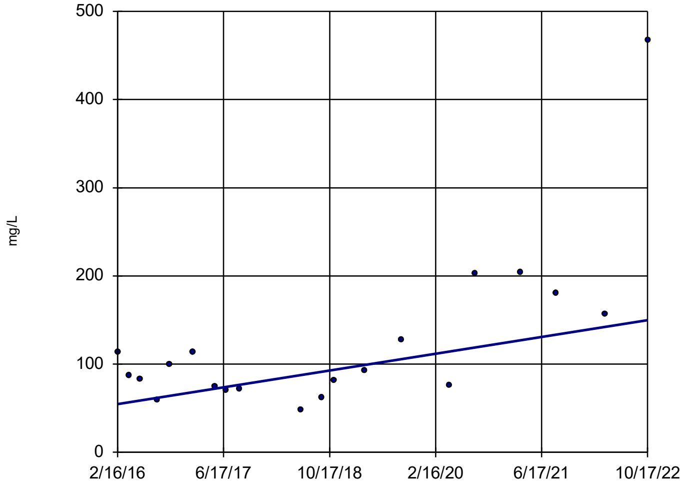
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-13



n = 20

Slope = 14.26
units per year.

Mann-Kendall
statistic = 65
critical = 81

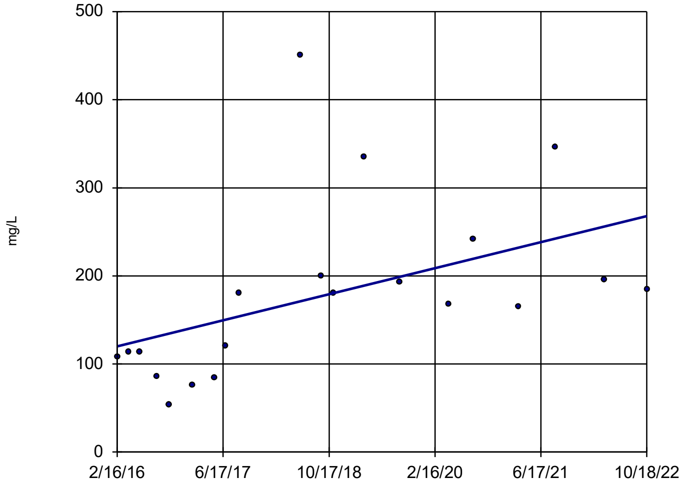
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-14



n = 20

Slope = 22.19
units per year.

Mann-Kendall
statistic = 86
critical = 81

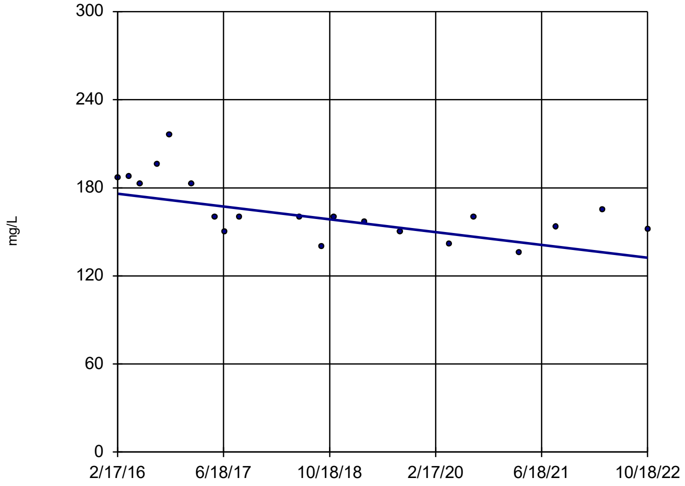
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-15



n = 20

Slope = -6.528
units per year.

Mann-Kendall
statistic = -92
critical = -81

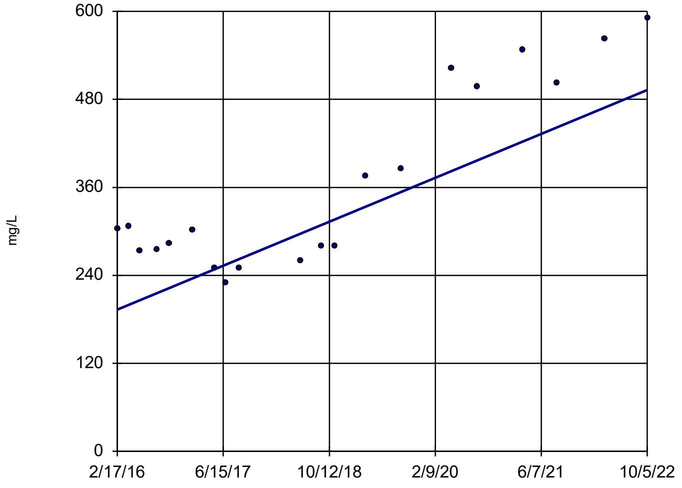
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 20

Slope = 45.13
units per year.

Mann-Kendall
statistic = 100
critical = 81

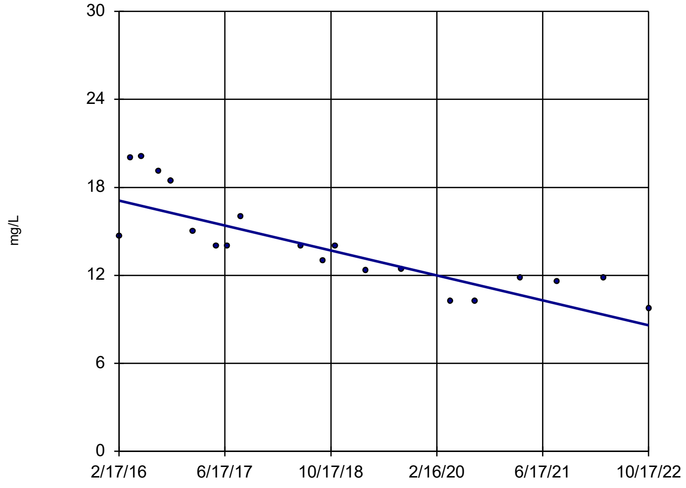
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-23 (bg)



n = 20

Slope = -1.275
units per year.

Mann-Kendall
statistic = -144
critical = -81

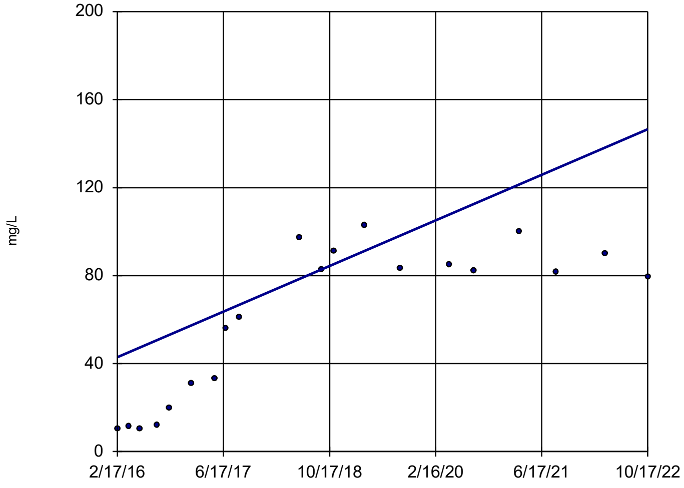
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-24 (bg)



n = 20

Slope = 15.55
units per year.

Mann-Kendall
statistic = 113
critical = 81

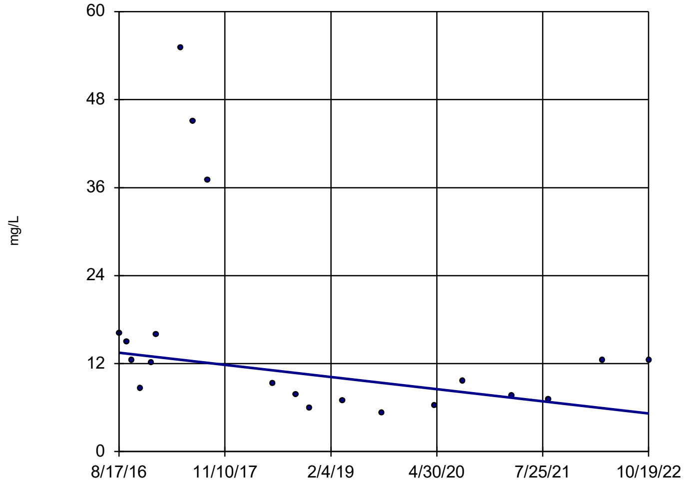
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-26 (bg)



n = 20

Slope = -1.339
units per year.

Mann-Kendall
statistic = -57
critical = -81

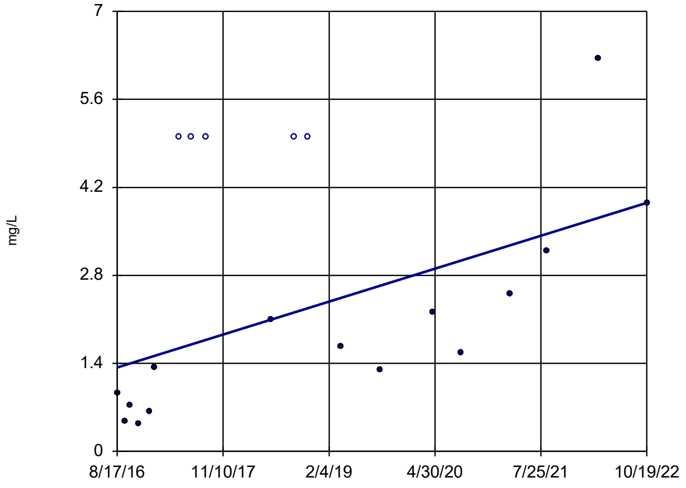
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 20

Slope = 0.4243
units per year.

Mann-Kendall
statistic = 74
critical = 81

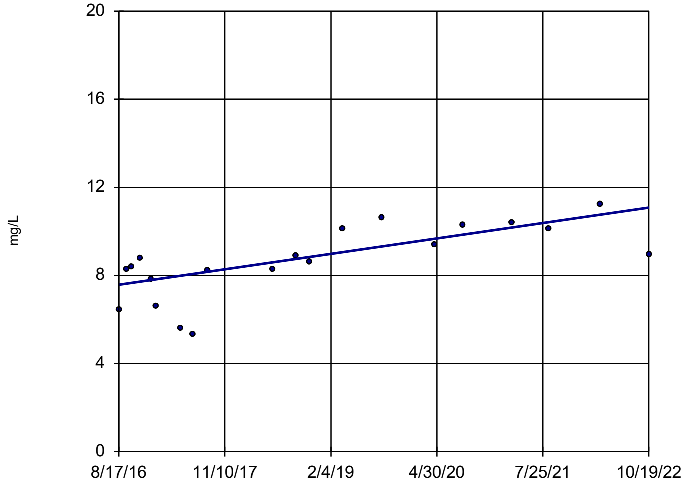
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 20

Slope = 0.5669
units per year.

Mann-Kendall
statistic = 106
critical = 81

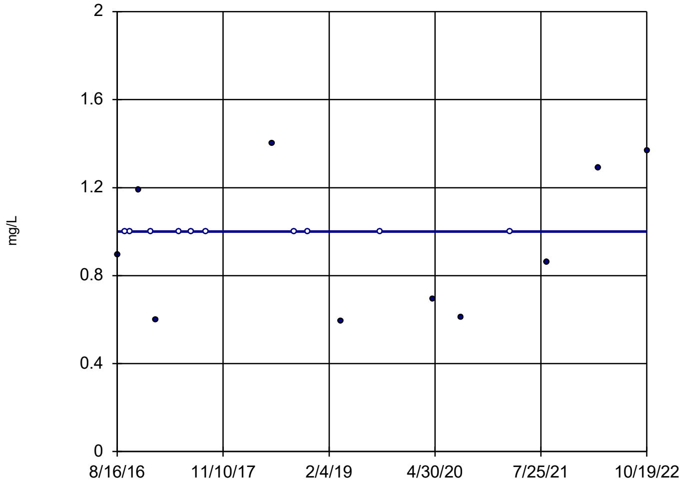
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 7
critical = 81

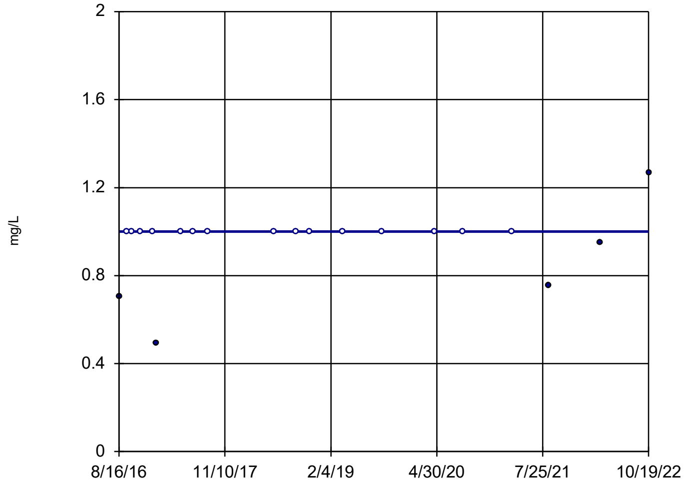
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-30 (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 15
critical = 81

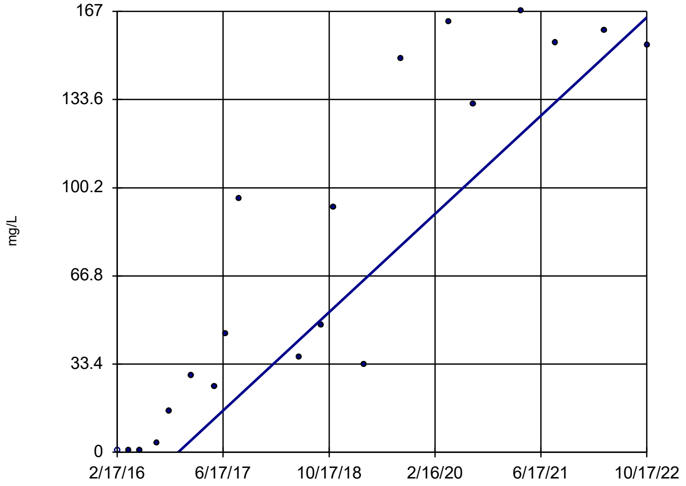
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-5



n = 20

Slope = 27.92
units per year.

Mann-Kendall
statistic = 148
critical = 81

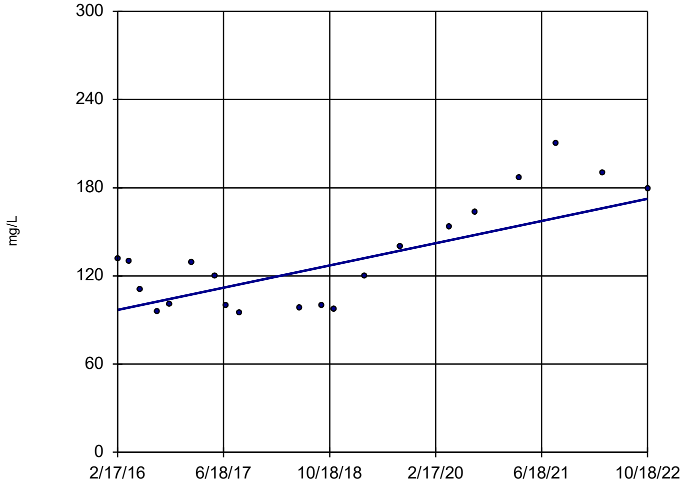
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-6



n = 20

Slope = 11.33
units per year.

Mann-Kendall
statistic = 74
critical = 81

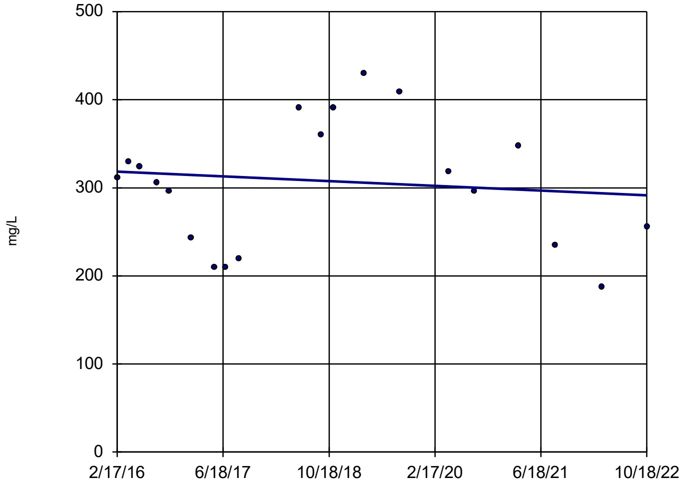
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-7



n = 20

Slope = -4.017
units per year.

Mann-Kendall
statistic = -13
critical = -81

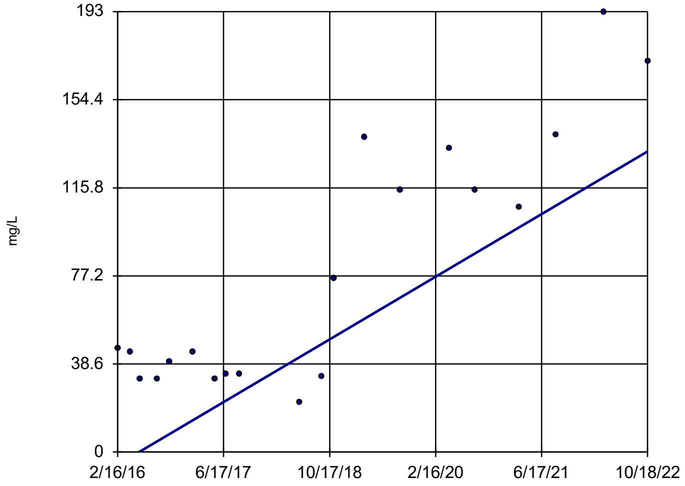
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-9



n = 20

Slope = 20.57
units per year.

Mann-Kendall
statistic = 97
critical = 81

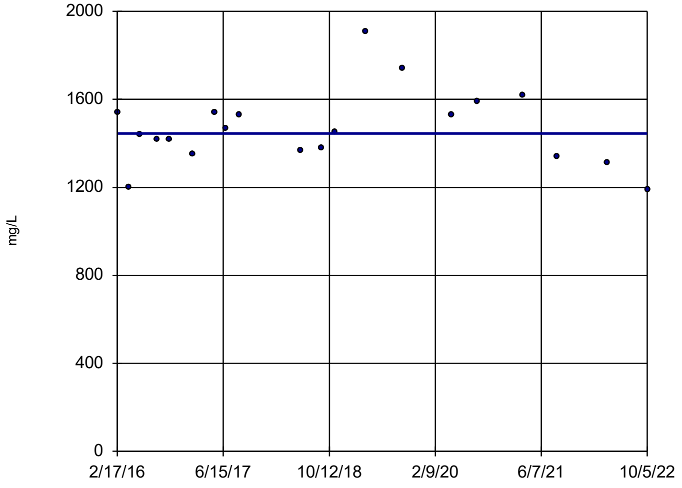
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Sulfate   Analysis Run 12/9/2022 10:51 AM   View: Trend
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-1



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 81

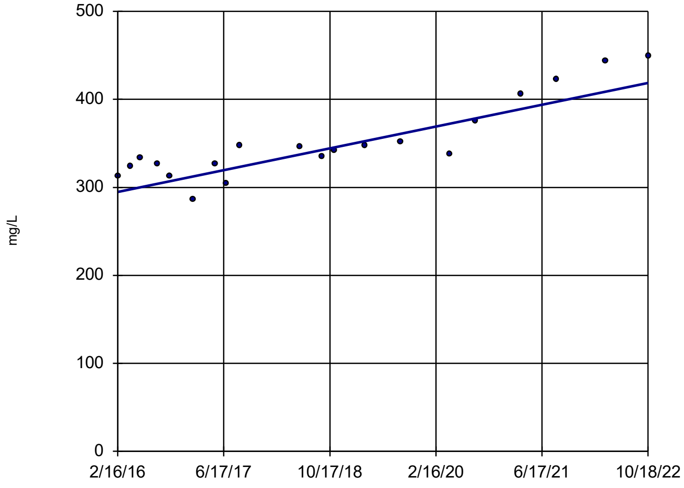
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-10



n = 20

Slope = 18.59
units per year.

Mann-Kendall
statistic = 133
critical = 81

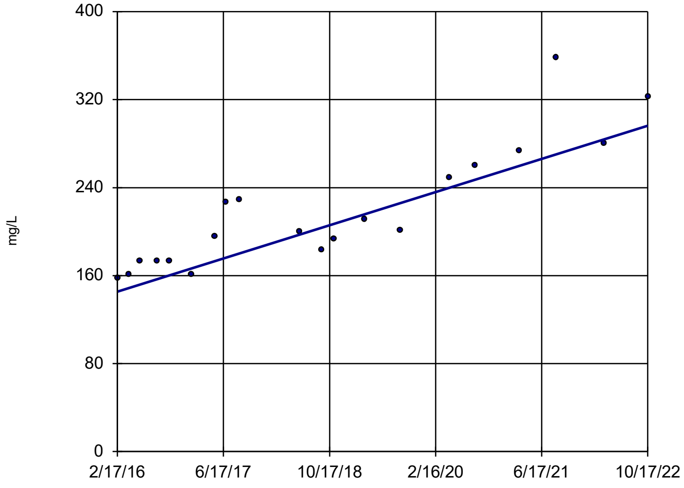
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-11



n = 20

Slope = 22.62
units per year.

Mann-Kendall
statistic = 146
critical = 81

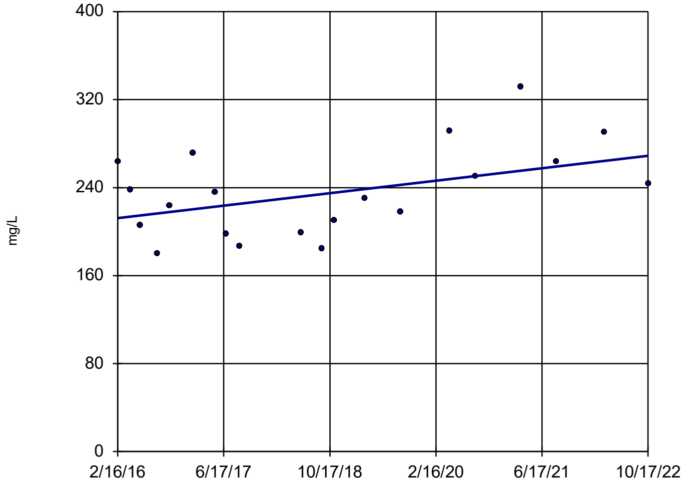
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-12



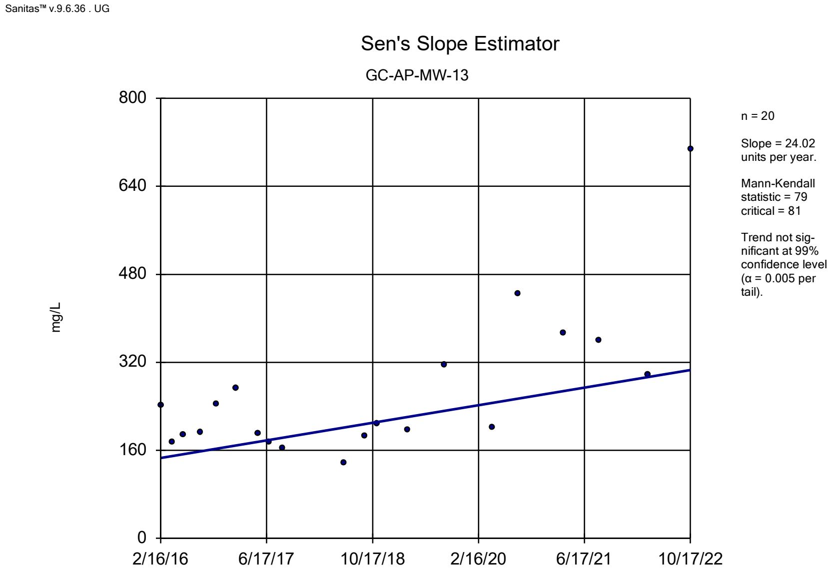
n = 20

Slope = 8.496
units per year.

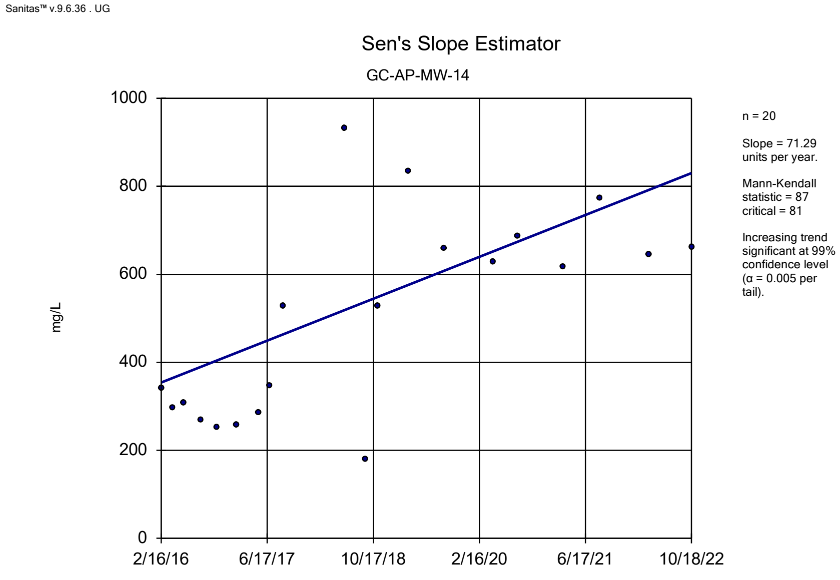
Mann-Kendall
statistic = 50
critical = 81

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

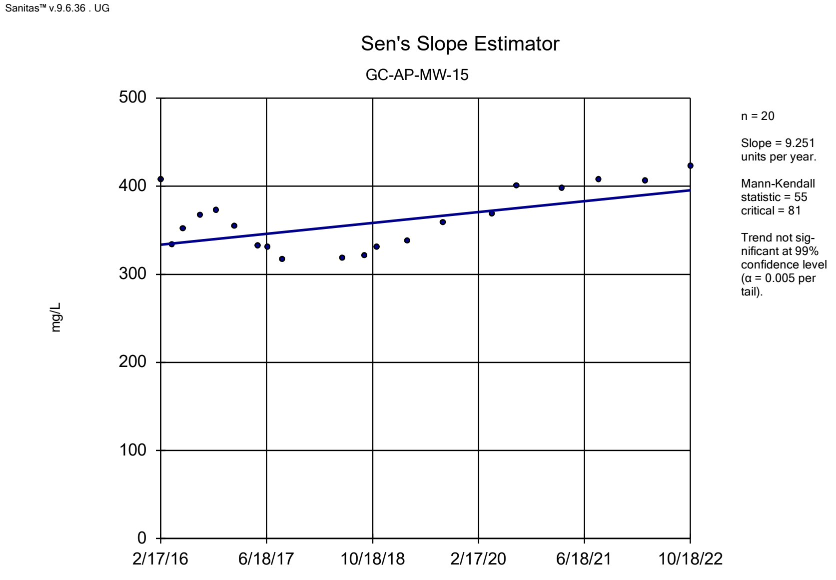
Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP



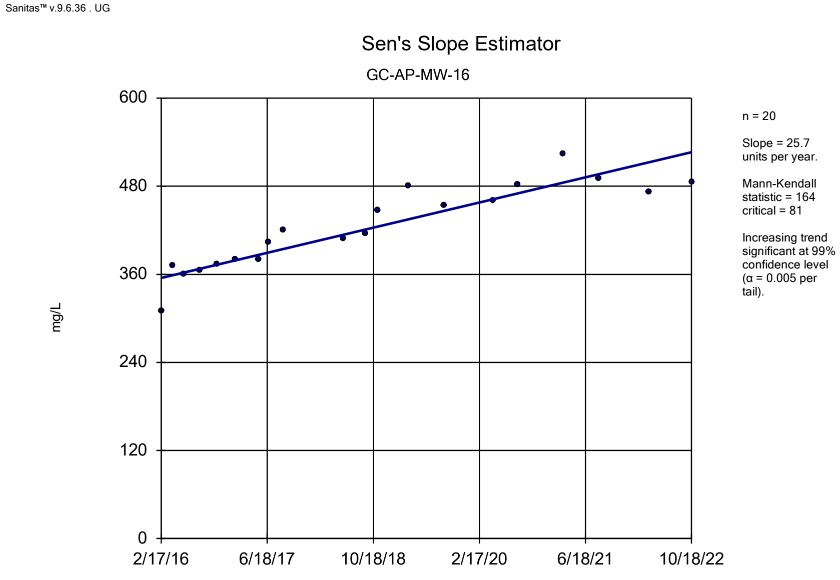
Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP



Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP



Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

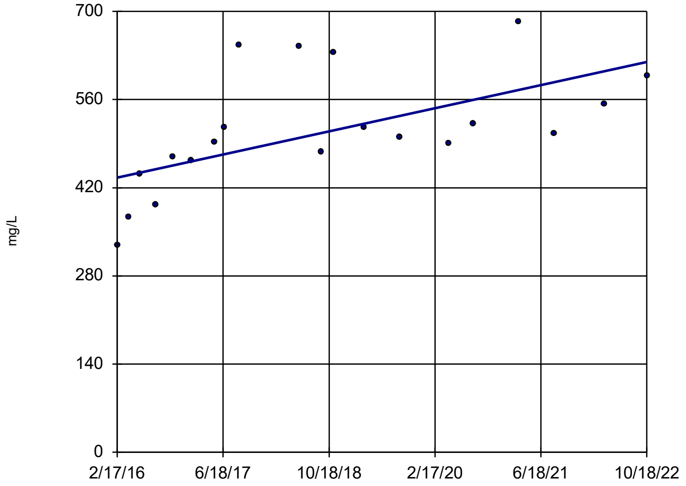


Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-17



n = 20

Slope = 27.57
units per year.

Mann-Kendall
statistic = 105
critical = 81

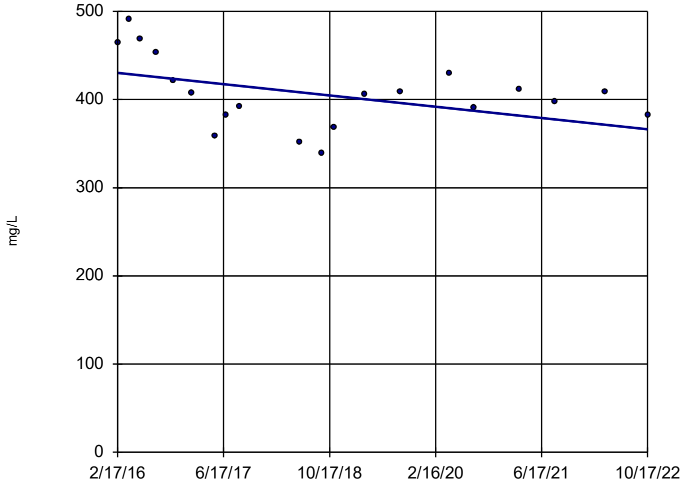
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-18



n = 20

Slope = -9.61
units per year.

Mann-Kendall
statistic = -53
critical = -81

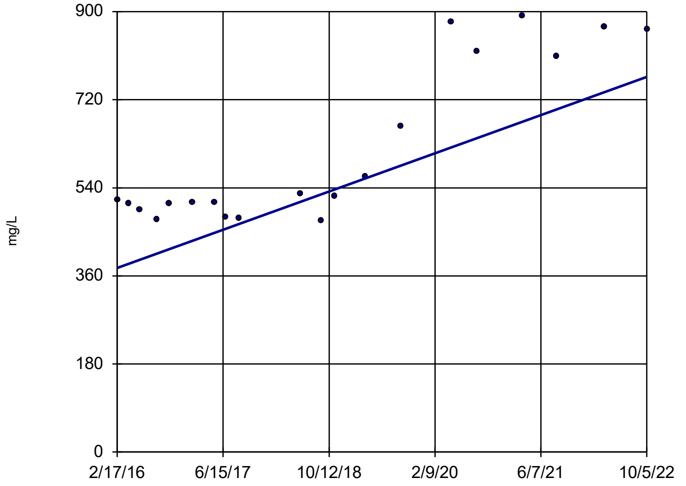
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-2



n = 20

Slope = 58.86
units per year.

Mann-Kendall
statistic = 104
critical = 81

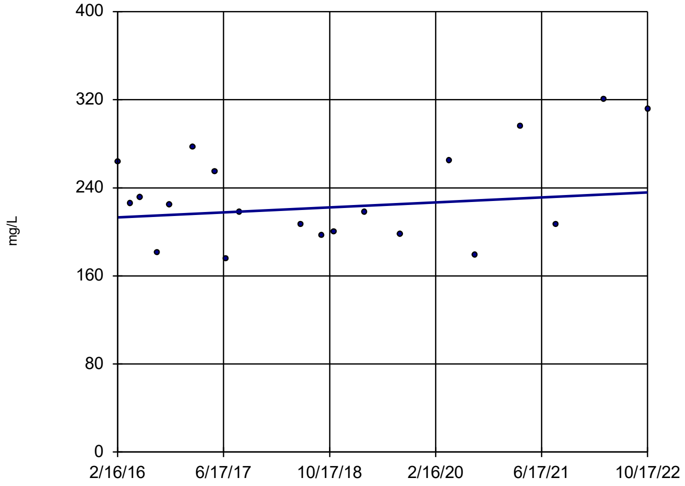
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-21



n = 20

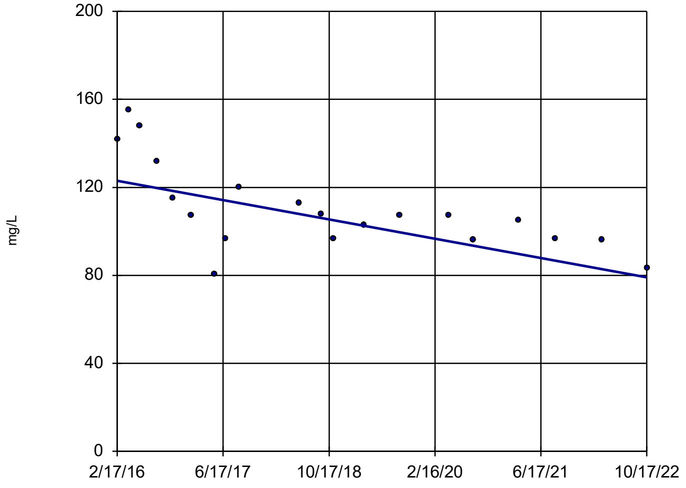
Slope = 3.383
units per year.

Mann-Kendall
statistic = 12
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-23 (bg)

n = 20

Slope = -6.6
units per year.

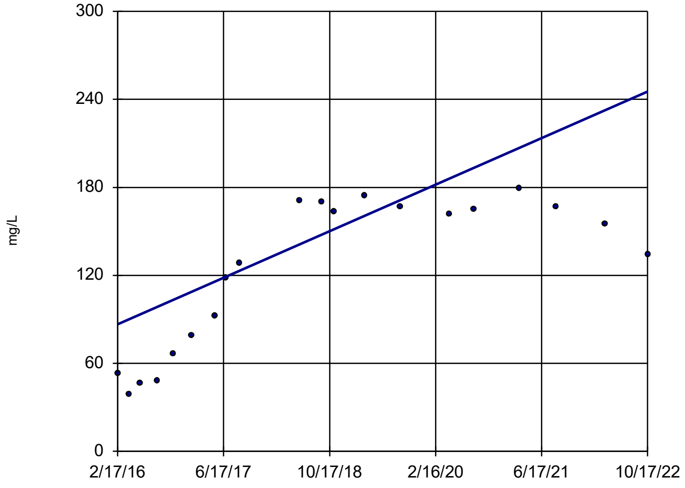
Mann-Kendall
statistic = -113
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-24 (bg)

n = 20

Slope = 23.79
units per year.

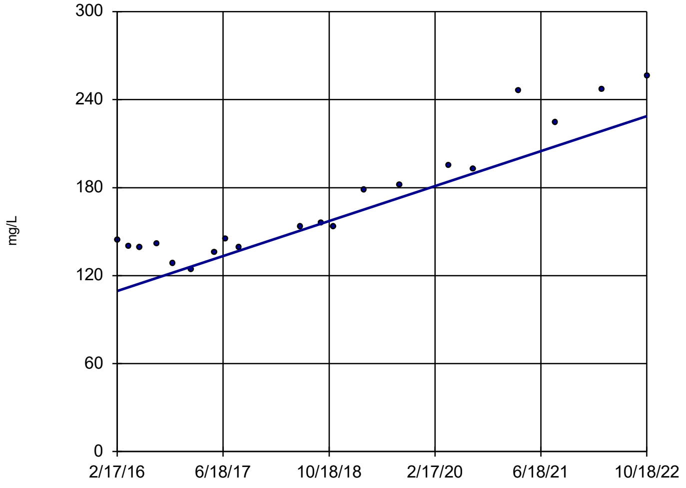
Mann-Kendall
statistic = 107
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-25

n = 20

Slope = 17.86
units per year.

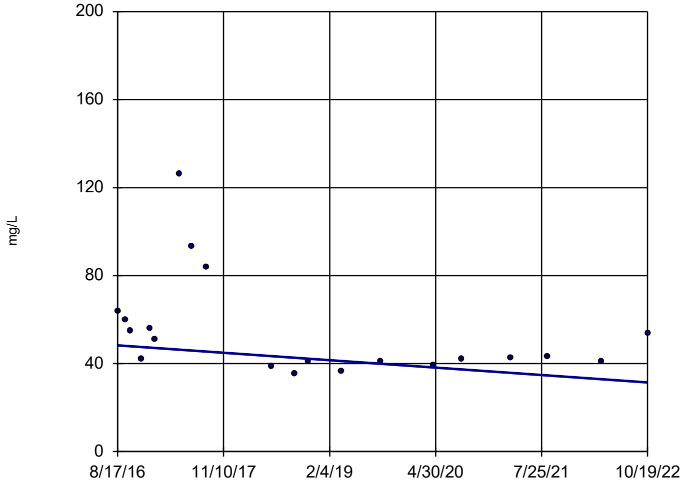
Mann-Kendall
statistic = 140
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-26 (bg)

n = 20

Slope = -2.73
units per year.

Mann-Kendall
statistic = -48
critical = -81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

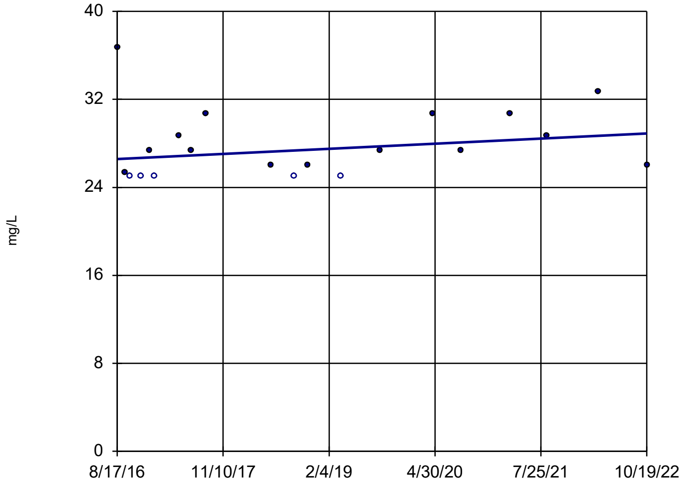
Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-27 (bg)



n = 20

Slope = 0.3739
units per year.

Mann-Kendall
statistic = 41
critical = 81

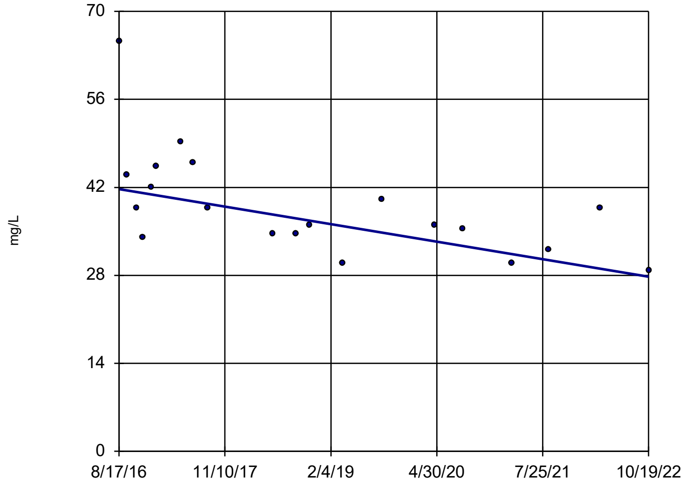
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-28 (bg)



n = 20

Slope = -2.253
units per year.

Mann-Kendall
statistic = -88
critical = -81

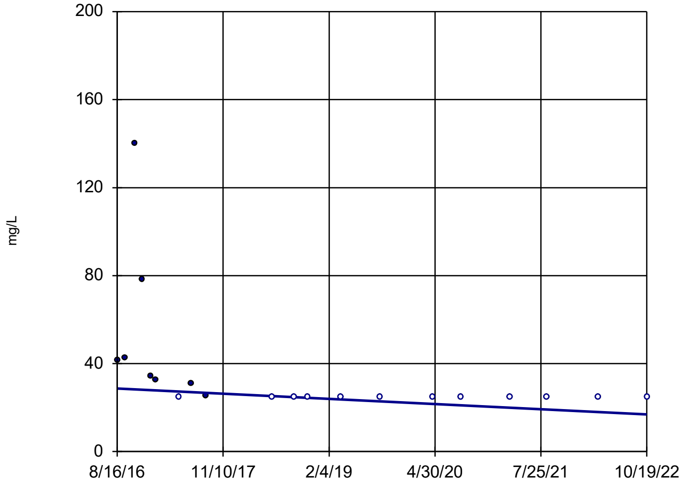
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-29 (bg)



n = 20

Slope = -1.905
units per year.

Mann-Kendall
statistic = -110
critical = -81

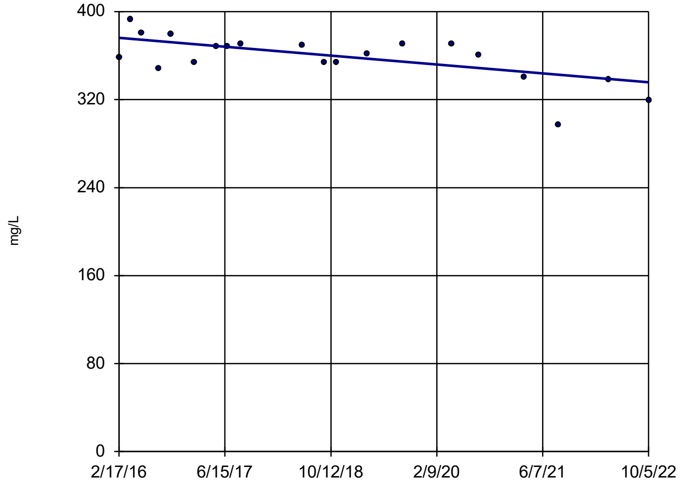
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-3



n = 20

Slope = -6.092
units per year.

Mann-Kendall
statistic = -75
critical = -81

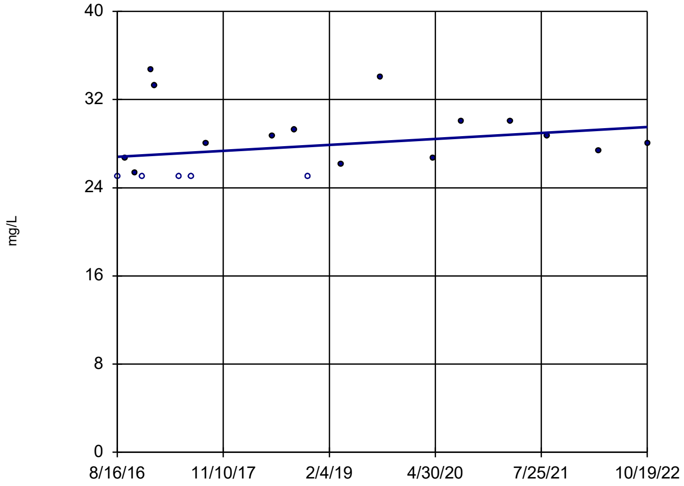
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GC-AP-MW-30 (bg)



n = 20

Slope = 0.4363 units per year.

Mann-Kendall statistic = 42 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

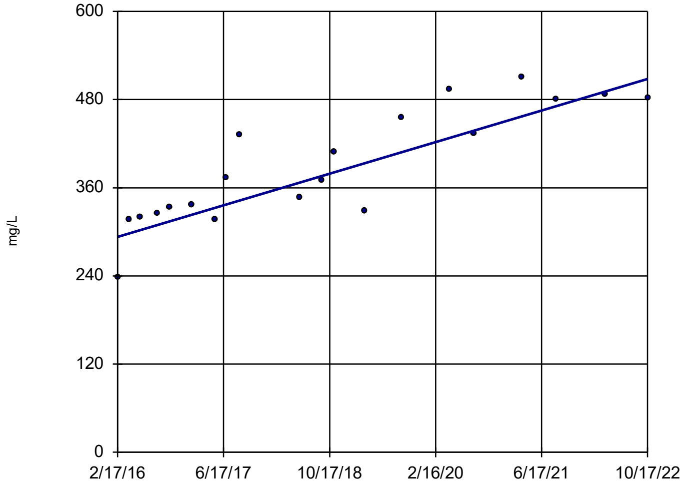
Constituent: TDS   Analysis Run 12/9/2022 10:51 AM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-5



n = 20

Slope = 32.23 units per year.

Mann-Kendall statistic = 140 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

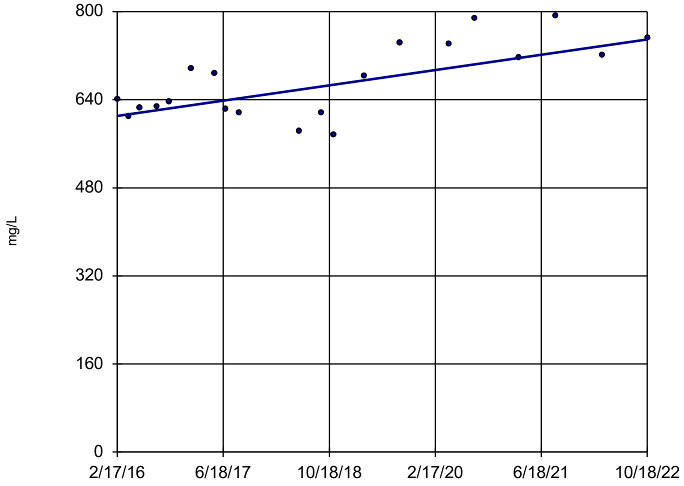
Constituent: TDS   Analysis Run 12/9/2022 10:51 AM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-6



n = 20

Slope = 20.83 units per year.

Mann-Kendall statistic = 75 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

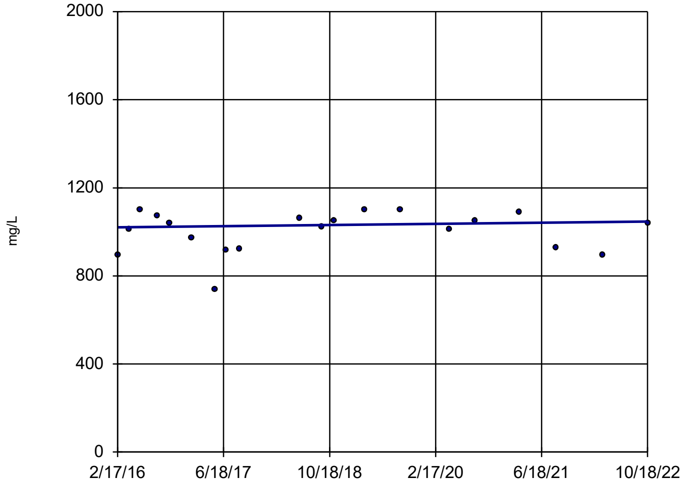
Constituent: TDS   Analysis Run 12/9/2022 10:51 AM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Sen's Slope Estimator

GC-AP-MW-7



n = 20

Slope = 3.995 units per year.

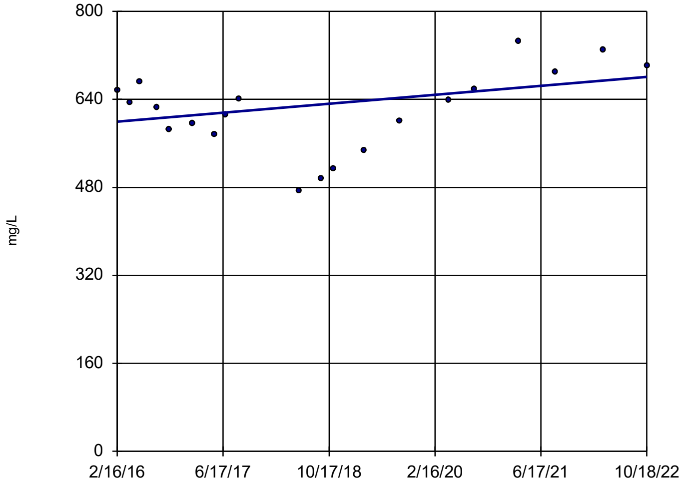
Mann-Kendall statistic = 14 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS   Analysis Run 12/9/2022 10:51 AM   View: Trend

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-8

n = 20

Slope = 12.2
units per year.

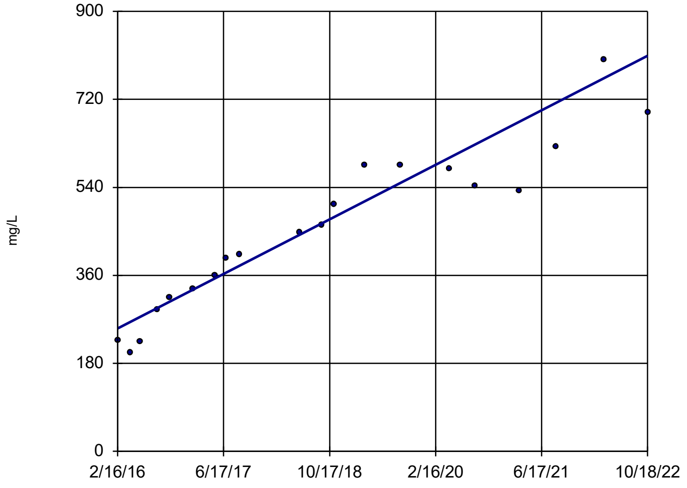
Mann-Kendall
statistic = 42
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG



Sen's Slope Estimator

GC-AP-MW-9

n = 20

Slope = 83.53
units per year.

Mann-Kendall
statistic = 165
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS Analysis Run 12/9/2022 10:51 AM View: Trend

Plant Greene County Client: Southern Company Data: Greene County AP

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Greene County   Client: Southern Company   Data: Greene County AP   Printed 11/18/2021, 6:28 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00137	119	n/a	n/a	91.6	n/a	n/a	0.002234	NP Inter(NDs)
Arsenic (mg/L)	0.0044	119	n/a	n/a	83.19	n/a	n/a	0.002234	NP Inter(NDs)
Barium (mg/L)	0.347	119	n/a	n/a	0	n/a	n/a	0.002234	NP Inter(normality)
Beryllium (mg/L)	0.00226	119	n/a	n/a	86.55	n/a	n/a	0.002234	NP Inter(NDs)
Cadmium (mg/L)	0.000912	119	n/a	n/a	74.79	n/a	n/a	0.002234	NP Inter(normality)
Chromium (mg/L)	0.01	119	n/a	n/a	88.24	n/a	n/a	0.002234	NP Inter(NDs)
Cobalt (mg/L)	0.0167	119	n/a	n/a	57.98	n/a	n/a	0.002234	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	3.88	119	n/a	n/a	3.361	n/a	n/a	0.002234	NP Inter(normality)
Fluoride (mg/L)	0.159	120	n/a	n/a	67.5	n/a	n/a	0.002122	NP Inter(normality)
Lead (mg/L)	0.0002	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)
Lithium (mg/L)	0.02	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Mercury (mg/L)	0.0005	119	n/a	n/a	100	n/a	n/a	0.002234	NP Inter(NDs)
Molybdenum (mg/L)	0.00308	119	n/a	n/a	97.48	n/a	n/a	0.002234	NP Inter(NDs)
Selenium (mg/L)	0.0072	119	n/a	n/a	89.92	n/a	n/a	0.002234	NP Inter(NDs)
Thallium (mg/L)	0.00039	119	n/a	n/a	98.32	n/a	n/a	0.002234	NP Inter(NDs)

FIGURE G.

GREENE COUNTY ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00137	0.006
Arsenic	mg/L	0.0044	0.01
Barium	mg/L	0.347	2
Beryllium	mg/L	0.00226	0.004
Cadmium	mg/L	0.000912	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0167	0.0167
Combined Radium-226/228	pCi/L	3.88	5
Fluoride	mg/L	0.159	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00308	0.1
Selenium	mg/L	0.0072	0.05
Thallium	mg/L	0.00039	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2019.

FIGURE H.

Confidence Interval Summary Table - Significant Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02619**	**0.01724**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01337**	**0.01168**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02819**	**0.02026**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1034**	**0.06695**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.948**	**0.4273**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05036**	**0.04757**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4568**	**0.3769**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2737**	**0.1513**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04112**	**0.02895**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01949**	**0.01773**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-10**	**0.2516**	**0.1013**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1321**	**0.07965**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.148**	**0.06753**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.6216**	**0.1649**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9796**	**0.5504**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6237**	**0.5538**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6611**	**0.5712**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3909**	**0.3166**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1377**	**0.09605**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GC-AP-MW-12	0.00121	0.00102	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-13	0.003348	0.001725	0.006	No	8	0	None	No	0.01	Param.
Antimony (mg/L)	GC-AP-MW-17	0.00102	0.000897	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-21	0.00102	0.000964	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-6	0.00141	0.00102	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GC-AP-MW-7	0.00102	0.00066	0.006	No	8	75	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-1**	**0.02619**	**0.01724**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-10**	**0.01337**	**0.01168**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-11	0.005867	0.002151	0.01	No	8	0	None	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-12	0.005	0.00023	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-13	0.004592	0.001592	0.01	No	8	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	**GC-AP-MW-14**	**0.02819**	**0.02026**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-15	0.005	0.00032	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-16**	**0.1034**	**0.06695**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-17**	**0.948**	**0.4273**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GC-AP-MW-18**	**0.05036**	**0.04757**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-2	0.01478	0.003086	0.01	No	8	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-21	0.005	0.00014	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-25	0.005	0.00026	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-3	0.01177	0.007138	0.01	No	8	0	None	No	0.01	Param.
Arsenic (mg/L)	GC-AP-MW-31	0.0002	0.000111	0.01	No	8	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GC-AP-MW-32	0.0002	0.000142	0.01	No	8	75	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-33	0.0002	0.000081	0.01	No	8	75	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GC-AP-MW-5**	**0.4568**	**0.3769**	**0.01**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GC-AP-MW-6	0.005	0.00013	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-7	0.005	0.00008	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-8	0.005	0.00015	0.01	No	8	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GC-AP-MW-9	0.01113	0.006448	0.01	No	8	0	None	x^2	0.01	Param.
Barium (mg/L)	GC-AP-MW-1	0.02747	0.02091	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-10	0.2734	0.1844	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-11	0.09467	0.0537	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-12	0.03597	0.02248	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-13	0.2013	0.06762	2	No	8	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GC-AP-MW-14	0.1163	0.07595	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-15	0.03908	0.03162	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-16	0.1042	0.08035	2	No	8	0	None	x^5	0.01	Param.
Barium (mg/L)	GC-AP-MW-17	0.3261	0.2454	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-18	0.1039	0.07118	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-2	0.03617	0.03118	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-21	0.104	0.05071	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-25	0.1088	0.07438	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-3	0.1549	0.1066	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-31	0.03181	0.02587	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-32	0.0764	0.0127	2	No	8	0	None	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-33	0.09858	0.02842	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-5	0.323	0.131	2	No	8	0	None	No	0.004	NP (normality)
Barium (mg/L)	GC-AP-MW-6	0.07745	0.06297	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-7	0.08718	0.07162	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-8	0.1331	0.09665	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GC-AP-MW-9	0.1884	0.1453	2	No	8	0	None	No	0.01	Param.
Cadmium (mg/L)	GC-AP-MW-1	0.0002	0.000092	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-11	0.000347	0.0002	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-13	0.0002	0.00008	0.005	No	8	75	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-15	0.001	0.00012	0.005	No	8	50	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-16	0.0002	0.000069	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GC-AP-MW-2	0.0002	0.00012	0.005	No	8	75	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-21	0.0002	0.00007	0.005	No	8	62.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-25	0.000203	0.00007	0.005	No	8	62.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-6	0.00278	0.00018	0.005	No	8	62.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	GC-AP-MW-8	0.000241	0.0002	0.005	No	8	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GC-AP-MW-1	0.01	0.000287	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-10	0.00102	0.000217	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-11	0.001015	0.00023	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-12	0.01	0.000224	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-13	0.01	0.000237	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-14	0.00102	0.00023	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-15	0.00102	0.00027	0.1	No	8	75	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-16	0.01	0.000267	0.1	No	8	50	None	No	0.004	NP (normality)

Confidence Interval Summary Table - All Results

Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GC-AP-MW-17	0.01	0.000211	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-18	0.01	0.00023	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-2	0.01	0.000256	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-21	0.01	0.00022	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-25	0.00102	0.00028	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-3	0.01	0.000286	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-31	0.01	0.000268	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-32	0.01	0.000301	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-33	0.01	0.000311	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-5	0.01	0.00025	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-6	0.00102	0.000228	0.1	No	8	62.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-7	0.01	0.00024	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-8	0.01	0.000217	0.1	No	8	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GC-AP-MW-9	0.01	0.000238	0.1	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-1**	**0.2737**	**0.1513**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-10	0.04225	0.0155	0.0167	No	8	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-11	0.03933	0.01632	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-12	0.005	0.00077	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-13	0.005	0.00007	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	**GC-AP-MW-14**	**0.04112**	**0.02895**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**GC-AP-MW-15**	**0.01949**	**0.01773**	**0.0167**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	GC-AP-MW-16	0.01672	0.01428	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-17	0.01666	0.009877	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-18	0.0189	0.01582	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-2	0.03102	0.01643	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-21	0.00501	0.00147	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-25	0.01293	0.01038	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-3	0.004208	0.0003914	0.0167	No	8	12.5	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-31	0.005	0.0006	0.0167	No	8	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-32	0.00105	0.0002	0.0167	No	8	75	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-33	0.00099	0.0002	0.0167	No	8	75	None	No	0.004	NP (normality)
Cobalt (mg/L)	GC-AP-MW-5	0.00879	0.005818	0.0167	No	8	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-6	0.003592	0.002134	0.0167	No	8	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-7	0.003852	0.00165	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-8	0.01065	0.005273	0.0167	No	8	0	None	No	0.01	Param.
Cobalt (mg/L)	GC-AP-MW-9	0.0323	0.0164	0.0167	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-1	1.486	0.9041	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-10	2.08	0.988	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-11	0.7105	0.3545	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-12	0.989	-0.02937	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-13	0.5689	0.3154	5	No	8	0	None	x^2	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-14	1.418	0.7862	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-15	0.7869	0.2439	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-16	1.294	0.4884	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-17	2.243	1.129	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-18	1.579	0.8481	5	No	8	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-2	1.672	0.3894	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-21	0.778	0.04437	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-25	0.8118	0.2697	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-3	1.23	0.5428	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-31	0.7828	0.179	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-32	3.18	-0.464	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-33	3.41	0.771	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-5	2.076	1.139	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-6	1.135	0.5803	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-7	1.19	0.545	5	No	8	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-8	1.445	0.4865	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GC-AP-MW-9	1.616	1.202	5	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-1	0.1728	0.1138	4	No	8	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-10	0.2929	0.2037	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-11	0.1757	0.07862	4	No	8	12.5	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-12	0.2384	0.1441	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-13	0.1139	0.07695	4	No	8	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-14	0.267	0.215	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-15	0.1527	0.1123	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-16	0.3024	0.2485	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-17	0.6011	0.4943	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-18	0.2079	0.1545	4	No	8	0	None	No	0.01	Param.

Confidence Interval Summary Table - All Results

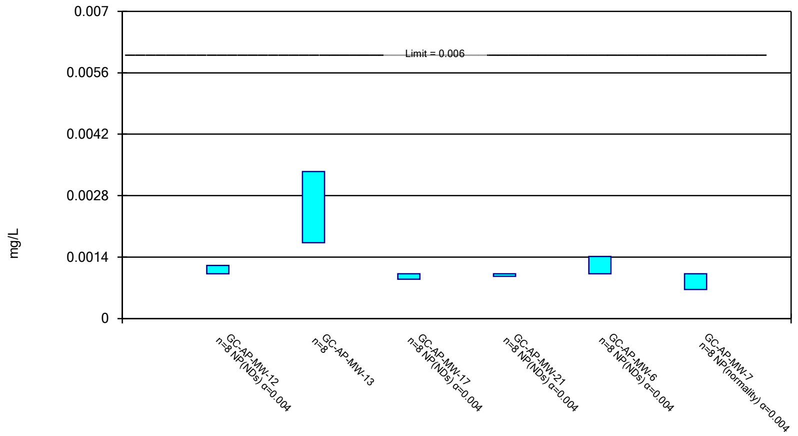
Plant Greene County Client: Southern Company Data: Greene County AP Printed 12/12/2022, 9:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-2	0.1603	0.08089	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-21	0.2022	0.08712	4	No	8	12.5	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-25	0.09939	0.07765	4	No	8	50	Kaplan-Meier	x^6	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-3	0.1893	0.1096	4	No	8	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-31	0.125	0.0671	4	No	8	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-32	0.125	0.0518	4	No	8	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GC-AP-MW-5	0.322	0.192	4	No	8	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GC-AP-MW-6	0.2378	0.1619	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-7	0.1072	0.08118	4	No	8	0	None	x^2	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-8	0.1416	0.09911	4	No	8	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GC-AP-MW-9	0.2097	0.1125	4	No	8	12.5	None	No	0.01	Param.
Lead (mg/L)	GC-AP-MW-16	0.005	0.000089	0.015	No	8	50	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-2	0.005	0.000453	0.015	No	8	50	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-25	0.0002	0.0000884	0.015	No	8	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-31	0.0002	0.00015	0.015	No	8	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GC-AP-MW-32	0.0002	0.000121	0.015	No	8	75	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-33	0.0002	0.000115	0.015	No	8	75	None	No	0.004	NP (normality)
Lead (mg/L)	GC-AP-MW-9	0.0002	0.0000784	0.015	No	8	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	**GC-AP-MW-10**	**0.2516**	**0.1013**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-11**	**0.1321**	**0.07965**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-12**	**0.148**	**0.06753**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-13**	**0.6216**	**0.1649**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-14**	**0.9796**	**0.5504**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-15**	**0.6237**	**0.5538**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-16**	**0.6611**	**0.5712**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-17**	**0.864**	**0.552**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GC-AP-MW-18**	**0.3909**	**0.3166**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-21**	**0.1137**	**0.06087**	**0.04**	**Yes**	**8**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Lithium (mg/L)	**GC-AP-MW-5**	**0.1377**	**0.09605**	**0.04**	**Yes**	**8**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GC-AP-MW-6	0.03304	0.009978	0.04	No	8	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lithium (mg/L)	GC-AP-MW-8	0.07075	0.007866	0.04	No	8	12.5	None	No	0.01	Param.
Lithium (mg/L)	GC-AP-MW-9	0.09868	0.01657	0.04	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-1	0.0002	0.000117	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-10	0.0132	0.00747	0.1	No	8	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-11	0.01774	0.006928	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-12	0.1145	0.04966	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-13	0.145	0.0146	0.1	No	8	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-14	0.01865	0.01207	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-16	0.01	0.000113	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-17	0.06819	0.04911	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-18	0.01	0.000305	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-2	0.0002	0.0000804	0.1	No	8	75	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-21	0.071	0.00666	0.1	No	8	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-25	0.0002	0.0000843	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-31	0.0002	0.0000741	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GC-AP-MW-5	0.003467	0.002703	0.1	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GC-AP-MW-6	0.01	0.00142	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-7	0.01	0.00012	0.1	No	8	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GC-AP-MW-8	0.0002	0.0000812	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-1	0.01	0.000737	0.05	No	8	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-12	0.00281	0.00081	0.05	No	8	75	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-13	0.02857	0.004315	0.05	No	8	12.5	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	GC-AP-MW-2	0.00102	0.00054	0.05	No	8	75	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-3	0.01	0.000612	0.05	No	8	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GC-AP-MW-32	0.00102	0.00059	0.05	No	8	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	GC-AP-MW-33	0.00102	0.00071	0.05	No	8	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	GC-AP-MW-1	0.001	0.000107	0.002	No	8	50	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-11	0.0002	0.00007	0.002	No	8	62.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-13	0.002073	0.0003626	0.002	No	8	0	None	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-15	0.0002	0.000084	0.002	No	8	62.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-16	0.0003925	0.0003252	0.002	No	8	0	None	No	0.01	Param.
Thallium (mg/L)	GC-AP-MW-2	0.001	0.000101	0.002	No	8	50	None	No	0.004	NP (normality)
Thallium (mg/L)	GC-AP-MW-21	0.0002	0.000106	0.002	No	8	62.5	None	No	0.004	NP (normality)

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



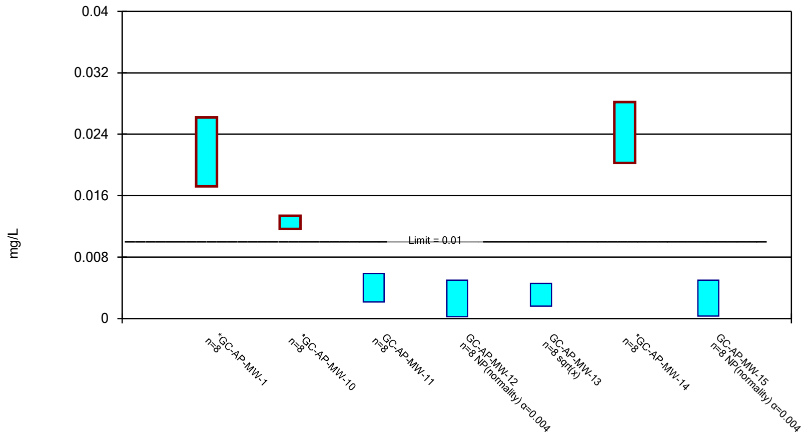
Constituent: Antimony   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on



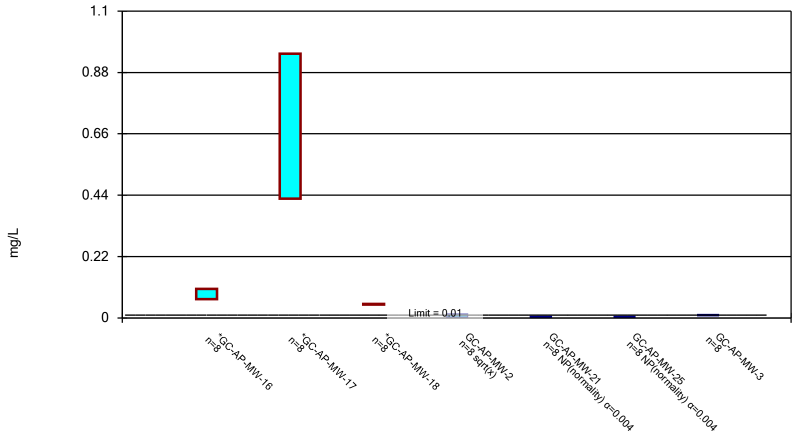
Constituent: Arsenic   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on



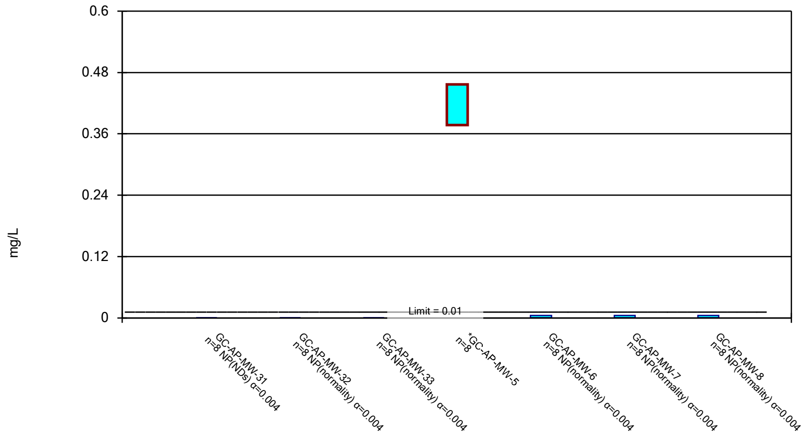
Constituent: Arsenic   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on



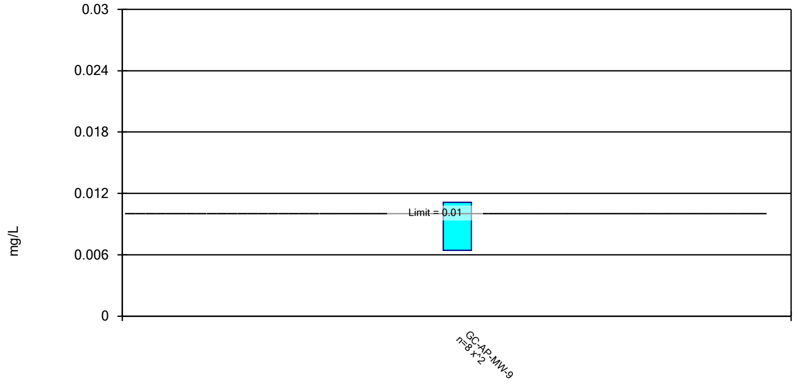
Constituent: Arsenic   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

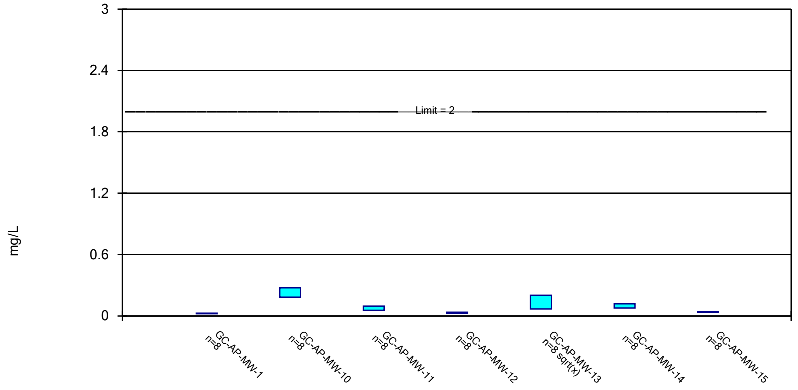


Constituent: Arsenic   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

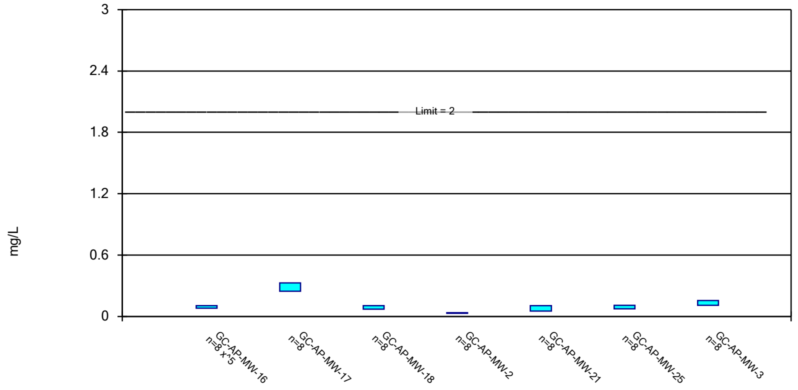


Constituent: Barium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

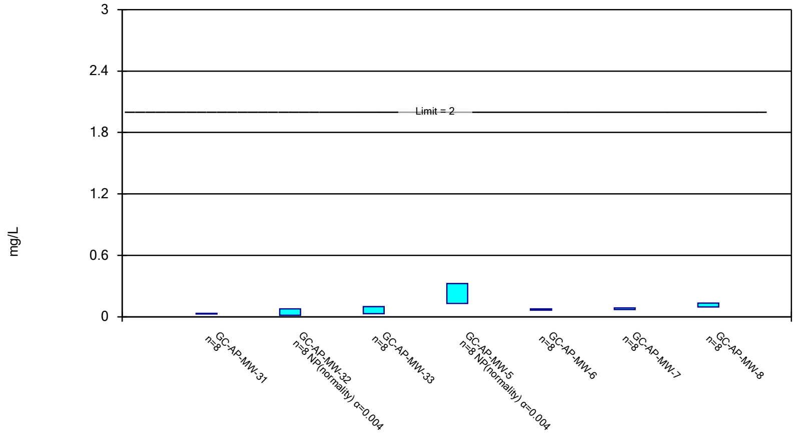


Constituent: Barium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



Constituent: Barium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

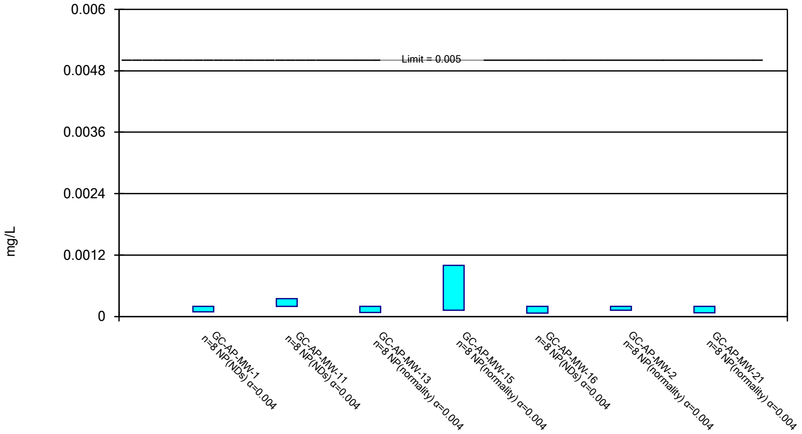
Constituent: Barium   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



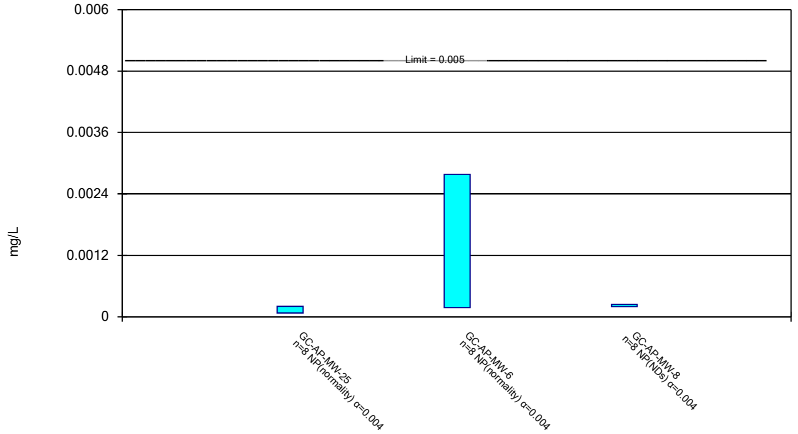
Constituent: Cadmium   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



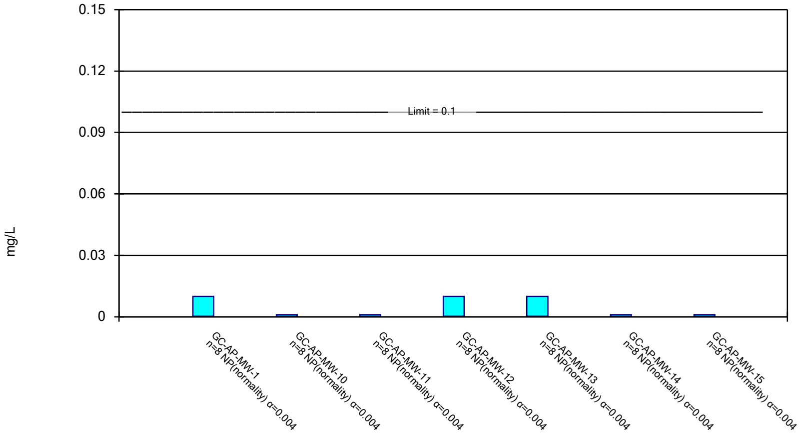
Constituent: Cadmium   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



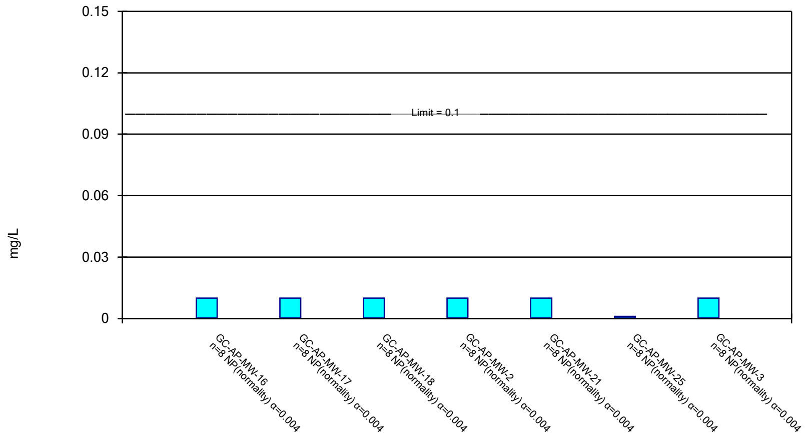
Constituent: Chromium   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

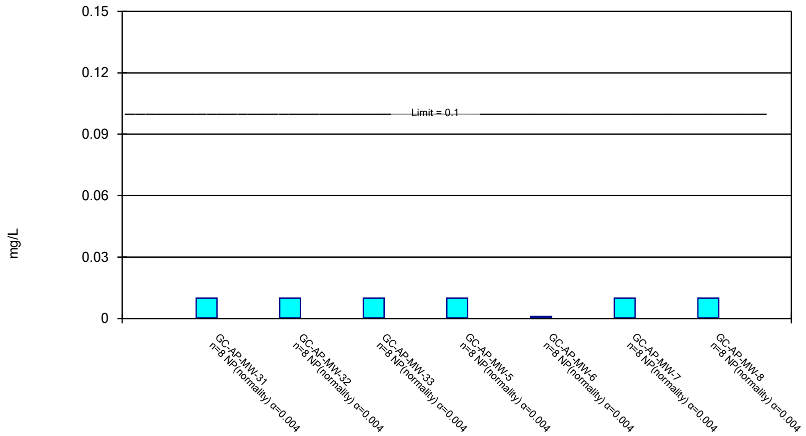


Constituent: Chromium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

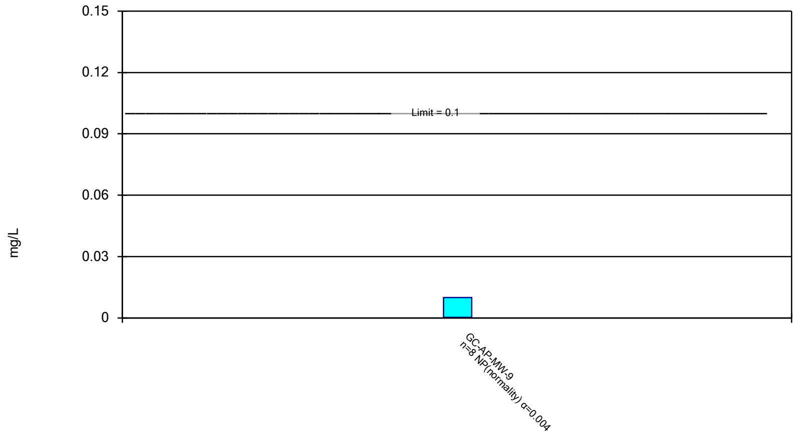


Constituent: Chromium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

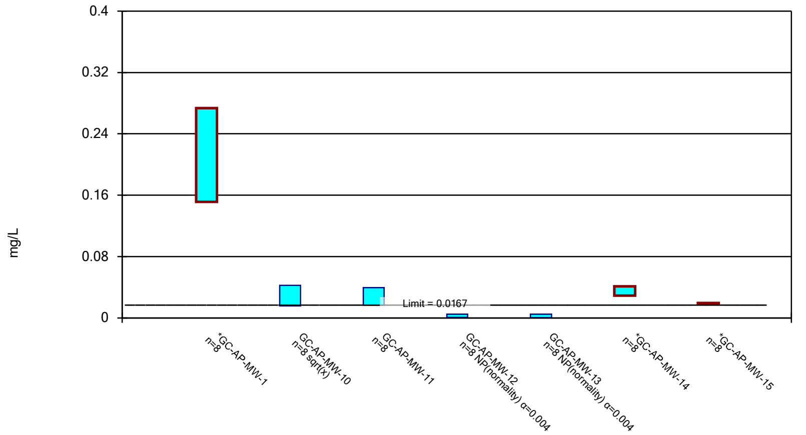


Constituent: Chromium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on

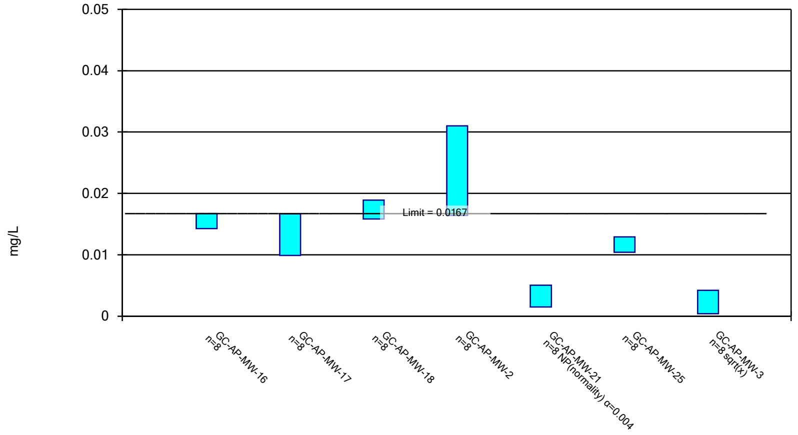


Constituent: Cobalt   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



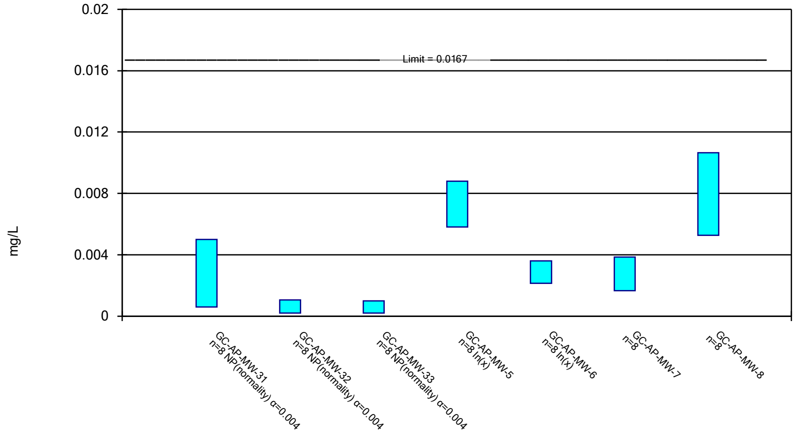
Constituent: Cobalt   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



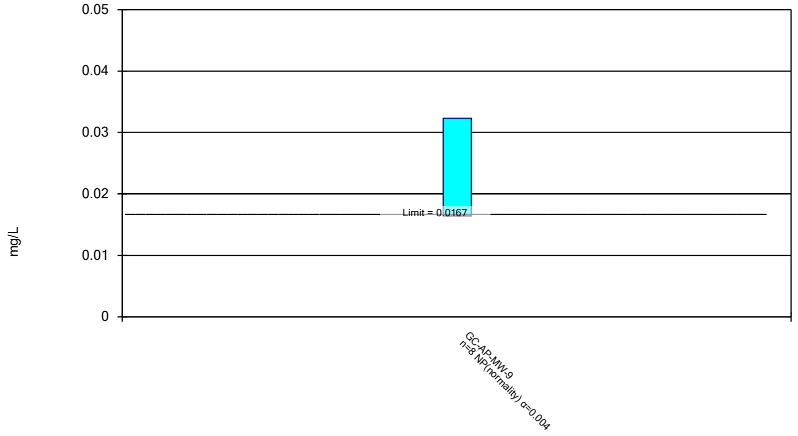
Constituent: Cobalt   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



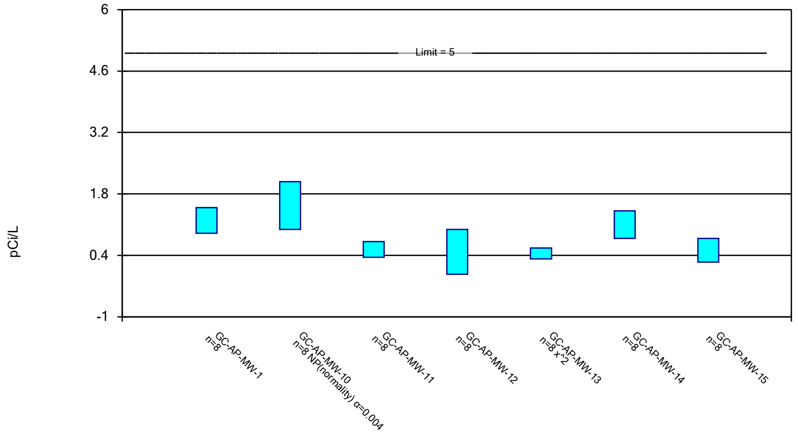
Constituent: Cobalt   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



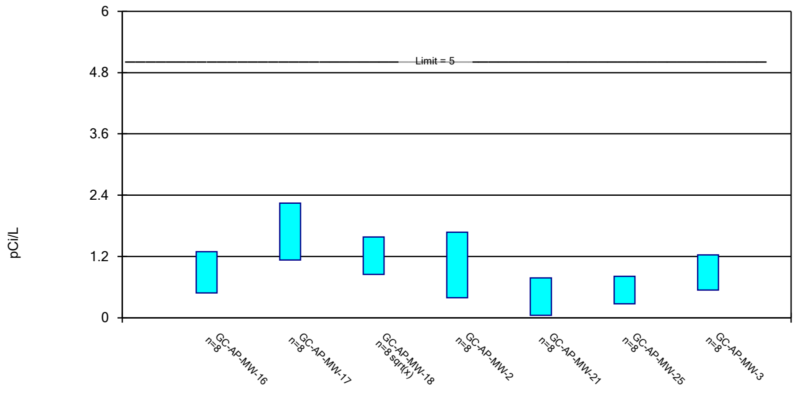
Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 11:16 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

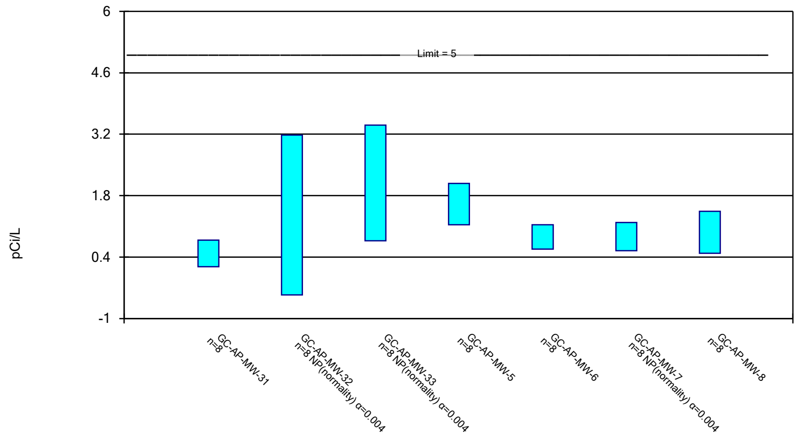


Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

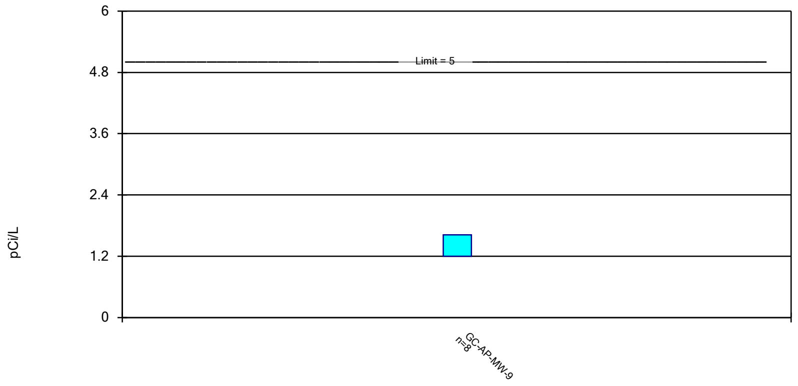


Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

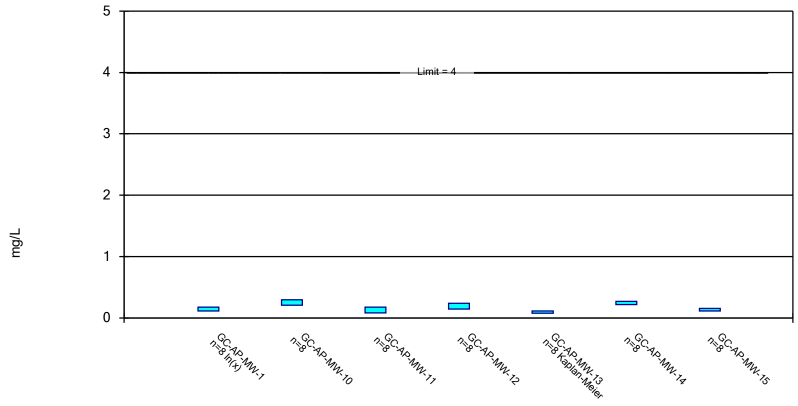


Constituent: Combined Radium 226 + 228   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

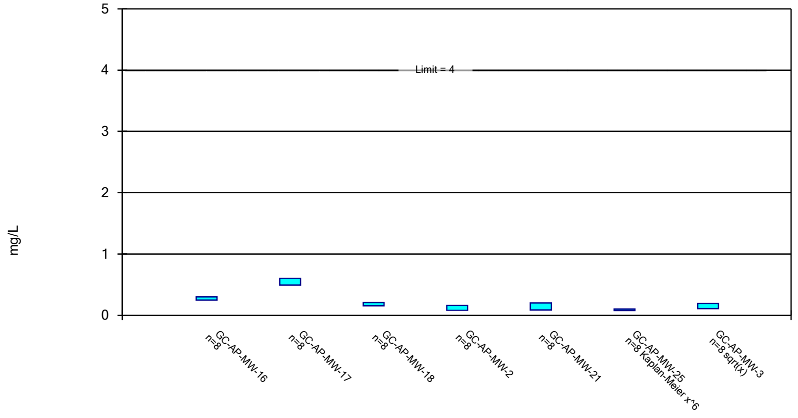


Constituent: Fluoride   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

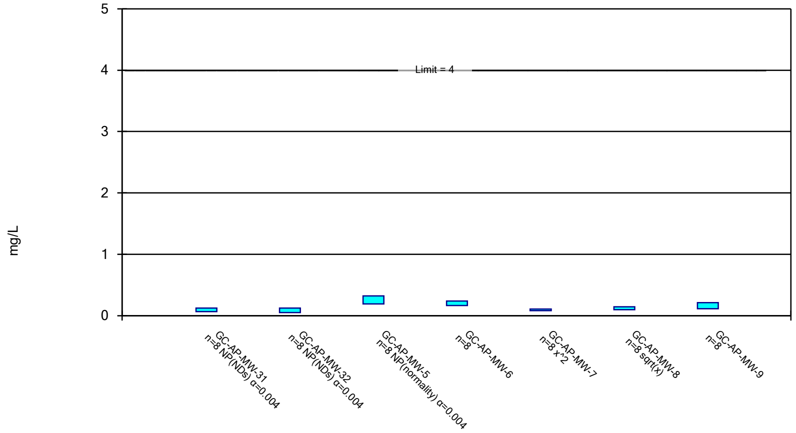


Constituent: Fluoride   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

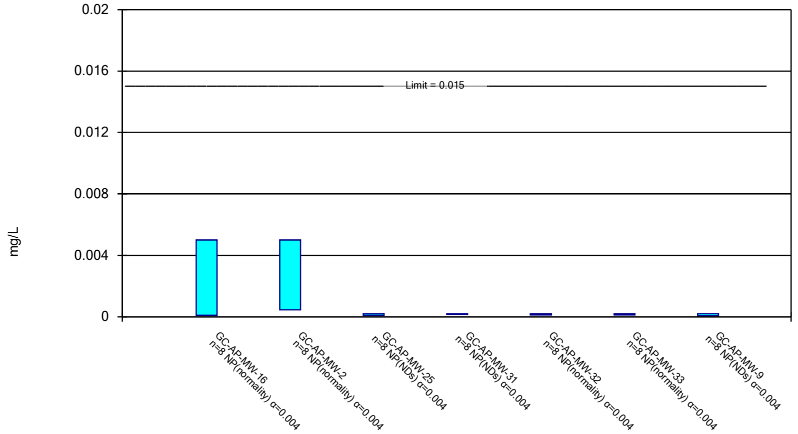


Constituent: Fluoride   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

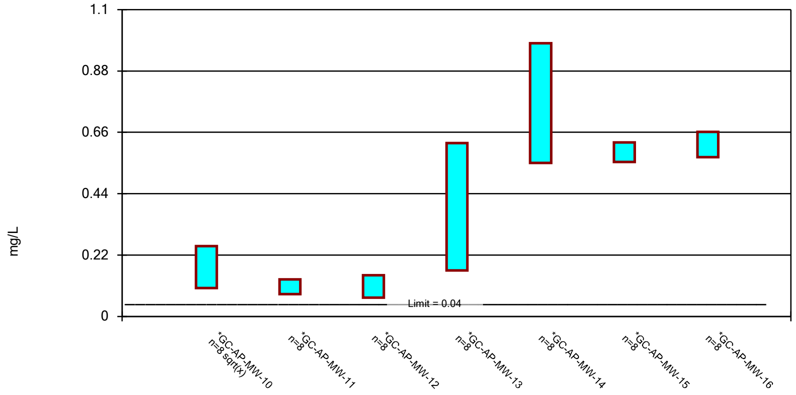


Constituent: Lead   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

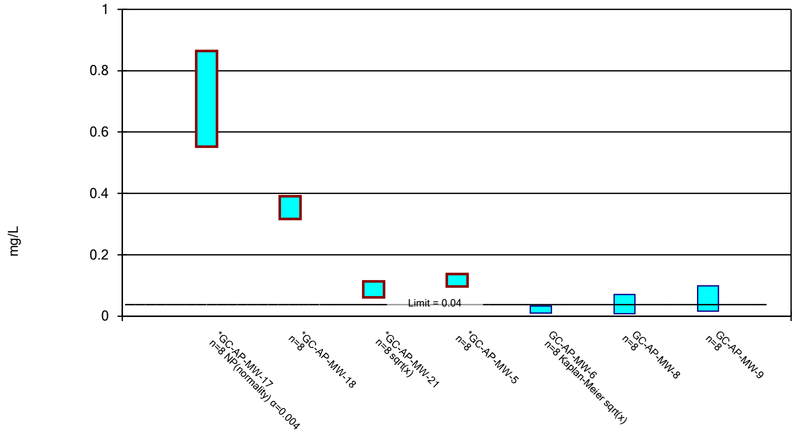


Constituent: Lithium   Analysis Run 12/9/2022 11:16 AM   View: AIV
Plant Greene County   Client: Southern Company   Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on

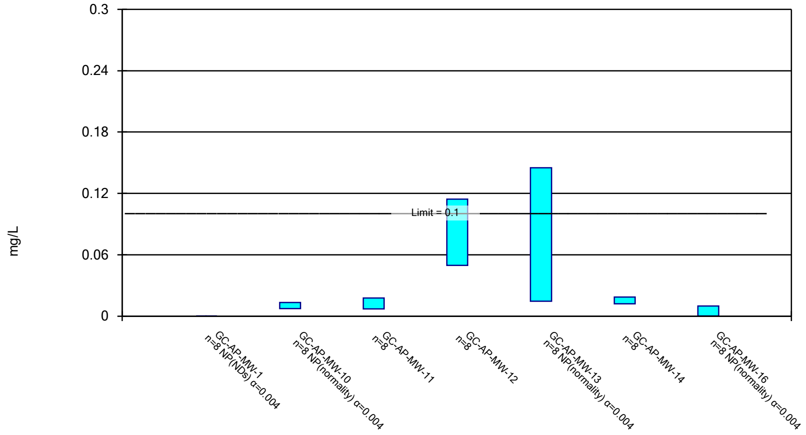


Constituent: Lithium Analysis Run 12/9/2022 11:16 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

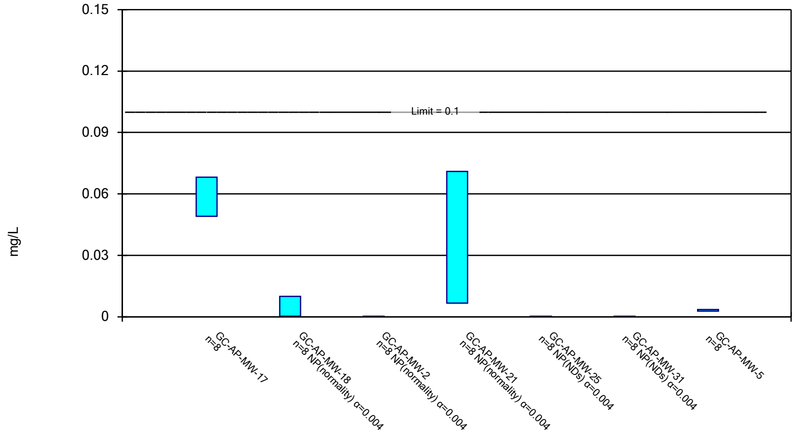


Constituent: Molybdenum Analysis Run 12/9/2022 11:16 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

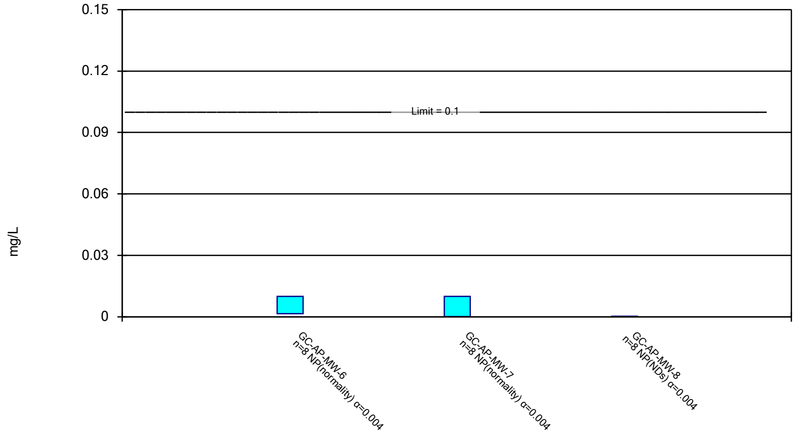


Constituent: Molybdenum Analysis Run 12/9/2022 11:16 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

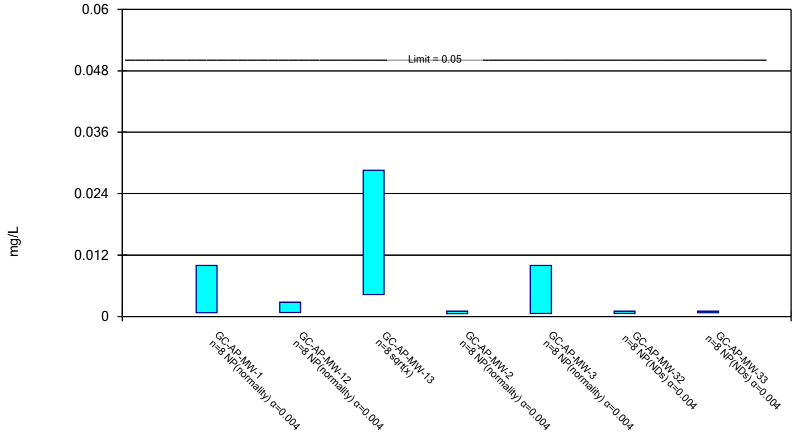


Constituent: Molybdenum Analysis Run 12/9/2022 11:16 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



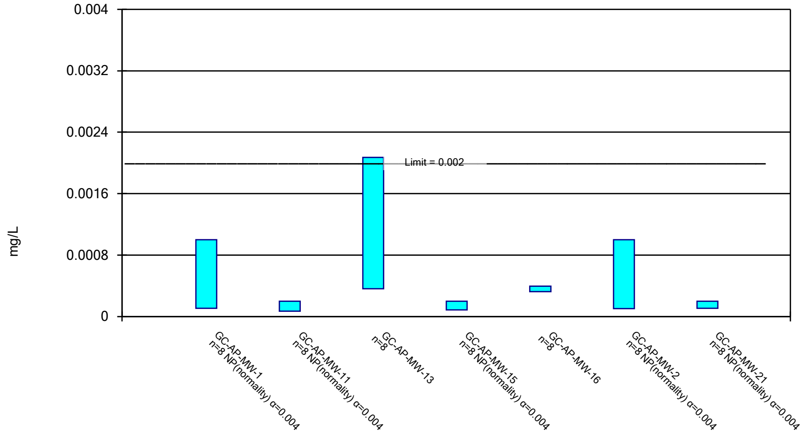
Constituent: Selenium Analysis Run 12/9/2022 11:16 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.36 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



Constituent: Thallium Analysis Run 12/9/2022 11:16 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

Confidence Interval

Constituent: Antimony (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-17	GC-AP-MW-21	GC-AP-MW-6	GC-AP-MW-7
3/26/2019	0.00121 (J)	0.00219 (J)	0.000897 (J)	0.000964 (J)	0.00141 (J)	<0.00102
9/9/2019			<0.00102			
9/10/2019	<0.00102			<0.00102	<0.00102	<0.00102
9/11/2019		0.00261 (J)				
4/20/2020		0.00338				
4/21/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
8/11/2020			<0.00102			
8/18/2020	<0.00102	0.00388		<0.00102		
8/19/2020					<0.00102	<0.00102
3/9/2021			<0.00102		<0.00102	<0.00102
3/10/2021	<0.00102			<0.00102		
3/15/2021		0.0016				
8/17/2021			<0.00102			
8/24/2021					<0.00102	0.00075 (J)
8/25/2021	<0.00102	0.00263		<0.00102		
3/29/2022	<0.00102				<0.00102	0.00066 (J)
3/30/2022				<0.00102		
4/4/2022			<0.00102			
4/6/2022		0.002				
10/17/2022	<0.00102	0.002		<0.00102		
10/18/2022			<0.00102		<0.00102	<0.00102
Mean	0.001044	0.002536	0.001005	0.001013	0.001069	0.0009412
Std. Dev.	6.718E-05	0.0007656	4.349E-05	1.98E-05	0.0001379	0.0001478
Upper Lim.	0.00121	0.003348	0.00102	0.00102	0.00141	0.00102
Lower Lim.	0.00102	0.001725	0.000897	0.000964	0.00102	0.00066

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
3/26/2019				<0.005	0.00251 (J)		<0.005
3/27/2019	0.0267	0.014	0.00573			0.0264	
9/10/2019	0.0226	0.0132	0.00378 (J)	<0.005		0.0263	<0.005
9/11/2019					0.00664		
4/20/2020					0.00181 (J)		<0.005
4/21/2020	0.0219			<0.005		0.0178	
4/22/2020		0.0121	0.00616				
8/11/2020						0.0207	
8/12/2020							<0.005
8/17/2020	0.0265						
8/18/2020		0.0121	0.00457 (J)	<0.005	0.00176 (J)		
3/9/2021						0.0292	
3/10/2021			0.00317	0.000251			0.000349
3/15/2021		0.0125			0.00207		
3/16/2021	0.0238						
8/17/2021	0.0206						
8/24/2021		0.0129					
8/25/2021			0.00518	0.00023	0.00302	0.0224	0.00046
3/29/2022				0.00023			0.00032
3/30/2022			0.00097				
4/4/2022	0.0164	0.0117				0.0241	
4/6/2022					0.00261		
10/5/2022	0.0152						
10/17/2022			0.00251	0.000335	0.00397		
10/18/2022		0.0117				0.0269	0.000379
Mean	0.02171	0.01253	0.004009	0.002631	0.003049	0.02423	0.002688
Std. Dev.	0.004223	0.0008013	0.001753	0.002533	0.001621	0.003742	0.002471
Upper Lim.	0.02619	0.01337	0.005867	0.005	0.004592	0.02819	0.005
Lower Lim.	0.01724	0.01168	0.002151	0.00023	0.001592	0.02026	0.00032

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-3
3/26/2019	0.0952	0.32	0.0477		<0.005		
3/27/2019				0.0101		<0.005	0.00596
9/9/2019		0.356	0.0498	0.022			0.00806
9/10/2019	0.0786				<0.005	<0.005	
4/20/2020	0.105						0.00751
4/21/2020		0.689	0.0478	0.013	<0.005		
4/22/2020						<0.005	
8/11/2020	0.0698	0.581				<0.005	
8/12/2020			0.0485				
8/17/2020				0.00768			0.00909
8/18/2020					<0.005		
3/9/2021	0.113	0.86	0.0505				
3/10/2021					0.000216	0.00033	
3/16/2021				0.0045			0.0112
8/17/2021	0.0765	0.937	0.0509	0.00514			0.0119
8/24/2021						0.00028	
8/25/2021					0.00014 (J)		
3/28/2022				0.00381			
3/29/2022						0.00026	
3/30/2022					0.00017 (J)		
4/4/2022		0.861					
4/5/2022							0.01
4/6/2022	0.078		0.049				
10/5/2022				0.00331			0.0119
10/17/2022			0.0475		0.000217		
10/18/2022	0.0653	0.897				0.000434	
Mean	0.08518	0.6876	0.04896	0.008693	0.002593	0.002663	0.009453
Std. Dev.	0.01719	0.2456	0.001316	0.006343	0.002573	0.002499	0.002184
Upper Lim.	0.1034	0.948	0.05036	0.01478	0.005	0.005	0.01177
Lower Lim.	0.06695	0.4273	0.04757	0.003086	0.00014	0.00026	0.007138

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
3/26/2019					<0.005	<0.005	<0.005
3/27/2019	<0.0002	<0.0002	<0.0002	0.455			
9/10/2019					<0.005	<0.005	<0.005
9/11/2019	<0.0002	<0.0002	<0.0002	0.406			
4/21/2020				0.42	<0.005	<0.005	<0.005
4/22/2020	<0.0002	<0.0002	<0.0002				
8/11/2020	<0.0002						
8/12/2020		<0.0002	<0.0002	0.415			
8/19/2020					<0.005	<0.005	<0.005
3/9/2021					0.000303	0.00015 (J)	0.000248
3/15/2021	0.000111 (J)	0.000142 (J)	<0.0002				
3/16/2021				0.473			
8/23/2021	<0.0002	0.00019 (J)	<0.0002	0.368			
8/24/2021					0.00028	0.0001 (J)	0.00027
3/28/2022	<0.0002	<0.0002	0.00015 (J)				
3/29/2022					0.00013 (J)	8E-05 (J)	0.00015 (J)
4/4/2022				0.432			
10/5/2022	<0.0002	<0.0002	8.1E-05 (J)				
10/17/2022				0.366			
10/18/2022					0.000182 (J)	0.000148 (J)	0.000261
Mean	0.0001889	0.0001915	0.0001789	0.4169	0.002612	0.00256	0.002616
Std. Dev.	3.147E-05	2.03E-05	4.324E-05	0.03768	0.002554	0.002609	0.002549
Upper Lim.	0.0002	0.0002	0.0002	0.4568	0.005	0.005	0.005
Lower Lim.	0.000111	0.000142	8.1E-05	0.3769	0.00013	8E-05	0.00015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9
3/26/2019	0.00969
9/10/2019	0.0108
4/21/2020	0.0102
8/18/2020	0.0108
3/9/2021	0.0105
8/24/2021	0.00695
3/29/2022	0.00316
10/18/2022	0.00787
Mean	0.008746
Std. Dev.	0.002665
Upper Lim.	0.01113
Lower Lim.	0.006448

Confidence Interval

Constituent: Barium (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
3/26/2019				0.0218	0.109		0.0282
3/27/2019	0.0286	0.167	0.0678			0.0768	
9/10/2019	0.0283	0.199	0.0651	0.0233		0.0685	0.0348
9/11/2019					0.275		
4/20/2020					0.104		0.0338
4/21/2020	0.0206			0.0325		0.102	
4/22/2020		0.186	0.0967				
8/11/2020						0.0806	
8/12/2020							0.0352
8/17/2020	0.0218						
8/18/2020		0.223	0.0866	0.021	0.199		
3/9/2021						0.125	
3/10/2021			0.0637	0.0373			0.0365
3/15/2021		0.261			0.0699		
3/16/2021	0.024						
8/17/2021	0.0211						
8/24/2021		0.287					
8/25/2021			0.104	0.0323	0.114	0.11	0.0402
3/29/2022				0.0355			0.0381
3/30/2022			0.0485				
4/4/2022	0.0235	0.26				0.103	
4/6/2022					0.0701		
10/5/2022	0.0256						
10/17/2022			0.0611	0.0301	0.119		
10/18/2022		0.248				0.103	0.036
Mean	0.02419	0.2289	0.07419	0.02923	0.1325	0.09611	0.03535
Std. Dev.	0.003094	0.04198	0.01932	0.006363	0.07013	0.01902	0.003519
Upper Lim.	0.02747	0.2734	0.09467	0.03597	0.2013	0.1163	0.03908
Lower Lim.	0.02091	0.1844	0.0537	0.02248	0.06762	0.07595	0.03162

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-3
3/26/2019	0.0626	0.242	0.117		0.047		
3/27/2019				0.0311		0.0901	0.0951
9/9/2019		0.319	0.101	0.035			0.111
9/10/2019	0.0754				0.0568	0.101	
4/20/2020	0.0921						0.109
4/21/2020		0.306	0.0926	0.0335	0.0763		
4/22/2020						0.11	
8/11/2020	0.0948	0.29				0.111	
8/12/2020			0.0815				
8/17/2020				0.0376			0.139
8/18/2020					0.0517		
3/9/2021	0.102	0.352	0.0849				
3/10/2021					0.111	0.0797	
3/16/2021				0.033			0.159
8/17/2021	0.101	0.254	0.0763	0.0347			0.15
8/24/2021						0.0988	
8/25/2021					0.0865		
3/28/2022				0.0301			
3/29/2022						0.0717	
3/30/2022					0.112		
4/4/2022		0.27					
4/5/2022							0.145
4/6/2022	0.103		0.0769				
10/5/2022				0.0344			0.138
10/17/2022			0.07		0.0774		
10/18/2022	0.103	0.253				0.0704	
Mean	0.09174	0.2858	0.08753	0.03368	0.07734	0.09159	0.1308
Std. Dev.	0.01498	0.03811	0.01542	0.002349	0.02513	0.01623	0.02276
Upper Lim.	0.1042	0.3261	0.1039	0.03617	0.104	0.1088	0.1549
Lower Lim.	0.08035	0.2454	0.07118	0.03118	0.05071	0.07438	0.1066

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
3/26/2019					0.0682	0.0796	0.0911
3/27/2019	0.025	0.0134	0.0912	0.251			
9/10/2019					0.0789	0.0887	0.11
9/11/2019	0.0267	0.0147	0.0824	0.323			
4/21/2020				0.138	0.0728	0.0762	0.116
4/22/2020	0.0285	0.0133	0.102				
8/11/2020	0.0264						
8/12/2020		0.0127	0.0601	0.134			
8/19/2020					0.0784	0.0816	0.119
3/9/2021					0.0664	0.083	0.15
3/15/2021	0.0316	0.0692	0.0144				
3/16/2021				0.143			
8/23/2021	0.0317	0.0764	0.0141	0.139			
8/24/2021					0.0737	0.0782	0.122
3/28/2022	0.0325	0.0132	0.0773				
3/29/2022					0.0614	0.0639	0.104
4/4/2022				0.131			
10/5/2022	0.0283	0.0133	0.0665				
10/17/2022				0.134			
10/18/2022					0.0619	0.084	0.107
Mean	0.02884	0.02828	0.0635	0.1741	0.07021	0.0794	0.1149
Std. Dev.	0.0028	0.02755	0.0331	0.07237	0.006832	0.007343	0.01721
Upper Lim.	0.03181	0.0764	0.09858	0.323	0.07745	0.08718	0.1331
Lower Lim.	0.02587	0.0127	0.02842	0.131	0.06297	0.07162	0.09665

Confidence Interval

Constituent: Barium (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9
3/26/2019	0.175
9/10/2019	0.206
4/21/2020	0.175
8/18/2020	0.165
3/9/2021	0.16
8/24/2021	0.168
3/29/2022	0.139
10/18/2022	0.147
Mean	0.1669
Std. Dev.	0.02031
Upper Lim.	0.1884
Lower Lim.	0.1453

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-11	GC-AP-MW-13	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-21
3/26/2019			<0.0002	<0.001	<0.0002		<0.0002
3/27/2019	<0.0002	<0.0002				<0.0002	
9/9/2019						<0.0002	
9/10/2019	<0.0002	<0.0002		<0.001	<0.0002		<0.0002
9/11/2019			<0.0002				
4/20/2020			<0.0002	<0.001	<0.0002		
4/21/2020	<0.0002					<0.0002	<0.0002
4/22/2020		<0.0002					
8/11/2020					<0.0002		
8/12/2020				<0.001			
8/17/2020	<0.0002					<0.0002	
8/18/2020		<0.0002	<0.0002				<0.0002
3/9/2021					<0.0002		
3/10/2021		0.000347		0.00012 (J)			7.02E-05 (J)
3/15/2021			<0.0002				
3/16/2021	<0.0002					0.00013 (J)	
8/17/2021	<0.0002				<0.0002	<0.0002	
8/25/2021		<0.0002	<0.0002	0.00014 (J)			<0.0002
3/28/2022						0.00012 (J)	
3/29/2022				0.00046			
3/30/2022		<0.0002					7E-05 (J)
4/4/2022	<0.0002						
4/6/2022			8E-05 (J)		<0.0002		
10/5/2022	9.2E-05 (J)					<0.0002	
10/17/2022		<0.0002	0.000145 (J)				0.000102 (J)
10/18/2022				0.000135 (J)	6.9E-05 (J)		
Mean	0.0001865	0.0002184	0.0001781	0.0006069	0.0001836	0.0001812	0.0001553
Std. Dev.	3.818E-05	5.197E-05	4.407E-05	0.0004338	4.632E-05	3.482E-05	6.251E-05
Upper Lim.	0.0002	0.000347	0.0002	0.001	0.0002	0.0002	0.0002
Lower Lim.	9.2E-05	0.0002	8E-05	0.00012	6.9E-05	0.00012	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-25	GC-AP-MW-6	GC-AP-MW-8
3/26/2019		<0.0002	<0.0002
3/27/2019	<0.000203		
9/10/2019	<0.000203	<0.0002	<0.0002
4/21/2020		<0.0002	<0.0002
4/22/2020	<0.000203		
8/11/2020	<0.000203		
8/19/2020		<0.0002	<0.0002
3/9/2021		0.00278	0.000241
3/10/2021	<0.000203		
8/24/2021	9E-05 (J)	0.00018 (J)	<0.0002
3/29/2022	7E-05 (J)	0.0005	<0.0002
10/18/2022	8.3E-05 (J)	<0.0002	<0.0002
Mean	0.0001573	0.0005575	0.0002051
Std. Dev.	6.337E-05	0.0009043	1.45E-05
Upper Lim.	0.000203	0.00278	0.000241
Lower Lim.	7E-05	0.00018	0.0002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
3/26/2019				<0.01	<0.01		<0.00102
3/27/2019	<0.01	<0.00102	<0.001015			<0.00102	
9/10/2019	<0.01	<0.00102	<0.001015	<0.01		<0.00102	<0.00102
9/11/2019					<0.01		
4/20/2020					<0.01		<0.00102
4/21/2020	<0.01			<0.01		<0.00102	
4/22/2020		<0.00102	<0.001015				
8/11/2020						<0.00102	
8/12/2020							<0.00102
8/17/2020	<0.01						
8/18/2020		<0.00102	<0.001015	<0.01	<0.01		
3/9/2021						0.000357 (J)	
3/10/2021			<0.001015	0.000224 (J)			0.000301 (J)
3/15/2021		0.000357 (J)			0.000311 (J)		
3/16/2021	0.000341 (J)						
8/17/2021	0.00034 (J)						
8/24/2021		0.00036 (J)					
8/25/2021			0.00027 (J)	0.00035 (J)	0.00026 (J)	0.00023 (J)	0.00027 (J)
3/29/2022				0.00043 (J)			<0.00102
3/30/2022			0.00023 (J)				
4/4/2022	0.00045 (J)	<0.00102				0.00025 (J)	
4/6/2022					0.0003 (J)		
10/5/2022	0.000287 (J)						
10/17/2022			0.000286 (J)	0.000332 (J)	0.000237 (J)		
10/18/2022		0.000217 (J)				<0.00102	<0.00102
Mean	0.005177	0.0007542	0.0007326	0.005167	0.005138	0.0007421	0.0008364
Std. Dev.	0.005156	0.0003694	0.00039	0.005167	0.005197	0.0003852	0.0003401
Upper Lim.	0.01	0.00102	0.001015	0.01	0.01	0.00102	0.00102
Lower Lim.	0.000287	0.000217	0.00023	0.000224	0.000237	0.00023	0.00027

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-3
3/26/2019	<0.01	<0.01	<0.01		<0.01		
3/27/2019				<0.01		<0.00102	<0.01
9/9/2019		<0.01	<0.01	<0.01			<0.01
9/10/2019	<0.01				<0.01	<0.00102	
4/20/2020	<0.01						<0.01
4/21/2020		<0.01	<0.01	<0.01	<0.01		
4/22/2020						<0.00102	
8/11/2020	<0.01	<0.01				<0.00102	
8/12/2020			<0.01				
8/17/2020				<0.01			<0.01
8/18/2020					<0.01		
3/9/2021	0.000444 (J)	0.000216 (J)	0.000346 (J)				
3/10/2021					0.000333 (J)	0.0003 (J)	
3/16/2021				0.0004 (J)			0.000347 (J)
8/17/2021	0.0004 (J)	0.00022 (J)	0.00023 (J)	0.00267			0.00032 (J)
8/24/2021						0.00028 (J)	
8/25/2021					0.00027 (J)		
3/28/2022				0.0003 (J)			
3/29/2022						0.00041 (J)	
3/30/2022					0.00022 (J)		
4/4/2022		0.00022 (J)					
4/5/2022							0.00039 (J)
4/6/2022	0.00034 (J)		0.00031 (J)				
10/5/2022				0.000256 (J)			0.000286 (J)
10/17/2022			0.000294 (J)		0.00026 (J)		
10/18/2022	0.000267 (J)	0.000211 (J)				<0.00102	
Mean	0.005181	0.005108	0.005147	0.005453	0.005135	0.0007612	0.005168
Std. Dev.	0.005152	0.005229	0.005188	0.004921	0.005201	0.0003591	0.005166
Upper Lim.	0.01	0.01	0.01	0.01	0.01	0.00102	0.01
Lower Lim.	0.000267	0.000211	0.00023	0.000256	0.00022	0.00028	0.000286

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
3/26/2019					<0.00102	<0.01	<0.01
3/27/2019	<0.01	<0.01	<0.01	<0.01			
9/10/2019					<0.00102	<0.01	<0.01
9/11/2019	<0.01	<0.01	<0.01	<0.01			
4/21/2020				<0.01	<0.00102	<0.01	<0.01
4/22/2020	<0.01	<0.01	<0.01				
8/11/2020	<0.01						
8/12/2020		<0.01	<0.01	<0.01			
8/19/2020					<0.00102	<0.01	<0.01
3/9/2021					0.000347 (J)	0.000351 (J)	0.000346 (J)
3/15/2021	0.000468 (J)	0.000431 (J)	0.000679 (J)				
3/16/2021				0.000285 (J)			
8/23/2021	0.00042 (J)	0.00038 (J)	0.0005 (J)	0.00027 (J)			
8/24/2021					0.00026 (J)	0.00036 (J)	0.00031 (J)
3/28/2022	0.00039 (J)	0.00042 (J)	0.00044 (J)				
3/29/2022					<0.00102	0.00024 (J)	0.00027 (J)
4/4/2022				0.00025 (J)			
10/5/2022	0.000268 (J)	0.000301 (J)	0.000311 (J)				
10/17/2022				0.000348 (J)			
10/18/2022					0.000228 (J)	0.000297 (J)	0.000217 (J)
Mean	0.005193	0.005191	0.005241	0.005144	0.0007419	0.005156	0.005143
Std. Dev.	0.005139	0.005141	0.005088	0.005191	0.0003853	0.005179	0.005193
Upper Lim.	0.01	0.01	0.01	0.01	0.00102	0.01	0.01
Lower Lim.	0.000268	0.000301	0.000311	0.00025	0.000228	0.00024	0.000217

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-9
3/26/2019	<0.01
9/10/2019	<0.01
4/21/2020	<0.01
8/18/2020	<0.01
3/9/2021	0.000381 (J)
8/24/2021	0.0003 (J)
3/29/2022	0.00027 (J)
10/18/2022	0.000238 (J)
Mean	0.005149
Std. Dev.	0.005186
Upper Lim.	0.01
Lower Lim.	0.000238

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
3/26/2019				<0.005	<0.005		0.0184
3/27/2019	0.176	0.014	0.0292			0.0303	
9/10/2019	0.104	0.0191	0.02	<0.005		0.0278	0.0201
9/11/2019					<0.005		
4/20/2020					<0.005		0.0189
4/21/2020	0.206			<0.005		0.0339	
4/22/2020		0.0233	0.0319				
8/11/2020						0.0373	
8/12/2020							0.0184
8/17/2020	0.195						
8/18/2020		0.0287	0.0298	<0.005	<0.005		
3/9/2021						0.0302	
3/10/2021			0.0197	0.00118			0.0189
3/15/2021		0.0475			0.000312		
3/16/2021	0.257						
8/17/2021	0.24						
8/24/2021		0.0514					
8/25/2021			0.0507	0.00094	7E-05 (J)	0.0436	0.0181
3/29/2022				0.00088			0.0172
3/30/2022			0.0157				
4/4/2022	0.296	0.0218				0.0423	
4/6/2022					0.00126		
10/5/2022	0.226						
10/17/2022			0.0256	0.00077	0.00424		
10/18/2022		0.0223				0.0349	0.0189
Mean	0.2125	0.02851	0.02783	0.002971	0.003235	0.03504	0.01861
Std. Dev.	0.05775	0.0136	0.01086	0.002172	0.002266	0.005741	0.0008288
Upper Lim.	0.2737	0.04225	0.03933	0.005	0.005	0.04112	0.01949
Lower Lim.	0.1513	0.0155	0.01632	0.00077	7E-05	0.02895	0.01773

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-3
3/26/2019	0.0177	0.0192	0.0161		<0.005		
3/27/2019				0.0131		0.0114	0.00463 (J)
9/9/2019		0.0121	0.0174	0.0154			0.00413 (J)
9/10/2019	0.0162				<0.005	0.0127	
4/20/2020	0.0146						0.00396 (J)
4/21/2020		0.0158	0.0173	0.0194	<0.005		
4/22/2020						0.0133	
8/11/2020	0.0148	0.0122				0.0126	
8/12/2020			0.0152				
8/17/2020				0.0249			<0.005
8/18/2020					<0.005		
3/9/2021	0.0162	0.0151	0.017				
3/10/2021					0.00204	0.0115	
3/16/2021				0.0272			0.00076
8/17/2021	0.0155	0.0109	0.0175	0.0296			0.00039
8/24/2021						0.0117	
8/25/2021					0.00147		
3/28/2022				0.0309			
3/29/2022						0.0101	
3/30/2022					0.00284		
4/4/2022		0.0115					
4/5/2022							0.00083
4/6/2022	0.0147		0.0183				
10/5/2022				0.0293			0.000297
10/17/2022			0.0201		0.00501		
10/18/2022	0.0143	0.00934				0.00995	
Mean	0.0155	0.01327	0.01736	0.02373	0.00392	0.01166	0.002187
Std. Dev.	0.001146	0.003199	0.001454	0.006881	0.001538	0.001202	0.001839
Upper Lim.	0.01672	0.01666	0.0189	0.03102	0.00501	0.01293	0.004208
Lower Lim.	0.01428	0.009877	0.01582	0.01643	0.00147	0.01038	0.0003914

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
3/26/2019					0.00223 (J)	0.0024 (J)	0.00445 (J)
3/27/2019	<0.005	<0.0002	<0.0002	0.00614			
9/10/2019					0.00306 (J)	0.0034 (J)	0.0108
9/11/2019	<0.005	<0.0002	<0.0002	0.00767			
4/21/2020				0.00601	0.00228 (J)	0.00206 (J)	0.0111
4/22/2020	<0.005	<0.0002	<0.0002				
8/11/2020	<0.005						
8/12/2020		<0.0002	<0.0002	0.00678			
8/19/2020					0.00278 (J)	0.0046 (J)	0.00975
3/9/2021					0.00367	0.00181	0.00707
3/15/2021	0.000624	0.000908	<0.0002				
3/16/2021				0.00857			
8/23/2021	0.0006	0.00105	<0.0002	0.00645			
8/24/2021					0.00419	0.00333	0.00898
3/28/2022	0.00061	<0.0002	0.00099				
3/29/2022					0.00223	0.0014	0.00619
4/4/2022				0.0104			
10/5/2022	0.000728	<0.0002	0.000909				
10/17/2022				0.0062			
10/18/2022					0.00233	0.00301	0.00537
Mean	0.00282	0.0003947	0.0003874	0.007278	0.002846	0.002751	0.007964
Std. Dev.	0.002331	0.0003626	0.0003476	0.001538	0.0007446	0.001039	0.002539
Upper Lim.	0.005	0.00105	0.00099	0.00879	0.003592	0.003852	0.01065
Lower Lim.	0.0006	0.0002	0.0002	0.005818	0.002134	0.00165	0.005273

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9
3/26/2019	0.0167
9/10/2019	0.0177
4/21/2020	0.0166
8/18/2020	0.0164
3/9/2021	0.0247
8/24/2021	0.0323
3/29/2022	0.0267
10/18/2022	0.0297
Mean	0.0226
Std. Dev.	0.006535
Upper Lim.	0.0323
Lower Lim.	0.0164

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
3/26/2019				0.381	0.471		0.535
3/27/2019	1.17	0.988	0.564			1.1	
9/10/2019	1.39	1.1	0.57	0.434 (U)		0.852	0.3 (U)
9/11/2019					0.557 (U)		
4/20/2020					0.256 (U)		0.693
4/21/2020	0.712			-0.0655 (U)		0.653	
4/22/2020		1.11	0.502 (U)				
8/11/2020						1.64	
8/12/2020							0.983
8/17/2020	1.46						
8/18/2020		1.08	0.457 (U)	0.135 (U)	0.568 (U)		
3/9/2021						1.28 (U)	
3/10/2021			0.666 (U)	0.481 (U)			0.335 (U)
3/15/2021		1.12 (U)			0.537 (U)		
3/16/2021	1.45						
8/17/2021	1.36						
8/24/2021		1.45					
8/25/2021			0.729 (U)	0.113 (U)	0.3 (U)	1.01	0.314 (U)
3/29/2022				1.37			0.273 (U)
3/30/2022			0.597 (U)				
4/4/2022	0.899	2.08				1.03	
4/6/2022					0.338 (U)		
10/5/2022	1.12						
10/17/2022			0.175 (U)	0.99 (U)	0.529 (U)		
10/18/2022		1.04				1.25	0.69 (U)
Mean	1.195	1.246	0.5325	0.4798	0.4445	1.102	0.5154
Std. Dev.	0.2746	0.3644	0.1679	0.4804	0.1265	0.2978	0.2562
Upper Lim.	1.486	2.08	0.7105	0.989	0.5689	1.418	0.7869
Lower Lim.	0.9041	0.988	0.3545	-0.02937	0.3154	0.7862	0.2439

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-3
3/26/2019	1.18	1.57	1.35		0.405		
3/27/2019				0.77		0.309 (U)	1.47
9/9/2019		1.29	1.08	0.3 (U)			1.12
9/10/2019	0.516 (U)				0.0889 (U)	0.578	
4/20/2020	0.493 (U)						0.899
4/21/2020		0.859	0.888	0.663 (U)	0.271 (U)		
4/22/2020						0.218 (U)	
8/11/2020	1.48	2.14				0.511 (U)	
8/12/2020			1.17				
8/17/2020				0.817			0.738
8/18/2020					-0.0105 (U)		
3/9/2021	1.2 (U)	2.27	1.11 (U)				
3/10/2021					0.418 (U)	1.03 (U)	
3/16/2021				1.05 (U)			0.553 (U)
8/17/2021	0.49 (U)	1.97	2.04	2.01			1.09
8/24/2021						0.693 (U)	
8/25/2021					0.305 (U)		
3/28/2022				0.745 (U)			
3/29/2022						0.37 (U)	
3/30/2022					1.04		
4/4/2022		2.17					
4/5/2022							0.532 (U)
4/6/2022	1 (U)		1.18 (U)				
10/5/2022				1.89			0.688 (U)
10/17/2022			0.84 (U)		0.772 (U)		
10/18/2022	0.772 (U)	1.22				0.617 (U)	
Mean	0.8914	1.686	1.207	1.031	0.4112	0.5408	0.8863
Std. Dev.	0.3802	0.5256	0.3739	0.605	0.3461	0.2557	0.324
Upper Lim.	1.294	2.243	1.579	1.672	0.778	0.8118	1.23
Lower Lim.	0.4884	1.129	0.8481	0.3894	0.04437	0.2697	0.5428

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
3/26/2019					0.904	0.841	0.507
3/27/2019	0.29 (U)	0.5	1.83	1.56			
9/10/2019					1.14	0.569 (U)	0.898
9/11/2019	0.28 (U)	-0.464 (U)	1.02	1.46			
4/21/2020				0.882	0.679 (U)	0.549 (U)	1.09
4/22/2020	0.0983 (U)	0.474 (U)	1.08				
8/11/2020	0.767						
8/12/2020		3.18	3.41	2.08			
8/19/2020					0.96	1.04	0.6 (U)
3/9/2021					1.12 (U)	0.545 (U)	1.6
3/15/2021	0.817 (U)	1.11 (U)	0.771 (U)				
3/16/2021				1.71			
8/23/2021	0.345 (U)	1.09	1.01 (U)	2.11			
8/24/2021					0.645 (U)	0.865 (U)	1.67
3/28/2022	0.413 (U)	0.682 (U)	1.36				
3/29/2022					0.394 (U)	0.575 (U)	0.621 (U)
4/4/2022				1.13			
10/5/2022	0.837 (U)	0.467 (U)	1.02				
10/17/2022				1.93			
10/18/2022					1.02	1.19	0.741 (U)
Mean	0.4809	0.8799	1.438	1.608	0.8578	0.7718	0.9659
Std. Dev.	0.2848	1.05	0.8581	0.4422	0.2618	0.2511	0.4523
Upper Lim.	0.7828	3.18	3.41	2.076	1.135	1.19	1.445
Lower Lim.	0.179	-0.464	0.771	1.139	0.5803	0.545	0.4865

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-9
3/26/2019	1.49
9/10/2019	1.75
4/21/2020	1.31
8/18/2020	1.59
3/9/2021	1.16 (U)
8/24/2021	1.43
3/29/2022	1.25
10/18/2022	1.29
Mean	1.409
Std. Dev.	0.1954
Upper Lim.	1.616
Lower Lim.	1.202

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15
3/26/2019				0.196	0.0775 (J)		0.113
3/27/2019	0.192	0.206	0.104			0.248	
9/10/2019	0.179	0.226	0.191	0.26		0.209	0.122
9/11/2019					0.118		
4/20/2020					0.0844 (J)		0.14
4/21/2020	0.12			0.198		0.254	
4/22/2020		0.224	0.167				
8/11/2020						0.278	
8/12/2020							0.147
8/17/2020	0.115						
8/18/2020		0.203	0.165	0.223	0.108		
3/9/2021						0.263	
3/10/2021			0.0749 (J)	0.161			0.115
3/15/2021		0.324			0.0737 (J)		
3/16/2021	0.129						
8/17/2021	0.158						
8/24/2021		0.277					
8/25/2021			0.135	0.188	0.111	0.239	0.167
3/29/2022				0.107 (J)			0.117 (J)
3/30/2022			<0.125				
4/4/2022	0.124 (JD)	0.2785 (D)				0.226 (D)	
4/6/2022					<0.125		
10/5/2022	0.125						
10/17/2022			0.118 (J)	0.197	<0.125		
10/18/2022		0.248				0.211	0.139
Mean	0.1428	0.2483	0.1272	0.1913	0.1028	0.241	0.1325
Std. Dev.	0.02956	0.04208	0.04581	0.0445	0.02117	0.02456	0.01903
Upper Lim.	0.1728	0.2929	0.1757	0.2384	0.1139	0.267	0.1527
Lower Lim.	0.1138	0.2037	0.07862	0.1441	0.07695	0.215	0.1123

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-3
3/26/2019	0.316	0.573	0.192		0.219		
3/27/2019				0.089 (J)		<0.1	0.13
9/9/2019		0.477	0.157	0.163			0.121
9/10/2019	0.267				0.194	<0.1	
4/20/2020	0.245						0.112
4/21/2020		0.565	0.171	0.126	0.173		
4/22/2020						<0.1	
8/11/2020	0.294	0.515				<0.1	
8/12/2020			0.198				
8/17/2020				0.0753 (J)			0.148
8/18/2020					0.18		
3/9/2021	0.286	0.628	0.205				
3/10/2021					0.113	0.104	
3/16/2021				0.185			0.23
8/17/2021	0.286	0.494	0.212	0.0974 (J)			0.184
8/24/2021						0.0914 (J)	
8/25/2021					0.117		
3/28/2022				0.105 (J)			
3/29/2022						0.0724 (J)	
3/30/2022					<0.125		
4/4/2022		0.5855 (D)					
4/5/2022							0.146 (JD)
4/6/2022	0.2395 (D)		0.1385 (JD)				
10/5/2022				0.124 (J)			0.12 (J)
10/17/2022			0.176		0.0988 (J)		
10/18/2022	0.27	0.544				0.0955 (J)	
Mean	0.2754	0.5477	0.1812	0.1206	0.1447	0.09541	0.1489
Std. Dev.	0.02544	0.0504	0.02522	0.03745	0.05429	0.01003	0.03991
Upper Lim.	0.3024	0.6011	0.2079	0.1603	0.2022	0.09939	0.1893
Lower Lim.	0.2485	0.4943	0.1545	0.08089	0.08712	0.07765	0.1096

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8	GC-AP-MW-9
3/26/2019				0.253	0.106	0.162	0.223
3/27/2019	<0.125	<0.125	0.208				
9/10/2019				0.227	0.086 (J)	0.113	0.178
9/11/2019	<0.125	0.0518 (J)	0.2				
4/21/2020			0.224	0.218	0.0951 (J)	0.114	0.181
4/22/2020	<0.125	<0.125					
8/11/2020	<0.125						
8/12/2020		<0.125	0.221				
8/18/2020							0.177
8/19/2020				0.223	0.103	0.116	
3/9/2021				0.17	0.0949 (J)	0.109	0.147
3/15/2021	<0.125	<0.125					
3/16/2021			0.282				
8/23/2021	<0.125	<0.125	0.322				
8/24/2021				0.161	0.1	0.141	0.164
3/28/2022	<0.125	<0.125					
3/29/2022				0.193	0.104 (J)	0.108 (J)	<0.125
4/4/2022			0.216				
10/5/2022	0.0671 (J)	<0.125					
10/17/2022			0.192				
10/18/2022				0.154	0.0649 (J)	0.0981 (J)	0.156
Mean	0.1178	0.1159	0.2331	0.1999	0.09424	0.1201	0.1611
Std. Dev.	0.02047	0.02588	0.04509	0.03581	0.01349	0.02088	0.04586
Upper Lim.	0.125	0.125	0.322	0.2378	0.1072	0.1416	0.2097
Lower Lim.	0.0671	0.0518	0.192	0.1619	0.08118	0.09911	0.1125

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-25	GC-AP-MW-31	GC-AP-MW-32	GC-AP-MW-33	GC-AP-MW-9
3/26/2019	<0.005						<0.0002
3/27/2019		<0.005	<0.0002	<0.0002	<0.0002	<0.0002	
9/9/2019		<0.005					
9/10/2019	<0.005		<0.0002				<0.0002
9/11/2019				<0.0002	<0.0002	<0.0002	
4/20/2020	<0.005						
4/21/2020		<0.005					<0.0002
4/22/2020			<0.0002	<0.0002	<0.0002	<0.0002	
8/11/2020	<0.005		<0.0002	<0.0002			
8/12/2020					<0.0002	<0.0002	
8/17/2020		<0.005					
8/18/2020							<0.0002
3/9/2021	0.000109 (J)						7.84E-05 (J)
3/10/2021			8.84E-05 (J)				
3/15/2021				<0.0002	0.000121 (J)	<0.0002	
3/16/2021		0.000736					
8/17/2021	0.00011 (J)	0.00059					
8/23/2021				<0.0002	0.00015 (J)	<0.0002	
8/24/2021			<0.0002				<0.0002
3/28/2022		0.00066		0.00015 (J)	<0.0002	0.00015 (J)	
3/29/2022			<0.0002				<0.0002
4/6/2022	9E-05 (J)						
10/5/2022		0.000453		<0.0002	<0.0002	0.000115 (J)	
10/18/2022	8.9E-05 (J)		<0.0002				<0.0002
Mean	0.00255	0.002805	0.000186	0.0001937	0.0001839	0.0001831	0.0001848
Std. Dev.	0.002619	0.002348	3.946E-05	1.768E-05	3.085E-05	3.262E-05	4.299E-05
Upper Lim.	0.005	0.005	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	8.9E-05	0.000453	8.84E-05	0.00015	0.000121	0.000115	7.84E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-15	GC-AP-MW-16
3/26/2019			0.0532	0.123		0.57	0.558
3/27/2019	0.115	0.119			1.11		
9/10/2019	0.112	0.124	0.0598		0.765	0.6	0.581
9/11/2019				0.246			
4/20/2020				0.201		0.604	0.62
4/21/2020			0.166		0.672		
4/22/2020	0.123	0.126					
8/11/2020					0.712		0.599
8/12/2020						0.594	
8/18/2020	0.124	0.109	0.0892	0.42			
3/9/2021					0.791		0.692
3/10/2021		0.0826	0.125			0.63	
3/15/2021	0.155			0.308			
8/17/2021							0.647
8/24/2021	0.198						
8/25/2021		0.132	0.117	0.5	0.985	0.622	
3/29/2022			0.13			0.534	
3/30/2022		0.0615					
4/4/2022	0.329				0.607		
4/6/2022				0.584			0.638
10/17/2022		0.0928	0.122	0.764			
10/18/2022	0.241				0.478	0.556	0.594
Mean	0.1746	0.1059	0.1078	0.3933	0.765	0.5888	0.6161
Std. Dev.	0.07734	0.02473	0.03797	0.2154	0.2024	0.03298	0.04242
Upper Lim.	0.2516	0.1321	0.148	0.6216	0.9796	0.6237	0.6611
Lower Lim.	0.1013	0.07965	0.06753	0.1649	0.5504	0.5538	0.5712

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-21	GC-AP-MW-5	GC-AP-MW-6	GC-AP-MW-8	GC-AP-MW-9
3/26/2019	0.595	0.378	0.0531		0.0192 (J)	0.0537	0.0931
3/27/2019				0.0988			
9/9/2019	0.571	0.408					
9/10/2019			0.0862		0.0267	0.0928	0.128
9/11/2019				0.117			
4/21/2020	0.629	0.386	0.0782	0.13	0.0518	0.0582	0.0693
8/11/2020	0.552						
8/12/2020		0.326		0.132			
8/18/2020			0.0718				0.0591
8/19/2020					0.0197 (J)	0.0511	
3/9/2021	0.864	0.364			0.013 (J)	0.0249	0.0417
3/10/2021			0.146				
3/16/2021				0.149			
8/17/2021	0.585	0.335					
8/23/2021				0.116			
8/24/2021					0.00951 (J)	0.0155 (J)	0.0383
8/25/2021			0.0872				
3/29/2022					<0.02	0.00828 (J)	0.0126 (J)
3/30/2022			0.082				
4/4/2022	0.647			0.102			
4/6/2022		0.312					
10/17/2022		0.321	0.0902	0.0901			
10/18/2022	0.656				<0.02	<0.02	0.0189 (J)
Mean	0.6374	0.3538	0.08684	0.1169	0.02249	0.03931	0.05763
Std. Dev.	0.09863	0.03508	0.02666	0.01963	0.01291	0.02967	0.03874
Upper Lim.	0.864	0.3909	0.1137	0.1377	0.03304	0.07075	0.09868
Lower Lim.	0.552	0.3166	0.06087	0.09605	0.009978	0.007866	0.01657

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-10	GC-AP-MW-11	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-14	GC-AP-MW-16
3/26/2019				0.11	0.0262		<0.01
3/27/2019	<0.0002	0.00778 (J)	0.0151			0.0167	
9/10/2019	<0.0002	0.00757 (J)	0.0205	0.134		0.0125	<0.01
9/11/2019					0.0226		
4/20/2020					0.0924		<0.01
4/21/2020	<0.0002			0.0947		0.0141	
4/22/2020		0.00747 (J)	0.0147				
8/11/2020						0.0117	<0.01
8/17/2020	<0.0002						
8/18/2020		0.00808 (J)	0.0146	0.0938	0.145		
3/9/2021						0.0205	0.000113 (J)
3/10/2021			0.00701	0.0611			
3/15/2021		0.0103			0.0146		
3/16/2021	0.000117 (J)						
8/17/2021	<0.0002						0.00014 (J)
8/24/2021		0.0132					
8/25/2021			0.0106	0.0547	0.0319	0.0127	
3/29/2022				0.0514			
3/30/2022			0.00425				
4/4/2022	<0.0002	0.0117				0.0166	
4/6/2022					0.0201		0.00015 (J)
10/5/2022	<0.0002						
10/17/2022			0.0119	0.0568	0.0197		
10/18/2022		0.0075				0.0181	0.000194 (J)
Mean	0.0001896	0.0092	0.01233	0.08206	0.04656	0.01536	0.005075
Std. Dev.	2.934E-05	0.002245	0.005098	0.03057	0.04696	0.003105	0.005265
Upper Lim.	0.0002	0.0132	0.01774	0.1145	0.145	0.01865	0.01
Lower Lim.	0.000117	0.00747	0.006928	0.04966	0.0146	0.01207	0.000113

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-17	GC-AP-MW-18	GC-AP-MW-2	GC-AP-MW-21	GC-AP-MW-25	GC-AP-MW-31	GC-AP-MW-5
3/26/2019	0.062	<0.01		0.071			
3/27/2019			<0.0002		<0.0002	<0.0002	0.00284 (J)
9/9/2019	0.0681	<0.01	<0.0002				
9/10/2019				0.0609	<0.0002		
9/11/2019						<0.0002	0.00328 (J)
4/21/2020	0.0694	<0.01	<0.0002	0.0562			0.00255 (J)
4/22/2020					<0.0002	<0.0002	
8/11/2020	0.0506				<0.0002	<0.0002	
8/12/2020		<0.01					0.00292 (J)
8/17/2020			<0.0002				
8/18/2020				0.0505			
3/9/2021	0.067	0.000362					
3/10/2021				0.0123	8.43E-05 (J)		
3/15/2021						7.41E-05 (J)	
3/16/2021			8.04E-05 (J)				0.00358
8/17/2021	0.0468	0.0004	0.00017 (J)				
8/23/2021						<0.0002	0.0031
8/24/2021					<0.0002		
8/25/2021				0.00789			
3/28/2022			<0.0002			<0.0002	
3/29/2022					<0.0002		
3/30/2022				0.00682			
4/4/2022	0.054						0.00354
4/6/2022		0.00032					
10/5/2022			<0.0002			<0.0002	
10/17/2022		0.000305		0.00666			0.00287
10/18/2022	0.0513				<0.0002		
Mean	0.05865	0.005173	0.0001813	0.03403	0.0001855	0.0001843	0.003085
Std. Dev.	0.008997	0.00516	4.21E-05	0.02802	4.091E-05	4.451E-05	0.0003606
Upper Lim.	0.06819	0.01	0.0002	0.071	0.0002	0.0002	0.003467
Lower Lim.	0.04911	0.000305	8.04E-05	0.00666	8.43E-05	7.41E-05	0.002703

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV
Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-6	GC-AP-MW-7	GC-AP-MW-8
3/26/2019	<0.01	<0.01	<0.0002
9/10/2019	<0.01	<0.01	<0.0002
4/21/2020	<0.01	<0.01	<0.0002
8/19/2020	<0.01	<0.01	<0.0002
3/9/2021	0.0024	0.000156 (J)	8.12E-05 (J)
8/24/2021	0.00211	0.00013 (J)	<0.0002
3/29/2022	0.00142	0.00016 (J)	<0.0002
10/18/2022	0.00149	0.00012 (J)	<0.0002
Mean	0.005927	0.005071	0.0001851
Std. Dev.	0.004365	0.00527	4.2E-05
Upper Lim.	0.01	0.01	0.0002
Lower Lim.	0.00142	0.00012	8.12E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L)   Analysis Run 12/9/2022 11:19 AM   View: AIV

Plant Greene County   Client: Southern Company   Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-12	GC-AP-MW-13	GC-AP-MW-2	GC-AP-MW-3	GC-AP-MW-32	GC-AP-MW-33
3/26/2019		<0.00102	0.0239				
3/27/2019	<0.01			<0.00102	<0.01	<0.00102	<0.00102
9/9/2019				<0.00102	<0.01		
9/10/2019	<0.01	<0.00102					
9/11/2019			<0.01			<0.00102	<0.00102
4/20/2020			0.0125		<0.01		
4/21/2020	<0.01	<0.00102		<0.00102			
4/22/2020						<0.00102	<0.00102
8/12/2020						<0.00102	<0.00102
8/17/2020	<0.01			<0.00102	<0.01		
8/18/2020		<0.00102	0.00416 (J)				
3/10/2021		<0.00102					
3/15/2021			0.0175			<0.00102	<0.00102
3/16/2021	0.00163			<0.00102	0.000959 (J)		
8/17/2021	0.00209			0.00054 (J)	0.00097 (J)		
8/23/2021						0.00059 (J)	<0.00102
8/25/2021		0.00281	0.00826				
3/28/2022				0.00058 (J)		<0.00102	0.00071 (J)
3/29/2022		<0.00102					
4/4/2022	0.00221						
4/5/2022					0.00074 (J)		
4/6/2022			0.111 (o)				
5/17/2022			0.0452 (R)				
10/5/2022	0.000737 (J)			<0.00102	0.000612 (J)	<0.00102	<0.00102
10/17/2022		0.00081 (J)	0.0103				
Mean	0.005833	0.001217	0.01585	0.000905	0.00541	0.0009662	0.0009812
Std. Dev.	0.004476	0.0006476	0.01354	0.0002132	0.004908	0.000152	0.0001096
Upper Lim.	0.01	0.00281	0.02857	0.00102	0.01	0.00102	0.00102
Lower Lim.	0.000737	0.00081	0.004315	0.00054	0.000612	0.00059	0.00071

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 12/9/2022 11:19 AM View: AIV

Plant Greene County Client: Southern Company Data: Greene County AP

	GC-AP-MW-1	GC-AP-MW-11	GC-AP-MW-13	GC-AP-MW-15	GC-AP-MW-16	GC-AP-MW-2	GC-AP-MW-21
3/26/2019			0.000215 (J)	<0.0002	0.00041 (J)		<0.0002
3/27/2019	<0.001	<0.0002				<0.001	
9/9/2019						<0.001	
9/10/2019	<0.001	<0.0002		<0.0002	0.000396 (J)		<0.0002
9/11/2019			0.00214				
4/20/2020			0.000433 (J)	<0.0002	0.00032 (J)		
4/21/2020	<0.001					<0.001	<0.0002
4/22/2020		<0.0002					
8/11/2020					0.000329 (J)		
8/12/2020				<0.0002			
8/17/2020	<0.001					<0.001	
8/18/2020		<0.0002	0.00114				<0.0002
3/9/2021					0.000369		
3/10/2021		8.7E-05 (J)		8.78E-05 (J)			0.000106 (J)
3/15/2021			0.000506				
3/16/2021	0.000107 (J)					0.000101 (J)	
8/17/2021	0.00012 (J)				0.00036	0.00013 (J)	
8/25/2021		9E-05 (J)	0.00124	<0.0002			<0.0002
3/28/2022						0.00015 (J)	
3/29/2022				0.00012 (J)			
3/30/2022		7E-05 (J)					0.00011 (J)
4/4/2022	0.00016 (J)						
4/6/2022			0.00169		0.00035		
10/5/2022	0.000149 (J)					0.000158 (J)	
10/17/2022		<0.0002	0.00238				0.00012 (J)
10/18/2022				8.4E-05 (J)	0.000337		
Mean	0.000567	0.0001559	0.001218	0.0001615	0.0003589	0.0005674	0.000167
Std. Dev.	0.0004632	6.117E-05	0.000807	5.421E-05	3.175E-05	0.0004628	4.571E-05
Upper Lim.	0.001	0.0002	0.002073	0.0002	0.0003925	0.001	0.0002
Lower Lim.	0.000107	7E-05	0.0003626	8.4E-05	0.0003252	0.000101	0.000106

ND substitution: RL or RL/2 if <15% NDs.

Appendix F

January 2023
Plant Greene County

Laboratory Treatability Study Results

Prepared for Alabama Power Company

January 2023
Plant Greene County

Laboratory Treatability Study Results

Prepared for
Alabama Power Company
600 18th Street North
Birmingham, Alabama 35203

Prepared by
Anchor QEA, LLC
6720 South Macadam Avenue, Suite 125
Portland, Oregon 97219

Project Number: 221114-05.01
\\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Text\Greene County Treatability Study Results.docx

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

ABBREVIATIONS

µg/L	milligram per liter
$BaCl_2$	barium chloride
cm	centimeter
COI	constituent of interest
DO	dissolved oxygen
EGL	Anchor QEA Environmental Geochemistry Laboratory
FerroBlack	FerroBlack-Fe+
$FeCl_3$	ferric chloride
$Fe(OH)_3$	ferrihydrite
FeS	ferrous sulfide
$FeSO_4$	ferrous sulfate
GWPS	groundwater protection standard
$KMnO_4$	potassium permanganate
M	molar
mg/kg	milligram per kilogram
$MgCl_2$	magnesium chloride
$MnCl_2$	manganese chloride
mL	milliliter
N_2	nitrogen
$NaAlO_2$	sodium aluminate
NaOH	sodium hydroxide
$Na_2HAsO_4{\cdot}7H_2O$	sodium arsenate heptahydrate
ORP	oxidation reduction potential
Plant Greene County	Greene County Electric Generating Plant
PV	pore volume
SC	specific conductivity
Site	Plant Greene County Ash Pond
SSE	selective sequential extraction

Executive Summary

As described in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a), geochemical manipulation via injections was selected as one corrective measure for arsenic, cobalt, and lithium in groundwater at the Greene County Electric Generating Plant (Plant Greene County) Ash Pond (Site) located in Greene County, Alabama. Geochemical manipulation was selected because of its effectiveness, ease of implementation, versatility (ability to treat more than one constituent of interest [COI]), ability to implement in areas with limited working space, and because it produces no byproducts that would require further treatment or disposal. Treatability studies were performed to determine the optimum reagents and their doses and to provide information for the required underground injection control permit and design of the injection treatment at the Site.

Treatability studies for injection treatment (geochemical manipulation) at the Site consisted of the following steps:

- Sampling and characterization of aquifer soil and groundwater
- Batch tests, both screening and optimization
- Column tests, including treatment effectiveness and post-treatment leaching to determine stability
- Selective sequential extraction (SSE) on post-treatment soils

Aquifer soil and groundwater samples were collected from multiple areas, based on number and concentrations of COIs, to help select areas for field pilot testing. Geochemical characterization of aquifer soils was performed to support the design and interpretation of the treatability testing. Homogenized soil samples were analyzed for the COIs (arsenic, cobalt, and lithium), other Appendix IV parameters, iron, manganese, sulfide, and total organic carbon. Extractable aluminum, iron, and manganese oxides, and cation exchange capacity in aquifer soils were also measured. Physical testing included percent moisture content and grain size distribution (gravel, sand, silt, and clay).

Groundwater samples were analyzed for major cations, anions, the COIs and other Appendix III/IV parameters, and water quality parameters influencing the chemical behavior of the COIs. Prior to beginning treatability testing, confirmatory analysis of the COIs and dissolved iron and manganese concentrations was performed. Aquifer soil samples were paired with their respective groundwater samples based on their sampling location proximity. Those pairs were used throughout batch and column testing.

Based on previous successful treatability studies at other sites and geochemical studies performed as part of remedy selection (Anchor QEA 2021a), a series of batch tests was performed to determine the effectiveness and to rank the performance of the selected reagents in reducing the COI concentrations in Site groundwater and groundwater-soil slurries. All batch tests were conducted with the following two configurations: 1) groundwater batch tests; and 2) slurry batch tests. In groundwater batch tests, reagents were added to test bottles filled with Site groundwater only. In slurry batch tests, the paired aquifer soils were mixed with the Site groundwaters to prepare slurries in test bottles, and then reagents were added to the test bottles. Slurry tests were performed because the aquifer solids could influence the performance of the tested reagents.

In the screening batch tests, eight reagents, plus aeration, were initially tested. More than one reagent effectively removed arsenic and cobalt from Site groundwaters and slurries. Aeration generally removed arsenic and, to a lesser extent, cobalt. As none of the reagents achieved sufficient lithium removal at the tested doses in the screening tests, lithium removal became a major objective of the optimization batch tests. Improvement in lithium treatment included increasing doses of selected reagents, adjusting solution pH, and testing five new reagents that have a potential to remove lithium. A commercial iron-based product FerroBlack-Fe+ (FerroBlack) effectively removed arsenic and cobalt, but not lithium, during batch tests. Reagent Mix C (manganese chloride [$MnCl_2$] + ferric chloride [$FeCl_3$] + magnesium chloride [$MgCl_2$] solution, followed by sodium aluminate [$NaAlO_2$] + potassium permanganate [$KMnO_4$] solution and sodium hydroxide [NaOH] for pH adjustment) showed the best lithium removal performance. FerroBlack and Reagent Mix C were, therefore, retained for column tests.

Column tests were conducted to simulate injection applications of the selected reagents and to evaluate the COI removal performance of aquifer soils treated with the selected reagents under flow conditions. Column tests more closely simulate treatment under groundwater flow conditions than batch tests and provide information on removal effectiveness and capacity, as well as the stability of the reagents under conditions representative of a field treatment application. Column test results are also used to provide data to support pilot test design and confirm the selected reagents will not inadvertently increase concentrations of other Appendix III/IV constituents above the groundwater protection standard (GWPS) due to, for example, release from the aquifer matrix. The two reagents selected from the batch tests (Reagent Mix C and FerroBlack) were mixed with aquifer soils to produce treated soils. Impacted groundwater was then run through the treated soils in columns to assess removal effectiveness and capacity for treatment.

Both Reagent Mix C and FerroBlack effectively removed arsenic from impacted groundwater during column studies, removing an average of >90% of the influent mass and achieving the GWPS in all studies. Reagent Mix C was more effective than FerroBlack at removing cobalt and lithium during column studies. In the two most successful column studies for cobalt using Reagent Mix C, 95% to 100% of the influent mass was removed, and concentrations were reduced to less than the GWPS for the duration of the studies. In the column studies for lithium using Reagent Mix C, 20% to 35% of the influent mass was removed, but the GWPS was only reached in half of the studies. Injection treatment is only one component of the remedy, as source control (slurry wall, consolidation, and capping) and natural attenuation are also expected to reduce concentrations of COIs in groundwater (Anchor QEA 2021a).

After column studies were complete, Site background groundwater was run through the columns to determine the stability of each treatment. During this phase of testing, the COI concentrations in the effluents were lower than the effluents from the previous treatment phase and decreased over time. Therefore, treatment is expected to be stable and Appendix III/IV constituents are not expected to be mobilized from aquifer soils by ambient groundwater flow after treatment.

Following completion of the column tests, the treated aquifer soils were tested to help evaluate the long-term stability of sequestered COIs using a five-step SSE procedure. In SSE, increasingly aggressive extraction solutions formulated to identify specific binding mechanisms are run through the treated aquifer soils to help determine the mechanisms, strength of binding, and stability (or reversibility) of the COI uptake by host solids.

SSE results indicate arsenic and cobalt are bound almost exclusively (near 100%) in stable solid phases—specifically, phases containing poorly crystalline metal oxides such as iron and manganese oxides, crystalline metal oxides, and residual phases (dissolvable only with concentrated strong acids). The associations with metal oxides were expected and indicate successful treatment, as the metals were major components of the treatment solutions. Lithium is somewhat less stable, with 65% to 90% being associated with stable phases such as poorly crystalline and crystalline metal oxides, and the remaining 10% to 35% being associated with the less-stable water-soluble fractions.

Reagent Mix C was selected for pilot testing at locations where lithium is present in groundwater, including locations with lithium and arsenic or cobalt, as Reagent Mix C is effective for arsenic and cobalt, as well as lithium. However, one component of Reagent Mix C, $KMnO_4$, was effective alone for arsenic and cobalt. Therefore, batch optimization and column tests are currently planned for permanganate for areas without lithium to simplify field implementation of injection treatment in those areas.

1 Introduction

As discussed in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a), geochemical manipulation via injections was selected as one corrective measure for constituents of interest (COIs) at the Greene County Electric Generating Plant (Plant Greene County) Ash Pond (Site), located in Greene County, Alabama. COIs at the Site are arsenic, cobalt, and lithium. Geochemical manipulation removes COIs from groundwater and immobilizes them in situ through the creation of solid precipitates formed from injection of treatment solutions (reagents). COIs adhere to the solid surfaces and are incorporated into the solid structures. Geochemical manipulation was selected because of its effectiveness, ease of implementation, versatility (ability to treat more than one COI), ability to implement in areas with limited working space, and because it produces no byproducts that would require further treatment or disposal. Before geochemical manipulation via injection treatment can be implemented, laboratory treatability studies were performed using the Site aquifer media and impacted groundwater.

The site-specific treatability studies discussed herein were conducted to evaluate reagent selection, dosing, and injection sequencing for in situ groundwater remediation. The treatability study approach includes the following:

- Sampling and characterization (analysis) of aquifer soil and groundwater
- Batch tests (screening batch tests, followed by optimization batch tests) to identify and rank reagents and reagent mixtures for removal of COIs from Site groundwater
- Selection of the two best-performing reagents for column testing to:
  - Assess COI removal effectiveness
  - Determine COI uptake capacity of reagent-treated aquifer soil to support pilot test design
- Confirm the selected reagents will not inadvertently increase concentrations of other Appendix III/IV constituents above the groundwater protection standard (GWPS) due to, for example, release from the aquifer matrix.
- Determine the stability of each treatment by:
  - Selective sequential extraction (SSE) of post-column-treated soil to provide information on the mechanisms and stability of COI sequestration
  - Running Site background groundwater through treated soils in the columns to assess potential for rerelease of COIs

2 Selection of Reagents

Selection and formulation of reagents that can be injected to treat site-specific COIs were based on site-specific soil and groundwater geochemistry, previous Site work, and prior experience from successful treatability studies performed by Anchor QEA, LLC, for the same COIs at other sites for confidential clients. The *Monitored Natural Attenuation Demonstration* (Anchor QEA 2021b) documented key geochemical attenuation mechanisms occurring at the Site, including the following:

- Sorption on and/or coprecipitation with iron oxides for arsenic and cobalt
- Cation exchange on oxides and clay minerals for lithium
- Precipitation of barium arsenate for arsenic (predicted by geochemical modeling)

Iron oxides are strong sorbents for many metals and metalloids, including arsenic (Dixit and Hering 2003; Mohan and Pittman 2007) and cobalt (Ainsworth et al. 1994). Subsurface geochemical conditions at the Site are generally favorable for formation of iron oxides. Lithium has an affinity for manganese and other metal oxides (Ooi et al. 1988; Yu et al. 2022). Therefore, the treatability studies were initially focused on reagents (or mixtures of reagents) with the potential to increase the abundance and stability of iron and/or manganese oxides and hydroxides in the subsurface. Based on Site conditions and treatability studies previously completed for other sites, the following reagents were initially selected for treatability testing:

- Ferrous sulfate ($FeSO_4$)
- Ferric chloride ($FeCl_3$)
- CleanER-10 (injectable zero-valent iron)
- FerroBlack-Fe+ (FerroBlack; injectable iron sulfide)
- Potassium permanganate ($KMnO_4$)
- Ferrous sulfate and potassium permanganate ($FeSO_4$ + $KMnO_4$)
- Ferric chloride with potassium permanganate and manganese chloride ($FeCl_3$ + $KMnO_4$ and $MnCl_2$)
- Barium chloride ($BaCl_2$)
- Aeration

Soluble iron reagents such as $FeSO_4$ and $FeCl_3$ are acidic and form iron oxides/hydroxides such as ferrihydrite ($Fe(OH)_3$) when neutralized. Iron oxides/hydroxides can adsorb and/or coprecipitate with arsenic and cobalt. Zero valent iron, specifically CleanER-10, was tested because it oxidizes to form iron oxides/hydroxides over time that can remove arsenic (Biterna et al. 2007) and heavy metals (Moraci and Calabrò 2010).

FerroBlack is a proprietary amendment from Redox Solutions. The active ingredient in FerroBlack is likely iron monosulfide, which immobilizes arsenic through adsorption at low arsenic concentrations, and precipitation/mineralization of arsenic sulfides at higher arsenic concentrations

(Niazi and Burton 2016). Cobalt is also likely to be removed through similar mechanisms by ferrous sulfide (FeS).

Permanganate has been widely used for in situ chemical oxidation. Permanganate reacts with soil components to produce manganese oxides, which can adsorb and incorporate COIs (Hou et al. 2017; Al Abdullah et al. 2016; Le and Phuc 2015).

Barium chloride was included in the reagent list because geochemical modeling indicated conditions were favorable for barium arsenate precipitation from groundwater. Increasing the dissolved barium concentration would, therefore, be expected to reduce arsenic concentrations.

Aeration was also included since Site groundwater generally contains high concentrations of dissolved iron (Section 3.1.2). Oxidation of dissolved iron by dissolved oxygen (DO) promotes iron (hydr)oxide formation and COI removal.

The following reagents were not initially included in the work plan but subsequently added to the reagent list specifically for lithium removal:

- Dolomite fines (Helena Quarry)
- Dolomite fines (Lakeshore Quarry)
- Dolomitic quicklime (Carmeuse)
- Hydrotalcite (Kisuma Chemicals B.V.)
- Magnesium chloride and sodium aluminate ($MgCl_2$ + $NaAlO_2$)

Dolomite from two different quarries in Central Alabama (Helena Quarry and Lakeshore Quarry) and dolomitic quicklime were added to the reagent list (based on treatability study results for another site in another state) and tested to assess their potential for lithium removal. Hydrotalcite is a magnesium/aluminum layered double hydroxide that can take up a wide range of cations and anions from water (Douglas 2014). Previous treatability studies performed by Anchor QEA documented that commercially available hydrotalcite effectively removed lithium. Hydrotalcite can also be precipitated from solution by mixing magnesium chloride ($MgCl_2$) and sodium aluminate ($NaAlO_2$). Both commercially available hydrotalcite and the injectable reagents ($MgCl_2$ + $NaAlO_2$) were tested to assess effectiveness in reducing lithium concentrations in Site groundwater.

The full list of reagents (or reagent combinations) tested and vendor sources is included in Table 1. The effectiveness of these treatments on COI removal was screened and evaluated through a series of batch tests. The most promising reagents (or mixtures) were selected for column testing. Prior to initiating the column studies, selected reagents were analyzed for Appendix III/ IV parameters to characterize impurity levels of these constituents (Section 5).

3 Sampling and Initial Characterization

Groundwater samples and aquifer soil were collected from the Site for treatability testing conducted at the Anchor QEA Environmental Geochemistry Laboratory (EGL) in Portland, Oregon.

3.1 Groundwater

3.1.1 Sample Collection

Groundwater samples were collected by Alabama Power Company with support from Anchor QEA from wells GC-AP-MW-1, GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-14, GC-AP-MW-17, and GC-AP-MW-44H (Figure 1). Five gallons of groundwater were collected from each well on April 4, 2022, for batch tests. An additional 10 gallons of groundwater from each well (plus an upgradient well GC-AP-MW-23) were collected on August 29 and 30, 2022, for column testing.

Prior to sampling, monitoring wells were purged until water quality parameters (pH, temperature, specific conductance, oxidation reduction potential [ORP], and DO) stabilized. Then, groundwater samples were collected in low-density polyethylene Cubitainers. Cubitainers were filled with zero headspace and packed in Mylar barrier bags containing oxygen-absorbent packets to minimize potential changes in redox conditions during transport to the EGL. Anaerobic conditions were maintained during sample handling at the EGL.[1]

3.1.2 Sample Analysis and Results

Groundwater samples were analyzed for major cations, anions, the COIs, other Appendix III/IV parameters, and water quality parameters influencing the chemical behavior of the COIs (Table 2). Laboratory analytical reports are included in Appendix A. Prior to commencing treatability testing at the EGL, groundwater samples in the Cubitainers were subsampled and submitted to ALS Environmental in Kelso, Washington, for confirmatory analysis of the COIs and dissolved iron and manganese concentrations (Table 2). Water quality parameters including pH, ORP, and DO were measured at the EGL and are provided in Table 2. Although almost all parameters remained constant, dissolved arsenic concentrations in GC-AP-MW-5 and GC-AP-MW-17 decreased after the groundwater samples were shipped to EGL. This is probably due to iron (hydr)oxide precipitation and its arsenic uptake. Dissolved iron is redox sensitive and can be oxidized when exposed to atmospheric oxygen such as during sample collection and handling.

---

[1] Groundwater for the column studies was collected in a second mobilization. Samples were submitted for analyses of COIs.

3.2 Aquifer Soils

3.2.1 Sample Collection

Aquifer soil samples were collected on February 15 and 16, 2022, from potential pilot test locations (GC-AP-PT-1, -2, -3, -4, and -5) at the Site (Figure 1). The aquifer soil samples were collected using sonic drilling technology from areas and depths where injection treatment will be implemented. Those samples were selected in the field, packaged to preserve field redox conditions (airtight containers packed in Mylar bags with oxygen-absorbent packets), and shipped on ice to the EGL. Upon arrival at the EGL, aquifer soil samples were inspected and checked against the chain of custody and then stored under refrigeration until further processing.

3.2.2 Sample Analysis and Results

Geochemical characterization of aquifer soils was performed to support the design and interpretation of the treatability testing. Aquifer soil samples were composited and homogenized under a nitrogen atmosphere. The homogenized soil samples were subsampled and submitted to ALS Environmental for bulk chemical analyses, which include the COIs (arsenic, cobalt, and lithium), other Appendix IV parameters, iron, manganese, sulfide, and total organic carbon (Table 3). Extractable aluminum, iron, and manganese oxides and cation exchange capacity in aquifer soils were also measured (Tables 4 and 5) to characterize potential for intrinsic COI removal by soils and help with interpretation of batch test results.

Additional analyses included percent moisture content and grain size distribution (gravel, sand, silt, and clay; Table 6). Laboratory analytical reports are included in Appendix A. The surficial aquifer soil at the Site consists mostly of sand (83% to 94%), with minor silt and clay, so the surficial aquifer is hydraulically suitable for injection. Aquifer soil samples were paired with their respective groundwater samples based on their sampling location proximity. Those pairs were used throughout batch and column testing (Table 7). GC-AP-PT-5 aquifer soil had relatively higher concentrations of arsenic (8.43 milligrams per kilogram [mg/kg]) and cobalt (9.21 mg/kg) than other aquifer soils. The concentrations of other Appendix IV constituents in the aquifer soils were very low or not detected, indicating release from the reagent treatment will not likely release or remobilize those contaminants. Bulk iron concentrations of aquifer soils range from 2,970 to 6,550 mg/kg (Table 3). Extractable iron oxides generally correlate with bulk iron concentrations and account for 4% to 20% of the iron in soils, indicating a variable but potentially significant capacity of soils to remove COIs such as arsenic and cobalt.

4 Batch Tests

4.1 Methodology

A series of batch tests were performed to determine and rank the performance of the selected reagents in reducing the COI concentrations in Site groundwater. All batch tests were conducted with the following two configurations: 1) groundwater batch tests; and 2) groundwater-soil slurry batch tests. The slurry tests were included to assess the potential effect of the aquifer matrix on treatment effectiveness. In groundwater batch tests, reagents were added to test bottles filled with only Site groundwater. In slurry batch tests, the paired aquifer soils were mixed with the Site groundwater to prepare slurries in test bottles at a liquid-to-solid ratio of 10 (Table 7), then reagents were added to the test bottles. The performance of the reagents was evaluated by the COI removal effectiveness and the final COI concentrations relative to their GWPSs.

The batch tests were divided into the following two stages: 1) screening batch tests to assess and compare the effectiveness of all the reagents to remove the COIs; and 2) optimization batch tests to further examine the effectiveness of reagents retained from the screening batch tests by varying reagent doses, mixing with other reagents, and/or adjusting pH.

To maintain in situ geochemical conditions as much as possible, the batch tests were performed under a nitrogen atmosphere in an anaerobic chamber. The general procedure for the batch tests is described in the following steps:

1. Test bottles were prepared in a controlled atmosphere glove box with 200 milliliters (mL) of groundwater or slurries of 200 mL of groundwater and 20 grams of aquifer soil (dry weight basis) for a liquid-to-solid ratio of 10. The initial arsenic concentrations in all the Site groundwaters as received were lower than expected based on historical data. This was attributed to the partial oxidation of dissolved iron in the groundwaters (present at much higher concentrations than arsenic) and precipitation of iron oxides, which removed dissolved arsenic. The Site groundwater samples were spiked with arsenic to provide initial arsenic concentrations to enable evaluation of treatment performance for arsenic. An arsenic stock solution was prepared from sodium arsenate heptahydrate ($Na_2HAsO_4{\cdot}7H_2O$) and used to spike the Site groundwater used for the batch tests. Spiked dissolved arsenic concentrations were similar or higher than historical concentrations (100 or 400 milligrams per liter [µg/L]). Spiking of cobalt and lithium was not necessary because the initial cobalt and lithium concentrations were consistent with historical data.
2. Reagents or reagent mixtures were added to the test bottles at a predetermined dose based on groundwater chemistry and previous successful treatability studies at other sites. The reagent doses are presented in Table 8. Controls without any reagent were also prepared for each

groundwater and slurry. The test bottles were sealed in Mylar bags with oxygen-absorbent packets and placed on a shaker table for 7 days.

3. Supernatants were collected from the test bottles at the end of the reaction period, filtered using 0.45-micron polyethersulfone syringe filters, and preserved with nitric acid. The filtered water samples were submitted to ALS Environmental and analyzed for dissolved COIs by U.S. Environmental Protection Agency Method 200.8 (inductively coupled plasma mass spectrometry). Water quality parameters including pH, ORP, and specific conductivity (SC) were also measured at the time of collection.
4. The solid fractions from each test jar were recovered and archived for possible future characterization.

4.2 Screening Batch Test Results

Table 9 and Figures 2 through 7 show the results of the batch screening tests, specifically the following:

- Arsenic: All reagents and aeration generally reduced dissolved arsenic concentrations in groundwater to below the GWPS. Dissolved arsenic concentrations were also reduced to less than the GWPS (10 µg/L.) in all the groundwater and slurry control batch tests (except for GC-AP-MW-17) due to ongoing slow iron oxidation and precipitation, despite the steps taken to exclude oxygen from the batch tests.
- Cobalt: Cobalt is a COI in GC-AP-MW-1, GC-AP-MW-14, and GC-AP-MW-44H. $KMnO_4$ and $FeCl_3$ + $MnCl_2$ and $KMnO_4$ showed good cobalt removal performance overall (Figures 2, 5, and 7). The reagents $KMnO_4$ and $FeCl_3$ + $MnCl_2$ and $KMnO_4$ almost completely removed cobalt from GC-AP-MW-14 and GC-AP-MW-44H groundwaters. Aeration reduced cobalt to concentrations less than the GWPS in GC-MW-14.
- Lithium: None of the tested reagents in the screening batch tests were effective in reducing lithium concentrations in groundwaters and slurries that have lithium as a COI (Figures 3 through 6). Lithium concentrations in the GC-AP-MW-5 slurries were lower than those in the GC-AP-MW-5 groundwater, indicating a positive effect of the soil matrix in lithium removal. The soil used in the slurry test had high extractable iron and aluminum oxide contents. A major focus, therefore, of the subsequent optimization batch studies was to improve lithium removal by either increasing iron-based reagent doses or testing additional aluminum-based reagents.

Laboratory analytical reports are included in Appendix A.

4.3 Supplemental Screening Batch Tests

FerroBlack, dolomite fines, and dolomitic quicklime were obtained from vendors after the completion of the initial screening batch tests. Supplemental screening batch tests were subsequently performed with these reagents following the procedures for the initial batch screening tests. Results of the supplemental batch screening tests are shown in Tables 10 and 11 and Figures 8 through 16, and are summarized as follows:

- FerroBlack treatment of arsenic: Although arsenic concentrations in the controls were depleted after the test duration despite spiking dissolved arsenic concentrations to 750 µg/L, a few groundwater controls (i.e., GC-AP-MW-5, GC-AP-MW-10, and GC-AP-MW-17) still maintained 150 to 320 µg/L of dissolved arsenic. FerroBlack effectively reduced dissolved arsenic concentrations from the groundwaters to below or very close to the GWPS (8.0 to 11.4 µg/L; Figure 8). The GC-AP-MW-10 slurry control also maintained 61.1 µg/L of dissolved arsenic, and FerroBlack reduced dissolved arsenic concentration to 6.8 µg/L in the slurry (Figure 8). Therefore, FerroBlack was found to be an effective reagent to remove arsenic.
- FerroBlack treatment of cobalt: FerroBlack also exhibited excellent performance for cobalt removal (Figure 9). Dissolved cobalt concentrations in GC-AP-MW-1, GC-AP-MW-14, and GC-AP-MW-44H groundwaters and slurries decreased to <2 µg/L after mixing with FerroBlack. Cobalt was probably removed through adsorption and/or precipitation of cobalt sulfide. Note that FerroBlack increased the pH of the groundwaters and slurries from an average of 6.23 to an average of 8.99. The pH shifts are likely favorable for cobalt removal because of the following: 1) cobalt adsorption on iron oxides, oxidation products of FeS, is generally enhanced at higher pH, and 2) cobalt sulfide solubility is also substantially lower at higher pH.
- FerroBlack treatment of lithium: FerroBlack removed lithium to some extent but was generally not effective enough to reduce dissolved lithium concentrations below the GWPS of 40 µg/L, except for the GW-AP-MW-5 groundwater and slurry, in which initial lithium concentrations were relatively lower (70 to 100 µg/L) than other groundwaters and slurries (Figure 10).
- Dolomite fines and dolomitic quicklime: Overall, the two dolomite fines and dolomitic quicklime showed poor performance in removing the COIs from the Site groundwaters and slurries (Figures 11 through 16). Therefore, these reagents were not retained for further testing.

Laboratory analytical reports are included in Appendix A.

4.4 Optimization Batch Tests

In the screening batch tests, $KMnO_4$, $FeCl_3$ + $KMnO_4$ and $MnCl_2$, and FerroBlack effectively removed arsenic and cobalt from the Site groundwaters and slurries. Since none of the reagents achieved sufficient lithium removal performance at the tested doses (Table 8), achieving sufficient lithium removal became the primarily focus of the optimization batch tests. Optimization included increasing doses of selected reagents, adjusting solution pH, and testing new reagents that have a potential to remove lithium. Based on the screening batch test results and previous treatability studies performed by Anchor QEA for other coal combustion residuals sites, the following reagents were selected and tested to achieve better lithium removal:

- Hydrotalcite
- Reagent Mix A: $MgCl_2$ solution, followed by $NaAlO_2$ solution, plus sodium hydroxide (NaOH) for pH adjustment to 9.5
- Reagent Mix B: $MnCl_2$ + $FeCl_3$ solution, followed by $KMnO_4$ solution, plus NaOH for pH adjustment to 9.5
- Reagent Mix C: $MnCl_2$ + $FeCl_3$ + $MgCl_2$ solution, followed by $NaAlO_2$ + $KMnO_4$ solution, plus NaOH for pH adjustment to 9.5

These reagents were tested at two different (i.e., low and high) doses, and the doses of hydrotalcite and Reagent Mixes A, B, and C are summarized in Table 12. High doses were approximately two times higher than low doses.

Granular hydrotalcite, obtained from Kisuma Chemicals B.V., was crushed to accelerate the COI uptake kinetics for batch testing. A soluble reagent mix that can form hydrotalcite (Reagent Mix A) was also tested to assess the effectiveness in reducing lithium concentrations. $MnCl_2$ + $FeCl_3$ and $KMnO_4$ was tested again at higher doses with pH adjustment by NaOH to 9.5 (Reagent Mix B). Cobalt was effectively removed from the Site groundwaters and slurries by this reagent mix at neutral to basic pH in the screening batch test (Figures 5 and 7). Lithium was also expected to be removed better at higher pH (Ooi et al. 1988) because metal oxide surfaces are negatively charged at higher pH, which attracts positively charged ions such as lithium.

A combination of soluble reagents to simultaneously form hydrotalcite and iron/manganese mixed metal oxides (Reagent Mix C) was tested in the optimization batch tests. Reagent Mix C removed lithium in previous treatability studies and at other locations.

Results of the optimization batch tests are summarized in Figures 17 through 20, the data are provided in Table 13, and the laboratory analytical reports are included in Appendix A. Overall, the four tested reagents effectively reduced lithium concentrations in the Site groundwaters and slurries, although their performance slightly varied in different groundwaters and slurries. Reagent Mix C showed the best lithium removal performance. The lithium concentrations in GC-AP-MW-5 and GC-AP-MW-10 groundwaters and slurries after treatment with Reagent Mix C were below the GWPS of 40 µg/L. Reagent Mix C removed >80% and >90% of lithium at low and high doses, respectively, from GC-AP-MW-5 and GC-AP-MW-10 groundwaters and slurries, although the final lithium concentrations were slightly above the GWPS of 40 µg/L due to their high initial lithium concentrations (592 to 706 µg/L). Hydrotalcite and Reagent Mixes A and B also removed lithium, though to a lesser extent.

4.5 Summary and Selected Reagents for Column Tests

Table 14 summarizes the performance of all tested reagents to remove the COIs from the Site groundwater and groundwater-soil slurries. Based on superior performance as compared to the other treatments, FerroBlack and Reagent Mix C were selected for subsequent column studies. Additional evidence for FerroBlack and Reagent Mix C selection include the following:

- $FeSO_4$ and $FeCl_3$ are effective for arsenic only, not cobalt and lithium.
- CleanER-10 did not reduce cobalt and lithium concentrations, and arsenic removal was less certain due to the decreased arsenic concentrations in the controls.
- Barium chloride did not remove any COIs.
- Aeration may be a simple treatment option to treat arsenic when high dissolved iron concentrations are present, but aeration was found to be ineffective for cobalt and lithium removal.
- FerroBlack exhibited excellent performance for arsenic and cobalt removal and removed lithium to some extent.
- Dolomite fines and dolomitic quicklime did not remove the COIs effectively and may increase the COI concentrations in some cases.
- Hydrotalcite and Reagent Mix A removed lithium to some extent but did not decrease lithium to below the GWPS of 40 μg/L in most of the Site groundwaters and slurries.
- Reagent Mix C showed the best performance in removing lithium in the Site groundwaters and slurries in batch testing.

Considering the results of the batch tests, Reagent Mix C and FerroBlack were selected for column testing.

5 Column Tests

5.1 Methodology

Column tests were conducted to simulate injection applications of the selected reagents and to evaluate the COI removal performance of aquifer soils treated with the selected reagents under flow conditions. Column tests more closely simulate treatment under groundwater flow conditions than batch tests and provide information on removal effectiveness and capacity, as well as the stability of the reagents under conditions representative of a field treatment application. Column test results are also used to provide data to support pilot test design and confirm the selected reagents will not inadvertently increase concentrations of other Appendix III/IV constituents above the GWPS, for example, due to release from the aquifer matrix. The two reagents selected from the batch tests (Reagent Mix C and FerroBlack) were mixed with aquifer soils to produce treated soils. Impacted groundwater was then run through the treated soils in columns to assess removal effectiveness and capacity for treatment.

Specifically, column tests consisted of the following steps:

- Prepare reagents and mix with the aquifer soils to simulate results of injection in the field.
- Run six groundwater samples from different locations through each of the two treated soils (12 columns total; Figures 21 and 22).
- Sample column influent and effluent solutions periodically (three to five times weekly) and analyze for COIs and other salient water quality parameters such as pH, ORP, and SC.
  - Reduction of COIs in the column effluents will demonstrate the solids created by treatment are capturing COIs, optimally to the extent that column effluents are below GWPSs.
  - Increase in COIs in the column effluents will demonstrate release of COIs from the treated aquifer soils (unintended consequences).
- Following completion of the column tests using impacted groundwater, run background groundwater through the columns (COI-loaded aquifer soils) to determine the stability and remobilization potential of each COI.
- Following completion of the stability/remobilization column tests, perform SSE on COI-loaded aquifer soils to help determine mechanisms of sequestration and stability of the COIs.

Reagent Mix C precipitate was prepared by mixing the solution reagents (i.e., $MnCl_2$ + $FeCl_3$ + $MgCl_2$ solution and $NaAlO_2$ + $KMnO_4$ solution with pH adjustment by NaOH) and recovered by centrifugation. Reagent Mix C precipitate was mixed with the aquifer soils to produce Reagent Mix C precipitate-treated soils. FerroBlack, a dense, wet black iron sulfide precipitate, was directly mixed with the aquifer soils to produce treated soils. The treated soils were packed into 12.8-centimeter (cm)-long, 2.6-cm-diameter polypropylene columns to achieve a total depth (length) of 11 cm. The six groundwater samples were used as the column influents, and the two treated soil columns were prepared for the Site groundwaters. Therefore, a total of 12 column tests were performed. A summary of the column test setup is provided in Table 15.

The Site groundwaters containing the COIs were pumped in the upflow direction through the columns at a constant flow rate of approximately 0.3 mL per minute for up to 250 pore volumes (PVs) using a peristatic pump with a multichannel pump head. Flow rates were regularly checked and adjusted as needed to maintain a constant flow rate. Table 16 provides a summary of the column test operating conditions. The laboratory column apparatus is shown in Figure 21, and a detailed schematic is provided in Figure 22.

The initial arsenic concentrations in the Site groundwater samples collected for column testing were also lower than expected based on historical data (Table 2). The groundwater samples in the influent reservoirs were, therefore, spiked with arsenic at 1,000 µg/L. An arsenic stock solution was prepared from $Na_2HAsO_4 \cdot 7H_2O$ and added to the influent reservoirs of GC-AP-MW-1, GC-AP-MW-5, GC-AP-MW-10, GC-AP-MW-14, and GC-AP-MW-17 to produce influent concentrations of approximately 750 µg/L. Cobalt and lithium were not spiked because those COIs were not attenuated to the extent of arsenic by iron oxide precipitation in groundwater samples.

Column influent and effluent solutions were sampled periodically (three to five times weekly), and water quality parameters including pH, ORP, and SC were measured at the EGL. The cumulative flow volume was also recorded at the time of sampling and used to calculate the total number of PVs treated. Column influent and effluent samples were filtered using 0.45-micron polyethersulfone syringe filters and preserved with nitric acid. The samples were submitted to ALS Environmental for analysis of dissolved arsenic, cobalt, lithium, and treatment reagent constituents, including iron and manganese.

Results of bulk chemical composition data of Reagent Mix C precipitate and FerroBlack are presented in Table 17 and are included in Appendix A. Since other Appendix III/IV constituents in the aquifer soils were very low (Table 3), dissolved concentrations of those constituents in the effluents were not analyzed. Following the completion of this phase of the column test, the column influent was switched to background groundwater (GC-AP-MW-23) to assess the stability of the treatment. The column was run at a constant flow rate for approximately 10 to 30 PVs and column influents and effluents were sampled at intervals. Samples were analyzed for dissolved COIs and constituents of the treatment reagents used (e.g., iron, manganese, and sulfate). At the end of the column tests, column solids were recovered for SSE to further examine COI sequestration strength by the reagent-treated soils and to assess the stability of the treatment.

The laboratory column tests were operated at a higher linear velocity (81.4 cm per day) than the groundwater flow conditions in the vicinity of the Site, which ranges from 18.9 to 52.7 cm per day

(SCS 2022). As a result, the hydraulic residence time in the columns was shorter than the hydraulic residence time expected in the field, where longer residence times may be expected to result in greater extent of removal. The attenuation measured in the columns, therefore, provides a conservative estimate of the COI removal in the field.

After column studies were complete, Site background groundwater was run through the columns to determine the stability of each treatment. Effluent concentrations were less than effluent concentrations observed during treatment studies, indicating that treatment is expected to be stable, and Appendix III/IV constituents are not expected to be mobilized from treated aquifer soils by ambient groundwater flow after treatment.

Following completion of the column tests, the treated aquifer soils were tested to help evaluate the long-term stability of sequestered COIs using a five-step SSE procedure. In SSE, increasingly aggressive solutions formulated to identify specific binding mechanisms are run through the treated aquifer soils to help determine the mechanisms, strength of binding, and stability (or reversibility) of the COIs and their host solids.

5.2 Column Test Results

Column test results are included in Table 18 and Appendix A. Influent and effluent concentrations of the COIs for the six Site groundwaters are shown in Figures 23 through 28. The cumulative COI mass uptakes by the two treated soils in the columns are also plotted against the cumulative COI mass loadings in Figure 29 through 31.

Arsenic concentrations in the influent reservoirs were not stable and decreased over time, despite spiking of dissolved arsenic at 1,000 µg/L (Figures 23 through 27). Although the influent reservoirs were purged with nitrogen (N_2) and kept in sealed Mylar bags with oxygen-absorbing packets during the column tests, orange-brown iron oxide precipitates were observed to form inside the influent reservoirs over time, likely due to ongoing slow iron oxidation under anaerobic conditions. The dissolved arsenic concentrations in the GC-AP-MW-1 influent reservoir were lower than the GWPS throughout the column test (Figure 23). Dissolved arsenic concentrations in the GC-AP-MW-5 groundwater reservoir were higher than the GWPS during the first 40 PVs of column flow, but the two treated aquifer soil columns showed arsenic uptake (Figure 24). The other three Site groundwater reservoirs maintained dissolved arsenic concentrations higher than the GWPS for more than approximately 200 PVs, and both treated soils showed excellent arsenic uptake performance (Figures 25 through 27). Dissolved arsenic concentrations in the effluents from the two treated soil columns were lower than 1 µg/L for the duration of the column tests, up to approximately 250 PVs. The attenuation capacity of arsenic in the two treated soils from GC-AP-MW-10, GC-AP-MW-14, and GC-AP-MW-17 groundwaters was significant (Figure 29); excess attenuation capacity remained after 250 PVs.

Influent concentrations of dissolved cobalt remained relatively constant throughout the tests for all Site groundwaters (Figures 23, 26, and 28). Although both treated soils attenuated cobalt from GC-AP-MW-14 and GC-AP-MW-44H groundwater, the Reagent Mix C treated soil exhibited better cobalt removal performance than the FerroBlack treated soil (Figures 26 and 28). The Reagent Mix C treated soil attenuated dissolved cobalt in the two groundwaters below the GWPS of 16.7 µg/L throughout the column tests (more than approximately 250 PVs). The better cobalt attenuation capacity of Reagent Mix C treated soil for GC-AP-MW-14 and GC-AP-MW-44H were also evident from Figure 30. In contrast, the effluent dissolved cobalt concentrations from the FerroBlack treated soil columns typically exceeded the GWPS after 30 to 60 PVs (Figures 23 and 26). Cobalt in GC-AP-MW-1 was not effectively attenuated by the two treated aquifer soils (Figures 23 and 30). This is probably due to lower pH of GC-AP-MW-1 (Table 18). Influent pH in GC-AP-MW-1 was near 5.5 at the beginning and decreased to near 2.5 over time. The two treated aquifer soil columns neutralized pH up to approximately 100 PVs but had little effect at later times. Cobalt is generally attenuated by adsorption and precipitation at higher pH (Dzombak and Morel 1990; Fetter et al. 2018; Landry et al. 2009), but the two treated soil columns could not maintain pH higher than 6. Although FerroBlack increased pH and removed cobalt, even from GC-AP-MW-1 groundwater, in batch testing (Figure 8), FerroBlack did not increase pH under flow conditions. These results emphasize the importance of pH adjustment under flow conditions for cobalt removal.

Lithium was not attenuated to the extent of arsenic and cobalt by the two treated soils (Figures 24 through 27). Reagent Mix C treated soil attenuated dissolved lithium concentrations below the GWPS of 40 µg/L in GC-AP-MW-5 groundwater, which had the lowest dissolved lithium concentration (80 to 90 µg/L) among the Site groundwaters. However, dissolved lithium concentrations in other column effluents increased from 1 PV. Reagent Mix C treated soil exhibited better lithium attenuation capacity than FerroBlack treated soil for all groundwaters (Figure 31). Reagent Mix C precipitate may be an effective treatment to reduce dissolved lithium concentration below the GWPS for dissolved lithium concentrations similar to those at GW-AP-MW-5. As explained in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a), source control, natural attenuation, and injection treatment are all expected to contribute to reduced lithium concentrations in groundwater.

Both Reagent Mix C and FerroBlack effectively removed arsenic from impacted groundwater during column studies, removing an average of >90% of the influent mass and achieving the GWPS in all studies. Reagent Mix C was more effective than FerroBlack at removing cobalt and lithium during column studies. In the two most successful column studies for cobalt using Reagent Mix C, 95% to 100% of the influent mass was removed, and concentrations were reduced to less than the GWPS for the duration of the studies. In the column studies for lithium using Reagent Mix C, 20% to 35% of the influent mass was removed, but the GWPS was only reached in half of the studies. Injection treatment is only one component of the remedy, as source control (slurry wall, consolidation, and capping) and natural attenuation are also expected to reduce concentrations of COIs in groundwater (Anchor QEA 2021a).

6 Mechanisms and Stability of Treatment

6.1 Column Tests to Assess Treatment Stability

Mechanisms and stability of treatment were assessed through additional column tests using background groundwater and SSE on post-column aquifer soils.

Following completion of the column tests using impacted groundwater, the column influents were switched to background groundwater (GC-AP-MW-23) to assess the reversibility of the COI removal by the treated soils. Background groundwater was run through the columns for up to approximately 30 PVs. During this phase of testing, the COI concentrations in the effluents were lower than the effluents from the previous treatment phase and decreased over time. These results demonstrate the irreversibility of COI treatment by the selected reagents. Column test results for this phase are included in Table 19 and Appendix A.

6.2 SSE on Post-Column Aquifer Soils

SSE quantifies the distribution of the sequestered COIs among different chemical phases in the treated and COI-loaded aquifer soils. SSE results provide insights into the COI removal mechanisms, potential for remobilization of COIs, and long-term stability of the sequestered COIs. Specifically, SSE categorizes the target constituents into five operationally defined fractions, F1 through F5, which require increasingly aggressive chemical reagents to extract. The chemical extractions and what they represent are as follows:

- F1: Soluble Fraction (1 molar (M) magnesium chloride adjusted to pH 7)
- F2: Exchangeable Fraction, e.g., on clay minerals (1 M monosodium phosphate at pH 5)
- F3: Reducible Fraction, e.g., poorly crystalline metal oxides such as iron and manganese oxides (0.1 M hydroxylamine/hydrochloric acid adjusted to pH 2 with nitric acid)
- F4: Strong Acid/Oxidizable Fraction, e.g., crystalline oxide and crystalline sulfide minerals (16 M nitric acid)
- F5: Residual Fraction, e.g., relict silicate phases from the aquifer matrix (digestion by U.S. Environmental Protection Agency Method 3050B)

SSE was performed in accordance with the EGL standard operating procedure. First, the bottom half of aquifer soil in the column was recovered and thoroughly homogenized under a nitrogen atmosphere in an anaerobic glove box. Approximately 1 gram (dry weight) of the recovered column media was weighed into a 50-mL centrifuge tube and extracted with the solutions described above.

The SSE results are summarized in Figures 32 through 34 and are included in Appendix A. SSE results indicate arsenic and cobalt are almost completely (near 100%) associated with the exchangeable, reducible, strong acid/oxidizable, and residual fractions. These fractions include COIs strongly adsorbed to and incorporated in poorly crystalline to crystalline iron and manganese oxides. The strong association with iron and manganese oxides were expected, and indicate successful treatment, as iron and manganese were major components of the treatment reagents. Lithium is also predominantly associated with the exchangeable and reducible fractions (which account for up to 80%) but with higher and variable amounts (10% to 40%) present in the soluble fraction.

7 Conclusions and Recommendations

Batch and column tests were performed to evaluate the effectiveness of reagents in removing the COIs (i.e., arsenic, cobalt, and lithium) from the Site groundwater. Performance criteria evaluated included the effectiveness of COI removal, whether the treatment had unintended consequences such as release of Appendix III/IV constituents from the aquifer matrix, and stability of the sequestered COIs after treatment. Major conclusions of the treatability studies are as follows:

- Reagent Mix C ($FeCl_3$ + $MnCl_2$ + $MgCl_2$, followed by $NaAlO_2$ + $KMnO_4$ solution + NaOH), a treatment that forms hydrotalcite and Fe and Mn oxides, performed the best for lithium-impacted groundwaters. Reagent Mix C also performed well for arsenic and cobalt treatment, so it can be used in areas where lithium or lithium plus arsenic and/or cobalt are COIs. The GWPS was achieved for all COIs during column tests, although lithium breakthrough occurred earlier than arsenic and cobalt. Depending on location, arsenic mass was removed 80% to 100%, cobalt mass was reduced 50% to 100%, and lithium mass was reduced 20% to 35%.
- Permanganate treatment generally performed well for arsenic and cobalt removal in batch tests.
- After column studies using impacted groundwater were complete, Site background groundwater was pumped through the columns to determine the reversibility of treatment. Effluent concentrations were less than effluent concentrations measured during the treatment phase, indicating treatment is not reversible, and Appendix III/IV constituents are not expected to be mobilized from aquifer soils by ambient groundwater flow after treatment.
- Following completion of the column tests, the column media (aquifer soils) were recovered to evaluate the long-term stability of sequestered COIs to remobilization using a five-step SSE procedure. SSE results indicate arsenic and cobalt are associated with and bound to iron and manganese oxides formed by the treatment. Lithium is also associated with poorly crystalline iron and manganese oxides, although a greater proportion is exchangeable and weakly bound to the solid phase.

Recommendations based on the laboratory treatability studies are as follows:

- Test Reagent Mix C in field pilot studies at the Site where lithium or lithium plus arsenic and/or cobalt are COIs in groundwater.
- Reagent Mix C requires mixing in situ in the aquifer, which has been performed successfully. However, to simplify field applications where lithium is not present (i.e., arsenic and/or cobalt are COIs), perform column tests for permanganate injection to evaluate effectiveness, possible COI release from the aquifer matrix, and stability.

8 References

Ainsworth, C.C., J.L. Pilon, P.L. Gassman, and W.G. Van Der Sluys, 1994. "Cobalt, Cadmium, and Lead Sorption to Hydrous Iron Oxide: Residence Time Effect." *Soil Science Society of America Journal* 58:1615–1623.

Al Abdullah, J., A.G. Al Lafi, W. Al Masri, Y. Amin, and T. Alnama, 2016. "Adsorption of Cesium, Cobalt, and Lead onto a Synthetic Nano Manganese Oxide: Behavior and Mechanism. "*Water, Air, & Soil Pollution* 227(7):1–14.

Anchor QEA (Anchor QEA, LLC), 2021a. *Groundwater Remedy Selection Report*. Plant Greene County. Prepared for Alabama Power Company. December 2021.

Anchor QEA, 2021b. *Monitored Natural Attenuation Demonstration*. Plant Greene County. Prepared for Alabama Power Company. September 2021.

Biterna, M., A. Arditsoglou, and E. Tsikouras, 2007. "Arsenate Removal by Zero Valent Iron: Batch and Column Tests." *Journal of Hazardous Materials* 149:548–552.

Dixit, S., and J.G. Hering, 2003. "Comparison of Arsenic(V) and Arsenic(III) Sorption onto Iron Oxide Minerals: Implication for Arsenic Mobility." *Environmental Science and Technology* 37: 4182–4189.

Douglas, G.B., 2014. "Contaminant Removal from Acidic Mine Pit Water via In Situ Hydrotalcite Formation." *Applied Geochemistry* 51: 15–22.

Dzombak, D.A., and F.M.M. Morel, 1990. *Surface Complexation Modeling: Hydrous Ferric Oxide*. New York: John Wiley; pp. 166–169.

Fetter, C.W., T. Boving, and D. Kreamer, 2018. *Contaminant Hydrogeology*. Long Grove, Illinois: Waveland Press, Inc.; p. 353.

Hou, J., J. Luo, S. Song, Y. Li, and Q. Li, 2017. "The Remarkable Effect of the Coexisting Arsenite and Arsenate Species Ratios on Arsenic Removal by Manganese Oxide." *Chemical Engineering Journal* 315:159–166.

Landry, C.J., C.M. Koretsky, T.J. Lund, M. Schaller, and S. Das, 2009. "Surface Complexation Modeling of Co(II) Adsorption on Mixtures of Hydrous Ferric Oxide, Quartz and Kaolinite," *Geochimica et Cosmochimica Acta* 73:3723–3737.

Le, N.C., and D.V. Phuc, 2015. "Sorption of Lead (II), Cobalt (II) and Copper (II) Ions from Aqueous Solutions by γ-MnO_2 Nanostructure." *Advances in Natural Sciences: Nanoscience and Nanotechnology* 6(2):025014.

Mohan, D., and C.U. Pittman Jr., 2007. "Arsenic Removal from Water/Wastewater Using Adsorbents – A Critical Review." *Journal of Hazardous Materials* 142:1–53.

Moraci, N., and P.S. Calabrò, 2010. "Heavy Metals Removal and Hydraulic Performance in Zero-Valent Iron/Pumice Permeable Reactive Barriers." *Journal of Environmental Management* 91:2336–2341.

Niazi, K.N., and E.D. Burton, 2016. "Arsenic Sorption to Nanoparticle Mackinawite (FeS): An Examination of Phosphate Competition." *Environmental Pollution* 218:111–117.

Ooi, K., Y. Miyai, S. Katoh, H. Maeda, and M. Abe. 1988. "The pH Titration Study of Lithium Ion Adsorption on λ-MnO_2." *Bulletin of the Chemical Society of Japan* 61:407–411.

SCS (Southern Company Services, Inc.), 2022. *2021 Annual Groundwater Monitoring and Corrective Action Report*. Plant Greene County. Prepared for Alabama Power Company. January 31, 2022.

Yu, H., G. Naidu, C. Zhang, C. Wang, A. Razmjou, D.S. Han, T. He, and H. Shon, 2022. "Metal-Based Adsorbents for Lithium Recovery from Aqueous Resources." *Desalination* 539:115951.

Tables

Table 1
Reagents Tested and Vendor Sources

No.	Reagent Tested	Abbreviation	Vendor	Notes
1	Ferrous sulfate	$FeSO_4$	Acros Organics	ACS grade
2	Ferric chloride	$FeCl_3$	Acros Organics	ACS grade
3	CleanER-10	CER-10	Höganäs Environment Solutions	Injectable zero-valent iron; D50: 7–8 µm
4	FerroBlack-Fe+	FB-Fe+	Redox Solutions	Injectable iron-sulfide
5	Potassium permanganate	$KMnO_4$	Fisher Chemical	ACS grade
6	Ferrous sulfate and potassium permanganate	$FeSO_4$ + $KMnO_4$	Acros Organics ($FeSO_4$) and Fisher Chemical ($KMnO_4$)	99+% for Analysis ($FeSO_4$) ACS Grade ($KMnO_4$)
7	Ferric chloride with potassium permanganate and manganese chloride[1]	$FeCl_3$ + $KMnO_4$ + $MnCl_2$	Acros Organics ($FeCl_3$), Fisher Chemical ($KMnO_4$), and ChemProducts ($MnCl_2$)	99% for Analysis ($FeCl_3$) ACS Grade ($KMnO_4$) ACS Grade ($MnCl_2$)
8	Barium chloride	$BaCl_2$	Sigma Aldrich	99.9% trace metals basis
9	Aeration	Aeration	--	Passive aeration
10	Dolomite fines (Helena Quarry)	Helena dolomite	Vulcan Materials Company	Passed through a 75-µm seive
11	Dolomite fines (Lakeshore Quarry)	Lakeshore dolomite	Vulcan Materials Company	Passed through a 75-µm seive
12	Dolomitic quicklime	Dolomitic quicklime	Carmeuse	Crushed with a mortar and pestle and passed through a 75-µm seive
13	Hydrotalcite	HT-4U	Kisuma Chemicals	Granular magnesium aluminum hydrotalcite, crushed with a mortar and pestle
14	Magnesium chloride and sodium aluminate[1]	$MgCl_2$ + $NaAlO_2$	Chemproducts ($MgCl_2$) and Spectrum Chemical ($NaAlO_2$)	ACS Grade ($MgCl_2$) Technical Grade ($NaAlO_2$)
15	Manganese chloride with ferric chloride, magnesium chloride, sodium aluminate with potassium permanganate[1]	($MnCl_2$ + $FeCl_3$ + $MgCl_2$) + ($NaAlO_2$ + $KMnO_4$)	ChemProducts ($MnCl_2$) Acros Organics ($FeCl_3$) Chemproducts ($MgCl_2$) Spectrum Chemical ($NaAlO_2$) Fisher Chemical ($KMnO_4$)	ACS Grade ($MnCl_2$) 99% for Analysis ($FeCl_3$) ACS Grade ($MgCl_2$) Technical Grade ($NaAlO_2$) ACS Grade (KMnO4)

Notes:

1. Indicates a dose of this reagent was pH adjusted by NaOH

µm: micrometer

ACS: American Chemical Society

D50: median diameter

Table 2
Initial Groundwater Characterization Results

		GC-AP-MW-1			GC-AP-MW-5			GC-AP-MW-10			GC-AP-MW-14			GC-AP-MW-17			GC-AP-MW-44H			GC-AP-MW-23	
Parameter	Unit	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	August 31, 2022
Arsenic, dissolved	µg/L	15.9	6.04	13.85 (0.07)	382	63.2	140	12	2.51	5.15	21.5	1.93 (0.04)	15.7	875	183	550	1.3	1.91	1.64	0.08 U	0.09 U
Arsenic, total	µg/L	16.4	10.4	16.55 (0.49)	432	314	310	11.7	6.02	10.9	24.1	13.1 (0.4)	25.5	861	597	886	1.87	3.00	1.73	0.08 U	0.15 J
Cobalt, dissolved	µg/L	298	284	269 (0)	10.2	8.54	5.68	21.5	19.4	20.9	40.6	37.5 (0.6)	35.8	11.4	9.70	7.95	324.00	321	273	0.07 U	0.03
Cobalt, total	µg/L	296	294	269 (1)	10.4	8.75	5.46	21.8	20.8	20.7	42.3	39.5 (0.3)	36.2	11.5	10.3	8.1	323	324	276	0.07 U	0.032
Iron, dissolved	mg/L	213	184	198.5 (0.7)	33.2	16.1	16.9	19.6	11.4	15.9	53.7	34.4 (0.6)	47.4	30	10.8	19.6	5.69	4.98	5.35	0.00812 U	0.0013 J
Iron, total	mg/L	210	193	201.5 (3.5)	34	27.1	22.5	19.4	14.6	19.8	51.1	45.5 (0.4)	52	26.6	21.5	26.4	6.24	5.32	5.43	0.0159 J	0.0065
Lithium, dissolved	µg/L	7.1 U	3.13 J	5.28 (0.05)	111	95.7	82.2	345	309	243	636	560.5 (13)	543	710	610	564	7.1 U	4.71	3.26	7.1 U	1.41
Lithium, total	µg/L	7.1 U	3.19 J	5.38 (0.06)	102	98.9	83.1	329	323	251	607	617 (3)	561	647	678	578	7.1 U	4.66 J	3.33	7.1 U	1.65
Manganese, dissolved	mg/L	15.6	14.3	15.10 (0.14)	1.93 J	1.68	1.56	3.06	2.95	3.3	4.83	4.33 (0.04)	4.96	2.22	1.99	1.75	9.64	9.02	7.66	0.00015 U	0.00066
Manganese, total	mg/L	15.3	14.3	15.35 (0.07)	1.99 J	1.71	1.52	3.27	2.94	3.27	4.91	4.65 (0.04)	5.08	2.42	2.09	1.78	9.81	9.24	7.77	0.00031	0.0009
pH	SU	5.17	5.71	5.73 (0.20)	6.42	6.71	6.20	6.21	6.67	6.16	6.39	6.54	6.24	6.71	6.79	6.46	5.56	6.33	6.41	6.08	6.20
Dissolved oxygen	mg/L	1.06	2.10	1.63 (0.54)	0.43	0.90	0.86	0.19	0.75	0.65	0.23	1.06	0.63	0.13	1.02	0.64	0.31	3.65	2.38	5.9	3.05
Oxidation-reduction potential	mV	53.3	443	-7.4 (20.1)	-86.8	446	-76.7	-71.8	449	-37	-81.4	364	-97.9	-120.6	433	-98.3	73.1	487	66.8	155	92.7
Specific conductivity	µS/cm	1465	1420	1060 (23)	509	839	1130	627	873	1110	891	634	1500	773	645	792	870	838	200	145	660
Alkalinity	mg/L	47.6	--	--	234	--	--	267	--	--	405	--	--	505	--	--	91.1	--	--	78.8	--
Aluminum, dissolved	mg/L	0.041	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00609 U	--
Aluminum, total	mg/L	0.0471	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00609 U	--	--	0.00863 J	--	--	0.0118	--
Antimony, dissolved	mg/L	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--
Antimony, total	mg/L	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--
Barium, dissolved	mg/L	0.0218	--	--	0.125	--	--	0.244	--	--	0.107	--	--	0.252	--	--	0.0495	--	--	0.0292	--
Barium, total	mg/L	0.0235	--	--	0.131	--	--	0.26	--	--	0.103	--	--	0.27	--	--	0.0482	--	--	0.0264	--
Beryllium, dissolved	mg/L	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--
Beryllium, total	mg/L	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--	--	0.00041 U	--
Bicarbonate alkalinity	mg/L	47.6 J	--	--	233	--	--	266	--	--	404 J	--	--	499 J	--	--	91 J	--	--	78.3	--
Boron, dissolved	mg/L	0.297	--	--	0.614	--	--	1.91	--	--	1.88	--	--	2.25	--	--	0.202	--	--	0.03 U	--
Boron, total	mg/L	0.269	--	--	0.615	--	--	1.92	--	--	1.89	--	--	2.32	--	--	0.202	--	--	0.03 U	--
Cadmium, dissolved	mg/L	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00039	--	--	0.00007 U	--
Cadmium, total	mg/L	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.0003	--	--	0.00007 U	--
Calcium, dissolved	mg/L	106	--	--	95.6	--	--	88.8	--	--	117	--	--	108	--	--	129	--	--	26.3	--
Calcium, total	mg/L	106	--	--	98.8	--	--	93.7	--	--	117	--	--	104	--	--	137	--	--	26	--
Carbonate alkalinity	mg/L	0.5 U	--	--	0.551	--	--	1.44	--	--	0.741 A	--	--	6.18 A	--	--	0.5 U	--	--	0.5 U	--
Chloride	mg/L	41.2	--	--	9.63	--	--	16.8	--	--	9.75	--	--	8.06	--	--	13.7	--	--	1.09	--
Chromium, dissolved	mg/L	0.00028 J	--	--	0.0002 U	--	--	0.0002 U	--	--	0.00022 J	--	--	0.00023 J	--	--	0.0002 U	--	--	0.0002 U	--
Chromium, total	mg/L	0.00045 J	--	--	0.00025 J	--	--	0.0002 U	--	--	0.00025 J	--	--	0.00022 J	--	--	0.00022 J	--	--	0.00034 J	--
Radium 226 + radium 228	pCi/L	0.899	--	--	1.13	--	--	2.08	--	--	1.03	--	--	2.17	--	--	0.795 U	--	--	0.99 U	--
Fluoride	mg/L	0.161	--	--	0.216	--	--	0.276	--	--	0.245	--	--	0.564	--	--	0.06 U	--	--	0.06 U	--
Lead, dissolved	mg/L	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--
Lead, total	mg/L	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--
Magnesium, dissolved	mg/L	35.9	--	--	19.8	--	--	20	--	--	27	--	--	28.6	--	--	19.4	--	--	2.16	--
Magnesium, total	mg/L	36.6	--	--	20.2	--	--	20.2	--	--	27.7	--	--	29	--	--	19.7	--	--	2.12	--
Mercury	mg/L	0.0003 U	--	--	0.0003 U	--	--	0.0003 U	--	--	0.0003 U	--	--	0.0003 U	--	--	0.0003 U	--	--	0.0003 U	--
Molybdenum, dissolved	mg/L	0.00013 J	--	--	0.00321	--	--	0.0111	--	--	0.0153	--	--	0.0546	--	--	0.0001 U	--	--	0.0001 U	--
Molybdenum, total	mg/L	0.0001 U	--	--	0.00354	--	--	0.0117	--	--	0.0166	--	--	0.054	--	--	0.0001 U	--	--	0.00012 J	--
Nitrate nitrite as N	mg/L as N	0.36	--	--	0.224 J	--	--	0.2 U	--	--	0.263	--	--	0.2 U	--	--	0.2 U	--	--	0.219 J	--

Table 2
Initial Groundwater Characterization Results

Parameter	Unit	GC-AP-MW-1			GC-AP-MW-5			GC-AP-MW-10			GC-AP-MW-14			GC-AP-MW-17			GC-AP-MW-44H			GC-AP-MW-23	
		April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	April 14, 2022	August 31, 2022	April 4, 2022	August 31, 2022
Potassium total	mg/L	3.54	--	--	6.46	--	--	6.35	--	--	10.4	--	--	12.5	--	--	2.72	--	--	0.65	--
Selenium, dissolved	mg/L	0.00233	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00108	--
Selenium, total	mg/L	0.00221	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00051 U	--	--	0.00099 J	--
Silica, dissolved	mg/L	11.9	--	--	18.3	--	--	9.95	--	--	13.5	--	--	20	--	--	9.67	--	--	7.51	--
Silica, total	mg/L	11.6	--	--	18	--	--	9.61	--	--	12.9	--	--	19.6	--	--	9.33	--	--	7.51	--
Silicon, dissolved	mg/L	5.55	--	--	8.56	--	--	4.65	--	--	6.29	--	--	9.36	--	--	4.52	--	--	3.51	--
Silicon, total	mg/L	5.42	--	--	8.43	--	--	4.49	--	--	6.02	--	--	9.15	--	--	4.36	--	--	3.51	--
Sodium, dissolved	mg/L	51.5	--	--	23.7	--	--	28.8	--	--	35	--	--	45	--	--	28.9	--	--	2.36	--
Sodium, total	mg/L	55.4	--	--	21.5	--	--	28.6	--	--	33.6	--	--	42.8	--	--	28.3	--	--	2.33	--
Sulfate	mg/L	801	--	--	160	--	--	111	--	--	192	--	--	65.5	--	--	390	--	--	11.8	--
Sulfide	mg/L	0	--	--	0	--	--	0	--	--	0	--	--	0	--	--	0	--	--	0	--
Total dissolved solids	mg/L	1280	--	--	488	--	--	435	--	--	630	--	--	556	--	--	604	--	--	96	--
Temperature (field)	°C	20.06	--	--	25.49	--	--	25.5	--	--	23.4	--	--	26.47	--	--	17.32	--	--	17.73	--
Thallium, dissolved	mg/L	0.00016 J	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00008 J	--	--	0.00007 U	--
Thallium, total	mg/L	0.00016 J	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--	--	0.00007 U	--
Total organic carbon	mg/L	2.86	--	--	1.69 J	--	--	2.64	--	--	2.77	--	--	2.06	--	--	1.27 J	--	--	1.0 U	--
Turbidity (field)	NTU	4.22	--	--	4.78	--	--	0.4	--	--	0.96	--	--	2.05	--	--	4.89	--	--	1.04	--

Notes:
Samples were field filtered with a 0.45-micron filter at the time of collection and filtered again prior to analysis for dissolved constituents.
Samples taken on April 4, 2022, were sent directly to the analytical laboratories from the field.
Samples taken on April 14, 2022, were supplemental analyses performed on the groundwaters used in the initial screening, Ferroblack-Fe+ screening, and optimization batch tests.
Samples taken on August 31, 2022, were supplemental analyses performed on the groundwaters used in the dolimite screening batch test and column test.
Parentheses represent standard deviation for duplicate samples. GC-AP-MW-14 water quality measurements were not taken in duplicate.
--: not measured
µg/L: microgram per liter
µS/cm: microsiemen per centimeter
A: values are estimates for alkalinity when pH is >10 and/or total dissolved solids are greater than 500 mg/L
J: indicates the result is an estimated value
mg/L: milligram per liter
mV: millivolt
NTU: Nephelometric Turbidity Units
U: indicates the compound was analyzed for but not detected
pCi/L: picocurie per liter
SU: standard unit

Table 3
Bulk Chemistry Results of Aquifer Soils

Parameter	Unit	GC-AP-PT-1	GC-AP-PT-1 (Duplicate)	GC-AP-PT-2	GC-AP-PT-3	GC-AP-PT-4	GC-AP-PT-5
Depth interval	ft bgs	11.0–25.0	11.0–25.0	34.0–40.0	10.0–15.0	24.0–35.0	12.0–22.0
Arsenic[1]	mg/kg	0.992 J	1.22 J	2.15	1.85	1.08 J	8.43
Cobalt[1]	mg/kg	0.675 J	0.630 U	1.48	0.735 J	1.11 J	9.21
Lithium[1]	mg/kg	2.93 U	3.15 U	3.71 J	5.13 J	3.07 U	3.26 U
Antimony	mg/kg	0.552 U	0.581 U	0.612 U	0.629 U	0.663 U	0.610 U
Barium	mg/kg	3.83	4.73	12.5	8.15	6.62	9.46
Beryllium	mg/kg	0.110 U	0.116 U	0.216 J	0.126 U	0.133 U	0.18 J
Cadmium	mg/kg	0.110 U	0.116 U	0.122 U	0.126 U	0.133 U	0.122 U
Chromium	mg/kg	2.6	4.35	3.6	3.98	3.09	4.74
Iron	mg/kg	2970	4110	4670	2990	3280	6550
Lead	mg/kg	0.918	1.04	1.75	1.74	1.16	1.29
Manganese	mg/kg	9.56	14.3	25.5	20.2	40.7	24.7
Mercury	mg/kg	0.0442 U	0.0465 U	0.0489 U	0.0503 U	0.0530 U	0.0488 U
Molybdenum	mg/kg	0.552 U	0.581 U	0.612 U	0.981 J	0.672 J	0.610 U
Selenium	mg/kg	0.552 U	0.581 U	0.612 U	0.629 U	0.663 U	0.610 U
Thallium	mg/kg	0.110 U	0.116 U	0.122 U	0.126 U	0.133 U	0.122 U
Sulfide	mg/kg	1.18 U	1.17 U	1.28 U	1.28 U	1.24 U	1.29 U
Fluoride	mg/kg	0.557 U	0.563 U	0.714 J	0.832 J	0.667 J	0.603 U
Total organic carbon[1]	mg/kg	232 U	233 U	268	241 U	237 U	241 U

Notes:

All results are reported on a dry weight basis.

1. Analytical results were reported on an as-received basis. Values were corrected to be on a dry-weight basis using moisture content values measured at the Anchor QEA, LLC, Environmental Geochemical Laboratory.

J: indicates the result was below the reporting limit and is an estimated value.

mg/kg: milligrams per kilogram

ft bgs: feet below ground surface

U: indicates the compound was analyzed for but not detected (Value is set to instrument detection limit.)

Table 4
Extractable Aluminum, Iron, and Manganese Oxides in Aquifer Soils

Sample ID	Boring Location	Depth Interval (ft bgs)	Extractable Oxides (mg/kg)			Simaltaneously Extractable Metals (mg/kg)		
			Aluminum[2]	Iron[2]	Manganese[3]	Arsenic[2]	Lithium[2]	Cobalt[2]
GC-AP-PT-1	PT-1	11.0–25.0	**52.3**	**223**	**4.50**	**0.322**	0.297 U	**0.512**
GC-AP-PT-1[1]	PT-1	11.0–25.0	**51.9**	**224**	**4.14**	**0.309**	0.298 U	**0.501**
GC-AP-PT-2	PT-2	34.0–40.0	**94.9**	**354**	**7.17**	**1.03**	0.297 U	**0.642**
GC-AP-PT-3	PT-3	10.0–15.0	**43.3**	**244**	**6.42**	**0.599**	0.297 U	**0.525**
GC-AP-PT-4	PT-4	24.0–35.0	**44.6**	**254**	**14.1**	**0.508**	0.296 U	**0.756**
GC-AP-PT-5	PT-5	12.0–22.0	**90.7**	**812**	**4.39**	**4.17**	0.298 U	**4.94**

Notes:

Bold indicates detected values.

1. Duplicate
2. Determined by acid ammonium oxalate method
3. Extracted by 0.1 modular hydroxylamine hydrochloride in 0.01 modular nitric acid

ft bgs: feet below ground surface

mg/kg: milligram per kilogram

U: Indicates compound was analyzed for but not detected above detection limit. Value is set to instrument detection limit.

Table 5
Cation Exchange Capacity of Aquifer Soils

Sample Name	Boring Location	Depth Interval (ft bgs)	Major Exchangeable Cations (mEq/kg)				Simultaneously Extracted Ions (mEq/kg)			CEC (mEq/kg)
			Calcium	Magnesium	Potassium	Sodium	Arsenic	Cobalt	Lithium	
GC-AP-PT-1	PT-1	11.0–25.0	**3.34**	**0.848**	**0.129**	**0.253**	**0.000789**	**0.000818**	0.0180 U	**4.59**
GC-AP-PT-1[1]	PT-1	11.0–25.0	**3.51**	**0.906**	**0.137**	**0.271**	**0.000769**	**0.000856**	0.0180 U	**4.84**
GC-AP-PT-2	PT-2	34.0–40.0	**4.81**	**2.59**	**0.412**	**0.618**	**0.00133**	**0.00325**	**0.00551 J**	**8.45**
GC-AP-PT-3	PT-3	10.0–15.0	**6.19**	**2.53**	**0.409**	**0.478**	**0.00108**	**0.000458**	**0.0271 J**	**9.63**
GC-AP-PT-4	PT-4	24.0–35.0	**2.21**	**0.880**	**0.174**	**0.234**	**0.000262 J**	**0.000909**	0.0180 U	**3.52**
GC-AP-PT-5	PT-5	12.0–22.0	**4.23**	**1.52**	**0.320**	**0.253**	**0.00217**	**0.0203**	0.0180 U	**6.37**

Notes:

Bold indicates detected values.

1. Duplicate

CEC: cation exchange capacity (Value is calculated by summing all exchangeable cations [mEq/kg])

ft bgs: feet below ground surface

J: Estimated value

mEq/kg: milliequivalent per kilogram

U: Value was analyzed for but not detected. Value is set to instrument detection limit.

Table 6
Moisture Content and Grain Size Distribution of Aquifer Soils

Sample ID	Depth Interval (ft bgs)	Moisture Content (%)	Gravel (%) (>2.00 mm)	Sand (%) (0.063–2.00 mm)	Silt (%) (0.005–0.063 mm)	Clay (%) (<0.005 mm)
GC-AP-PT-1	11.0–25.0	14.1	3.3	94.0	0.9	1.7
GC-AP-PT-1[1]	11.0–25.0	--	3.3	94.3	1.2	1.2
GC-AP-PT-2	34.0–40.0	17.8	0.4	90.8	6.1	2.7
GC-AP-PT-3	10.0–15.0	17.2	0.3	93.1	5.4	1.3
GC-AP-PT-4	24.0–35.0	15.6	1.8	93.9	3.1	1.2
GC-AP-PT-5	12.0–22.0	17.1	12.4	83.4	2.1	2.1

Notes:

Moisture content was measured in triplicate for each sample.

1. Duplicate

--: not applicable

ft bgs: feet below ground surface

mm: millimeter

Table 7
Pairs of Groundwater and Aquifer Soils Used in the Treatability Studies

Groundwater ID	Soil Sample ID	Depth Interval (ft bgs)	COI(s) in Groundwater
GC-AP-MW-1	GC-AP-PT-1	11.0–25.0	Arsenic and cobalt
GC-AP-MW-5	GC-AP-PT-5	12.0–22.0	Arsenic and lithium
GC-AP-MW-10	GC-AP-PT-4	24.0–35.0	Arsenic and lithium
GC-AP-MW-14	GC-AP-PT-3	10.0–15.0	Arsenic, cobalt, and lithium
GC-AP-MW-17	GC-AP-PT-2	34.0–40.0	Arsenic and lithium
GC-AP-MW-44H	GC-AP-PT-5	12.0–22.0	Cobalt

Notes:

COI: constituent of interest

ft bgs: feet below ground surface

Table 8
Reagent Doses in Screening Batch Tests

Reagent	Abbreviation	Dose	Notes
Ferrous sulfate	$FeSO_4$	1.33 mM $FeSO_4$	2 mL of 133 mM (0.133 M) stock solution was injected into 200 mL of groundwater.
Ferric chloride	$FeCl_3$	1.33 mM $FeCl_3$	2 mL of 133 mM (0.133 M) stock solution was spiked in 200 mL of groundwater.
CleanER-10	CER-10	1.33 mM as Fe	15.3 mg of CleanER-10 was added to achieve 1.33 mM of Fe.
FerroBlack	FB-Fe+	55 g/L	The dose was specified by the vendor (Redox Solutions).
Potassium permanganate	$KMnO_4$	1.33 mM $KMnO_4$	2 mL of 133 mM (0.133 M) stock solution was spiked in 200 mL of groundwater.
Ferrous sulfate and potassium permanganate	$FeSO_4$ + $KMnO_4$	1.00 mM $FeSO_4$, 0.33 mM $KMnO_4$	1.5 mL of 133 mM $FeSO_4$ stock solution and 0.5 mL of 133 mM $KMnO_4$ stock solution were injected into 200 mL of groundwater.
Ferric chloride, potassium permanganate, and manganese chloride	$FeCl_3$/$KMnO_4$ + $MnCl_2$	0.665 mM $FeCl_3$, 0.266 mM $KMnO_4$, 0.399 mM $MnCl_2$	1.0 mL of 133 mM $FeSO_4$ stock solution, 0.4 mL of 133 mM $KMnO_4$ stock solution, and 0.6 mL of 133 mM $MnCl_2$ solution were injected into 200 mL of groundwater.
Barium chloride	$BaCl_2$	1.33 mM $BaCl_2$	2 mL of 133 mM stock solution were spiked in 200 mL of groundwater.
Aeration	Aeration	--	No reagents; bottles were passively aerated during the batch test.
Dolomite (Helena Quarry)	Helena dolomite	50 g/L	10 g of fines (<75 μm) were added in 200 mL of groundwater.
Dolomite (Lakeshore Quarry)	Lakeshore dolomite	50 g/L	10 g of fines (<75 μm) were added in 200 mL of groundwater.
Dolomitic quicklime	Dolomitic quicklime	50 g/L	10 g of fines (<75 μm) were added in 200 mL of groundwater.

Notes:
--: not applicable
μm: micrometer
Fe: iron
g: gram
g/L: gram per liter
M: molar
mL: millililter
mM: millimolar
Mn: manganese

Table 9
Screening Batch Test Result Data

Groundwater ID	Test	Reagent	Dissolved Metals After Treatment (µg/L)			pH	SC (µS/cm)	ORP (mV)
			Arsenic (GWPS: 10)	Cobalt (GWPS: 16.7)	Lithium (GWPS: 40)			
GC-AP-MW-1	Groundwater	$FeSO_4$	0.7 J	294	--	4.71	1640	120
		$FeSO_4$ (Dup)	0.6 J	289	--	4.48	1640	190
		$FeCl_3$	2.3 J	294	--	2.56	2210	516
		CER-10	2.2 J	294	--	5.61	1510	8.5
		$KMnO_4$	2.4 J	319	--	2.42	1970	458
		$FeSO_4$ + $KMnO_4$	0.7 J	298	--	2.97	1740	400
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	1.0 J	294	--	2.58	2020	418
		$BaCl_2$	0.5 U	297	--	4.9	1550	141
		Aeration	0.5 U	304	--	4.27	1490	201
		Control	0.5 U	297	--	4.79	1490	16.4
	Slurry	$FeSO_4$	3.3	295	--	2.73	1870	372
		$FeSO_4$ (Dup)	3.6	293	--	2.74	1890	377
		$FeCl_3$	3.8	295	--	2.60	2140	385
		CER-10	3.4	272	--	5.55	1480	85.5
		$KMnO_4$	3.4	313	--	2.53	1880	470
		$FeSO_4$ + $KMnO_4$	3.6	298	--	2.92	1780	360
		$FeCl_3$ / $KMnO_4$ + $MnCl_2$	4.1	298	--	2.61	1960	399
		$BaCl_2$	3.0	291	--	2.72	1790	410
		Aeration	2.7	291.0	--	2.80	1690	379
		Control	9.6	300.0	--	2.75	1750	376
GC-AP-MW-17	Groundwater	$FeSO_4$	2.3 J	--	678	6.62	902	301
		$FeSO_4$ (Dup)	1.9 J	--	671	6.67	904	415
		$FeCl_3$	2.4 J	--	715	6.34	1010	311
		CER-10	10.0	--	678	7.16	893	-46.5
		$KMnO_4$	5.4	--	970	7.15	1040	584
		$FeSO_4$ + $KMnO_4$	0.9 J	--	673	6.75	919	449
		$FeCl_3$ / $KMnO_4$ + $MnCl_2$	1.2 J	--	667	6.83	951	448
		$BaCl_2$	49	--	693	7.14	1060	380
		Aeration	47.4	--	692	8.16	779	286
		Control	46.3	--	675	7.19	898	373
	Slurry	$FeSO_4$	2.0 J	--	870	6.59	845	427
		$FeSO_4$ (Dup)	2.7	--	612	7.03	831	368
		$FeCl_3$	2.5 J	--	608	7.28	936	360
		CER-10	4.1	--	618	7.67	795	305
		$KMnO_4$	3.4	--	581	8.31	865	542
		$FeSO_4$ + $KMnO_4$	1.2 J	--	611	7.87	826	414
		$FeCl_3$ / $KMnO_4$ + $MnCl_2$	2.1 J	--	593	8.26	817	378
		$BaCl_2$	2.7	--	603	7.17	952	379
		Aeration	10	--	617	8.29	721	272
		Control	5.1	--	594	7.14	812	360
GC-AP-MW-14	Groundwater	$FeSO_4$	0.5 U	27.2	616	6.24	920	465
		$FeSO_4$ (Dup)	0.5 U	28.7	608	6.24	915	425
		$FeCl_3$	0.5 U	33.0	614	5.89	1020	478
		CER-10	0.5 U	28.5	613	6.67	888	406
		$KMnO_4$	0.5 U	0.05 U	610	6.62	1020	642
		$FeSO_4$ + $KMnO_4$	0.5 U	17.6	626	6.46	954	441
		$FeCl_3$ / $KMnO_4$ + $MnCl_2$	0.5 U	0.05 U	631	6.30	991	479
		$BaCl_2$	0.7 J	34.4	601	6.71	959	413
		Aeration	0.5 J	20.6	630	8.41	860	221
		Control	0.5 J	33.5	631	6.74	897	398
	Slurry	$FeSO_4$	0.5 U	17.9	593	6.29	906	432
		$FeSO_4$ (Dup)	0.5 U	18.4	628	6.33	900	402
		$FeCl_3$	0.5 U	24.6	616	6.01	1050	419
		CER-10	0.7 J	14.2	618	6.65	884	344
		$KMnO_4$	0.5 U	0.05 U	603	6.79	982	605
		$FeSO_4$ + $KMnO_4$	0.5 U	20.1	608	6.58	944	410
		$FeCl_3$ / $KMnO_4$ + $MnCl_2$	0.5 U	0.05 U	640	6.25	973	460
		$BaCl_2$	0.5 U	15.5	612	6.69	931	408
		Aeration	0.5 U	5.3	613	7.98	820	278
		Control	0.5 U	14.6	596	6.83	878	377
GC-AP-MW-10	Groundwater	$FeSO_4$	0.5 U	--	293.0	6.08	821	191
		$FeSO_4$ (Dup)	0.5 U	--	307.0	6.05	815	459
		$FeCl_3$	0.8 J	--	296.0	5.63	931	232
		CER-10	1.0 J	--	305.0	6.69	776	-443
		$KMnO_4$	1.0 J	--	306.0	6.64	944	618
		$FeSO_4$ + $KMnO_4$	0.5 U	--	302.0	6.28	833	453
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	0.5 U	--	301.0	6.21	879	650
		$BaCl_2$	1.5 J	--	303.0	6.71	872	403
		Aeration	3.4	--	317.0	8.00	733	274
		Control	1.8 J	--	314.0	6.79	794	380
GC-AP-MW-10	Slurry	$FeSO_4$	0.9 J	--	303.0	6.35	847	1.30
		$FeSO_4$ (Dup)	0.5 J	--	292.0	6.36	836	48.2
		$FeCl_3$	0.5 U	--	300.0	5.74	910	239
		CER-10	1.2 J	--	289.0	6.81	755	211
		$KMnO_4$	0.7 J	--	298.0	6.88	889	596
		$FeSO_4$ + $KMnO_4$	0.5 U	--	297.0	6.42	808	436
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	0.5 U	--	328.0	6.33	857	576
		$BaCl_2$	1.3 J	--	291.0	6.79	855	376
		Aeration	4.1	--	292.0	7.98	707	272
		Control	2.0 J	--	294.0	6.90	758	188

Table 9
Screening Batch Test Result Data

			Dissolved Metals After Treatment (µg/L)					
Groundwater ID	Test	Reagent	Arsenic (GWPS: 10)	Cobalt (GWPS: 16.7)	Lithium (GWPS: 40)	pH	SC (µS/cm)	ORP (mV)
GC-AP-MW-5	Groundwater	$FeSO_4$	1.0 J	--	99.7	6.54	815	9.4
		$FeSO_4$ (Dup)	0.5 U	--	101	5.97	829	402
		$FeCl_3$	0.8 J	--	106	5.88	954	33.3
		CER-10	1.1 J	--	97.6	6.94	780	-137
		$KMnO_4$	0.8 J	--	97.8	6.74	948	605
		$FeSO_4$ + $KMnO_4$	1.4 J	--	98.5	6.66	850	389
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	3.0	--	99.3	7.62	861	334
		$BaCl_2$	7.0	--	102	7.80	828	277
		Aeration	4.3	--	104	8.18	761	234
		Control	6.6	--	119	7.94	762	262
	Slurry	$FeSO_4$	17.1	--	82.5	6.16	896	185
		$FeSO_4$ (Dup)	0.6 J	--	80.3	5.93	787	431
		$FeCl_3$	0.5 U	--	91.7	5.12	909	385
		CER-10	3.0	--	81.0	6.67	741	246
		$KMnO_4$	0.5 U	--	71.2	6.83	879	598
		$FeSO_4$ + $KMnO_4$	0.9 J	--	76.3	6.50	799	416
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	0.5 U	--	80.7	5.82	909	483
		$BaCl_2$	0.9 J	--	71.1	6.84	787	426
		Aeration	1.7 J	--	67.0	7.93	713	285
		Control	1.3 J	--	71.8	6.80	724	379
GC-AP-MW-44H	Groundwater	$FeSO_4$	--	326	--	5.54	1140	307
		$FeSO_4$ (Dup)	--	324	--	5.24	1130	364
		$FeCl_3$	--	348	--	2.73	1780	567
		CER-10	--	347	--	6.16	1000	400
		$KMnO_4$	--	0.15	--	6.07	1150	683
		$FeSO_4$ + $KMnO_4$	--	332	--	4.60	1080	628
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	--	23.5	--	3.20	1330	785
		$BaCl_2$	--	326	--	6.30	1070	477
		Aeration	--	330	--	7.69	1020	355
		Control	--	339	--	6.65	1010	330
	Slurry	$FeSO_4$	--	697	--	3.54	1150	635
		$FeSO_4$ (Dup)	--	738	--	3.47	1110	654
		$FeCl_3$	--	789	--	3.14	1120	681
		CER-10	--	251	--	6.15	975	514
		$KMnO_4$	--	0.14	--	6.09	1120	691
		$FeSO_4$ + $KMnO_4$	--	526	--	5.00	1050	589
		$FeCl_3$/$KMnO_4$ + $MnCl_2$	--	7.75	--	3.92	1120	676
		$BaCl_2$	--	262	--	6.17	1030	474
		Aeration	--	105	--	6.78	965	409
		Control	--	184	--	6.65	966	433

Notes:
Reaction time was 7 days.
--: not applicable
µg/L: microgram per liter
µS/cm: microsiemen per centimeter
$BaCl_2$: barium chloride
CER-10: CleanER
Dup: dulicate
$FeCl_3$/$KMnO_4$ + $MnCl_2$: ferric chloride with potassium permanganate and manganese chloride
$FeCl_3$: ferric chloride
$FeSO_4$ + $KMnO_4$: ferrous sulfate with potassium permanganate
$FeSO_4$: ferrous sulfate
GWPS: groundwater protection standard
J: indicates the result is an estimated value
$KMnO_4$: potassium permanganate
mV: millivolt
ORP: oxidation reduction potential
SC: specific conductivity
U: indicates the compound was analyzed for but not detected (value is set to instrument detection limit).

Table 10
Screening Batch Test Result Data for FerroBlack-Fe+

			Dissolved Metals After Treatment (µg/L)					
GW ID	**Test**	**Reagent**	**Arsenic (GWPS: 10)**	**Cobalt (GWPS: 16.7)**	**Lithium (GWPS: 40)**	**pH**	**SC (µS/cm)**	**ORP (mV)**
GC-AP-MW-1	Groundwater (MW-1)	Ferroblack-Fe+	0.7 J	0.24	--	8.19	9630	-270
		Ferroblack-Fe+ (Dup)	0.6 J	0.67	--	8.34	9640	-300
		Control	8.0	295	--	6.34	1280	-151
	Slurry (GW: MW-1; soil: PT-1)	Ferroblack-Fe+	0.8 J	0.39	--	6.56	9740	-317
		Ferroblack-Fe+ (Dup)	0.8 J	0.37	--	7.87	9750	-358
		Control	3.4	296	--	3.81	1470	-0.7
GC-AP-MW-17	Groundwater (MW-17)	Ferroblack-Fe+	9.2	--	539	9.02	10400	170
		Control	291	--	698	7.58	234	198
	Slurry (GW: MW-17; soil: PT-2)	Ferroblack-Fe+	5.7	--	429	8.38	9930	146
		Control	5.7	--	609	7.09	855	258
GC-AP-MW-14	Groundwater (MW-14)	Ferroblack-Fe+	1.9 J	0.15	439	8.56	9700	114
		Control	14.0	18.2	577	7.98	891	235
	Slurry (GW: MW-14; soil: PT-3)	Ferroblack-Fe+	1.8 J	0.15	440	7.76	9970	142
		Control	5.5	4.31	589	6.98	956	101
GC-AP-MW-10	Groundwater (MW-10)	Ferroblack-Fe+	8.0	--	160	9.56	9860	-433
		Control	319	--	320	8.32	540	-246
	Slurry (GW: MW-10; soil: PT-4)	Ferroblack-Fe+	6.8	--	138	9.44	9460	-389
		Control	61.1	--	295	8.03	518	-225
GC-AP-MW-5	Groundwater (MW-5)	Ferroblack-Fe+	11.4	--	27.2	9.08	10300	-423
		Control	150	--	102	8.06	514	-232
	Slurry (GW: MW-5; soil: PT-5)	Ferroblack-Fe+	5.9	--	18.2	9.29	9450	-337
		Control	5.3	--	74.8	8.04	492	-216
GC-AP-MW-44H	Groundwater (MW-44H)	Ferroblack-Fe+	--	0.59	--	11.37	10000	-83.3
		Ferroblack-Fe+ (Dup)	--	0.95	--	11.45	9860	-62.7
		Control	--	326	--	7.93	917	215
	Slurry (GW: MW-44H; soil: PT-5)	Ferroblack-Fe+	--	1.03	--	10.70	9380	-29.9
		Ferroblack-Fe+ (Dup)	--	0.95	--	10.75	9250	-33.0
		Control	--	169	--	7.67	905	286

Notes:
Reaction time was 7 days.
--: not applicable
µg/L: microgram per liter
µS/cm: microsiemens per centimeter
Dup: duplicate
GW: groundwater
GWPS: groundwater protection standard
J: indicates the result is an estimated value
mV: millivolt
ORP: oxidation reduction potential
SC: specific conductivity
U: indicates the compound was analyzed for but not detected (Value is set to instrument detection limit.)

Table 11
Screening Batch Test Result Data for Dolomite Fines and Dolomitic Quicklime

			Dissolved Metals After Treatment (µg/L)					
Groundwater ID	Test	Treatment	Arsenic (GWPS: 10)	Cobalt (GWPS: 16.7)	Lithium (GWPS: 40)	pH	SC (µS/cm)	ORP (mV)
GC-AP-MW-1	Groundwater	Helena dolomite	0.12 J	169	--	7.02	291	33.6
		Helena dolomite (Dup)	0.15 J	187	--	5.81	294	70
		Lakeshore dolomite	0.09 J	133	--	6.35	294	40
		Dolomitic quicklime	0.13 J	0.059	--	11.94	298	-290
		Control	1.59	258	--	4.50	292	176
	Slurry	Helena dolomite	0.20 J	167	--	6.90	291	-25.4
		Helena dolomite (Dup)	0.15 J	171	--	7.44	292	-46.5
		Lakeshore dolomite	0.22 J	120	--	7.28	294	3.1
		Dolomitic quicklime	0.21 J	0.047	--	12.24	298	-213
		Control	2.04	255	--	2.71	294	269
GC-AP-MW-5	Groundwater	Helena dolomite	5.40	--	89.4	8.20	283	144
		Helena dolomite (Dup)	7.09	--	87.4	8.14	283	124
		Lakeshore dolomite	12.8	--	91.8	8.29	281	147
		Dolomitic quicklime	0.09 U	--	153	12.07	299	-70.3
		Control	10.1	--	88.8	8.09	277	132
	Slurry	Helena dolomite	1.90	--	58.6	8.35	285	150
		Helena dolomite (Dup)	3.48	--	58.4	8.30	283	110
		Lakeshore dolomite	3.44	--	61.4	8.43	281	147
		Dolomitic quicklime	0.16 J	--	61.5	13.64	298	-71.3
		Control	1.12	--	65.4	7.92	277	134
GC-AP-MW-10	Groundwater	Helena dolomite	14.5	--	267	7.53	284	168
		Helena dolomite (Dup)	9.85	--	274	7.65	286	138
		Lakeshore dolomite	19.4	--	276	7.72	282	164
		Dolomitic quicklime	0.10 J	--	337	10.50	300	-47.9
		Control	6.42	--	271	7.75	276	155
	Slurry	Helena dolomite	5.37	--	244	7.42	285	169
		Helena dolomite (Dup)	4.58	--	249	7.34	285	128
		Lakeshore dolomite	6.35	--	253	7.43	283	173
		Dolomitic quicklime	0.12 J	--	245	10.34	301	-49.4
		Control	3.73	--	263	7.30	277	158
GC-AP-MW-14	Groundwater	Helena dolomite	1.22	17.4	578	6.95	296	126
		Helena dolomite (Dup)	1.02	17.6	579	6.90	295	128
		Lakeshore dolomite	1.17	11.9	577	6.94	295	138
		Dolomitic quicklime	0.09 U	0.017 J	647	11.26	309	-67.3
		Control	1.61	25.8	590	6.97	292	108
	Slurry	Helena dolomite	0.63	12.5	569	7.08	296	105
		Helena dolomite (Dup)	0.67	13.0	541	6.90	296	89
		Lakeshore dolomite	0.63	9.89	579	7.05	298	119
		Dolomitic quicklime	0.18 J	0.035	505	11.73	309	-84.3
		Control	4.99	6.60	446	7.47	293	95.6
GC-AP-MW-17	Groundwater	Helena dolomite	12.0	--	608	7.12	293	182
		Helena dolomite (Dup)	14.5	--	624	6.90	294	188
		Lakeshore dolomite	14.9	--	628	7.12	292	184
		Dolomitic quicklime	0.10 J	--	679	9.90	309	184
		Control	67.4	--	633	7.19	293	173
	Slurry	Helena dolomite	10.4	--	553	6.69	294	159
		Helena dolomite (Dup)	9.44	--	546	6.88	292	187
		Lakeshore dolomite	10.1	--	558	6.82	291	182
		Dolomitic quicklime	0.22 J	--	445	9.48	308	-28.1
		Control	4.81	--	558	7.45	289	140
GC-AP-MW-44H	Groundwater	Helena dolomite	--	59.5	--	6.77	293	169
		Helena dolomite (Dup)	--	51.7	--	7.09	290	122
		Lakeshore dolomite	--	54.0	--	6.89	291	172
		Dolomitic quicklime	--	0.042	--	8.03	305	-34.2
		Control	--	283	--	6.88	288	166
	Slurry	Helena dolomite	--	33.3	--	6.85	294	193
		Helena dolomite (Dup)	--	40.6	--	7.20	293	136
		Lakeshore dolomite	--	27.9	--	6.92	293	196
		Dolomitic quicklime	--	0.651	--	8.52	307	-26.4
		Control	--	184	--	6.50	291	195
De-ionized Water	--	Helena dolomite	1.17	0.015 J	1.04	8.02	207	90.1
		Lakeshore dolomite	0.95	0.040	2.48	8.57	90.8	117
		Dolomitic quicklime	0.09 U	0.011 J	61.8	10.40	309	-44.8
		Helena dolomite (Dup)	1.02	0.013 J	1.02	8.68	225	113
		DI method blank	0.09 U	0.013 J	0.30 U	8.67	26.8	88.0

Notes:

Reaction time was 7 days.

Deionized water control samples were processed to assess any arsenic, cobalt, or lithium leaching.

--: not applicable
µg/L: microgram per liter
µS/cm: microsiemen per centimeter
Dup: duplicate
GWPS: groundwater protection standard
J: indicates the result is an estimated value
mV: millivolt
ORP: oxidation-reduction potential
SC: specific conductivity
U: indicates the compound was analyzed for but not detected (value is set to instrument detection limit).

Table 12
Reagent Doses in Optimization Batch Tests

Reagent	Dose[1]		Notes
HT-4U	Low dose	50 g/L	Crushed with a mortar and pestle.
	High dose	100 g/L	
Reagent Mix A	Low dose	28.6 mM $MgCl_2$ and 9.52 mM $NaAlO_2$	1.2 M $MgCl_2$ solution and 0.4 M $NaAlO_2$ solution solution were prepared, and 5 and 10 mL of each solution was injected into 200 mL of groundwater for low and high doses, respectively. Then, pH was adjusted to 9.5±0.1 using sodium hydroxide.
	High dose	54.5 mM $MgCl_2$ and 18.2 mM $NaAlO_2$	
Reagent Mix B	Low dose	4.76 mM $FeCl_3$, 10.7 mM $MnCl_2$, 7.14 mM $KMnO_4$	(0.20 M $FeCl_3$ + 0.45 M $MnCl_2$) solution and 0.3 M $KMnO_4$ solution were prepared, and 5 and 10 mL of each solution was injected into 200 mL of groundwater for low and high doses, respectively. Then, pH was adjusted to 9.5±0.1 using sodium hydroxide.
	High dose	9.09 mM $FeCl_3$, 20.5 mM $MnCl_2$, and 13.6 mM $KMnO_4$	
Reagent Mix C	Low dose	4.76 mM $FeCl_3$, 10.7 mM $MnCl_2$, 28.6 mM $MgCl_2$, 7.14 mM $KMnO_4$, and 9.52 mM $NaAlO_2$	(1.2 M $MgCl_2$ + 0.20 M $FeCl_3$+ 0.45 M $MnCl_2$) solution and (0.30 M $KMnO_4$ + 0.4 M $NaAlO_2$) solution were prepared, and 5 and 10 mL of each solution was injected into 200 mL groundwater for low and high doses, respectively. Then, pH was adjusted to 9.5±0.1 using sodium hydroxide.
	High dose	9.09 mM $FeCl_3$, 20.5 mM $MnCl_2$, 54.5 mM $MgCl_2$, 13.6 mM $KMnO_4$ and 18.2 mM $NaAlO_2$	

Notes:

1. High dose is approximately two times higher than low dose.

g/L: gram per liter

M: molar

mL: milliliter

mM: millimolar

Reagent Mix A: $MgCl_2$ solution followed by $NaAlO_2$ solution [+NaOH for pH adjustment to 9.5]

Reagent Mix B: $MnCl_2$/$FeCl_3$ solution followed by $KMnO_4$ solution [+NaOH for pH adjustment to 9.5]

Reagent Mix C: $MnCl_2$/$FeCl_3$/$MgCl_2$ solution followed by $NaAlO_2$/$KMnO_4$ solution [+NaOH for pH adjustment to 9.5]

Table 13
Optimization Batch Test Results

Groundwater ID	Test	Treatment	Dissolved Metals After Treatment (µg/L)		pH	SC (µS/cm)	ORP (mV)
			Cobalt (GWPS: 16.7)	Lithium (GWPS: 40)			
GC-AP-MW-5	Groundwater	HT-4U (low dose)	--	18.8	7.60	508	-115.9
		HT-4U (low dose) Dup	--	18.7	8.20	529	-127.4
		HT-4U (high dose)	--	14.5	8.19	629	-133.4
		Reagent Mix B (low dose)	--	88.4	10.01	4863	-215.7
		Reagent Mix B (high dose)	--	81.1	10.07	8098	-210.4
		Reagent Mix A (low dose)	--	59.6	9.12	5367	-179.4
		Reagent Mix A (high dose)	--	54.1	8.50	8318	-126.7
		Reagent Mix C (low dose)	--	6.54	9.24	8500	-164.2
		Reagent Mix C (high dose)	--	1.87	9.13	14418	-140.5
		Control	--	102	8.34	505	-134.2
	Slurry	HT-4U (low dose)	--	24.1	7.30	478	-105.8
		HT-4U (low dose) Dup	--	17.4	7.60	554	-99.8
		HT-4U (high dose)	--	11.3	8.28	622	-151.2
		Reagent Mix B (low dose)	--	43.2	9.13	4337	-164.8
		Reagent Mix B (high dose)	--	33.8	9.09	7718	-163.9
		Reagent Mix A (low dose)	--	14.4	7.53	5259	-141.1
		Reagent Mix A (high dose)	--	23.3	8.11	8205	-107.5
		Reagent Mix C (low dose)	--	6.84	8.89	14767	-171.1
		Reagent Mix C (high dose)	--	1.61	8.73	8579	-153.4
		Control	--	73.0	6.73	510	-107.1
GC-AP-MW-10	Groundwater	HT-4U (low dose)	--	83.2	7.38	430	-122.4
		HT-4U (low dose) Dup	--	80.1	7.82	560	-123.1
		HT-4U (high dose)	--	74.6	7.93	648	-129.5
		Reagent Mix B (low dose)	--	290	8.83	4340	-154.3
		Reagent Mix B (high dose)	--	243	10.20	7690	-220.5
		Reagent Mix A (low dose)	--	142	9.01	5218	-148.8
		Reagent Mix A (high dose)	--	65.6	8.61	8310	-117.4
		Reagent Mix C (low dose)	--	26.6	8.48	7697	-122.8
		Reagent Mix C (high dose)	--	10.1	8.78	132279	-97.8
		Control	--	322	8.13	511	-97.8
	Slurry	HT-4U (low dose)	--	76.9	7.46	548	-134.1
		HT-4U (low dose) Dup	--	80.5	7.70	549	-143.4
		HT-4U (high dose)	--	70.7	7.87	632	-137.5
		Reagent Mix B (low dose)	--	208	10.07	5131	-229.9
		Reagent Mix B (high dose)	--	248	9.27	7293	-143.4
		Reagent Mix A (low dose)	--	112	8.67	5098	-120.8
		Reagent Mix A (high dose)	--	47.5	8.44	8212	-94.9
		Reagent Mix C (low dose)	--	35.0	8.41	7664	-104.1
		Reagent Mix C (high dose)	--	11.4	8.62	13254	-118.0
		Control	--	317	8.06	508	-104.1
GC-AP-MW-14	Groundwater	HT-4U (low dose)	0.05 U	150	8.62	930	239.6
		HT-4U (low dose) Dup	0.05 U	154	8.17	924	229.3
		HT-4U (high dose)	0.05 U	111	8.14	1058	218.4
		Reagent Mix B (low dose)	0.05 U	509	9.02	6007	197.1
		Reagent Mix B (high dose)	0.05 U	159	9.13	8409	188.9
		Reagent Mix A (low dose)	0.05 U	195	8.26	5703	217.9
		Reagent Mix A (high dose)	0.05 U	216	8.00	9589	218.4
		Reagent Mix C (low dose)	0.05 U	86.9	8.42	8782	215.1
		Reagent Mix C (high dose)	0.05 U	54.9	8.38	14713	550.9
		Control	19.8	615	7.35	933	342.3
	Slurry	HT-4U (low dose)	0.07 J	170	7.92	893	285.8
		HT-4U (low dose) Dup	0.05 U	158	7.91	901	292.0
		HT-4U (high dose)	0.05 U	124	8.00	999	293.3
		Reagent Mix B (low dose)	0.05 U	510	8.68	4826	254.9
		Reagent Mix B (high dose)	0.05 U	296	8.47	8027	299.1
		Reagent Mix A (low dose)	0.05 J	169	8.04	5558	302.4
		Reagent Mix A (high dose)	0.05 U	187	7.98	9208	314.1
		Reagent Mix C (low dose)	0.05 U	116	8.35	8726	296.3
		Reagent Mix C (high dose)	0.05 U	50.1	7.90	14200	574.2
		Control	5.48	592	6.71	922	365.3
		HT-4U (low dose)	--	189	8.13	1003	262.3
		HT-4U (low dose) Dup	--	185	8.24	975	255.8
		HT-4U (high dose)	--	149	8.26	1063	251.7

Table 13
Optimization Batch Test Results

Groundwater ID	Test	Treatment	Dissolved Metals After Treatment (µg/L) Cobalt (GWPS: 16.7)	Dissolved Metals After Treatment (µg/L) Lithium (GWPS: 40)	pH	SC (µS/cm)	ORP (mV)
GC-AP-MW-17	Groundwater	Reagent Mix B (low dose)	--	257	9.12	5060	410.7
		Reagent Mix B (high dose)	--	57.1	9.04	9009	471.9
		Reagent Mix A (low dose)	--	272	8.49	6000	371.1
		Reagent Mix A (high dose)	--	146	8.20	9323	336.0
		Reagent Mix C (low dose)	--	23.9	8.27	8538	334.2
		Reagent Mix C (high dose)	--	71.1	8.24	13959	381.1
		Control	--	706	7.38	943	324.3
	Slurry	HT-4U (low dose)	--	205	8.12	1033	289.3
		HT-4U (low dose) Dup	--	193	8.17	968	264.5
		HT-4U (high dose)	--	143	8.17	1062	265.2
		Reagent Mix B (low dose)	--	287	8.58	4813	374.2
		Reagent Mix B (high dose)	--	44.9	9.28	8184	292.1
		Reagent Mix A (low dose)	--	188	8.40	5680	313.3
		Reagent Mix A (high dose)	--	137	8.37	9163	307.2
		Reagent Mix C (low dose)	--	54.5	8.79	8591	297.6
		Reagent Mix C (high dose)	--	14.3	8.76	14220	280.2
		Control	--	604	7.51	906	301.4

Notes:
Reaction time was 7 days.
Samples were processed under aerobic conditions, and arsenic was not analyzed, as the purpose of the optimization test was to optimize for lithium removal.
Groundwaters without lithium as a COI were not tested in this experiment.
--: not applicable
µg/L: microgram per liter
µS/cm: microsiemen per centimeter
COI: constituent of interest
Dup: duplicate
GWPS: groundwater protection standard
J: indicates the result is an estimated value
mV: millivolt
ORP: oxidation-reduction potential
Reagent Mix A: magnesium chloride, followed by sodium aluminate, pH-adjusted to 9.5±0.1 in sample bottle
Reagent Mix B: ferric chloride with manganese chloride followed by potassium permanganate, pH-adjusted to 9.5±0.1 in sample bottle
Reagent Mix C: ferric chloride with manganese chloride and magnesium chloride, followed by sodium aluminate with permanganate, pH-adjusted to 9.5±0.1 in sample bottle
SC: specific conductivity
U: indicates the compound was analyzed for but not detected

Table 14
Summary of Performance of Tested Reagents

	GC-AP-MW-1		GC-AP-MW-5		GC-AP-MW-10		GC-AP-MW-14			GC-AP-MW-17		GC-AP-MW-44H
Reagent	**As**	**Co**	**As**	**Li**	**As**	**Li**	**As**	**Co**	**Li**	**As**	**Li**	**Co**
$FeSO_4$	🟩	🟧	🟨	🟧	🟩	🟧	🟩	🟥	🟧	🟩	🟥	🟥
$FeCl_3$	🟩	🟧	🟩	🟥	🟩	🟧	🟩	🟥	🟧	🟩	🟧	🟥
CER-10	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟧	🟧	🟩	🟧	🟥
FB-Fe+	🟩	🟩	🟩	🟧	🟩	🟧	🟩	🟩	🟧	🟩	🟧	🟩
$KMnO_4$	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟧	🟧	🟩	🟧	🟩
$FeSO_4$ + $KMnO_4$	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟥	🟧	🟩	🟧	🟥
$FeCl_3/KMnO_4$ + $MnCl_2$	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟧	🟧	🟩	🟧	🟩
$BaCl_2$	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟧	🟧	🟩	🟧	🟥
Aeration	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟧	🟧	🟩	🟧	🟧
Helena dolomite	🟩	🟧	🟩	🟧	🟩	🟧	🟩	🟩	🟥	🟩	🟧	🟨
Lakeshore dolomite	🟩	🟨	🟩	🟧	🟩	🟧	🟩	🟩	🟥	🟩	🟧	🟨
Dolomitic quicklime	🟩	🟩	🟩	🟧	🟩	🟧	🟩	🟩	🟧	🟩	🟧	🟩
HT-4U	N/T	N/T	N/T	🟩	N/T	🟧	N/T	🟩	🟨	N/T	🟨	N/T
Reagent Mix A	N/T	N/T	N/T	🟩	N/T	🟨	N/T	🟩	🟨	N/T	🟨	N/T
Reagent Mix B	N/T	N/T	N/T	🟩	N/T	🟥	N/T	🟩	🟧	N/T	🟨	N/T
Reagent Mix C	N/T	N/T	N/T	🟩	N/T	🟩	N/T	🟩	🟨	N/T	🟩	N/T

Notes:

Green cells indicate the concentration was decreasedd to less than the GWPS.

Yellow cells indicate the concentration was decreased by more than 50%, but the GWPS was not reached.

Orange cells indicate the concentration was decreased by less than 50%, and the GWPS was not reached.

Red cells indicate the concentration was increased more than 25% and the GWPS was not reached.

N/T: not tested

As: arsenic

Co: cobalt

Li: lithium

GWPS: groundwater protection standard

Reagent Mix A: $MgCl_2$ solution followed by $NaAlO_2$ solution (+NaOH for pH adjustment to 9.5)

Reagent Mix B: $MnCl_2/FeCl_3$ solution followed by $KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlO_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Table 15
Column Test Setup

Column No.	Reagent	Groundwater ID	Aquifer Soil ID (depth; feet)	COI	Soil Added (dry weight; grams)	Reagent Added (dry weight; grams)
1	Reagent Mix C	GC-AP-MW-1	GC-AP-PT-1 (11.0–25.0)	As and Co	67.2	2.33
2	FerroBlack-Fe+				93.7	2.75
3	Reagent Mix C	GC-AP-MW-5	GC-AP-PT-5 (12.0–22.0)	As and Li	66.0	2.29
4	FerroBlack-Fe+				91.4	2.67
5	Reagent Mix C	GC-AP-MW-10	GC-AP-PT-4 (24.0–35.0)	As and Li	71.0	2.46
6	FerroBlack-Fe+				94.2	2.77
7	Reagent Mix C	GC-AP-MW-14	GC-AP-PT-3 (10.0–15.0)	As, Co, and Li	66.2	2.29
8	FerroBlack-Fe+				93.8	2.75
9	Reagent Mix C	GC-AP-MW-17	GC-AP-PT-2 (34.0–40.0)	As and Li	62.3	2.16
10	FerroBlack-Fe+				89.2	2.62
11	Reagent Mix C	GC-AP-MW-44H	GC-AP-PT-5 (12.0–22.0)	Co	66.0	2.29
12	FerroBlack-Fe+				92.5	2.71

Notes:

Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlO_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

As: arsenic

Co: cobalt

COI: contaminant of interest

Li: lithium

Table 16
Column Test Operating Conditions

Parameter	Value	Unit
Column depth	11.0	centimeter
Column inner diameter	2.6	centimeter
Flow rate	0.30	milliliter per minute
Porosity	43	%
Hydraulic residence time	1.41	hour
Superficial velocity	81.4	centimeter per day
Test duration	18	day
Pore volumes treated	Approximately 250	--

Note:

--: not applicable

Table 17
Appendix III/IV Parameters in Column Test Amendments

Component	Units	Reagent Mix C	Ferroblack-Fe+
Antimony, total	mg/kg	0.027 U	0.22
Arsenic, total	mg/kg	0.08 U	0.4 J
Barium, total	mg/kg	1.27	0.25
Beryllium, total	mg/kg	0.008 U	0.015 U
Boron, total	mg/kg	0.49 J	3
Cadmium, total	mg/kg	0.009 U	0.017 U
Calcium, total	mg/kg	10 J	112
Chromium, total	mg/kg	0.41	58.6
Cobalt, total	mg/kg	0.025 J	3.1
Fluoride	mg/kg	2.9 U	5.2 U
Lead, total	mg/kg	0.031 J	0.34
Lithium, total	mg/kg	0.49	0.24 U
Mercury, total	ng/g	0.34 J	0.48 U
Molybdenum, total	mg/kg	0.1	13
Selenium, total	mg/kg	0.1 U	0.2 U
Solids, total	%	67.4	37.7
Sulfate	mg/kg	7 U	107
Thallium, total	mg/kg	0.007 J	0.051

Notes:

All results are reported on a dry weight basis using the total solids determined by the analytical testing laboratory.

mg/kg: milligram per kilogram

ng/g: nanogram per gram

J: indicates the result is an estimated value

U: indicates the compound was analyzed for but not detected

Table 18
Column Test Results

					Dissolved COIs (µg/L)			Dissolved Amendment Constituents (mg/L)				Water Quality Parameters		
Sample	Sampling Date-Time	Elapsed Time (days)	Flow Rate (mL/min)	Pore Volume Treated	Arsenic	Cobalt	Lithium	Iron	Manganese	Aluminum	Magnesium	pH	SC (µS/cm)	ORP (mV)
Influent (GC-AP-MW-1)	9/12/22 11:44	0.1	--	--	7.42	262	--	191	15.5	0.0051	29.9	5.46	1430	112
	9/13/22 8:04	1.0	--	--	5.22	262	--	--	--	--	--	5.56	1680	105
	9/14/22 7:36	2.0	--	--	3.1	268	--	--	--	--	--	6.68	3210	432
	9/15/22 10:30	3.1	--	--	3.86	264	--	--	--	--	--	5.46	1910	272
	9/16/22 8:20	4.0	--	--	1.68	270	--	--	--	--	--	5.48	1780	467
	9/19/22 9:02	7.0	--	--	1.92	269	--	--	--	--	--	5.67	2580	328
	9/21/22 11:40	9.1	--	--	1.87	274	--	--	--	--	--	3.19	2690	417
	9/23/22 7:45	11.0	--	--	1.71	271	--	--	--	--	--	3.23	2470	457
	9/26/22 7:45	14.0	--	--	1.24	273	--	--	--	--	--	2.80	2690	473
	9/28/22 8:00	16.0	--	--	0.87	289	--	--	--	--	--	2.67	2780	456
	9/30/2022 8:35	18.0	--	--	0.87	273	--	--	--	--	--	2.31	2770	396
Effluent (GC-AP-MW-1, Reagent Mix C column)	9/12/22 11:32	0.13	0.27	1.6	0.11 J	0.013 J	--	0.0081	0.00954	0.037	55	7.65	1070	258
	9/13/22 10:22	1.08	0.27	14.1	0.09 U	17.4	--	0.51	27.1	0.0064	112	7.07	2070	46.3
	9/14/2022 9:46	2.05	0.27	26.9	0.09 U	57.4	--	2.29	67.3	0.0044	90.7	7.64	2290	-5.8
	9/15/2022 14:56	3.27	0.26	42.6	0.43 J	236	--	121	28.9	0.729	45.6	6.98	2630	287
	9/16/2022 10:43	4.09	0.27	53.2	0.47 J	265	--	107	33.6	1.52	42.8	5.69	3040	349
	9/19/2022 9:14	7.03	0.27	91.3	0.20 J	119	--	6.15	65.1	0.468	67.3	7.33	3060	355
	9/21/2022 13:56	9.22	0.26	118.9	0.69	247	--	67.7	38.3	4.97	43.1	3.32	2260	388
	9/23/2022 10:43	11.09	0.13	131.0	0.78	244	--	62.5	36.3	6.48	43.0	3.30	2400	394
	9/26/2022 14:09	14.23	0.08	143.4	0.66	235	--	4.22	63.5	9.11	57.5	3.93	2450	375
	9/28/2022 14:12	16.24	0.09	151.8	0.80	273	--	24.8	49.6	12.2	44.4	2.72	2380	383
	9/30/2022 14:47	18.26	0.08	159.8	0.83	276	--	23.1	40.3	12.7	41.9	2.57	2570	399
Effluent (GC-AP-MW-1, FB-Fe+ column)	9/12/22 11:33	0.1	0.28	1.7	0.1 J	34.2	--	49.4	--	--	--	6.15	1410	41.9
	9/13/22 10:23	1.1	0.28	14.9	0.13 J	172	--	205	--	--	--	7.30	1550	10.8
	9/14/2022 9:47	2.1	0.28	28.3	0.18 J	210	--	197	--	--	--	7.23	1570	-25.1
	9/15/2022 14:57	3.3	0.28	45.0	0.21 J	245	--	185	--	--	--	6.50	2100	32.3
	9/16/2022 10:44	4.1	0.28	56.4	0.55	246	--	181	--	--	--	5.53	2180	155
	9/19/2022 9:15	7.0	0.28	96.7	0.82	252	--	157	--	--	--	6.00	2370	240
	9/21/2022 13:57	9.2	0.29	127.2	1.02	262	--	153	--	--	--	3.54	2130	319
	9/23/2022 10:44	11.1	0.28	153.2	1.35	255	--	148	--	--	--	3.97	2250	228
	9/26/2022 10:09	14.1	0.28	194.0	1.32	274	--	136	--	--	--	3.51	2530	440
	9/28/2022 10:12	16.1	0.28	221.8	1.07	282	--	132	--	--	--	3.19	2330	278
	9/30/2022 10:47	18.1	0.28	249.8	1.23	304	--	125	--	--	--	2.86	2250	339
Influent (GC-AP-MW-5)	9/12/22 11:45	0.1	--	--	41.3	--	85.7	9.32	1.61	0.0055	16.8	6.4	685	-2.5
	9/13/22 8:05	1.0	--	--	20.5	--	86.7	--	--	--	--	6.81	763	-30.8
	9/14/22 7:37	2.0	--	--	12.6	--	88	--	--	--	--	7.56	1010	-29.3
	9/15/22 10:31	3.1	--	--	7.13	--	86.9	--	--	--	--	7.06	944	-51.0
	9/16/22 8:21	4.0	--	--	4.69	--	88	--	--	--	--	6.47	879	-48.1
	9/19/22 9:03	7.0	--	--	4.46	--	84.7	--	--	--	--	6.63	1270	-55.0
	9/21/22 11:41	9.1	--	--	3.30	--	82.8	--	--	--	--	6.47	1080	427
	9/23/22 7:46	11.0	--	--	1.43	--	80.8	--	--	--	--	6.77	1180	510
	9/26/22 7:46	14.0	--	--	3.82	--	80.1	--	--	--	--	6.35	1150	555
	9/28/22 8:01	16.0	--	--	5.90	--	88.6	--	--	--	--	6.68	1180	535
	9/30/2022 8:36	18.0	--	--	7.90	--	88.7	--	--	--	--	6.28	1140	146
Effluent (GC-AP-MW-5, Reagent Mix C column)	9/12/22 11:34	0.1	0.29	1.8	0.15 J	--	0.3	0.0027	0.00031	0.0282	32.2	5.66	4880	385
	9/13/22 10:24	1.1	0.28	14.8	0.6	--	16.8	0.0034	0.00142	0.0131	50.7	7.57	882	99.2
	9/14/2022 9:48	2.1	0.29	28.4	0.44 J	--	39	0.003	0.00198	0.0199	44.3	8.95	1350	-71.0
	9/15/2022 14:58	3.3	0.28	45.3	0.47 J	--	58.1	0.0057	0.0126	0.0283	39.1	7.67	1130	136
	9/16/2022 10:45	4.1	0.29	56.8	0.45 J	--	59.8	0.0048	0.0179	0.0234	36	7.51	1260	156
	9/19/2022 9:16	7.0	0.28	97.6	0.33 J	--	57.5	0.053	0.0373	0.0129	27.4	7.40	1310	134
	9/21/2022 13:58	9.2	0.29	128.6	0.38 J	--	56.5	0.0568	0.0517	0.0125	24.8	6.51	1050	59.3
	9/23/2022 10:45	11.1	0.29	154.8	0.39 J	--	62.2	0.0486	0.0576	0.0171	25.0	6.60	1150	117
	9/26/2022 10:10	14.1	0.29	196.2	0.33 J	--	59.4	0.0381	0.0722	0.0126	22.1	7.21	1290	362
	9/28/2022 10:13	16.1	0.28	223.8	0.33 J	--	65.2	0.0045	0.111	0.0109	20.1	7.16	1090	173
	9/30/2022 10:48	18.1	0.25	248.5	0.38 J	--	65.4	0.0050	0.0992	0.0113	19.9	7.68	1030	154
Effluent (GC-AP-MW-5, FB-Fe+ column)	9/12/22 11:35	0.1	0.28	1.7	1.3	--	5.74	0.0059	--	--	--	6.60	8360	237
	9/13/22 10:25	1.1	0.27	14.3	0.62	--	60.8	0.567	--	--	--	8.04	852	71.9
	9/14/2022 9:49	2.1	0.27	27.3	0.62	--	80.5	3.79	--	--	--	8.34	933	-38.1
	9/15/2022 14:59	3.3	0.11	34.0	0.4 J	--	77.6	0.796	--	--	--	8.20	813	56.6
	9/16/2022 10:46	4.1	0.28	45.2	0.81	--	76.7	1.74	--	--	--	7.33	1090	163
	9/19/2022 9:17	7.0	0.27	84.4	0.89	--	75.5	1.13	--	--	--	7.67	1150	57.1
	9/21/2022 13:59	9.2	0.28	114.1	0.82	--	75.5	0.349	--	--	--	6.64	1030	83.9
	9/23/2022 10:46	11.1	0.28	139.3	0.65	--	74.9	0.0447	--	--	--	7.12	1120	41.9
	9/26/2022 10:11	14.1	0.27	179.0	0.87	--	71.1	0.0366	--	--	--	7.19	1220	459
	9/28/2022 12:12	16.2	0.25	204.5	0.63	--	75.8	0.0054	--	--	--	7.53	1150	160
	9/30/2022 10:49	18.1	0.22	225.0	0.71	--	74.9	0.0080	--	--	--	7.44	1040	158
Influent (GC-AP-MW-10)	9/12/22 11:46	0.1	--	--	46	--	253	7.04	3.48	0.0044	15.1	7.15	880	-11.7
	9/13/22 8:06	1.0	--	--	49	--	254	--	--	--	--	7.03	723	-15.8
	9/14/22 7:38	2.0	--	--	39.1	--	256	--	--	--	--	7.21	908	23.7
	9/15/22 10:32	3.1	--	--	33.4	--	265	--	--	--	--	7.70	857	-25.8
	9/16/22 8:22	4.0	--	--	33.3	--	260	--	--	--	--	6.66	846	-50.3
	9/19/22 9:04	7.0	--	--	29.3	--	251	--	--	--	--	7.60	1150	-31.1
	9/21/22 11:42	9.1	--	--	27.6	--	242	--	--	--	--	6.79	1040	346
	9/23/22 7:47	11.0	--	--	25.3	--	246	--	--	--	--	7.03	1180	435
	9/26/22 7:47	14.0	--	--	8.61	--	250	--	--	--	--	6.50	1130	456
	9/28/22 8:02	16.0	--	--	8.13	--	259	--	--	--	--	7.26	1110	503
	9/30/2022 8:37	18.0	--	--	9.04	--	253	--	--	--	--	6.71	1090	143

Table 18
Column Test Results

Sample	Sampling Date-Time	Elapsed Time (days)	Flow Rate (mL/min)	Pore Volume Treated	Dissolved COIs (µg/L)			Dissolved Amendment Constituents (mg/L)				Water Quality Parameters		
					Arsenic	Cobalt	Lithium	Iron	Manganese	Aluminum	Magnesium	pH	SC (µS/cm)	ORP (mV)
Effluent (GC-AP-MW-10, Reagent Mix C column)	9/12/22 11:36	0.1	0.25	1.5	0.5 U	--	0.5 U	0.008 J	0.011	0.084	48.6	7.26	799	250
	9/13/22 10:26	1.1	0.21	11.3	0.13 J	--	24.1	0.0019 J	0.00087	0.0094	61.2	8.66	801	109
	9/14/2022 9:50	2.1	0.25	23.0	0.11 J	--	152	0.0018 J	0.00157	0.0137	48	8.84	855	-8.6
	9/15/2022 15:00	3.3	0.25	37.9	0.1 J	--	203	0.0014 J	0.0005	0.0231	41.1	8.41	1120	139
	9/16/2022 10:47	4.1	0.25	47.9	0.13 J	--	218	0.0019 J	0.00057	0.0287	36.2	8.07	914	151
	9/19/2022 9:18	7.0	0.25	83.4	0.11 J	--	205	0.0142	0.00553	0.0296	36.6	7.93	1200	85.8
	9/21/2022 14:00	9.2	0.25	110.2	0.13 J	--	215	0.0139	0.0188	0.0246	29.7	7.26	1050	86.3
	9/23/2022 10:47	11.1	0.25	133.0	0.15 J	--	211	0.0103	0.490	0.0164	23.4	7.45	1100	93.7
	9/26/2022 10:12	14.1	0.25	168.9	0.18 J	--	208	0.0104	0.0205	0.0225	25.9	7.55	1180	440
	9/28/2022 10:15	16.1	0.25	193.4	0.15 J	--	226	0.0016 J	0.440	0.0197	20.3	8.06	1050	171
	9/30/2022 10:50	18.1	0.25	218.0	0.18 J	--	227	0.0032	0.676	0.0222	20.0	7.62	1010	152
Effluent (GC-AP-MW-10, FB-Fe+ column)	9/12/22 11:37	0.1	0.25	1.6	0.09 U	--	0.66	0.0167	--	--	--	7.93	347	143
	9/13/22 10:27	1.1	0.25	13.2	0.1 J	--	237	0.718	--	--	--	8.53	769	169
	9/14/2022 9:51	2.1	0.25	25.1	0.09 U	--	236	1.67	--	--	--	8.17	775	24.8
	9/15/2022 15:01	3.3	0.25	40.0	0.1 J	--	256	0.681	--	--	--	7.95	1040	158
	9/16/2022 10:48	4.1	0.25	50.1	0.09 U	--	246	1.36	--	--	--	7.38	1130	199
	9/19/2022 9:19	7.0	0.25	85.7	0.15 J	--	233	0.693	--	--	--	7.77	1120	151
	9/21/2022 14:01	9.2	0.25	112.7	0.13 J	--	228	0.272	--	--	--	6.93	1010	123
	9/23/2022 10:48	11.1	0.25	135.7	0.16 J	--	224	0.0674	--	--	--	7.31	1060	122
	9/26/2022 10:13	14.1	0.25	172.0	0.27 J	--	220	0.0281	--	--	--	7.37	1130	391
	9/28/2022 10:16	16.1	0.25	196.6	0.26 J	--	231	0.0158	--	--	--	7.60	1050	180
	9/30/2022 10:51	18.1	0.24	219.9	0.24 J	--	236	0.0083	--	--	--	7.42	1010	155
Influent (GC-AP-MW-14)	9/12/22 11:47	0.1	--	--	23.7	34.9	539	40.4	5.59	0.0049	25.7	6.90	970	-34.5
	9/13/22 8:07	1.0	--	--	15.1	34.8	572	--	--	--	--	6.59	1040	-44.4
	9/14/22 7:39	2.0	--	--	18.1	35.7	564	--	--	--	--	6.97	1160	-67.1
	9/15/22 10:33	3.1	--	--	19.1	35.7	585	--	--	--	--	7.64	1180	-78.9
	9/16/22 8:23	4.0	--	--	23.2	35.4	581	--	--	--	--	6.70	1170	-81.8
	9/19/22 9:05	7.0	--	--	20.4	34.8	556	--	--	--	--	7.45	1490	-86.1
	9/21/22 11:43	9.1	--	--	18.6	34.7	545	--	--	--	--	6.55	1400	-84.4
	9/23/22 7:48	11.0	--	--	15.6	34.5	546	--	--	--	--	6.75	1510	-101
	9/26/22 7:48	14.0	--	--	13.9	34.3	534	--	--	--	--	6.60	1500	-85.7
	9/28/22 8:03	16.0	--	--	12.7	34.0	572	--	--	--	--	6.93	1460	-111
	9/30/2022 8:38	18.0	--	--	10.0	31.9	577	--	--	--	--	6.56	1440	-92.0
Effluent (GC-AP-MW-14, Reagent Mix C column)	9/12/22 11:38	0.1	0.28	1.8	0.1 J	0.009 U	0.93	0.0027	0.00023	0.0304	44.5	6.89	1860	247
	9/13/22 10:28	1.1	0.28	14.5	0.16 J	0.036	377	0.0017 J	0.00074	0.0186	90.7	8.69	1170	-321
	9/14/2022 9:52	2.1	0.27	27.6	0.11 J	0.035	423	0.0014 J	0.00306	0.0203	83.6	8.33	1270	49.4
	9/15/2022 15:02	3.3	0.27	43.9	0.14 J	0.986	471	0.0018 J	0.625	0.0098	51.5	8.20	1250	181
	9/16/2022 10:49	4.1	0.28	55.0	0.09 U	0.517	483	0.0016 J	0.863	0.0083	50.1	7.77	1260	196
	9/19/2022 9:20	7.0	0.27	94.2	0.13 J	3.41	443	0.0066	2.35	0.0047	42.8	7.66	1400	182
	9/21/2022 14:02	9.2	0.28	124.0	0.09 J	1.73	463	0.0066	2.42	0.0044	35.9	6.83	1390	141
	9/23/2022 10:49	11.1	0.28	149.5	0.09 U	1.06	435	0.0067	1.69	0.0043	36.1	7.15	1440	145
	9/26/2022 10:14	14.1	0.28	189.9	0.12 J	0.260	431	0.0050	0.746	0.0045	32.0	7.14	1500	428
	9/28/2022 10:17	16.1	0.29	217.8	0.10 J	0.282	488	0.0027	1.15	0.0044	29.2	7.42	1390	185
	9/30/2022 10:52	18.1	0.28	245.9	0.10 J	0.291	498	0.0016 J	1.24	0.0049	28.1	7.09	1360	159
Effluent (GC-AP-MW-14, FB-Fe+ column)	9/12/22 11:39	0.1	0.25	1.6	0.25 J	0.021	9.59	0.0058	--	--	--	7.79	657	216
	9/13/22 10:29	1.1	0.25	13.2	0.16 J	4.77	550	15.1	--	--	--	7.87	1020	13.9
	9/14/2022 9:53	2.1	0.25	25.1	0.23 J	8.21	560	16.8	--	--	--	7.52	1120	-60.7
	9/15/2022 15:03	3.3	0.25	39.9	0.21 J	12.4	565	9.96	--	--	--	7.82	1200	-48.2
	9/16/2022 10:50	4.1	0.25	50.0	0.21 J	11.5	556	11.6	--	--	--	7.34	1070	10.9
	9/19/2022 9:21	7.0	0.25	85.5	0.21 J	14.6	529	6.46	--	--	--	7.65	1480	-55.0
	9/21/2022 14:03	9.2	0.25	112.7	0.23 J	11.1	517	4.25	--	--	--	6.74	1310	-53.1
	9/23/2022 10:50	11.1	0.25	135.9	0.19 J	8.76	525	1.57	--	--	--	6.97	1340	-7.8
	9/26/2022 10:15	14.1	0.26	172.9	0.25 J	7.40	504	2.15	--	--	--	7.01	1460	-12.3
	9/28/2022 10:18	16.1	0.26	198.4	0.23 J	7.73	528	1.16	--	--	--	7.29	1370	188
	9/30/2022 10:53	18.1	0.26	224.2	0.22 J	6.38	538	0.890	--	--	--	7.06	1330	179
Influent (GC-AP-MW-17)	9/12/22 11:48	0.1	--	--	401	--	570	16.7	1.82	0.0045	23.8	6.60	9.36	-64.0
	9/13/22 8:08	1.0	--	--	365	--	590	--	--	--	--	6.97	976	-72.2
	9/14/22 7:40	2.0	--	--	307	--	584	--	--	--	--	7.00	1130	-81.8
	9/15/22 10:34	3.1	--	--	276	--	631	--	--	--	--	7.62	1150	-89.4
	9/16/22 8:24	4.0	--	--	260	--	605	--	--	--	--	6.95	1120	-101
	9/19/22 9:06	7.0	--	--	188	--	578	--	--	--	--	7.83	1520	-101
	9/21/22 11:44	9.1	--	--	155	--	568	--	--	--	--	6.99	1360	-85.6
	9/23/22 7:49	11.0	--	--	134	--	562	--	--	--	--	7.10	1440	-106
	9/26/22 7:49	14.0	--	--	73.8	--	555	--	--	--	--	6.94	1450	-88.4
	9/28/22 8:04	16.0	--	--	43.9	--	593	--	--	--	--	7.57	1400	-50.8
	9/30/2022 8:39	18.0	--	--	25.1	--	603	--	--	--	--	7.13	1390	-67.7

Table 18
Column Test Results

Sample	Sampling Date-Time	Elapsed Time (days)	Flow Rate (mL/min)	Pore Volume Treated	Dissolved COIs (µg/L)			Dissolved Amendment Constituents (mg/L)				Water Quality Parameters		
					Arsenic	Cobalt	Lithium	Iron	Manganese	Aluminum	Magnesium	pH	SC (µS/cm)	ORP (mV)
Effluent (GC-AP-MW-17, Reagent Mix C column)	9/12/22 11:40	0.1	0.30	1.9	0.17 J	--	24	0.0019 J	0.00037	0.0269	38.6	7.41	3120	367
	9/13/22 10:30	1.1	0.29	15.6	0.21 J	--	457	0.0025	0.0004	0.0173	75.8	8.57	1150	126
	9/14/2022 9:54	2.1	0.30	29.7	0.18 J	--	531	0.0016 J	0.00162	0.023	58.3	7.97	1120	37.3
	9/15/2022 15:04	3.3	0.29	47.1	0.19 J	--	540	0.0022	0.00368	0.027	58	8.13	1200	149
	9/16/2022 10:51	4.1	0.30	59.0	0.17 J	--	521	0.0028	0.00327	0.0219	50.9	7.91	1380	-327
	9/19/2022 9:22	7.0	0.29	100.7	0.16 J	--	511	0.0039	0.00438	0.009	36.5	7.65	1370	129
	9/21/2022 14:04	9.2	0.30	132.4	0.13 J	--	522	0.0032	0.00337	0.0071	31.6	7.23	1360	57.8
	9/23/2022 10:51	11.1	0.10	141.3	0.20 J	--	437	0.0047	0.00455	0.0132	30.7	6.88	1390	130
	9/26/2022 10:16	14.1	0.26	179.6	0.16 J	--	516	0.0022	0.00482	0.0078	28.1	7.38	1460	140
	9/28/2022 10:19	16.1	0.27	205.6	0.21 J	--	552	0.0020	0.0047	0.0086	26.0	7.96	1390	178
	9/30/2022 10:54	18.1	0.26	231.6	0.18 J	--	584	0.0031	0.00461	0.0091	26.3	7.65	1360	168
Effluent (GC-AP-MW-17, FB-Fe+ column)	9/12/22 11:41	0.1	0.29	1.9	0.5 U	--	3.35	1.35	--	--	--	7.14	8240	302
	9/13/22 10:31	1.1	0.29	15.4	0.9	--	518	4.13	--	--	--	7.82	921	-9.3
	9/14/2022 9:55	2.1	0.29	29.2	0.77	--	575	2.44	--	--	--	7.80	1010	-1.9
	9/15/2022 15:05	3.3	0.29	46.4	0.85	--	599	0.647	--	--	--	8.04	1110	192
	9/16/2022 10:52	4.1	0.29	58.1	0.81	--	600	0.961	--	--	--	7.98	1080	-334
	9/19/2022 9:23	7.0	0.29	99.2	0.74	--	563	0.571	--	--	--	7.64	1270	156
	9/21/2022 14:05	9.2	0.29	130.3	0.74	--	552	0.0628	--	--	--	7.10	1310	84.5
	9/23/2022 10:52	11.1	0.23	151.0	0.67	--	514	0.164	--	--	--	7.38	1340	26.3
	9/26/2022 10:17	14.1	0.26	189.0	0.83	--	552	0.0211	--	--	--	7.39	1420	149
	9/28/2022 10:20	16.1	0.26	214.7	0.75	--	580	0.0150	--	--	--	7.87	1390	201
	9/30/2022 10:55	18.1	0.26	240.4	0.68	--	592	0.0186	--	--	--	7.55	1370	172
Influent (GC-AP-MW-44H)	9/12/22 11:49	0.1	--	--	--	304	--	0.0042	9.35	0.0046	15.8	6.16	866	209
	9/13/22 8:09	1.0	--	--	--	310	--	--	--	--	--	7.24	879	220
	9/14/22 7:41	2.0	--	--	--	312	--	--	--	--	--	7.09	979	544
	9/15/22 10:35	3.1	--	--	--	298	--	--	--	--	--	8.32	1050	198
	9/16/22 8:25	4.0	--	--	--	307	--	--	--	--	--	7.32	1030	118
	9/19/22 9:07	7.0	--	--	--	285	--	--	--	--	--	7.46	1320	91.6
	9/21/22 11:45	9.1	--	--	--	290	--	--	--	--	--	6.77	1290	108
	9/23/22 7:50	11.0	--	--	--	281	--	--	--	--	--	6.74	1370	96.1
	9/26/22 7:50	14.0	--	--	--	285	--	--	--	--	--	6.90	1390	511
	9/28/22 8:05	16.0	--	--	--	308	--	--	--	--	--	7.33	1350	121
	9/30/22 8:40	18.0	--	--	--	300	--	--	--	--	--	7.10	1330	80.2
Effluent (GC-AP-MW-44H, Reagent Mix C column)	9/12/22 11:42	0.1	0.25	1.6	--	0.013 J	--	0.0013 J	0.00023	0.0367	38.1	7.94	240	237
	9/13/22 10:32	1.1	0.25	13.3	--	0.131	--	0.0027	0.00101	0.014	53.4	8.79	896	86.0
	9/14/2022 9:56	2.1	0.25	25.2	--	0.136	--	0.0023	0.00049	0.0177	42.9	8.39	1030	61.5
	9/15/2022 15:06	3.3	0.25	40.0	--	0.135	--	0.0023	0.00238	0.0296	39.0	8.50	1160	152
	9/16/2022 10:53	4.1	0.25	50.2	--	0.173	--	0.0022	0.00102	0.026	37.0	8.15	1300	180
	9/19/2022 9:24	7.0	0.25	85.8	--	0.300	--	0.0017 J	0.350	0.0232	32.0	7.93	1480	144
	9/21/2022 14:06	9.2	0.25	112.7	--	0.393	--	0.0045	0.477	0.0242	30.2	7.44	1320	90.3
	9/23/2022 10:53	11.1	0.25	122.4	--	0.317	--	0.0041	0.078	0.0248	26.8	7.68	1370	81.3
	9/26/2022 10:18	14.1	0.25	158.5	--	0.385	--	0.0036	0.662	0.0194	24.6	7.57	1430	143
	9/28/2022 10:21	16.1	0.25	183.1	--	0.421	--	0.0021	1.42	0.0179	21.9	7.84	1360	203
	9/30/2022 10:56	18.1	0.25	207.7	--	0.579	--	0.0021	2.41	0.0145	20.4	7.45	1330	174
Effluent (GC-AP-MW-44H, FB-Fe+ column)	9/12/22 11:43	0.1	0.26	1.7	--	0.196	--	0.0019 J	--	--	--	7.76	1020	213
	9/13/22 10:33	1.1	0.26	13.6	--	15.3	--	0.983	--	--	--	8.27	814	128
	9/14/2022 9:57	2.1	0.26	25.9	--	22.4	--	6.03	--	--	--	7.80	948	-44.0
	9/15/2022 15:07	3.3	0.26	41.1	--	31.1	--	7.89	--	--	--	8.15	1090	-14.4
	9/16/2022 10:54	4.1	0.26	51.5	--	48.1	--	7.86	--	--	--	7.66	1080	-335
	9/19/2022 9:25	7.0	0.25	87.9	--	46.5	--	6.98	--	--	--	7.20	1440	-15.8
	9/21/2022 14:07	9.2	0.26	115.6	--	42.5	--	5.06	--	--	--	6.74	1250	-35.3
	9/23/2022 10:54	11.1	0.26	134.0	--	24.1	--	3.38	--	--	--	6.92	1310	-14.5
	9/26/2022 10:19	14.1	0.26	171.0	--	40.9	--	0.889	--	--	--	7.02	1340	101
	9/28/2022 10:22	16.1	0.26	196.3	--	38.8	2.71	--	--	--	--	7.18	1320	230
	9/30/2022 10:57	18.1	0.26	221.6	--	34.7	--	0.0583	--	--	--	6.86	1290	186

Notes:

Amendment constituents were measured in influent samples on the first day of the experiment to establish baseline concentrations.

Reagent Mix C amendment constituents: iron, aluminum, manganese, and magnesium

FB-Fe+ amendment consituent: iron

1. Flow rate was measured in effluent samples only.

--: not applicable

µg/L: microgram per liter

µS/cm: microsiemen per centimeter

COI: constituent of interest

FB-Fe+: Ferroblack-Fe+

J: indicates the result is an estimated value

mg/L: milligram per liter

mL/min: milliliter per minute

mV: millivolt

ORP: oxidation reduction potential

Reagent Mix C: precipitates collected from reaction of ferric chloride, manganese chloride, and magnesium chloride with potassium permanganate and sodium aluminate at pH 9.5

SC: specific conductivity

U: indicates the compound was analyzed for but not detected (value is set to instrument detection limit).

Table 19
Column Desorption Test Results

Sample	Sampling Date and Time	Elapsed Time (days)	Flow Rate[1] (mL/min)	Pore Volume Treated	Arsenic (µg/L)	Cobalt (µg/L)	Lithium (µg/L)	pH	SC (µS/cm)	ORP (mV)
Effluent (GC-AP-MW-1, Reagent Mix C column)	10/3/2022 18:50	0.4	0.10	1.7	0.7 J	78.8	NA	2.36	1490	527
	10/4/2022 16:49	1.3	0.08	5.4	0.21 J	14.4	NA	3.34	404	347
	10/5/2022 14:20	2.2	0.08	9.1	0.09 J	6.42	NA	3.73	628	323
Effluent (GC-AP-MW-1, FB-Fe+ column)	10/3/2022 14:18	0.2	0.29	2.3	0.95	71.8	NA	2.36	1360	479
	10/4/2022 12:29	1.1	0.29	15.3	0.12 J	4.89	NA	5.81	205	179
	10/5/2022 10:20	2.0	0.29	28.1	0.1 J	0.655	NA	7.08	658	186
Effluent (GC-AP-MW-5, Reagent Mix C column)	10/3/2022 14:19	0.2	0.29	2.4	0.3 J	NA	52.6	6.51	835	527
	10/4/2022 12:30	1.1	0.29	15.5	0.24 J	NA	25.7	6.69	471	120
	10/5/2022 10:21	2.0	0.29	28.5	0.2 J	NA	17.3	7.36	490	179
Effluent (GC-AP-MW-5, FB-Fe+ column)	10/3/2022 14:20	0.2	0.27	2.2	0.56	NA	58.5	7.10	764	423
	10/4/2022 12:31	1.1	0.28	14.7	0.63	NA	36.2	6.64	178	37.4
	10/5/2022 10:22	2.0	0.28	27.1	0.74	NA	24	7.28	397	-9.6
Effluent (GC-AP-MW-10, Reagent Mix C column)	10/3/2022 14:21	0.2	0.25	2.1	0.09 J	NA	129	7.48	638	364
	10/4/2022 12:32	1.1	0.25	13.4	0.25 U	NA	60.6	6.97	212	25.3
	10/5/2022 10:23	2.0	0.25	24.6	0.09 U	NA	31.5	7.41	425	121
Effluent (GC-AP-MW-10, FB-Fe+ column)	10/3/2022 14:22	0.2	0.25	2.1	0.13 J	NA	181	7.37	648	363
	10/4/2022 12:33	1.1	0.25	13.5	0.12 J	NA	78.7	6.76	165	49.2
	10/5/2022 10:24	2.0	0.25	24.7	0.11 J	NA	54	7.10	337	26.2
Effluent (GC-AP-MW-14, Reagent Mix C column)	10/3/2022 14:23	0.2	0.29	2.4	0.09 U	0.182	282	7.40	1000	376
	10/4/2022 12:34	1.1	0.29	15.4	0.25 U	0.06	113	6.83	179	58.6
	10/5/2022 10:25	2.0	0.29	28.3	0.09 U	0.076	80.8	7.38	325	110
Effluent (GC-AP-MW-14, FB-Fe+ column)	10/3/2022 14:24	0.2	0.26	2.2	0.14 J	2.95	282	7.24	766	374
	10/4/2022 13:21	1.1	0.18	14.1	0.11 J	3.96	101	6.84	153	63.3
	10/5/2022 14:21	2.2	0.13	20.7	0.2 U	2.59	92.6	6.67	318	200
Effluent (GC-AP-MW-17, Reagent Mix C column)	10/3/2022 14:25	0.2	0.26	2.2	0.14 J	NA	353	7.81	958	346
	10/4/2022 12:36	1.1	0.26	14.2	0.25 U	NA	93.3	7.00	198	62.3
	10/5/2022 10:27	2.0	0.27	26.0	0.09 U	NA	61.4	7.77	394	130
Effluent (GC-AP-MW-17, FB-Fe+ column)	10/3/2022 14:26	0.2	0.26	2.2	0.38 J	NA	262	7.49	771	333
	10/4/2022 12:37	1.1	0.26	14.0	0.18 J	NA	75.5	6.70	166	77.9
	10/5/2022 10:28	2.0	0.26	25.6	0.19 J	NA	57.2	7.45	303	59.2
Effluent (GC-AP-MW-44H, Reagent Mix C column)	10/3/2022 14:27	0.2	0.25	2.1	NA	0.379	NA	7.83	1080	293
	10/4/2022 12:38	1.1	0.25	13.2	NA	0.093	NA	6.97	191	71.7
	10/5/2022 10:29	2.0	0.25	24.2	NA	0.068	NA	7.85	336	71.1
Effluent (GC-AP-MW-44H, FB-Fe+ column)	10/3/2022 14:28	0.2	0.25	2.1	NA	17.9	NA	7.60	--	300
	10/4/2022 12:39	1.1	0.25	13.6	NA	27.3	NA	6.65	147	23.1
	10/5/2022 10:30	2.0	0.26	25.0	NA	28	NA	7.56	244	42.8
Influent (GC-AP-MW-23)	10/3/2022 14:30	0.2	--	--	0.12 J	0.346	1.35	7.33	231	362
	10/4/2022 16:30	1.3	--	--	0.09 U	0.041	1.37	6.40	129	183
	10/5/2022 8:17	1.9	--	--	0.09 U	0.024	1.4	6.66	258	338

Notes:

Desorption test was conducted after termination of column test by flowing GC-AP-MW-23 groundwater through all columns for 2 days.

1. Flow rate was measured in effluent samples only.

--: not applicable

µg/L: microgram per liter

µS/cm: microsiemen per centimeter

COI: constituent of interest

FB-Fe+: Ferroblack-Fe+

J: indicates the result is an estimated value

mL/min: milliliter per minute

mV: millivolt

NA: not analyzed; parameter not a COI for location

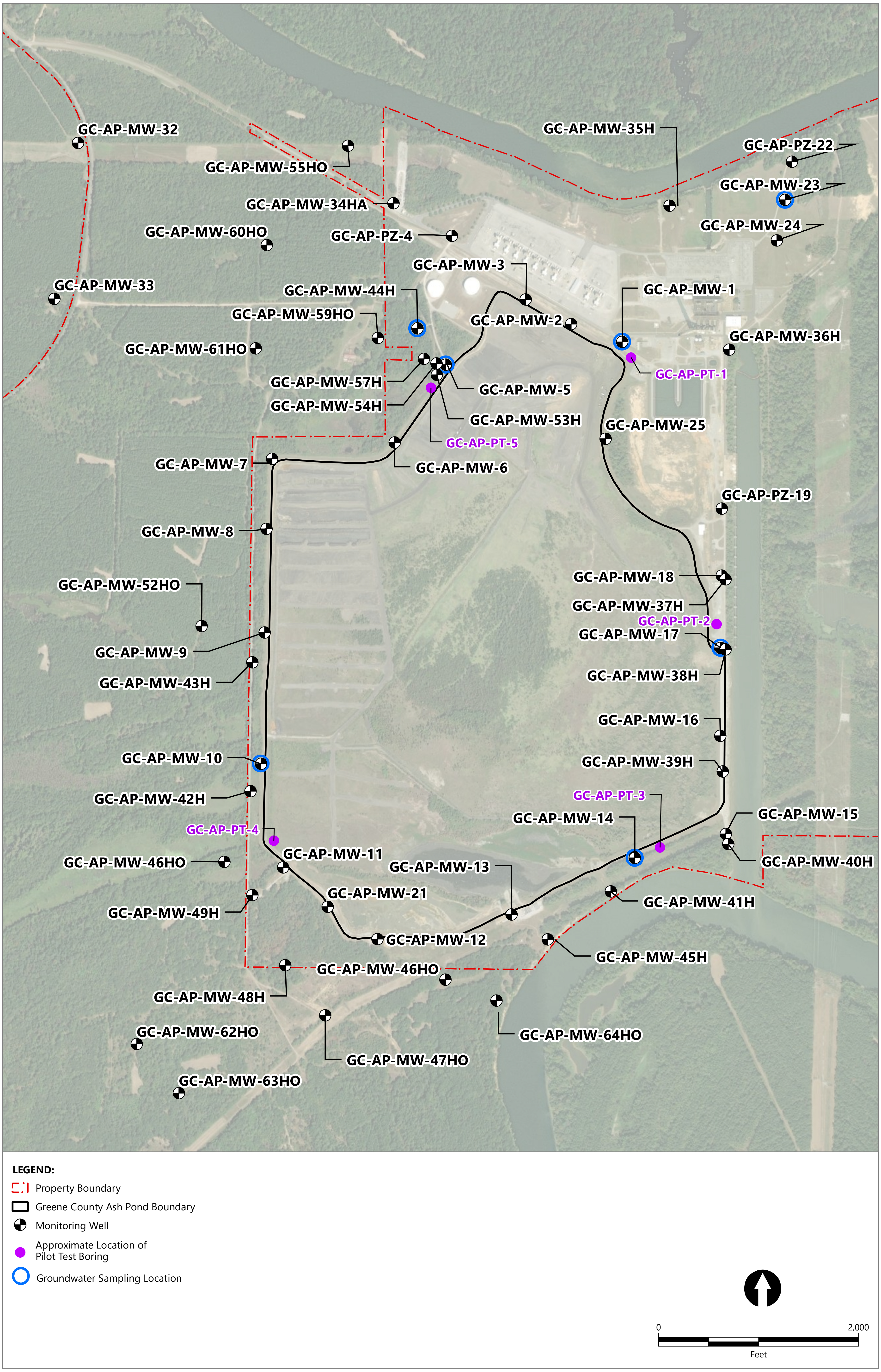
ORP: oxidation reduction potential

Reagent Mix C: precipitates collected from reaction of ferric chloride, manganese chloride, and magnesium chloride, with potassium permanganate and sodium aluminate at pH 9.5

SC: specific conductivity

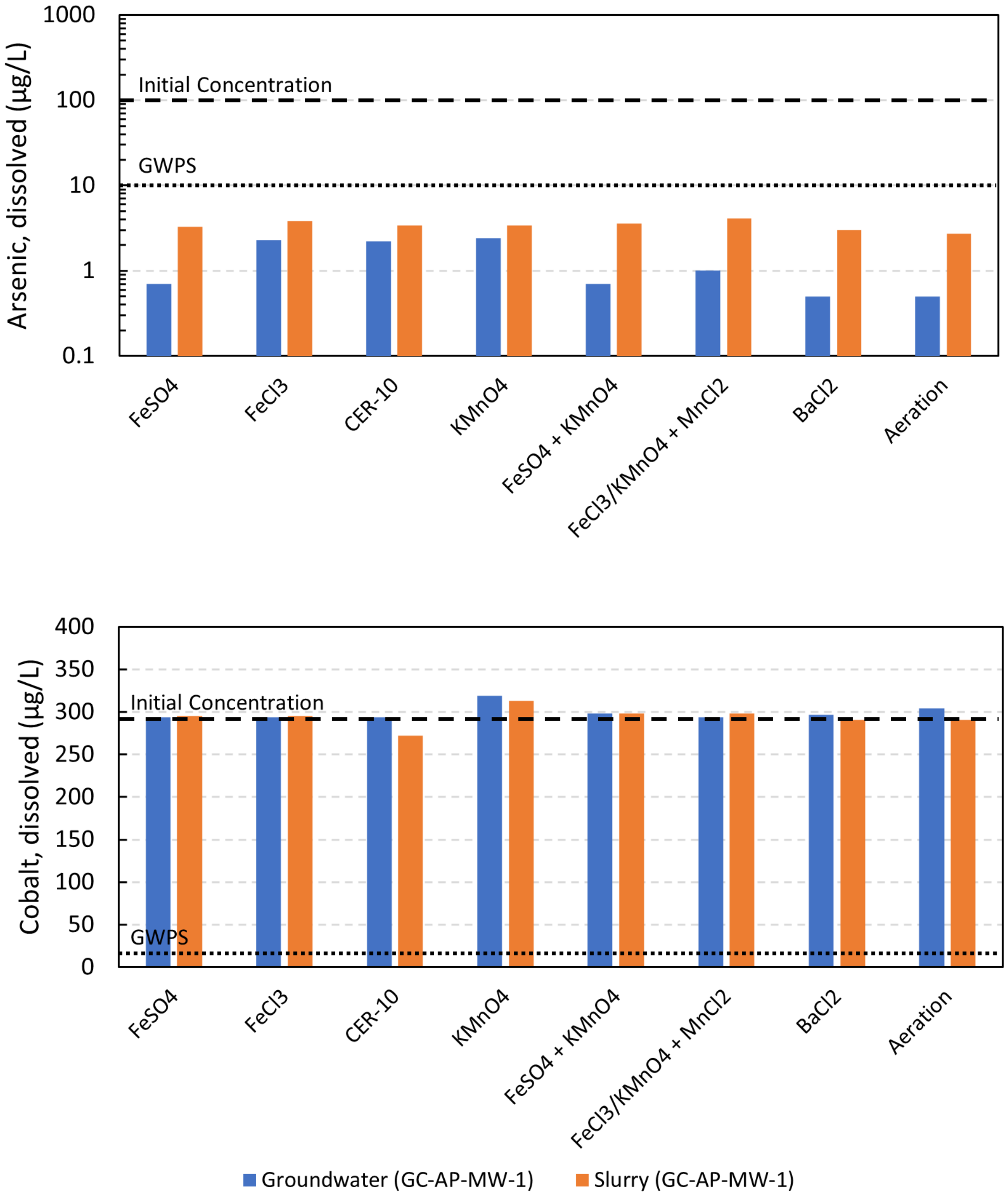
U: indicates the compound was analyzed for but not detected (Value is set to instrument detection limit.)

Figures



Filepath: \\orcas\GIS\Jobs\SouthernCompany_1114\GreeneCounty\Maps\2022_TreatabilityStudy_Results\AQ_GC_Figure01_TreatabilityStudy_SamplingLocations.mxd

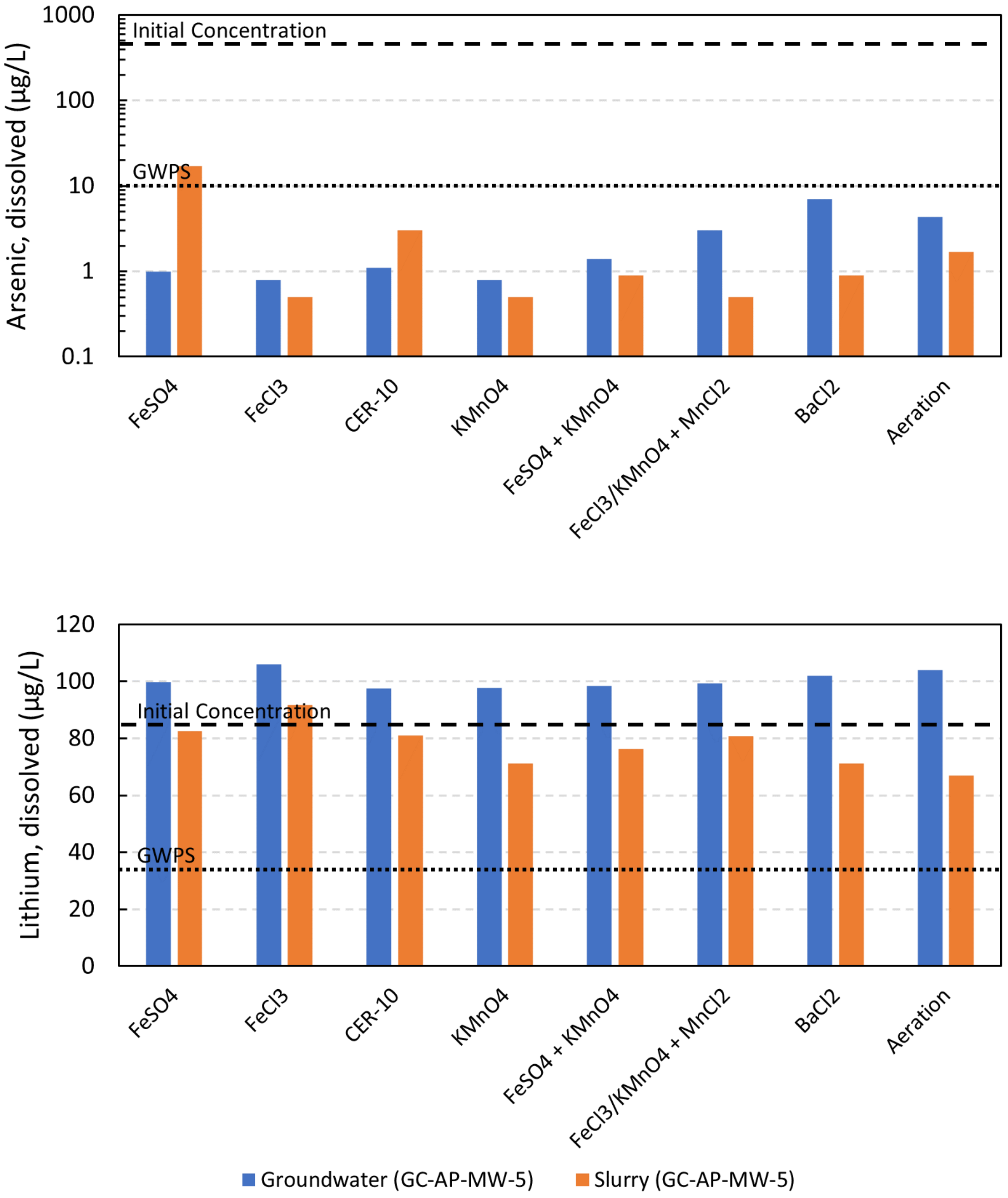
Figure 1
Sampling Locations
Laboratory Treatability Study Results
Plant Greene County



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

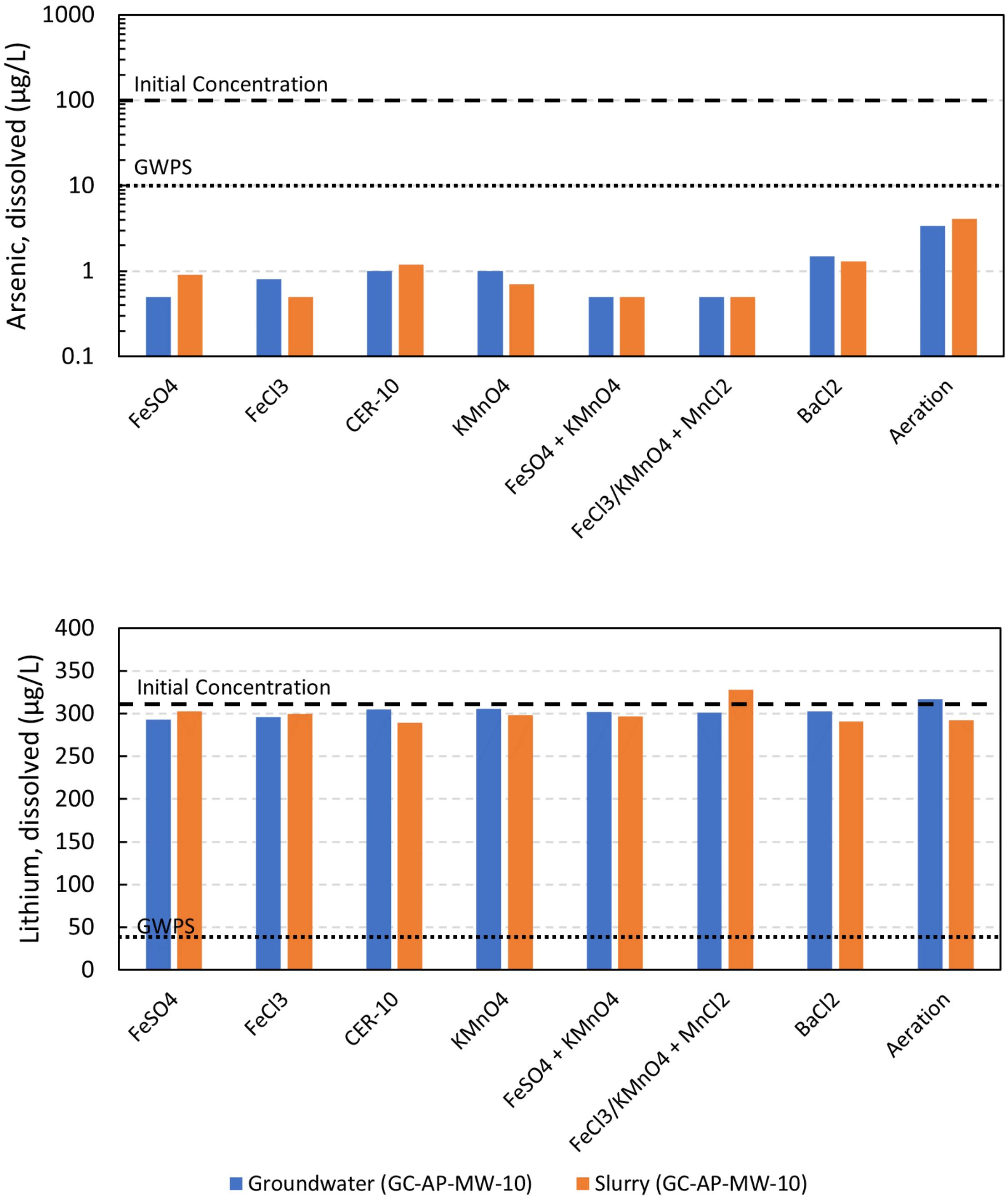
Figure 2
Screening Batch Test Results for GC-AP-MW-1

Laboratory Treatability Study Results
Plant Greene County



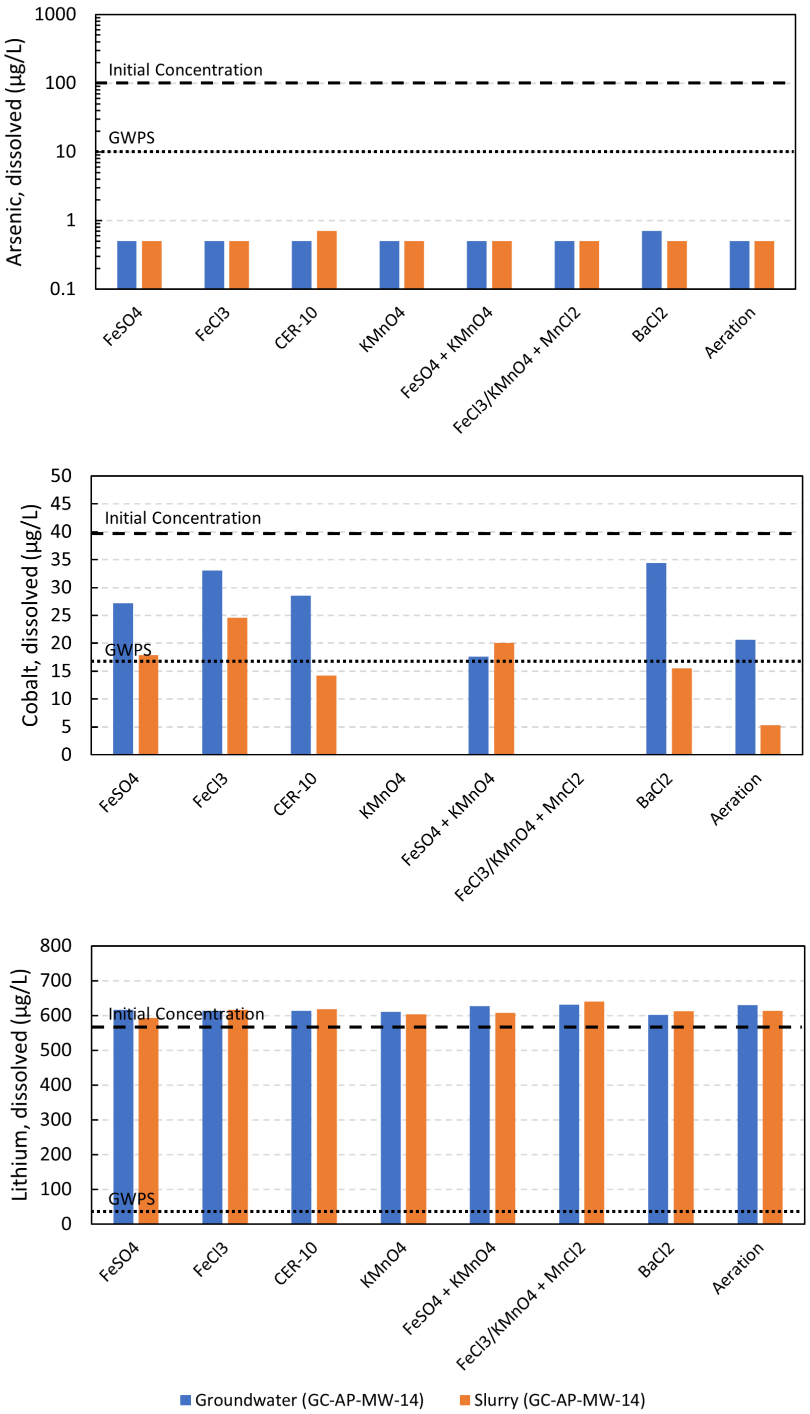
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 3
Screening Batch Test Results for GC-AP-MW-5



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

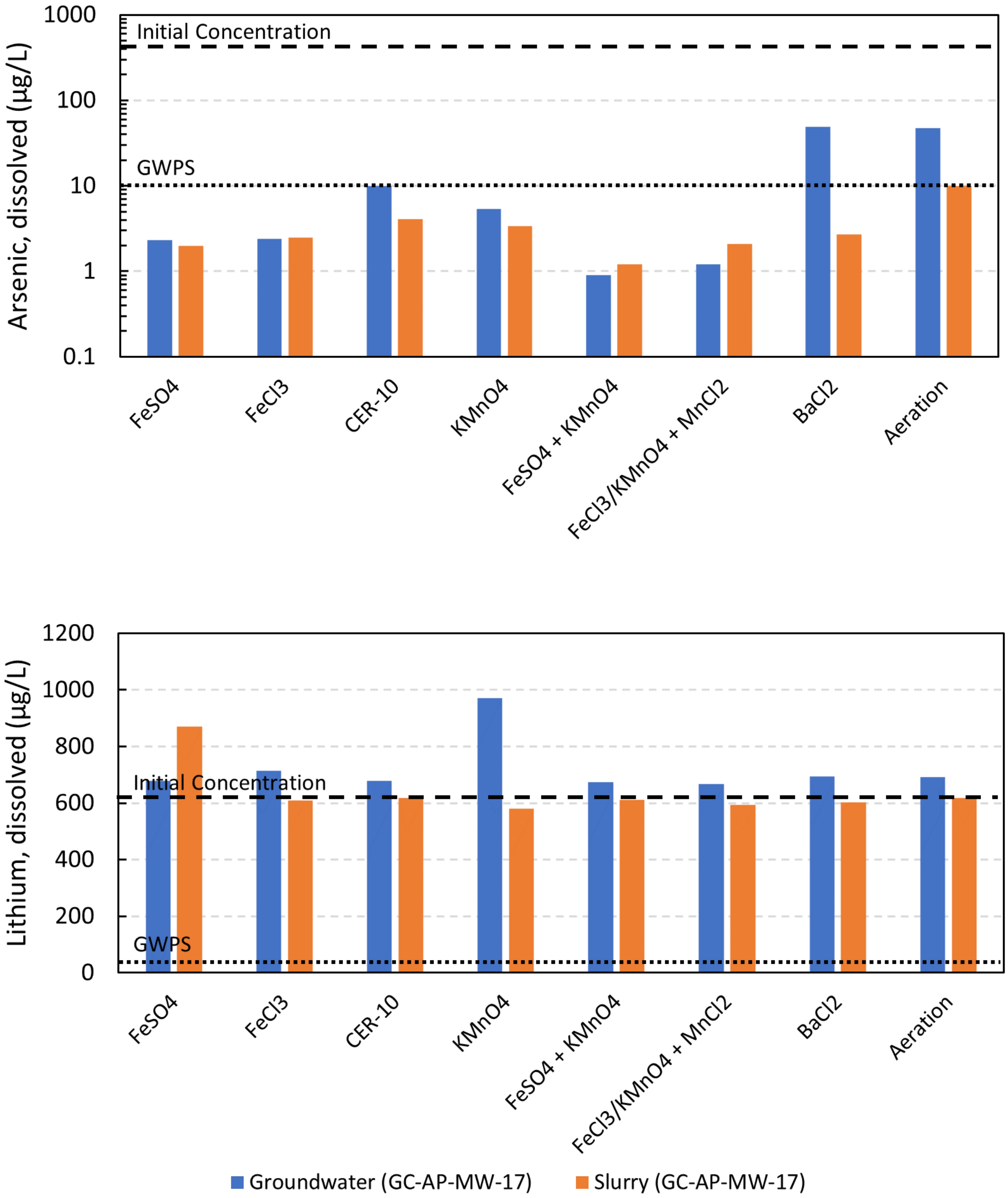
Figure 4
Screening Batch Test Results for GC-AP-MW-10



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

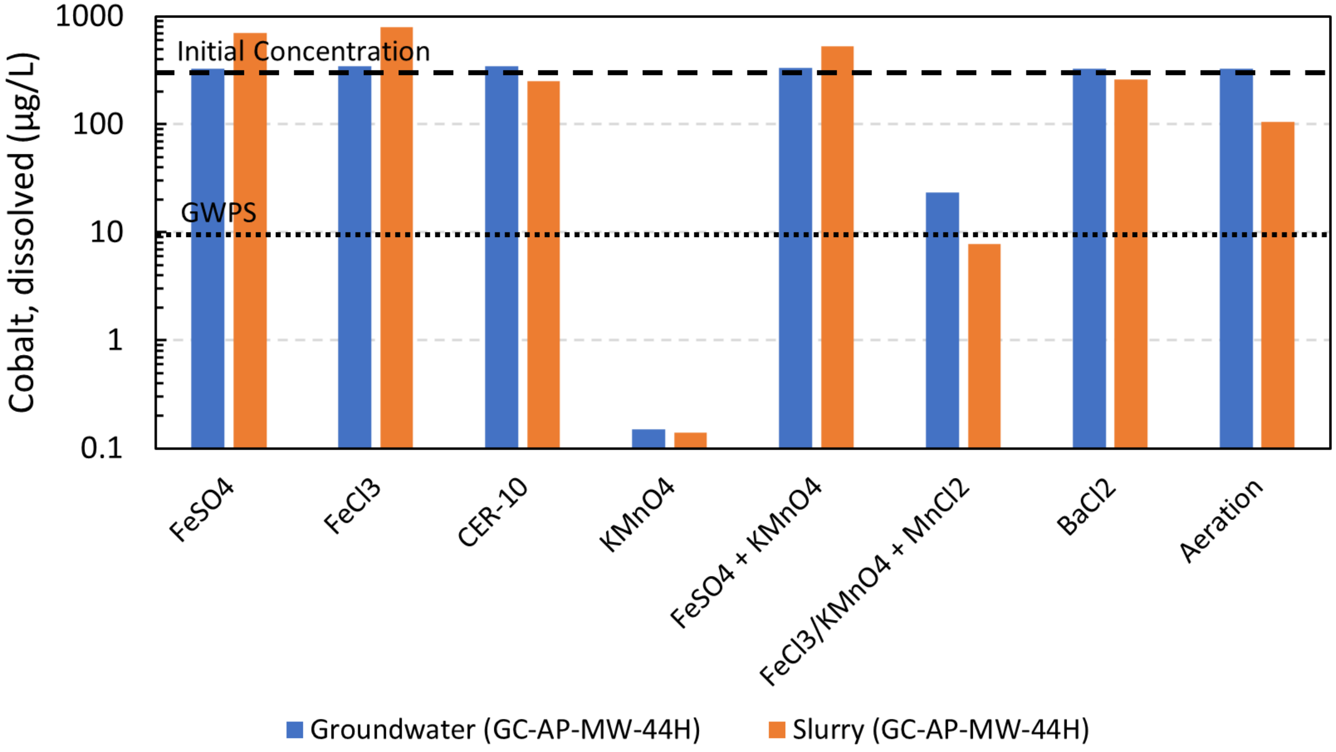
ANCHOR QEA

Figure 5
Screening Batch Test Results for GC-AP-MW-14
Laboratory Treatability Study Results
Plant Greene County



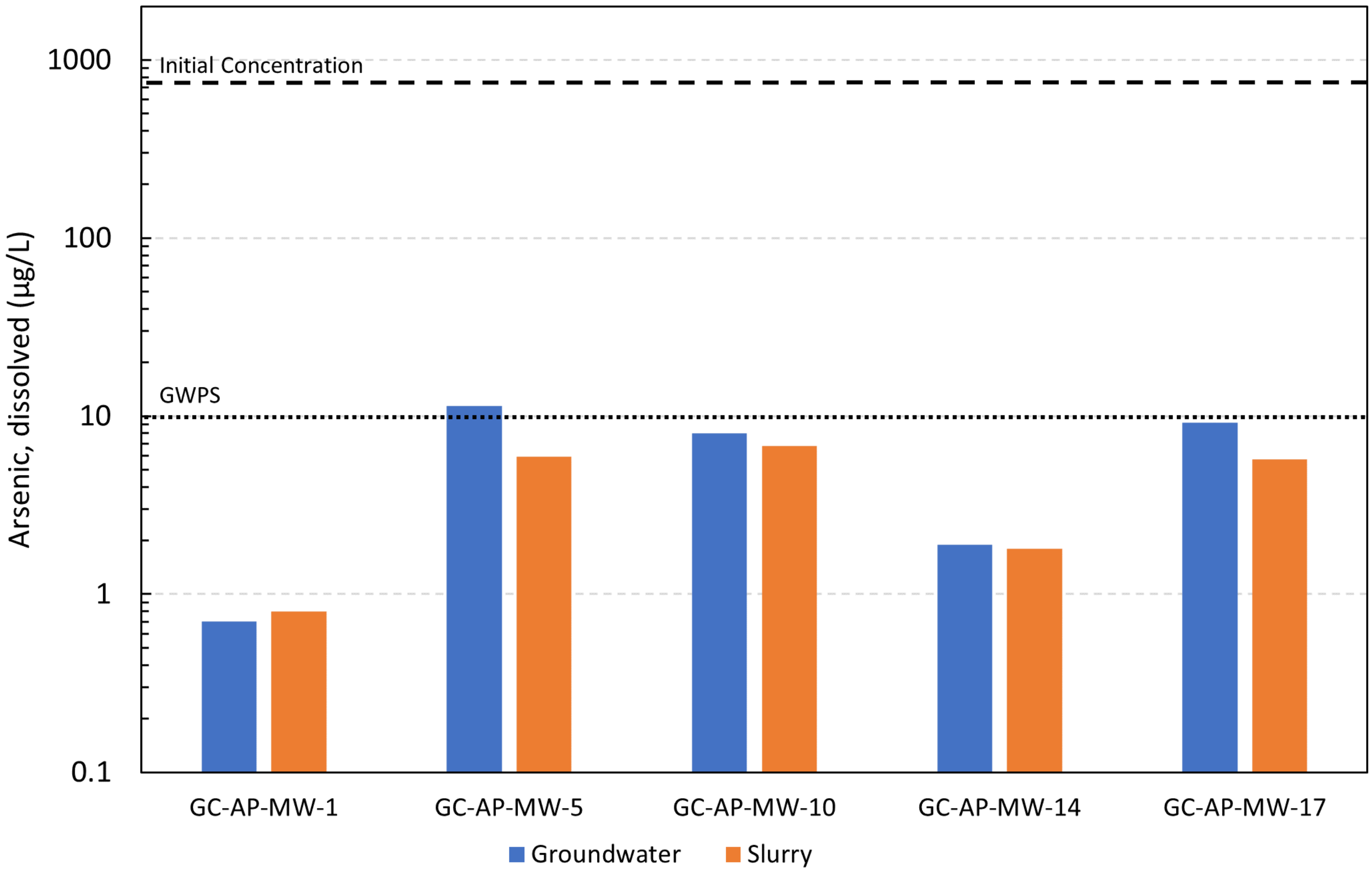
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 6
Screening Batch Test Results for GC-AP-MW-17



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 7
Screening Batch Test Results for GC-AP-MW-44H

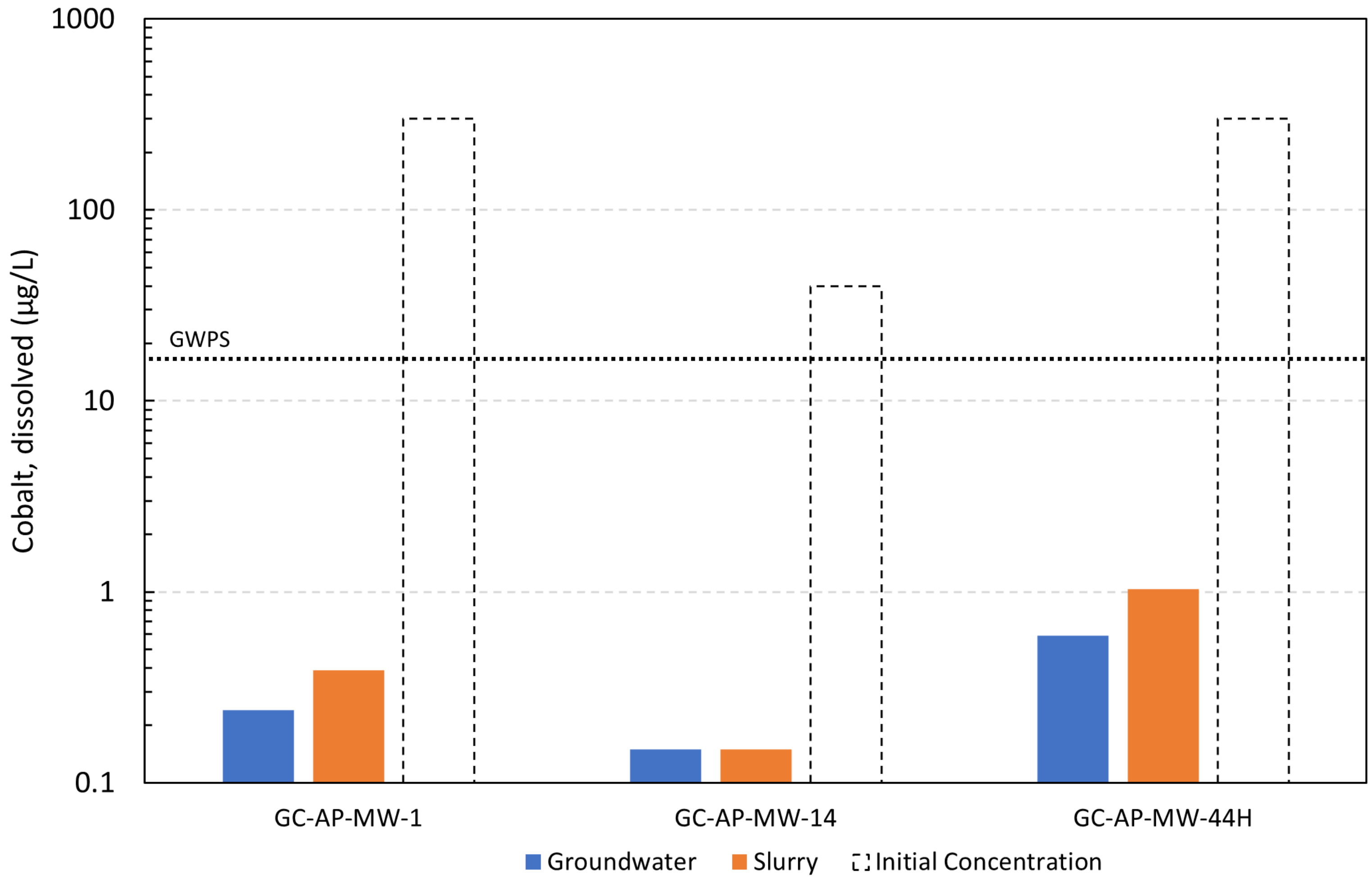


Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 8

Screening Batch Test Results of FerroBlack-Fe+ for Arsenic

Laboratory Treatability Study Results
Plant Greene County

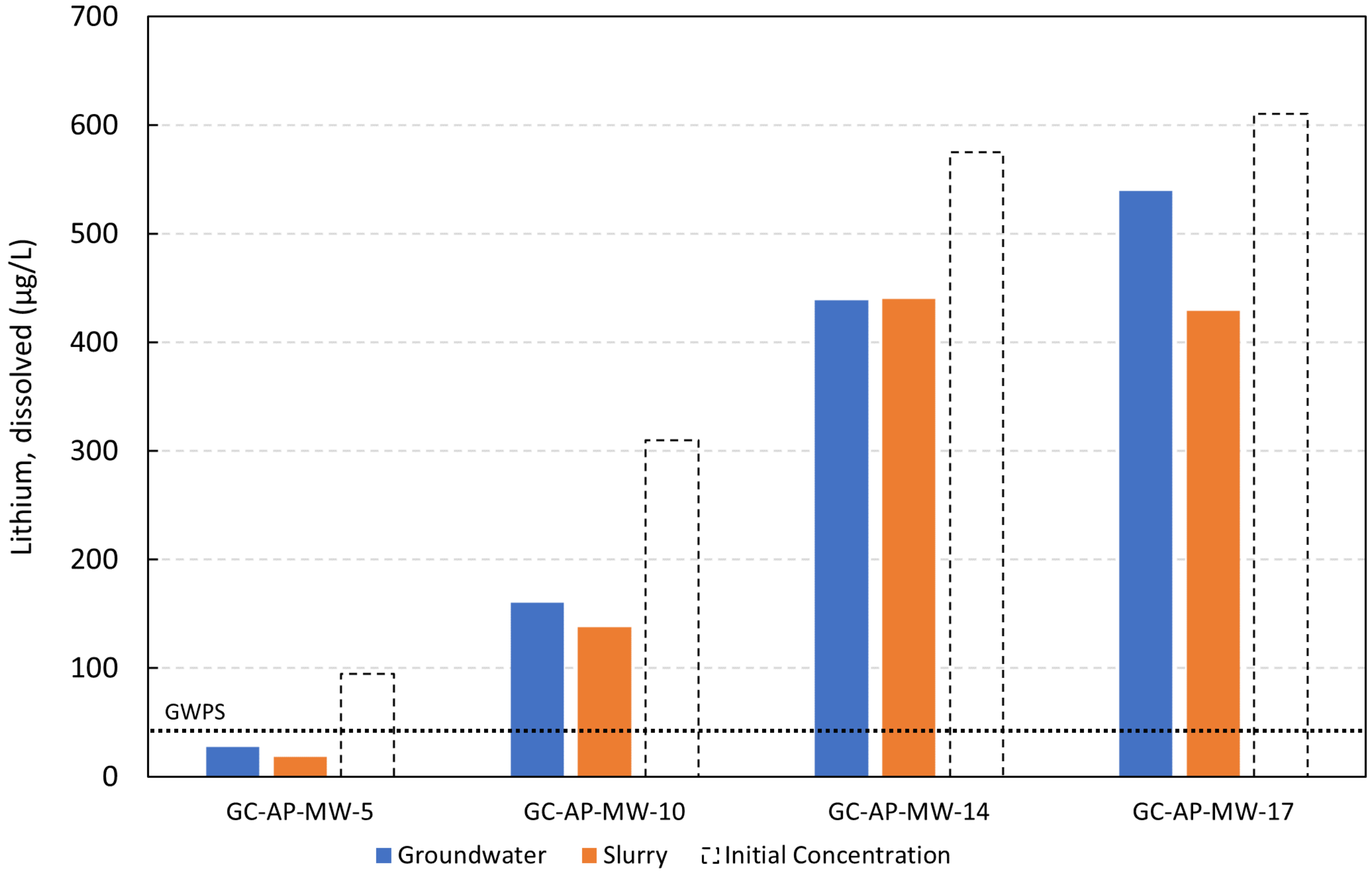


Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures\Figure 9 - Screening Batch Tests Results of FerroBlack-Fe+ for Co.docx

ANCHOR QEA

Figure 9
Screening Batch Test Results of FerroBlack-Fe+ for Cobalt
Laboratory Treatability Study Results
Plant Greene County

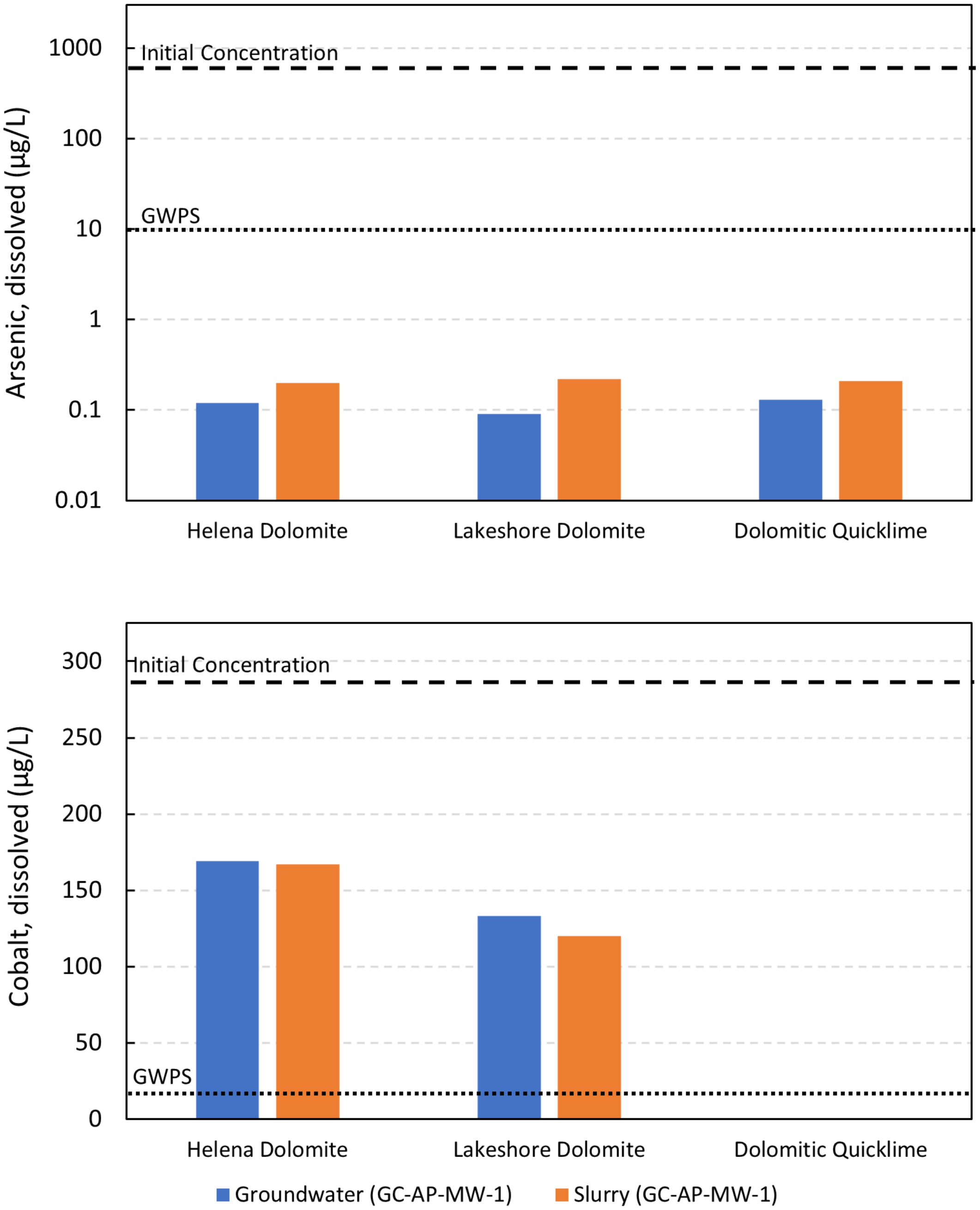


Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures\Figure 10 - Screening Batch Tests Results of FerroBlack-Fe+ for Li.docx

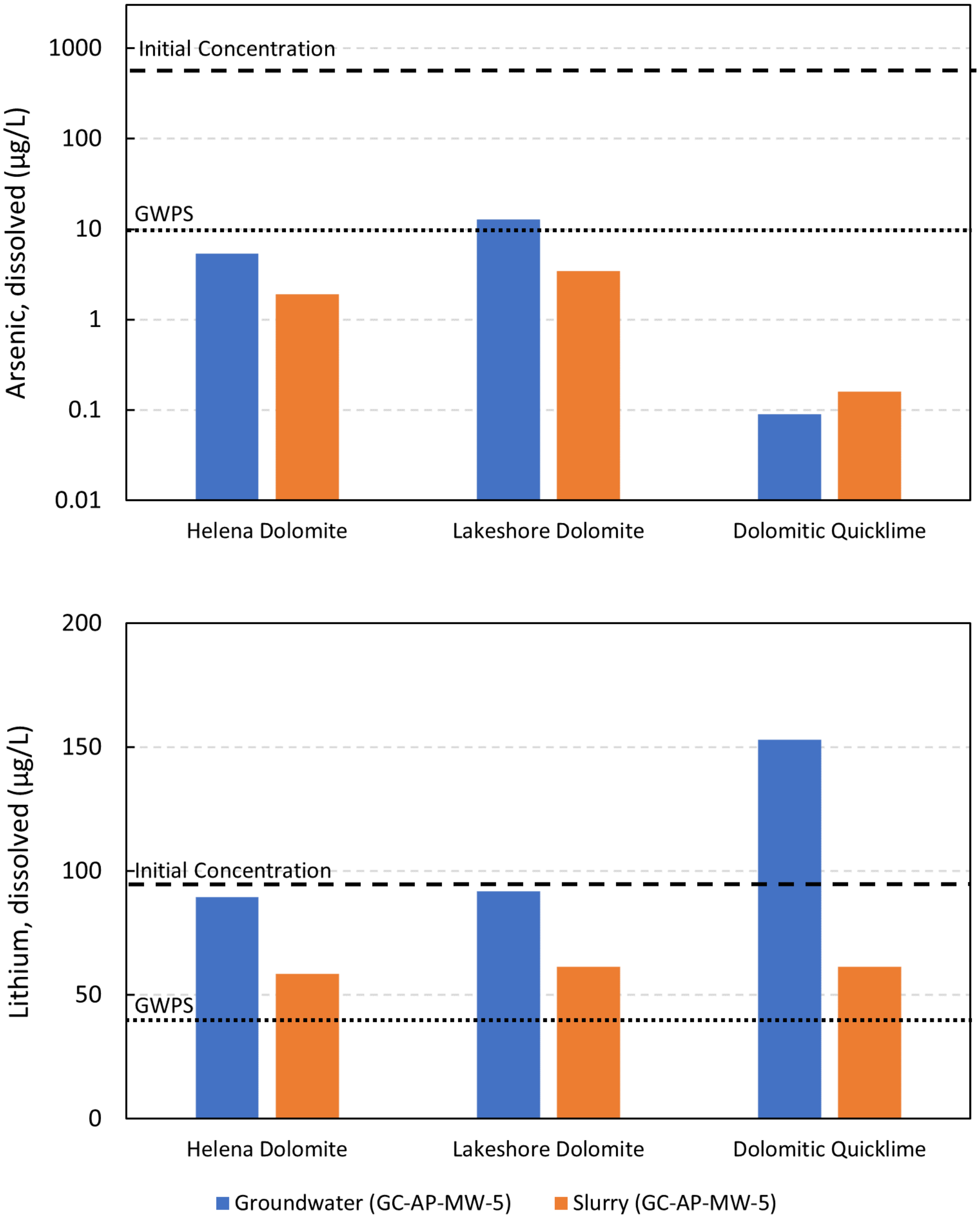
ANCHOR QEA

Figure 10
Screening Batch Test Results of FerroBlack-Fe+ for Lithium
Laboratory Treatability Study Results
Plant Greene County



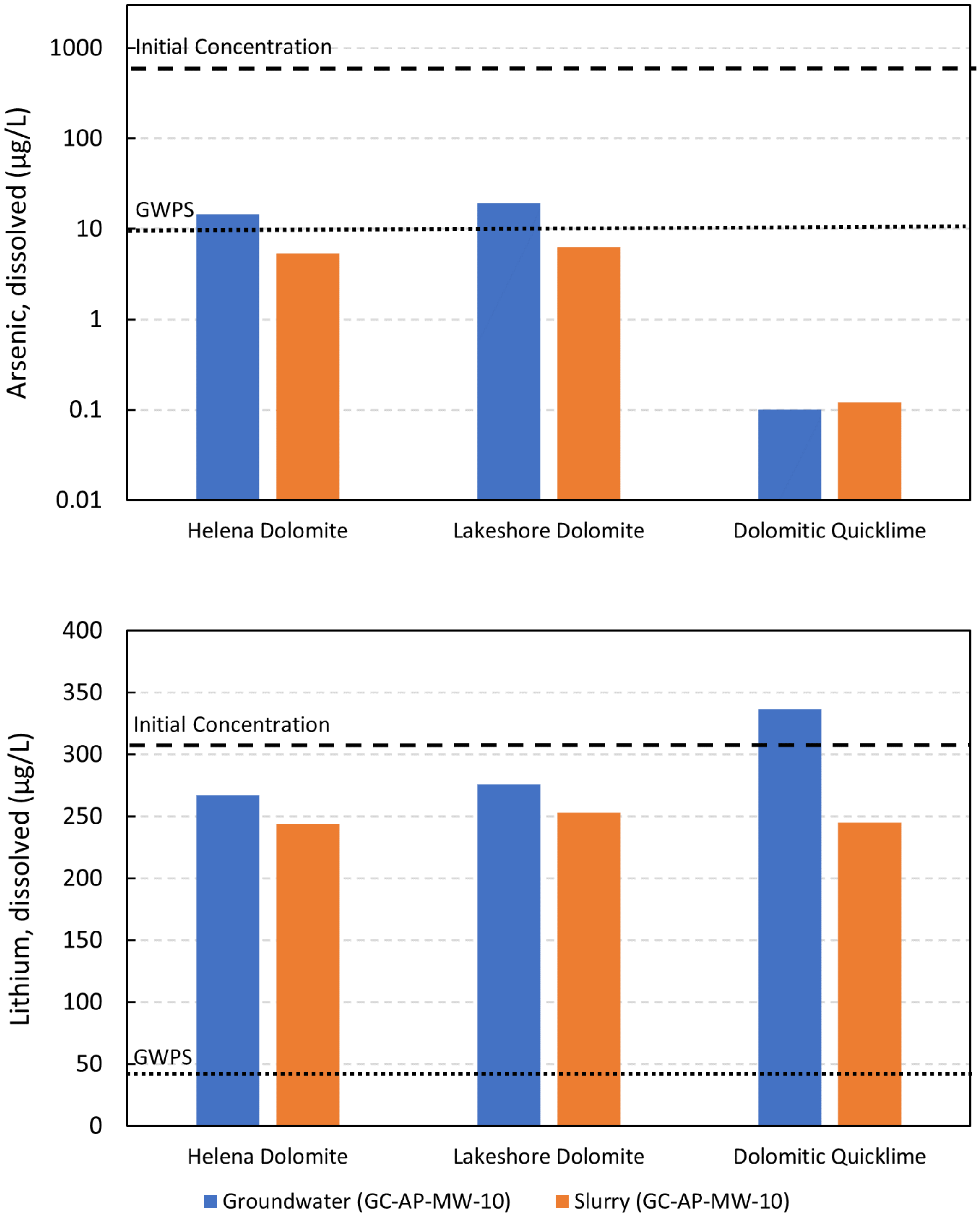
Notes:
Cobalt in the dolomitic quicklime screening batch tests was detected at concentrations too low to be seen on the bar chart.
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 11
Screening Batch Test Results of Dolomite Fines and Dolomitic Quicklime for GC-AP-MW-1



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

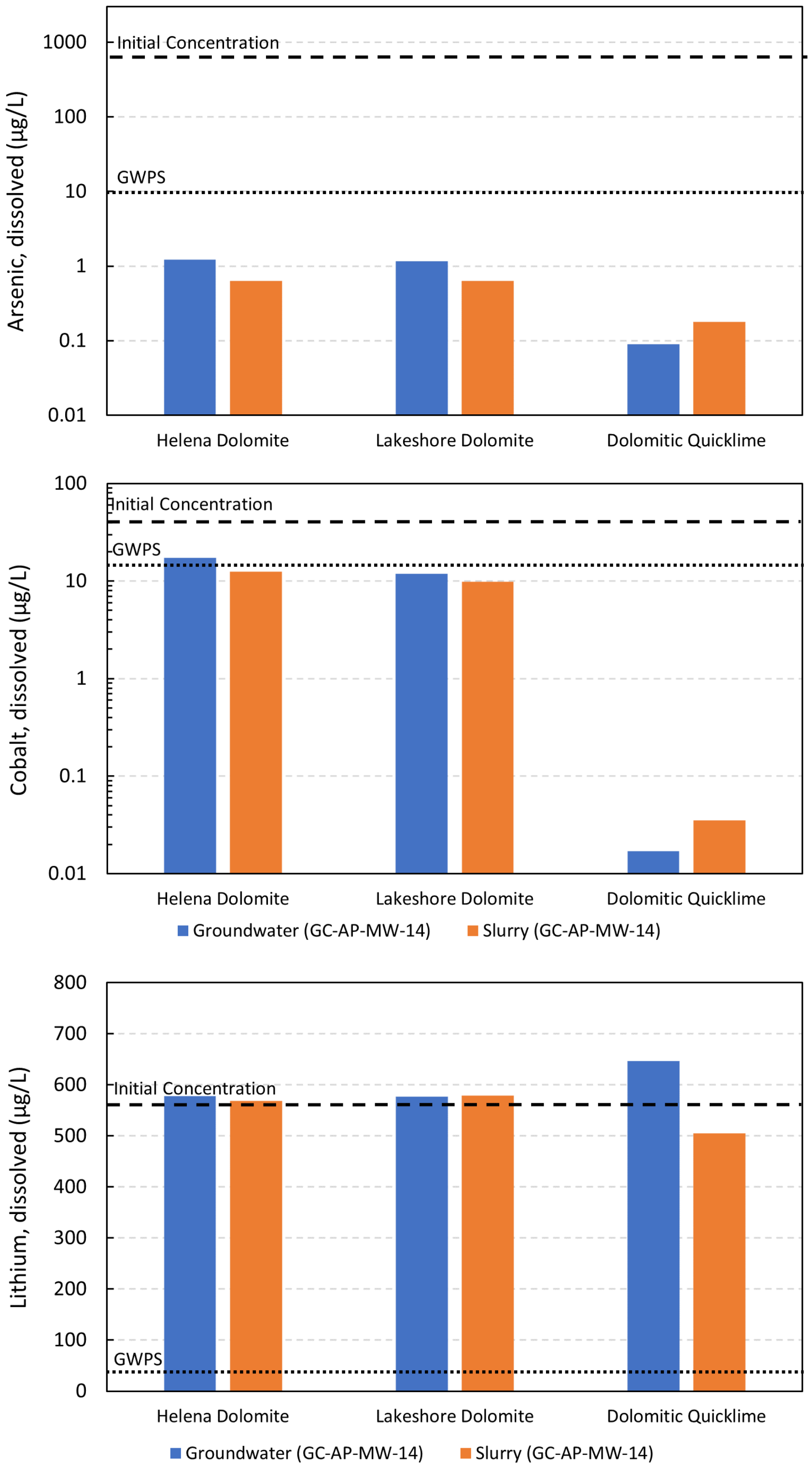
Figure 12
Screening Batch Test Results of Dolomite Fines and Dolomitic Quicklime for GC-AP-MW-5



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

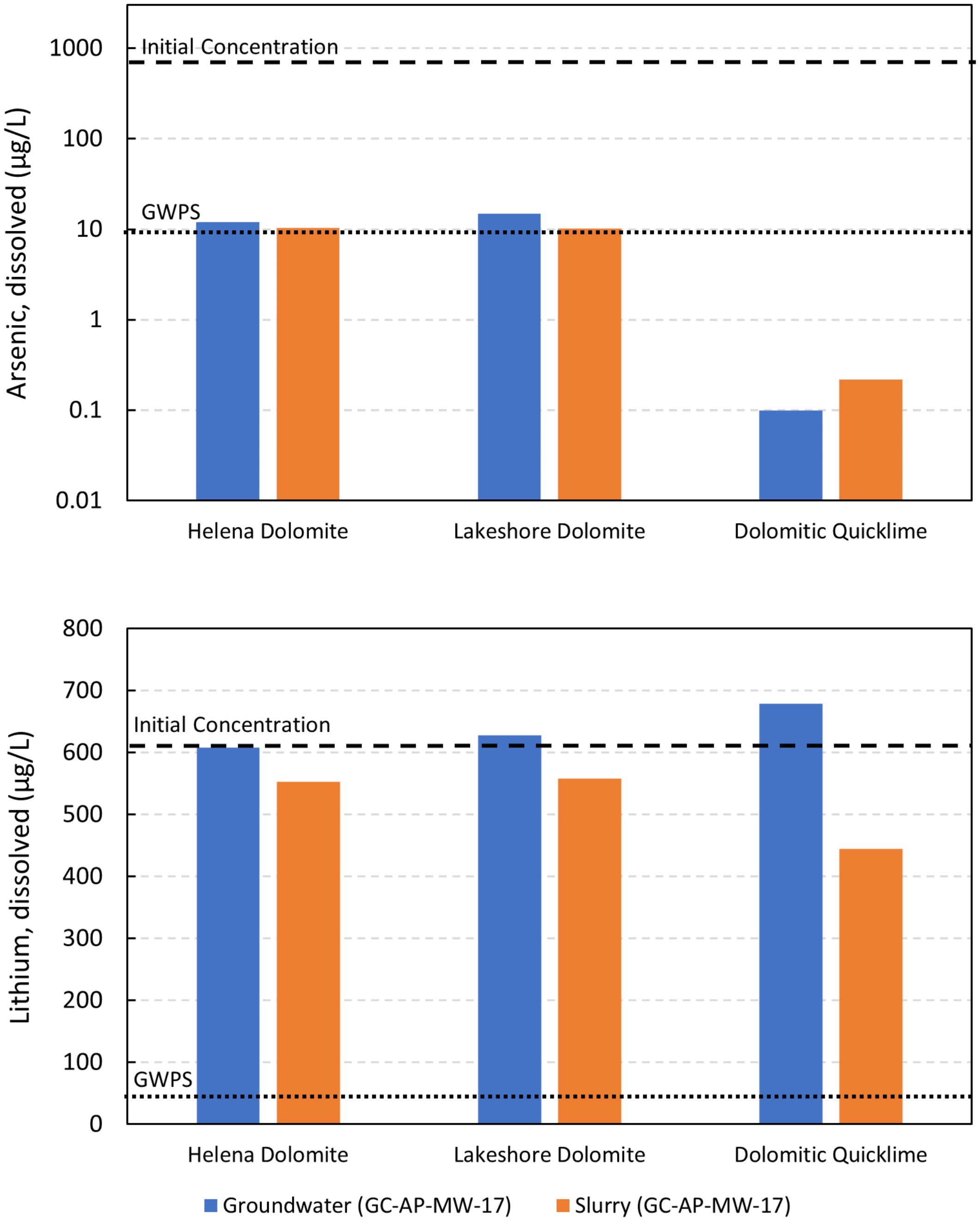
Figure 13
Screening Batch Test Results of Dolomite Fines and Dolomitic Quicklime for GC-AP-MW-10

Laboratory Treatability Study Results
Plant Greene County



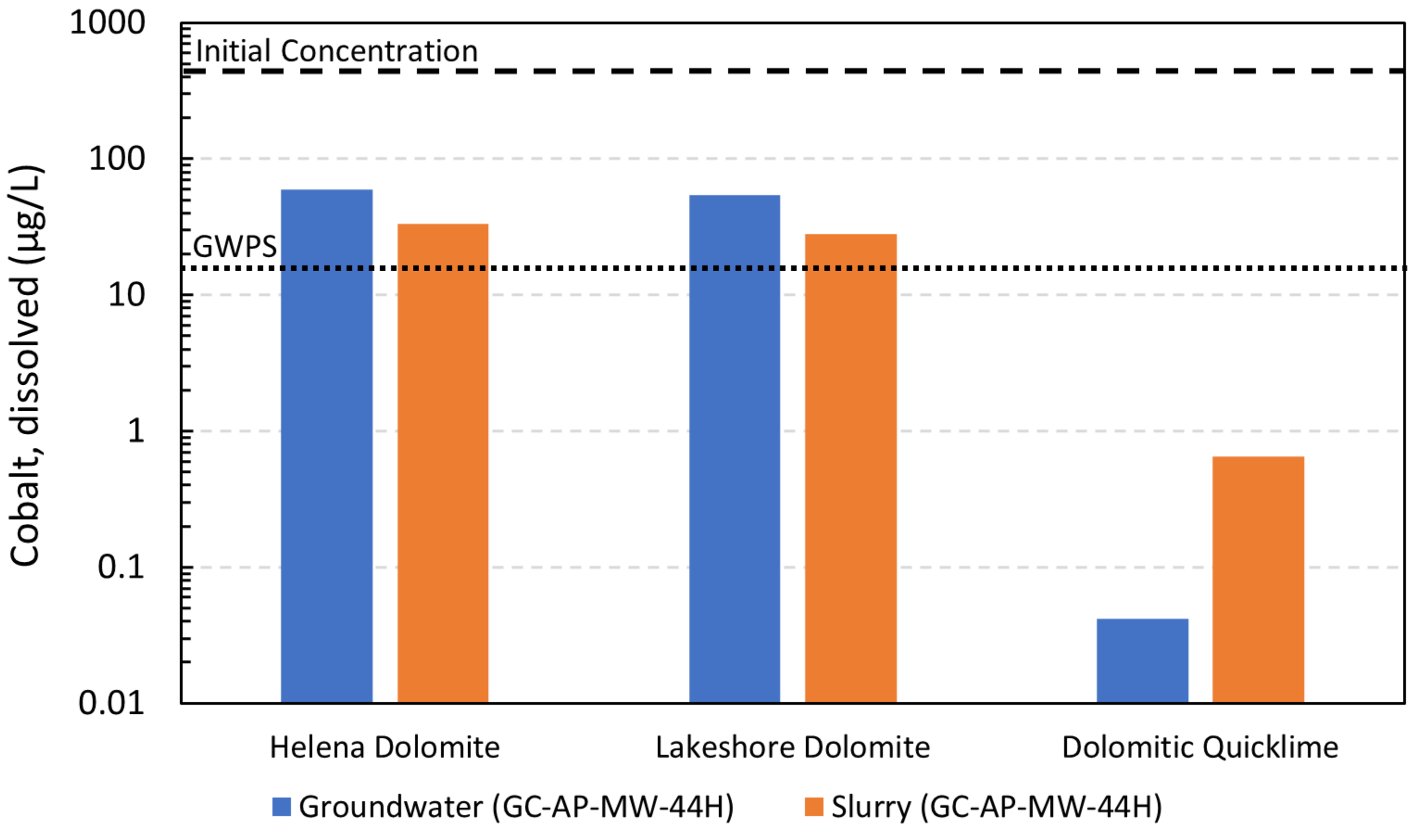
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 14
Screening Batch Test Results of Dolomite Fines and Dolomitic Quicklime for GC-AP-MW-14



Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Figure 15
Screening Batch Test Results of Dolomite Fines and Dolomitic Quicklime for GC-AP-MW-17



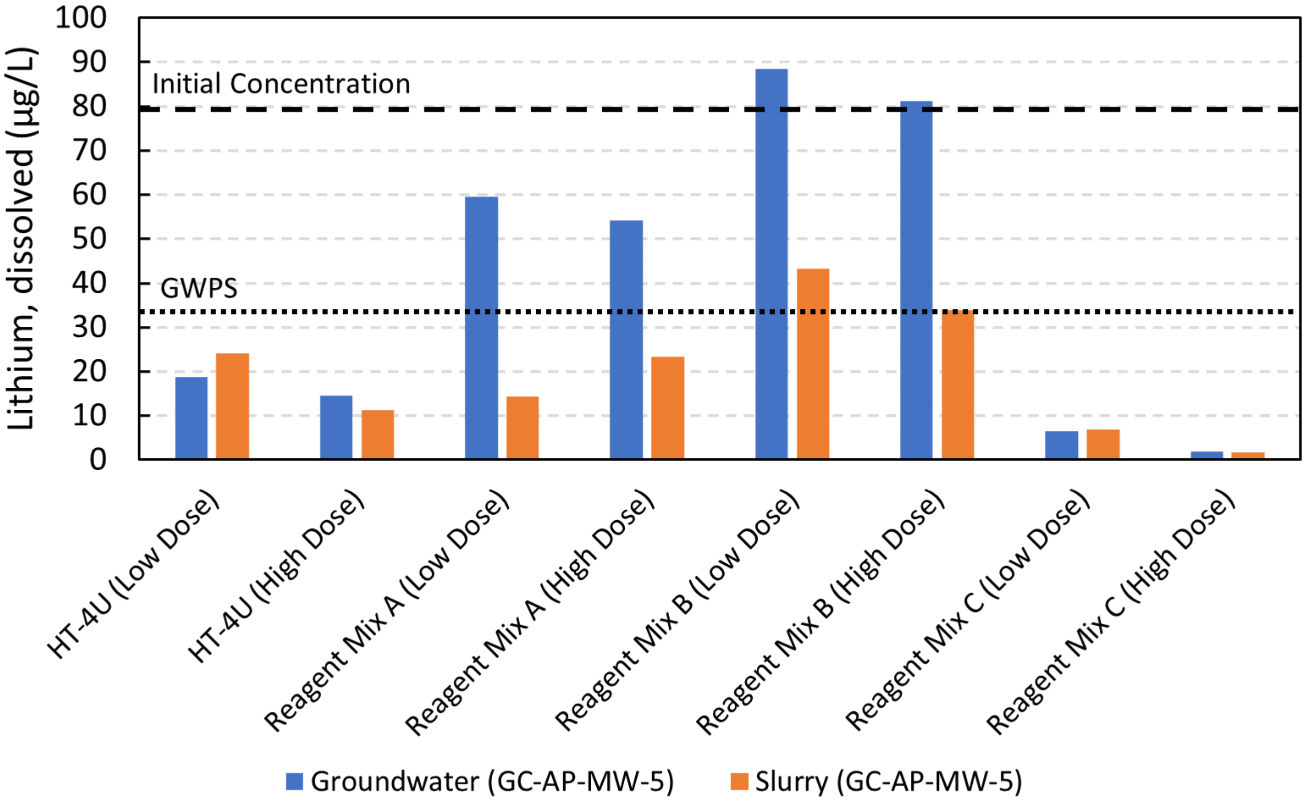
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

ANCHOR QEA

Figure 16

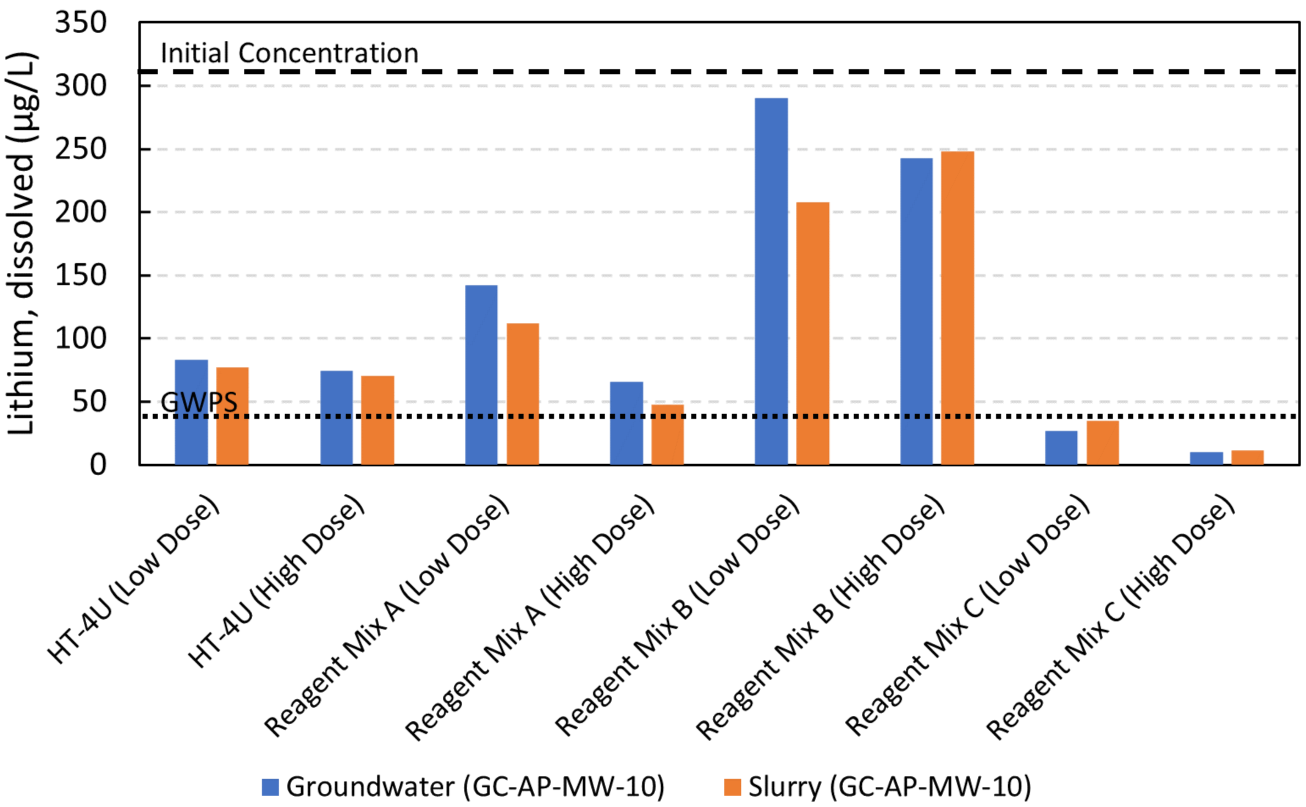
Screening Batch Test Results of Dolomite Fines and Dolomitic Quicklime for GC-AP-MW-44H

Laboratory Treatability Study Results
Plant Greene County



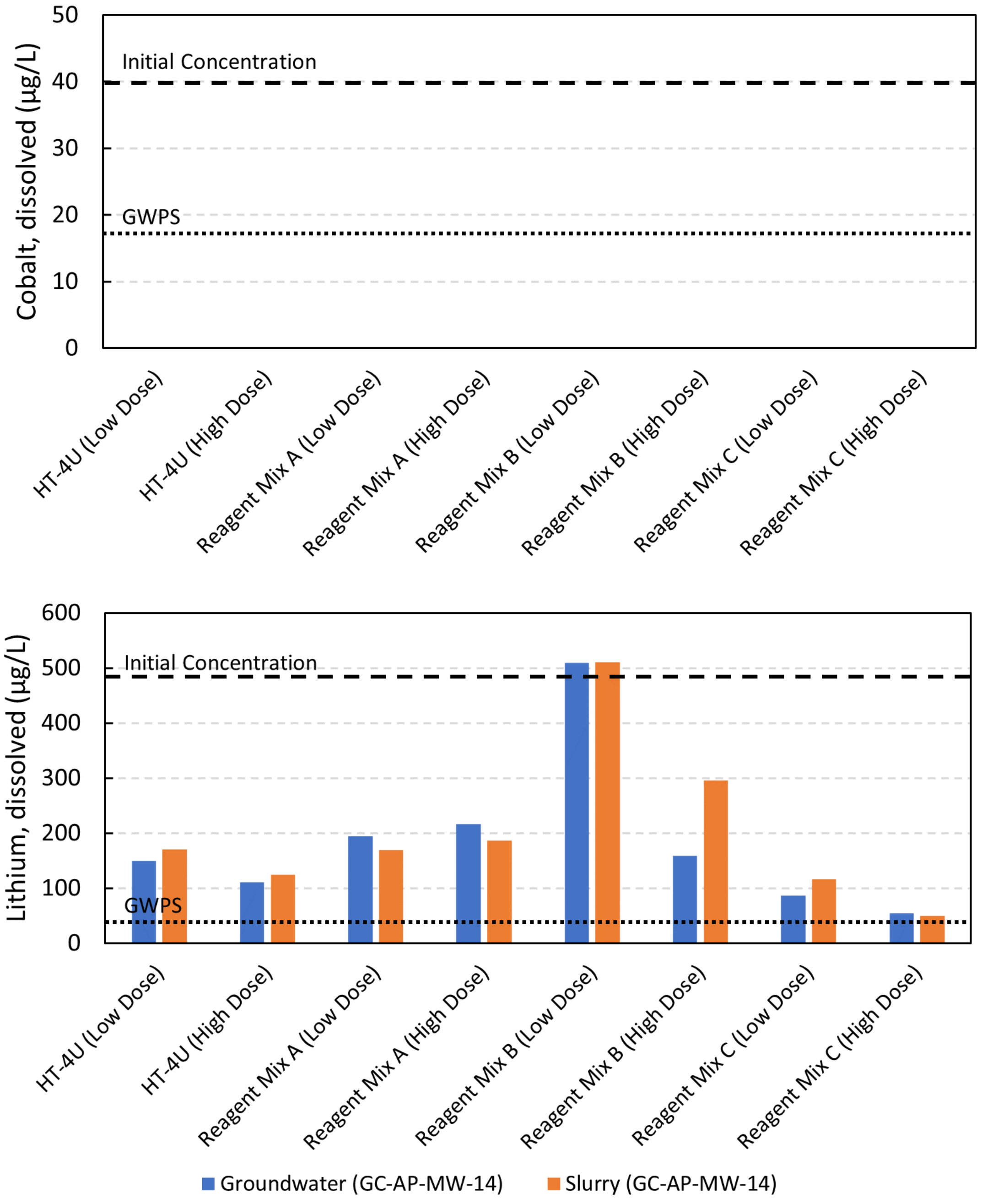
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard
Reagent Mix A: $MgCl_2$ solution followed by $NaAlO_2$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix B: $MnCl_2/FeCl_3$ solution followed by $KMnO_4$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 17
Optimization Batch Test Results for GC-AP-MW-5
Laboratory Treatability Study Results
Plant Greene County



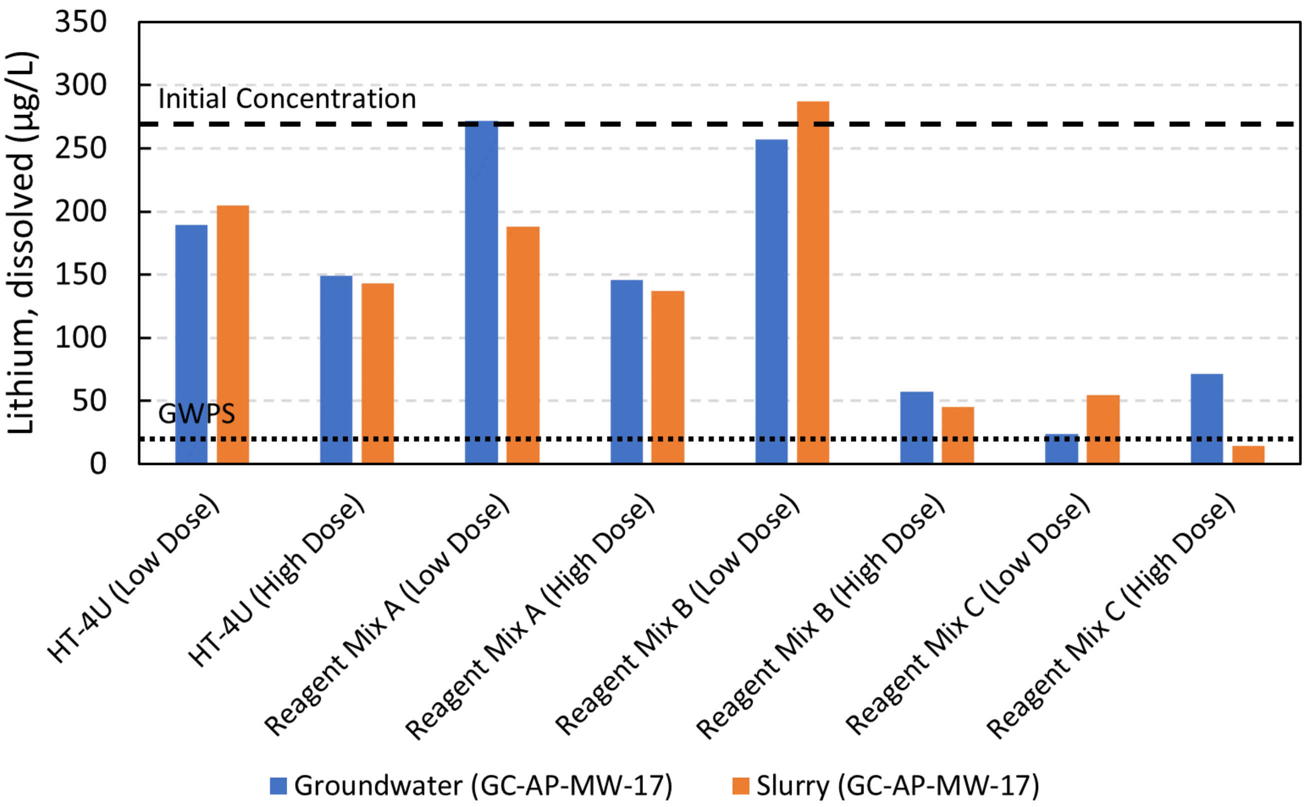
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard
Reagent Mix A: $MgCl_2$ solution followed by $NaAlO_2$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix B: $MnCl_2/FeCl_3$ solution followed by $KMnO_4$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 18
Optimization Batch Test Results for GC-AP-MW-10
Laboratory Treatability Study Results
Plant Greene County



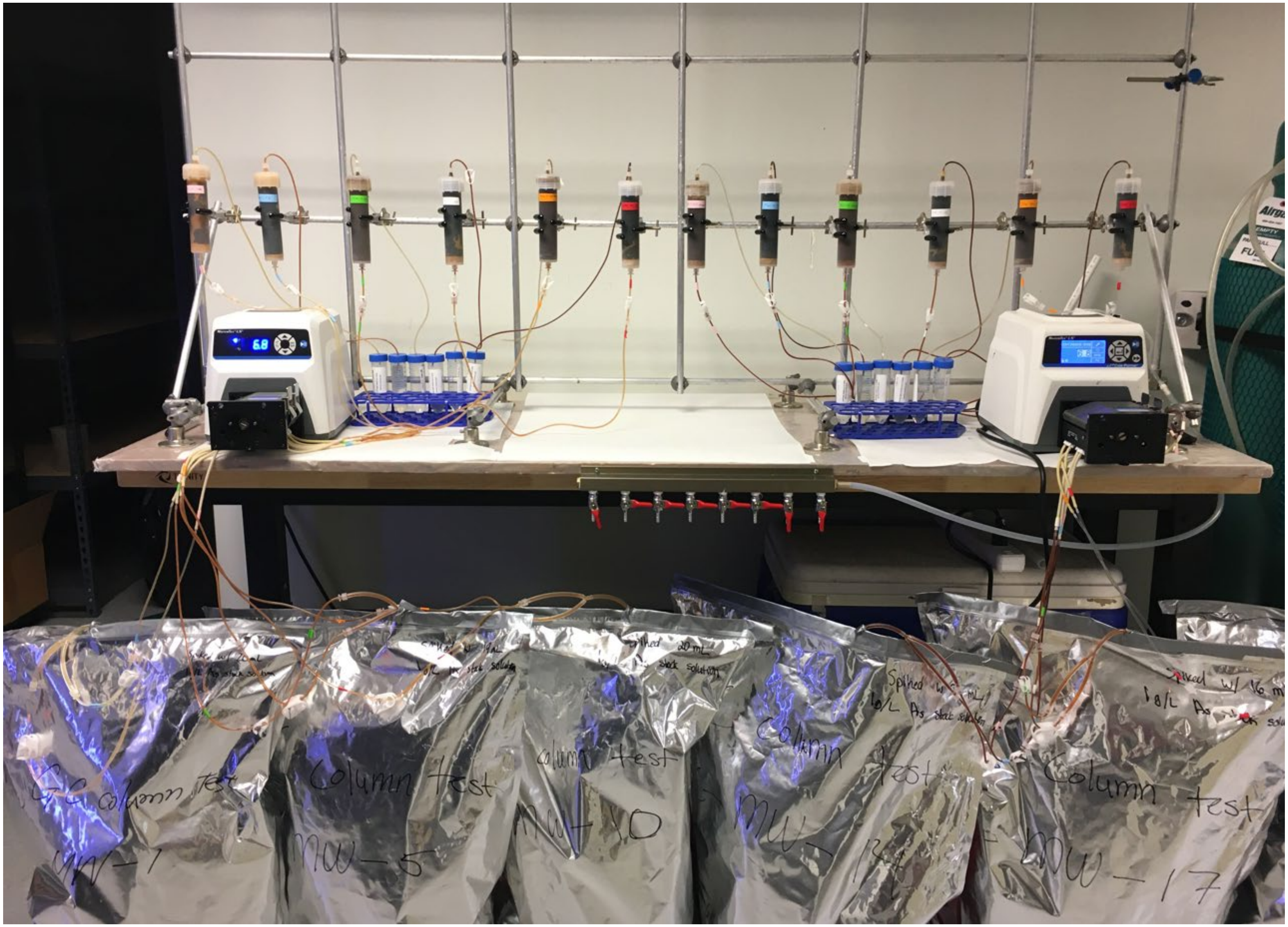
Notes:
Cobalt was not detected in any batch test.
µg/L: microgram per liter
GWPS: groundwater protection standard
Reagent Mix A: $MgCl_2$ solution followed by $NaAlO_2$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix B: $MnCl_2/FeCl_3$ solution followed by $KMnO_4$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 19
Optimization Batch Test Results for GC-AP-MW-14



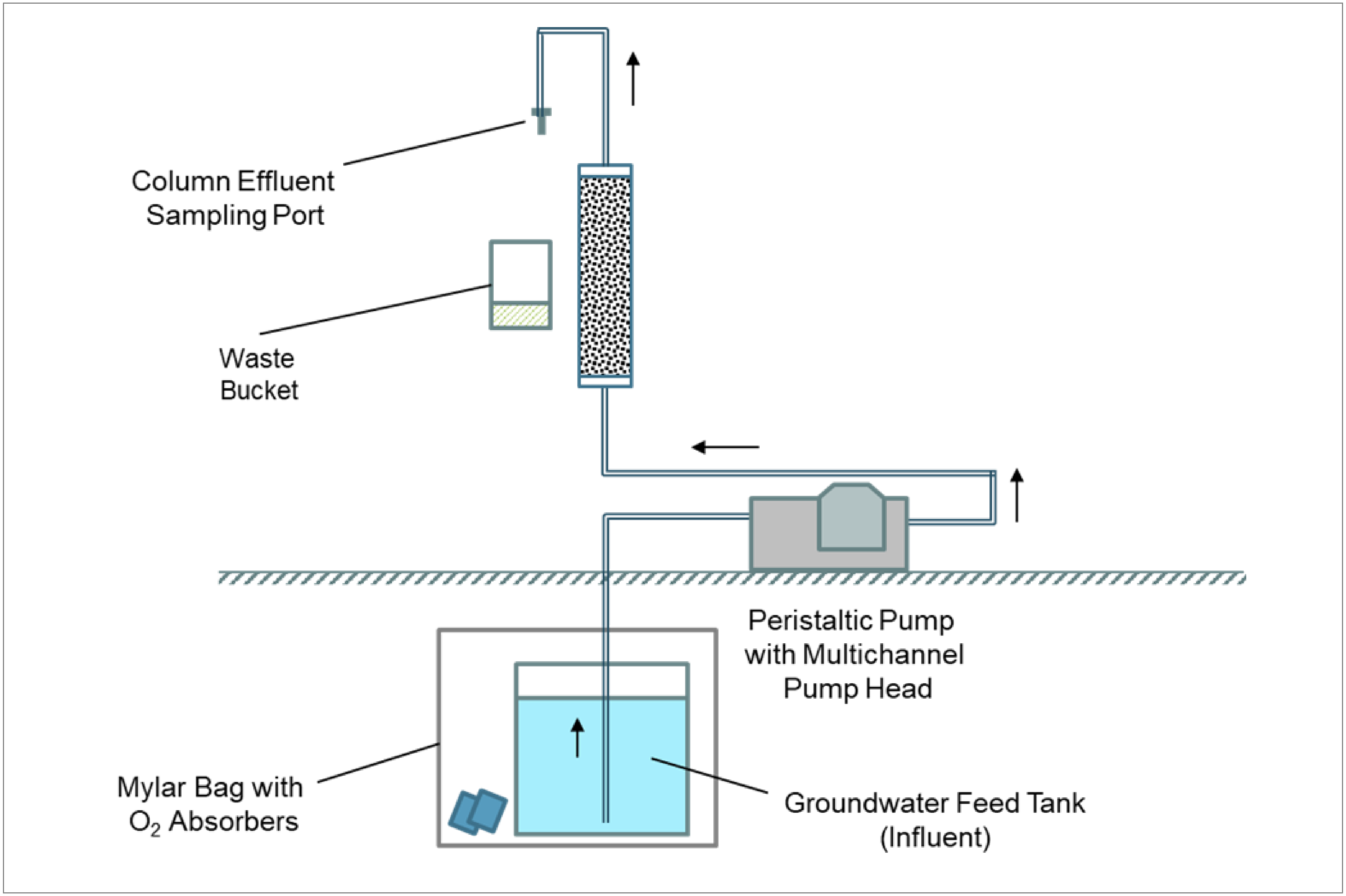
Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard
Reagent Mix A: $MgCl_2$ solution followed by $NaAlO_2$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix B: $MnCl_2/FeCl_3$ solution followed by $KMnO_4$ solution (+NaOH for pH adjustment to 9.5)
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 20
Optimization Batch Test Results for GC-AP-MW-17



Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures

Figure 21
Column Test Equipment Setup
Laboratory Treatability Study Results
Plant Greene County

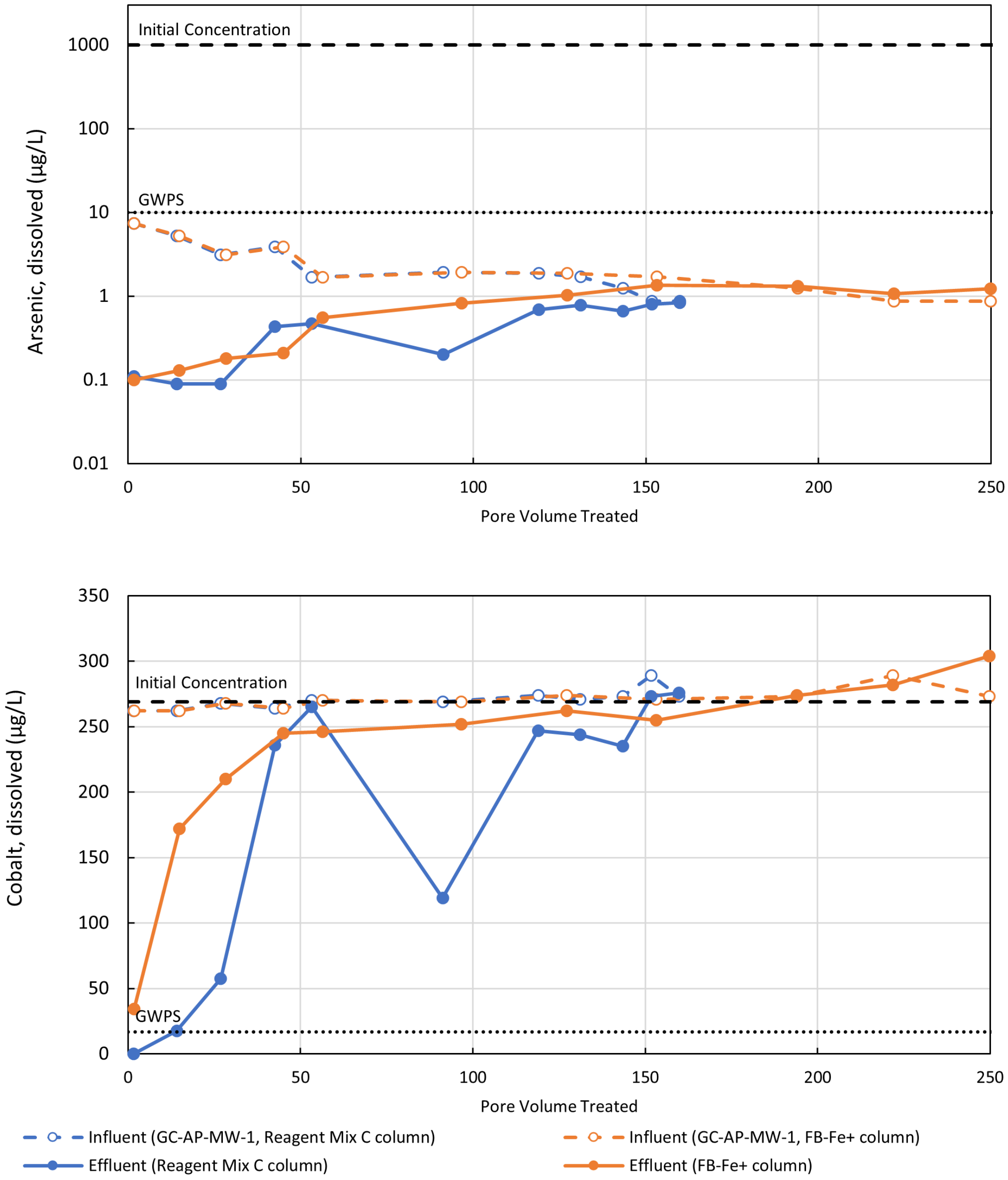


Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures

Figure 22

Schematic of Column Test Setup

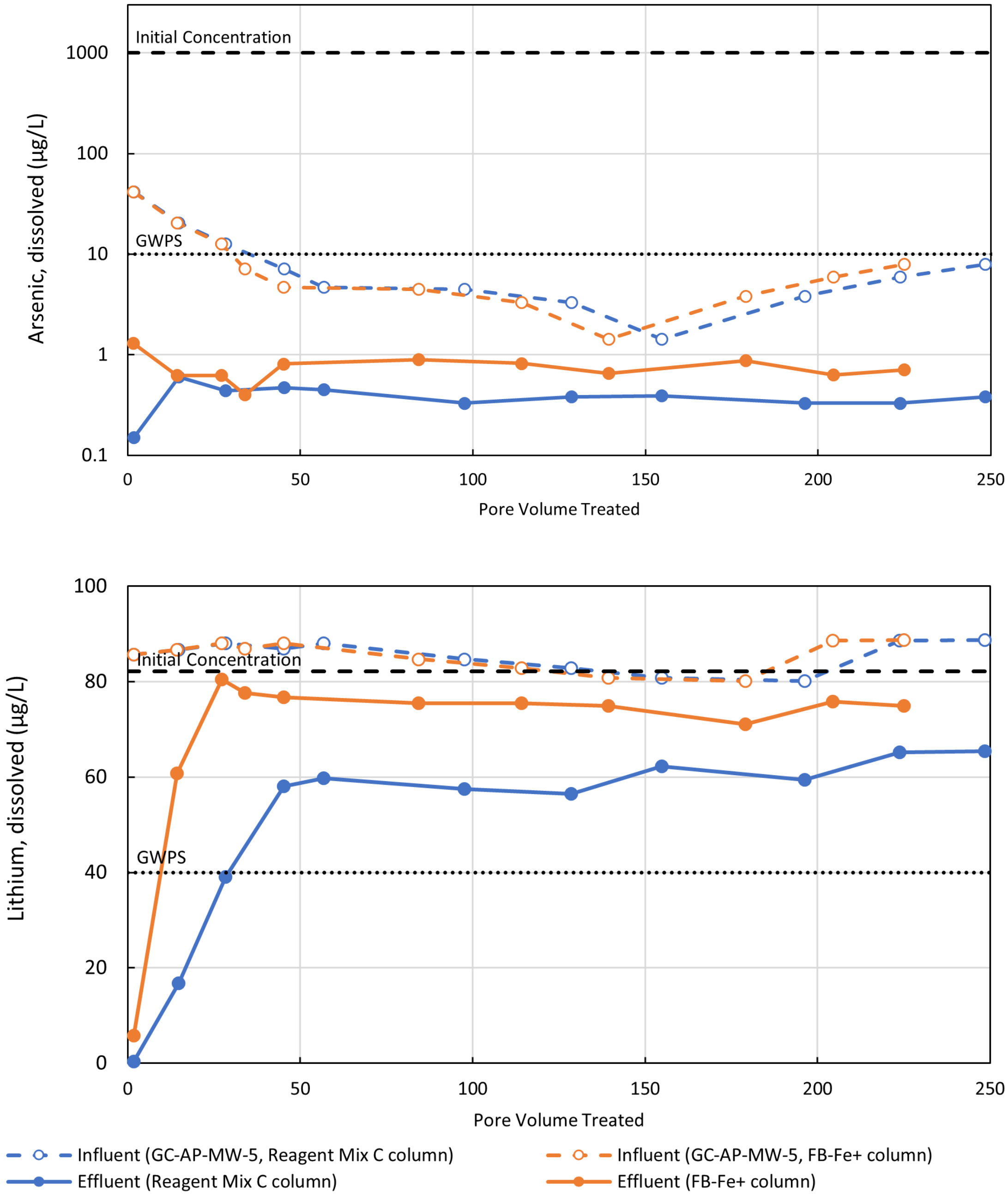
Laboratory Treatability Study Results
Plant Greene County



Notes:
µg/L: microgram per liter
FB-Fe+: FerroBlack-Fe+
GWPS: groundwater protection standard
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

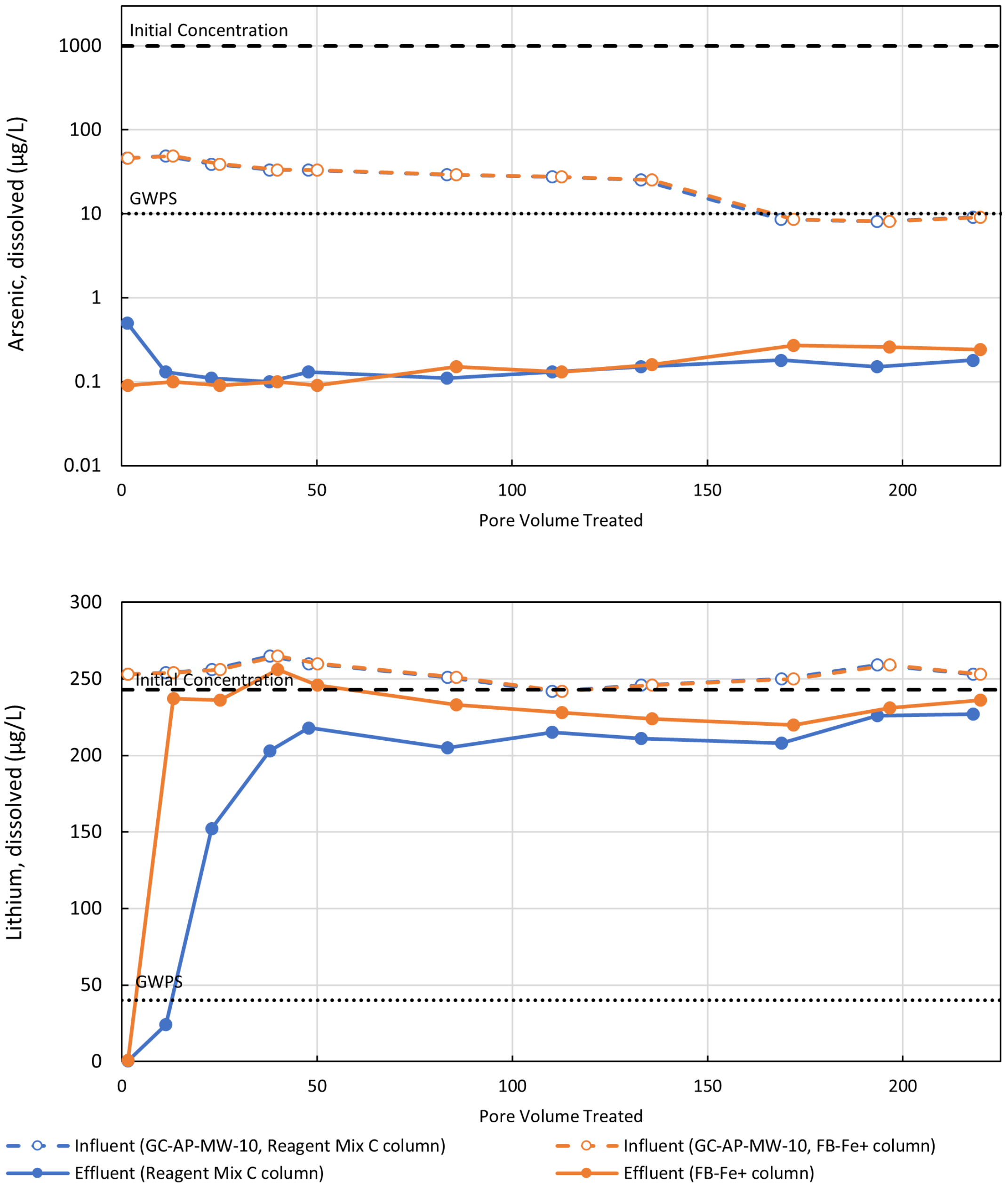
Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures\Figure 23 - Column Breakthrough Curves for GC-AP-MW-1.docx

Figure 23
Column Breakthrough Curves for GC-AP-MW-1
Laboratory Treatability Study Results
Plant Greene County



Notes:
µg/L: microgram per liter
FB-Fe+: FerroBlack-Fe+
GWPS: groundwater protection standard
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

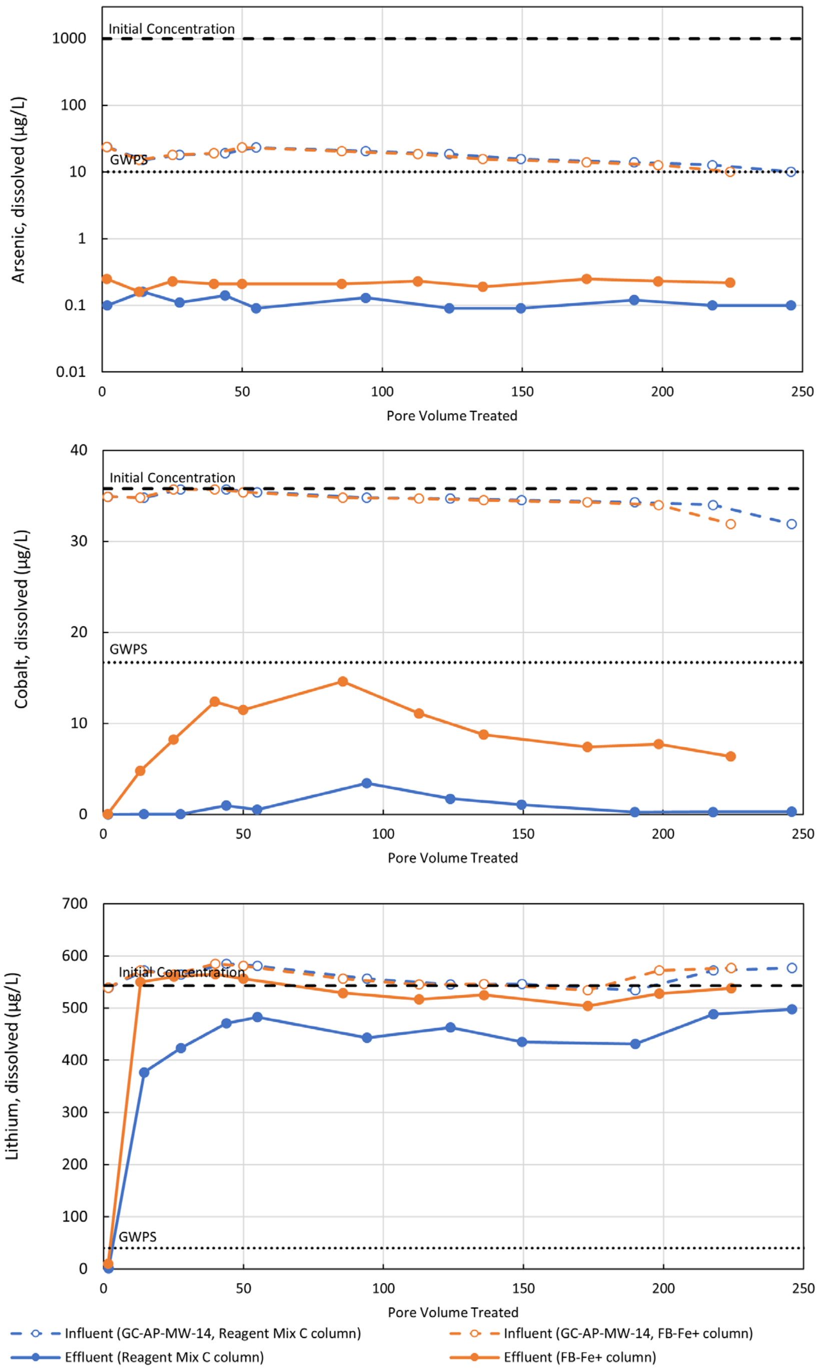
Figure 24
Column Breakthrough Curves for GC-AP-MW-5
Laboratory Treatability Study Results
Plant Greene County



Notes:
µg/L: microgram per liter
FB-Fe+: FerroBlack-Fe+
GWPS: groundwater protection standard
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

ANCHOR QEA

Figure 25
Column Breakthrough Curves for GC-AP-MW-10
Laboratory Treatability Study Results
Plant Greene County

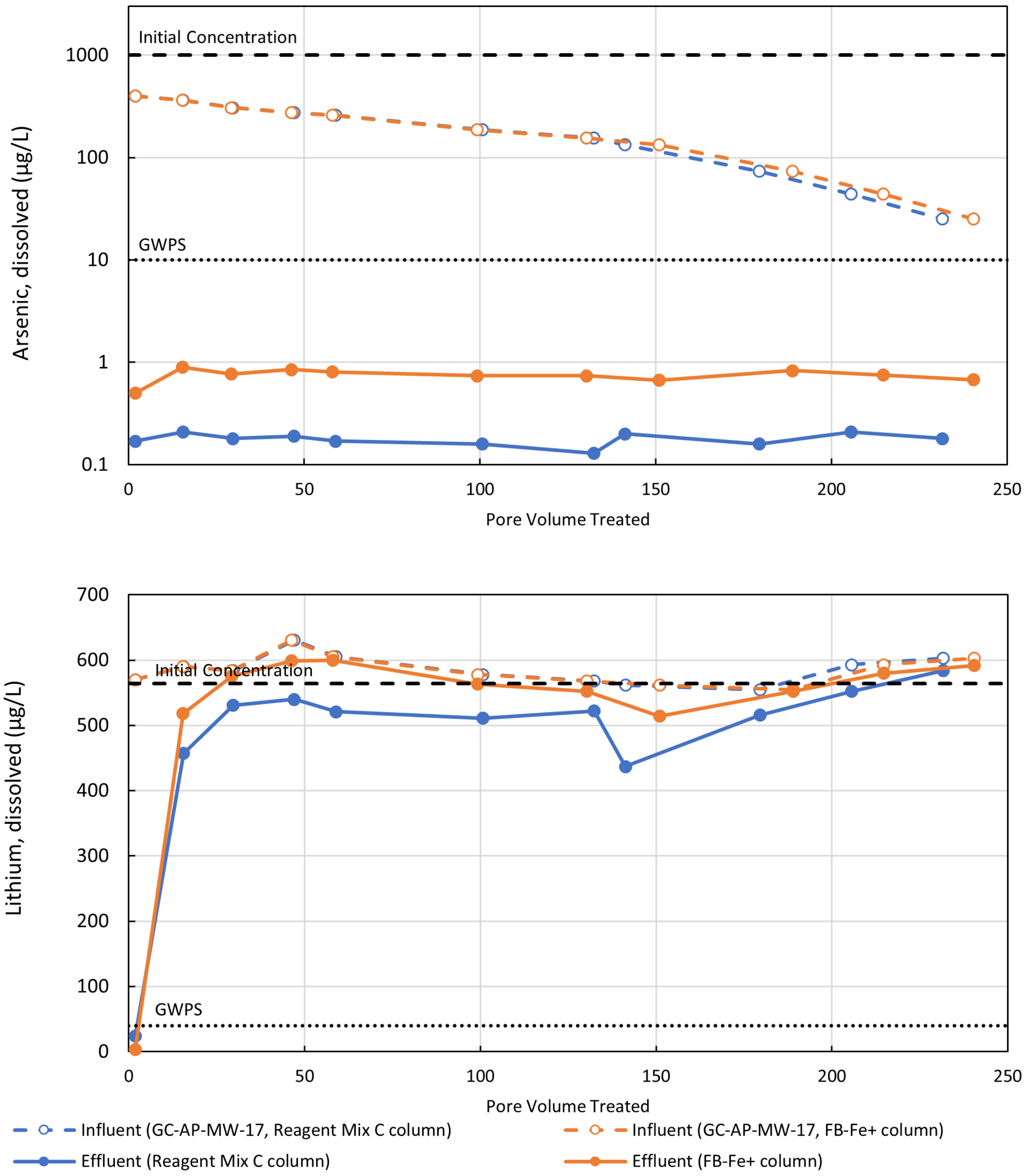


Notes:
µg/L: microgram per liter
FB-Fe+: FerroBlack-Fe+
GWPS: groundwater protection standard
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures\Figure 26 - Column Breakthrough Curves for GC-AP-MW-14.docx

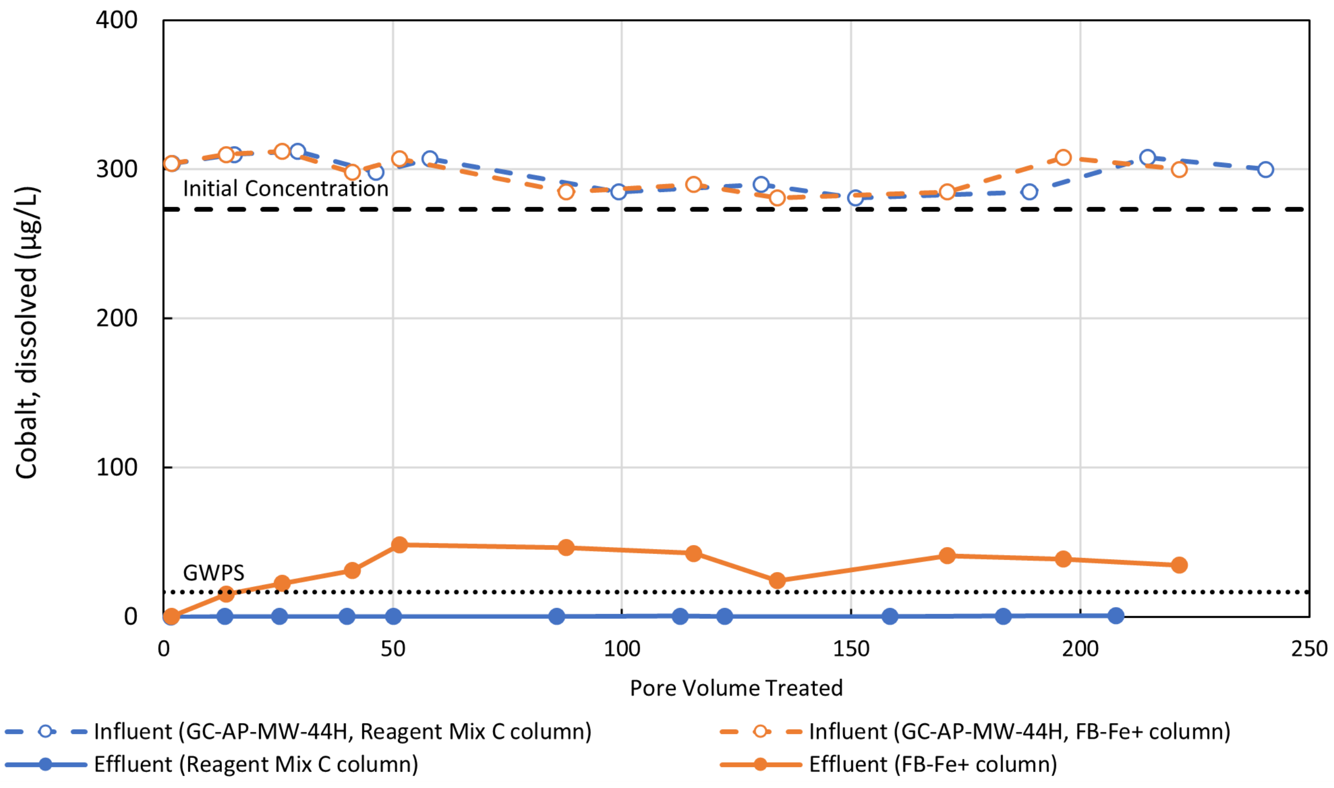
ANCHOR QEA

Figure 26
Column Breakthrough Curves for GC-AP-MW-14
Laboratory Treatability Study Results
Plant Greene County



Notes:
µg/L: microgram per liter
FB-Fe+: FerroBlack-Fe+
GWPS: groundwater protection standard
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 27
Column Breakthrough Curves for GC-AP-MW-17

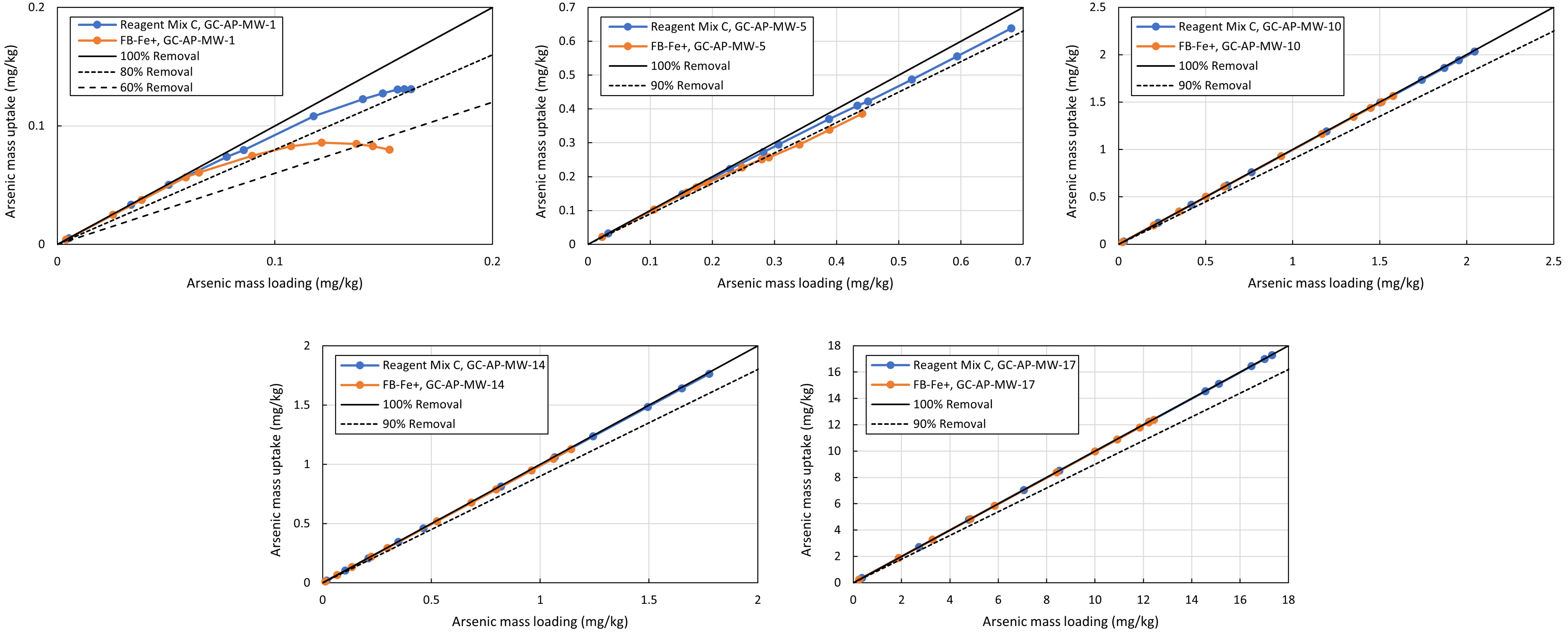


Notes:
µg/L: microgram per liter
FB-Fe+: FerroBlack-Fe+
GWPS: groundwater protection standard
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 28

Column Breakthrough Curves for GC-AP-MW-44H

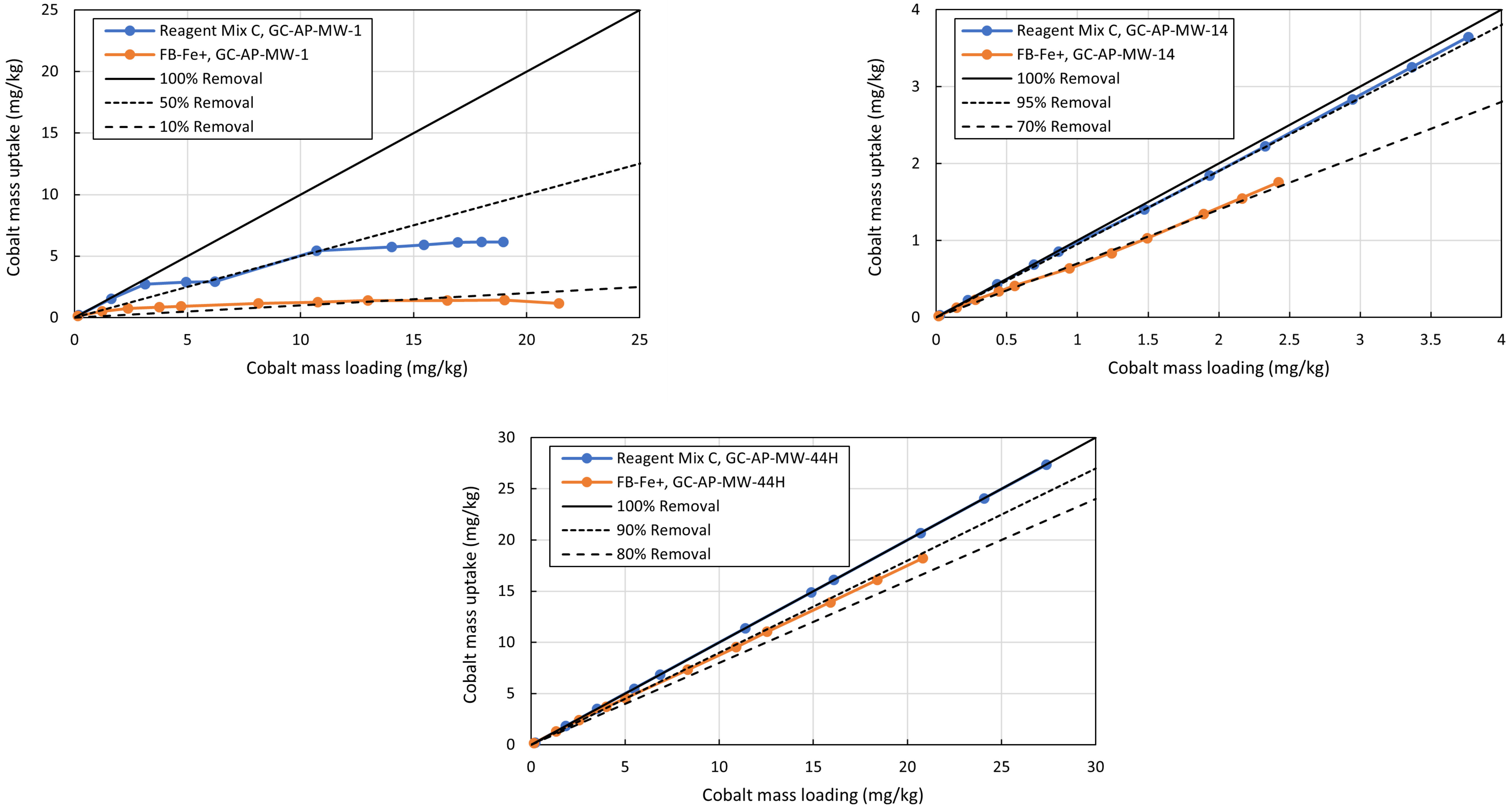
Laboratory Treatability Study Results
Plant Greene County



Notes:
FB-Fe+: FerroBlack-Fe+
mg/kg: milligram per kilogram
Reagent Mix C: MnCl$_2$/FeCl$_3$/MgCl$_2$ solution followed by NaAlOH$_2$/KMnO$_4$ solution (+NaOH for pH adjustment to 9.5)

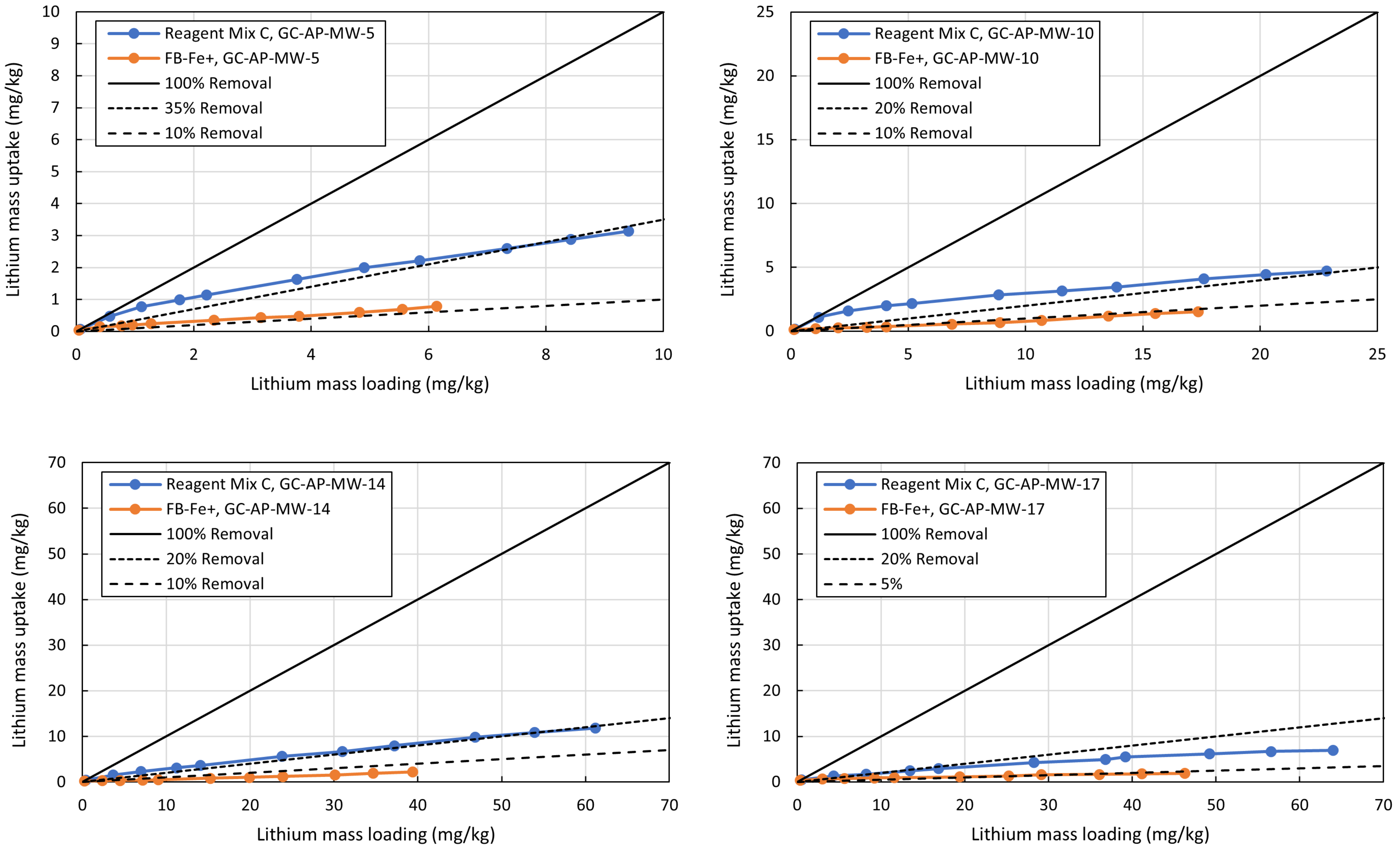
Filepath: \\Athena\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Greene County\Figures\Figure 29 - Arsenic Mass Uptake vs Arsenic Mass Loading.docx

Figure 29
Arsenic Mass Uptake Versus Arsenic Mass Loading
Laboratory Treatability Study Results
Plant Greene County



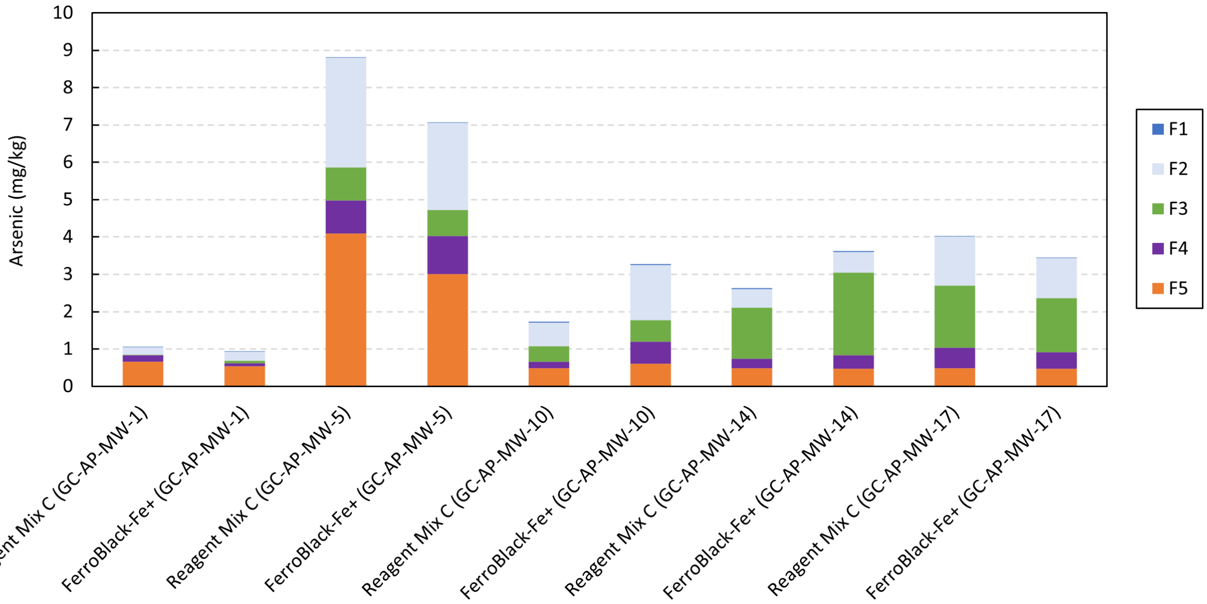
Notes:
FB-Fe+: FerroBlack-Fe+
mg/kg: milligram per kilogram
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

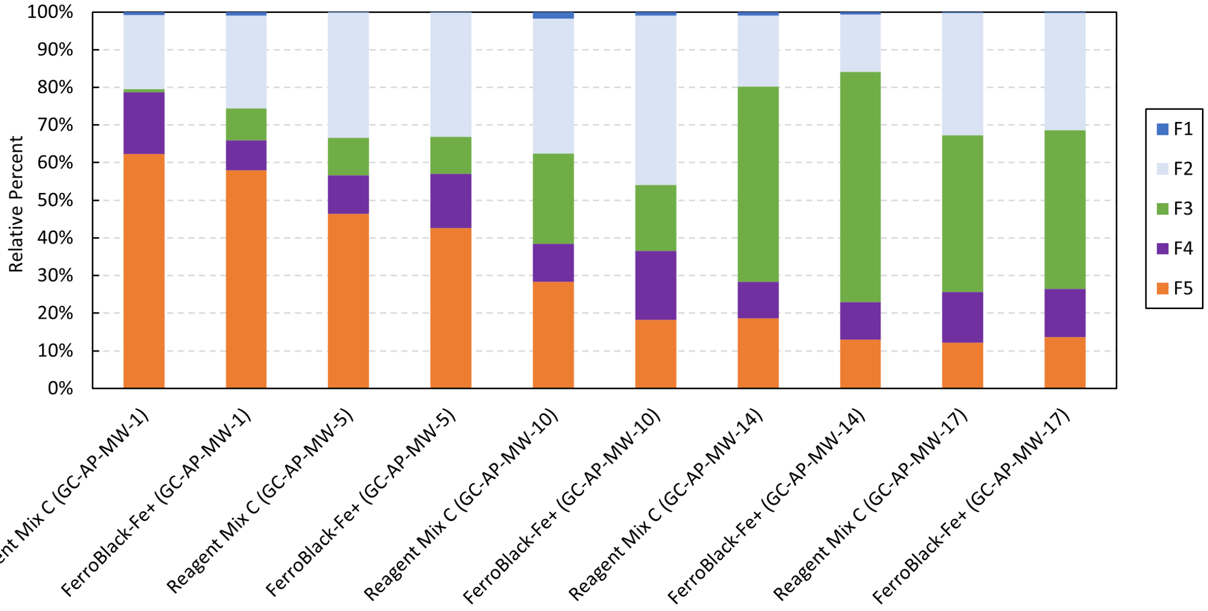
Figure 30
Cobalt Mass Uptake Versus Cobalt Mass Loading
Laboratory Treatability Study Results
Plant Greene County



Notes:
FB-Fe+: FerroBlack-Fe+
mg/kg: milligram per kilogram
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

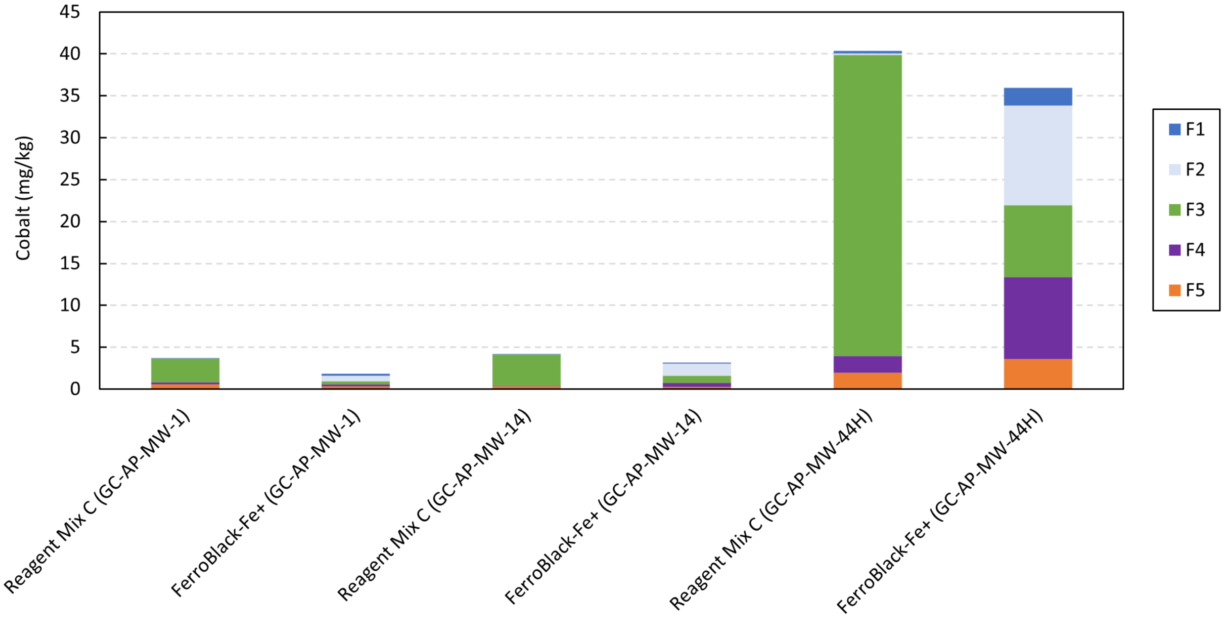
Figure 31
Lithium Mass Uptake Versus Lithium Mass Loading

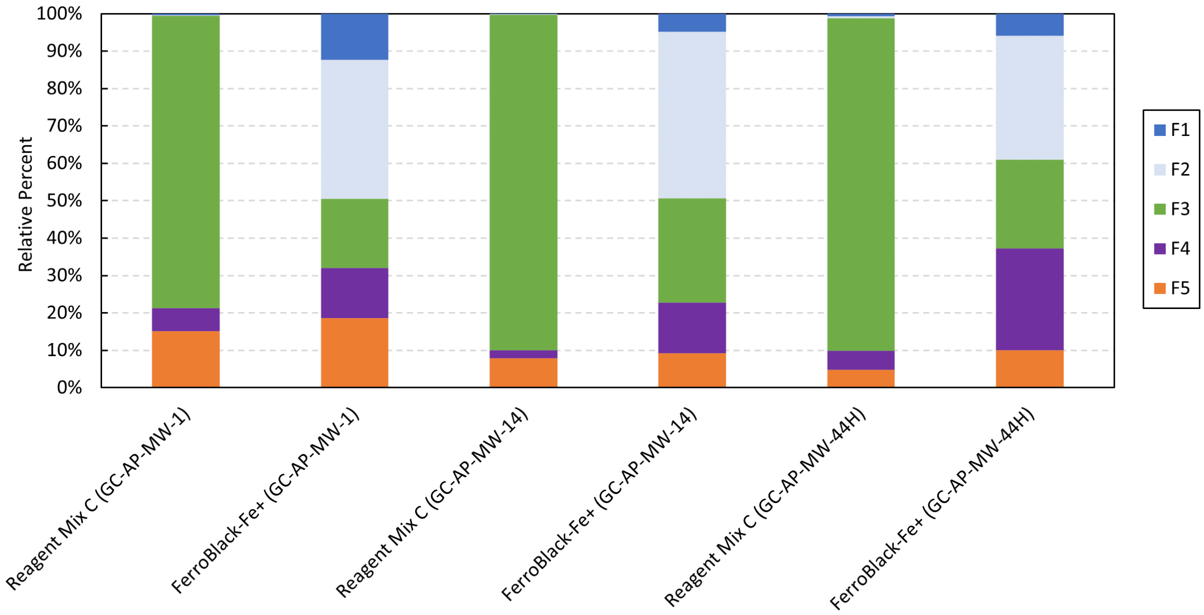




Notes:
F1: Water soluble (extracted by 1 M magnesium chloride to pH 7)
F2: Exchangeable, e.g., on clay minerals (extracted by 1 M monosodium phosphate at pH 5)
F3: Reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: Oxidizable, e.g., crystalline oxide and crystalline sulfide minerals (extracted by 16 M nitric acid)
F5: Residual, e.g., relict silicate phases from the aquifer matrix (prepared by U.S. Environmental Protection Agency Method 3050B)
M: molar
mg/kg: milligram per kilogram
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

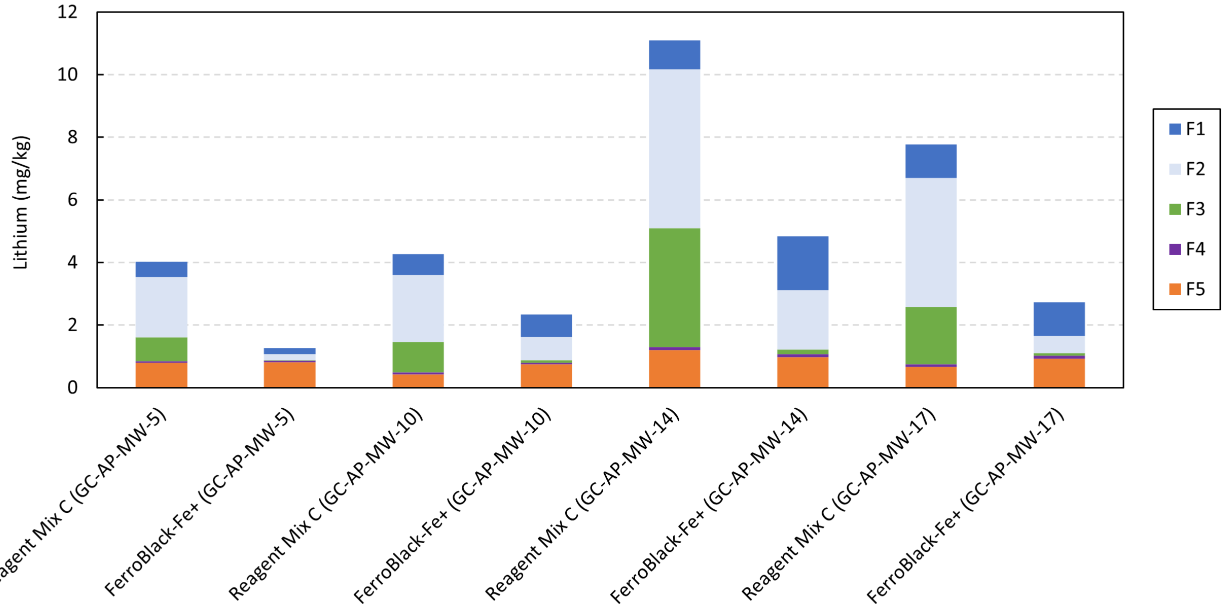
Figure 32
Selective Sequential Extraction Results of Arsenic for Post-Column Test Media

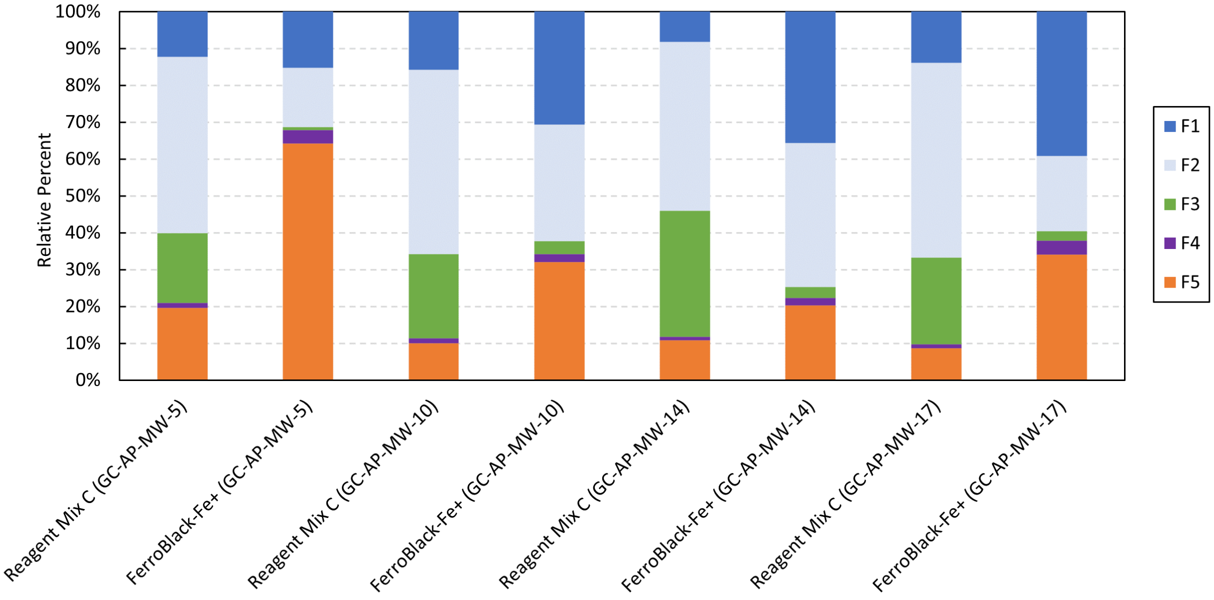




Notes:
F1: Water soluble (extracted by 1 M magnesium chloride to pH 7)
F2: Exchangeable, e.g., on clay minerals (extracted by 1 M monosodium phosphate at pH 5)
F3: Reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/HCl adjusted to pH 2 with nitric acid)
F4: Oxidizable, e.g., crystalline oxide and crystalline sulfide minerals (extracted by 16 M nitric acid)
F5: Residual, e.g., relict silicate phases from the aquifer matrix (prepared by U.S. Environmental Protection Agency Method 3050B))
M: molar
mg/kg: milligram per kilogram
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

Figure 33
Selective Sequential Extraction Results of Cobalt for Post-Column Test Media
Laboratory Treatability Study Results
Plant Greene County





Notes:
F1: Water soluble (extracted by 1 M magnesium chloride to pH 7)
F2: Exchangeable, e.g., on clay minerals (extracted by 1 M monosodium phosphate at pH 5)
F3: Reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/HCl adjusted to pH 2 with nitric acid)
F4: Oxidizable, e.g., crystalline oxide and crystalline sulfide minerals (extracted by 16 M nitric acid)
F5: Residual, e.g., relict silicate phases from the aquifer matrix (prepared by U.S. Environmental Protection Agency Method 3050B)
M: molar
mg/kg: milligram per kilogram
Reagent Mix C: $MnCl_2/FeCl_3/MgCl_2$ solution followed by $NaAlOH_2/KMnO_4$ solution (+NaOH for pH adjustment to 9.5)

ANCHOR QEA

Figure 34
Selective Sequential Extraction Results of Lithium for Post-Column Test Media
Laboratory Treatability Study Results
Plant Greene County

Appendix A

Laboratory Analytical Reports

ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Wednesday, May 18, 2022

Jessica Goin, PhD
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A2D0553 - Greene County - 201114-01.05 Task 09

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2D0553, which was received by the laboratory on 4/14/2022 at 1:06:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	0.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0553 - 05 18 22 1532

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
APC-GC-MW-1-20220413	A2D0553-01	Water	04/13/22 14:00	04/14/22 13:06
APC-GC-MW-5-20220413	A2D0553-02	Water	04/13/22 14:15	04/14/22 13:06
APC-GC-MW-10-20220413	A2D0553-03	Water	04/13/22 14:30	04/14/22 13:06
APC-GC-MW-14-20220413	A2D0553-04	Water	04/13/22 14:45	04/14/22 13:06
APC-GC-MW-14-D-20220413	A2D0553-05	Water	04/13/22 15:00	04/14/22 13:06
APC-GC-MW-17-20220413	A2D0553-06	Water	04/13/22 15:15	04/14/22 13:06
APC-GC-MW-44H-20220413	A2D0553-07	Water	04/13/22 15:30	04/14/22 13:06
APC-GC-MB-20220414	A2D0553-08	Water	04/14/22 11:30	04/14/22 13:06

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
APC-GC-MW-1-20220413 (A2D0553-01)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**6.04**	0.500	1.00	ug/L	1	04/21/22 13:59	EPA 6020B (Diss)	
Cobalt	**284**	0.500	1.00	ug/L	1	04/21/22 13:59	EPA 6020B (Diss)	
Lithium	**3.13**	2.50	5.00	ug/L	1	04/22/22 15:34	EPA 6020B (Diss)	J
APC-GC-MW-1-20220413 (A2D0553-01RE1)				**Matrix: Water**				
Batch: 22D0782								
Iron	**184000**	250	500	ug/L	10	04/21/22 15:55	EPA 6020B (Diss)	
Manganese	**14300**	5.00	10.0	ug/L	10	04/21/22 15:55	EPA 6020B (Diss)	
APC-GC-MW-5-20220413 (A2D0553-02)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**63.2**	0.500	1.00	ug/L	1	04/21/22 14:04	EPA 6020B (Diss)	
Cobalt	**8.54**	0.500	1.00	ug/L	1	04/21/22 14:04	EPA 6020B (Diss)	
Iron	**16100**	25.0	50.0	ug/L	1	04/21/22 14:04	EPA 6020B (Diss)	
Manganese	**1680**	0.500	1.00	ug/L	1	04/21/22 14:04	EPA 6020B (Diss)	
APC-GC-MW-5-20220413 (A2D0553-02RE1)				**Matrix: Water**				
Batch: 22D0782								
Lithium	**95.7**	12.5	25.0	ug/L	5	04/22/22 18:20	EPA 6020B (Diss)	
APC-GC-MW-10-20220413 (A2D0553-03)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**2.51**	0.500	1.00	ug/L	1	04/21/22 14:29	EPA 6020B (Diss)	
Cobalt	**19.4**	0.500	1.00	ug/L	1	04/21/22 14:29	EPA 6020B (Diss)	
Iron	**11400**	25.0	50.0	ug/L	1	04/21/22 14:29	EPA 6020B (Diss)	
APC-GC-MW-10-20220413 (A2D0553-03RE1)				**Matrix: Water**				
Batch: 22D0782								
Manganese	**2950**	5.00	10.0	ug/L	10	04/21/22 16:00	EPA 6020B (Diss)	
Lithium	**309**	12.5	25.0	ug/L	5	04/22/22 18:24	EPA 6020B (Diss)	
APC-GC-MW-14-20220413 (A2D0553-04)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**1.95**	0.500	1.00	ug/L	1	04/21/22 14:39	EPA 6020B (Diss)	

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0553 - 05 18 22 1532

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
APC-GC-MW-14-20220413 (A2D0553-04)				**Matrix: Water**				
Cobalt	**37.9**	0.500	1.00	ug/L	1	04/21/22 14:39	EPA 6020B (Diss)	
Iron	**34800**	25.0	50.0	ug/L	1	04/21/22 14:39	EPA 6020B (Diss)	
APC-GC-MW-14-20220413 (A2D0553-04RE1)				**Matrix: Water**				
Batch: 22D0782								
Manganese	**4300**	5.00	10.0	ug/L	10	04/21/22 16:05	EPA 6020B (Diss)	
Lithium	**570**	25.0	50.0	ug/L	10	04/22/22 18:29	EPA 6020B (Diss)	
APC-GC-MW-14-D-20220413 (A2D0553-05)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**1.90**	0.500	1.00	ug/L	1	04/21/22 14:50	EPA 6020B (Diss)	
Cobalt	**37.0**	0.500	1.00	ug/L	1	04/21/22 14:50	EPA 6020B (Diss)	
Iron	**33900**	25.0	50.0	ug/L	1	04/21/22 14:50	EPA 6020B (Diss)	
APC-GC-MW-14-D-20220413 (A2D0553-05RE1)				**Matrix: Water**				
Batch: 22D0782								
Manganese	**4360**	5.00	10.0	ug/L	10	04/21/22 16:10	EPA 6020B (Diss)	
Lithium	**551**	25.0	50.0	ug/L	10	04/22/22 18:33	EPA 6020B (Diss)	
APC-GC-MW-17-20220413 (A2D0553-06)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**183**	0.500	1.00	ug/L	1	04/21/22 15:00	EPA 6020B (Diss)	
Cobalt	**9.70**	0.500	1.00	ug/L	1	04/21/22 15:00	EPA 6020B (Diss)	
Iron	**10800**	25.0	50.0	ug/L	1	04/21/22 15:00	EPA 6020B (Diss)	
Manganese	**1990**	0.500	1.00	ug/L	1	04/21/22 15:00	EPA 6020B (Diss)	
APC-GC-MW-17-20220413 (A2D0553-06RE1)				**Matrix: Water**				
Batch: 22D0782								
Lithium	**610**	25.0	50.0	ug/L	10	04/22/22 18:38	EPA 6020B (Diss)	
APC-GC-MW-44H-20220413 (A2D0553-07)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	**1.91**	0.500	1.00	ug/L	1	04/21/22 15:35	EPA 6020B (Diss)	
Cobalt	**321**	0.500	1.00	ug/L	1	04/21/22 15:35	EPA 6020B (Diss)	
Iron	**4980**	25.0	50.0	ug/L	1	04/21/22 15:35	EPA 6020B (Diss)	

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
APC-GC-MW-44H-20220413 (A2D0553-07)				**Matrix: Water**				
Lithium	**4.71**	2.50	5.00	ug/L	1	04/22/22 16:01	EPA 6020B (Diss)	**J**
APC-GC-MW-44H-20220413 (A2D0553-07RE1)				**Matrix: Water**				
Batch: 22D0782								
Manganese	**9020**	5.00	10.0	ug/L	10	04/21/22 16:19	EPA 6020B (Diss)	
APC-GC-MB-20220414 (A2D0553-08)				**Matrix: Water**				
Batch: 22D0782								
Arsenic	ND	0.500	1.00	ug/L	1	04/21/22 15:45	EPA 6020B (Diss)	
Cobalt	ND	0.500	1.00	ug/L	1	04/21/22 15:45	EPA 6020B (Diss)	
Iron	ND	25.0	50.0	ug/L	1	04/21/22 15:45	EPA 6020B (Diss)	
Manganese	ND	0.500	1.00	ug/L	1	04/21/22 15:45	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 16:06	EPA 6020B (Diss)	

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0782 - Matrix Matched Direct Inject							**Water**					
Blank (22D0782-BLK1)				Prepared: 04/20/22 12:40		Analyzed: 04/21/22 12:17						
EPA 6020B (Diss)												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Cobalt	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Blank (22D0782-BLK3)				Prepared: 04/20/22 12:40		Analyzed: 04/22/22 18:11						
EPA 6020B (Diss)												
Lithium	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	Q-16
LCS (22D0782-BS1)				Prepared: 04/20/22 12:40		Analyzed: 04/21/22 12:23						
EPA 6020B (Diss)												
Arsenic	51.3	0.500	1.00	ug/L	1	55.6	---	92	80-120%	---	---	
Cobalt	52.9	0.500	1.00	ug/L	1	55.6	---	95	80-120%	---	---	
Iron	2660	25.0	50.0	ug/L	1	2780	---	96	80-120%	---	---	
Manganese	52.3	0.500	1.00	ug/L	1	55.6	---	94	80-120%	---	---	
LCS (22D0782-BS2)				Prepared: 04/20/22 12:40		Analyzed: 04/22/22 18:15						
EPA 6020B (Diss)												
Lithium	496	2.50	5.00	ug/L	1	444	---	112	80-120%	---	---	
Duplicate (22D0782-DUP1)				Prepared: 04/20/22 12:40		Analyzed: 04/21/22 18:22						
QC Source Sample: Non-SDG (A2D0663-13)												
Arsenic	**6.31**	0.500	1.00	ug/L	1	---	6.47	---	---	3	20%	
Cobalt	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Iron	**24100**	25.0	50.0	ug/L	1	---	24200	---	---	0.3	20%	
Manganese	**1240**	0.500	1.00	ug/L	1	---	1250	---	---	0.8	20%	
Duplicate (22D0782-DUP2)				Prepared: 04/20/22 12:40		Analyzed: 04/22/22 18:56						
QC Source Sample: Non-SDG (A2D0663-13)												
Lithium	**7.53**	2.50	5.00	ug/L	1	---	7.50	---	---	0.4	20%	
Matrix Spike (22D0782-MS1)				Prepared: 04/20/22 12:40		Analyzed: 04/21/22 18:32						

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0782 - Matrix Matched Direct Inject							**Water**					
Matrix Spike (22D0782-MS1)			Prepared: 04/20/22 12:40			Analyzed: 04/21/22 18:32						
QC Source Sample: Non-SDG (A2D0663-14)												
EPA 6020B (Diss)												
Arsenic	53.9	0.500	1.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Cobalt	54.1	0.500	1.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Iron	10200	25.0	50.0	ug/L	1	2780	7000	116	75-125%	---	---	
Manganese	574	0.500	1.00	ug/L	1	55.6	515	105	75-125%	---	---	
Matrix Spike (22D0782-MS2)			Prepared: 04/20/22 12:40			Analyzed: 04/22/22 19:05						
QC Source Sample: Non-SDG (A2D0663-15)												
EPA 6020B (Diss)												
Lithium	457	2.50	5.00	ug/L	1	444	20.2	98	75-125%	---	---	

SAMPLE PREPARATION INFORMATION

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22D0782							
A2D0553-01	Water	EPA 6020B (Diss)	04/13/22 14:00	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-01RE1	Water	EPA 6020B (Diss)	04/13/22 14:00	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-02	Water	EPA 6020B (Diss)	04/13/22 14:15	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-02RE1	Water	EPA 6020B (Diss)	04/13/22 14:15	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-03	Water	EPA 6020B (Diss)	04/13/22 14:30	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-03RE1	Water	EPA 6020B (Diss)	04/13/22 14:30	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-04	Water	EPA 6020B (Diss)	04/13/22 14:45	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-04RE1	Water	EPA 6020B (Diss)	04/13/22 14:45	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-05	Water	EPA 6020B (Diss)	04/13/22 15:00	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-05RE1	Water	EPA 6020B (Diss)	04/13/22 15:00	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-06	Water	EPA 6020B (Diss)	04/13/22 15:15	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-06RE1	Water	EPA 6020B (Diss)	04/13/22 15:15	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-07	Water	EPA 6020B (Diss)	04/13/22 15:30	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-07RE1	Water	EPA 6020B (Diss)	04/13/22 15:30	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00
A2D0553-08	Water	EPA 6020B (Diss)	04/14/22 11:30	04/20/22 12:40	45mL/50mL	45mL/50mL	1.00

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-16	Reanalysis of an original Batch QC sample.

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET	Analyte DETECTED at or above the detection or reporting limit.
ND	Analyte NOT DETECTED at or above the detection or reporting limit.
NR	Result Not Reported
RPD	Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry"	Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry") See Percent Solids section for details of dry weight analysis.
" wet"	Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
" "	Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

‘B’ and ‘B-02’ qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

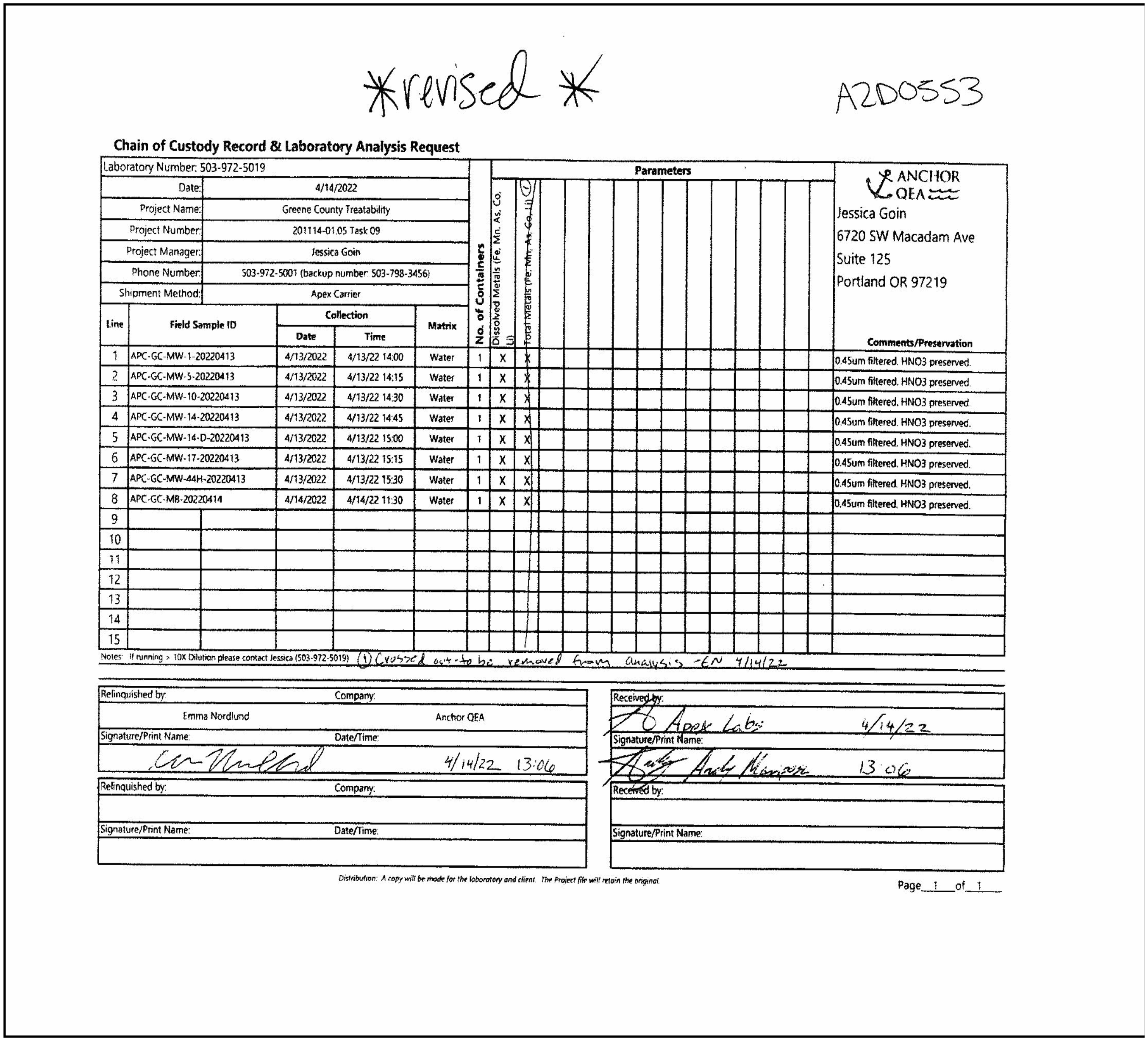
Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.



revised

A2D0553

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	4/14/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	Apex Carrier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Parameters

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (Fe, Mn, As, Co, Li)	~~Total Metals (Fe, Mn, As, Co, Li)~~ ①	Comments/Preservation
1	APC-GC-MW-1-20220413	4/13/2022	4/13/22 14:00	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
2	APC-GC-MW-5-20220413	4/13/2022	4/13/22 14:15	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
3	APC-GC-MW-10-20220413	4/13/2022	4/13/22 14:30	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
4	APC-GC-MW-14-20220413	4/13/2022	4/13/22 14:45	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
5	APC-GC-MW-14-D-20220413	4/13/2022	4/13/22 15:00	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
6	APC-GC-MW-17-20220413	4/13/2022	4/13/22 15:15	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
7	APC-GC-MW-44H-20220413	4/13/2022	4/13/22 15:30	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
8	APC-GC-MB-20220414	4/14/2022	4/14/22 11:30	Water	1	X	~~X~~	0.45um filtered. HNO3 preserved.
9								
10								
11								
12								
13								
14								
15								

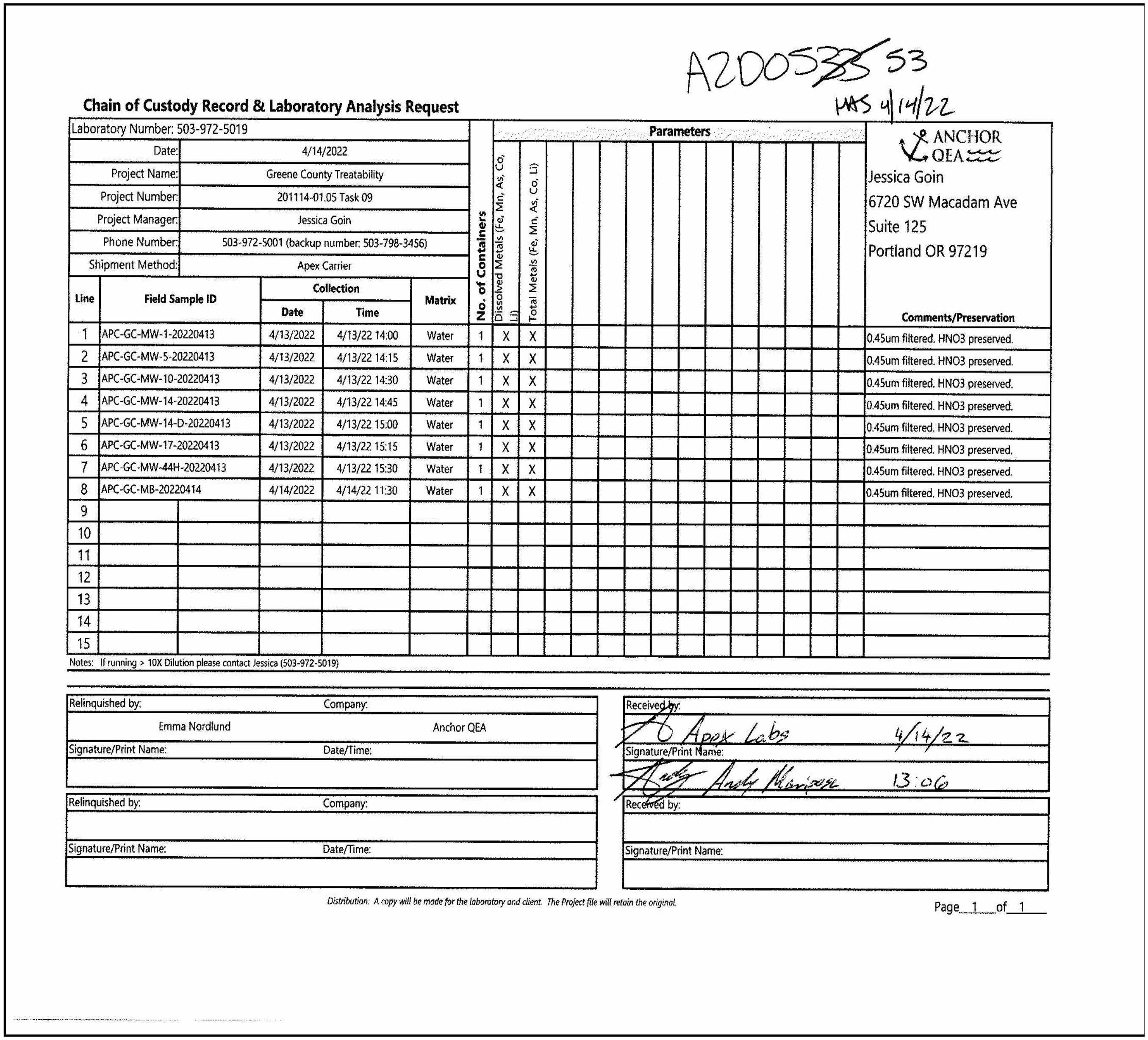
Notes: If running > 10X Dilution please contact Jessica (503-972-5019) ① Crossed out - to be removed from analysis -EN 4/14/22

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	Apex Labs	4/14/22
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	4/14/22 13:06	Andy Manzori	13:06
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



A2D05~~33~~53
HAS 4/14/22

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	4/14/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	Apex Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (Fe, Mn, As, Co, Li)	Total Metals (Fe, Mn, As, Co, Li)	Comments/Preservation
1	APC-GC-MW-1-20220413	4/13/2022	4/13/22 14:00	Water	1	X	X	0.45um filtered. HNO3 preserved.
2	APC-GC-MW-5-20220413	4/13/2022	4/13/22 14:15	Water	1	X	X	0.45um filtered. HNO3 preserved.
3	APC-GC-MW-10-20220413	4/13/2022	4/13/22 14:30	Water	1	X	X	0.45um filtered. HNO3 preserved.
4	APC-GC-MW-14-20220413	4/13/2022	4/13/22 14:45	Water	1	X	X	0.45um filtered. HNO3 preserved.
5	APC-GC-MW-14-D-20220413	4/13/2022	4/13/22 15:00	Water	1	X	X	0.45um filtered. HNO3 preserved.
6	APC-GC-MW-17-20220413	4/13/2022	4/13/22 15:15	Water	1	X	X	0.45um filtered. HNO3 preserved.
7	APC-GC-MW-44H-20220413	4/13/2022	4/13/22 15:30	Water	1	X	X	0.45um filtered. HNO3 preserved.
8	APC-GC-MB-20220414	4/14/2022	4/14/22 11:30	Water	1	X	X	0.45um filtered. HNO3 preserved.
9								
10								
11								
12								
13								
14								
15								

Notes: If running > 10X Dilution please contact Jessica (503-972-5019)

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time:

Received by: Apex Labs 4/14/22
Signature/Print Name: Andy Minjarez 13:06

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A2 D0553

Project/Project #: Greene County Treatability / 201114-01.05 Task 09

Delivery Info:

Date/time received: 4/14/22@ 13:06 By: AM

Delivered by: Apex ✓ Client ___ ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 4/14/22 @ 13:39 By: AM

Chain of Custody included? Yes ✓ No ___ Custody seals? Yes ___ No ✓

Signed/dated by client? Yes ✓ No ___

Signed/dated by Apex? Yes ✓ No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.9						
Received on ice? ([✓ Y]/N)	Y						
Temp. blanks? ([✓ Y]/N)	Y						
Ice type: (Gel/[✓ Real]/Other)	Real Ice						
Condition:	Good						

Cooler out of temp? (Y/[✓ N]) Possible reason why: ___
Green dots applied to out of temperature samples? Yes/[✓ No]
Out of temperature samples form initiated? Yes/[✓ No]
Sample Inspection: Date/time inspected: 4/14/22 @ 1545 By: HAS

All samples intact? Yes X No ___ Comments: ___

HAS 4/14/22 axx4/14/22

Bottle labels/COCs agree? [✓ Yes] ~~X~~ No ~~X~~ Comments: ~~APC-~~ ~~GC-MB-20220414~~
HAS 4/14/22

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes X No ___ NA ___ pH appropriate? Yes X No ___ NA ___

Comments: ___

Additional information: ___

Labeled by: HAS

Witness:

Cooler Inspected by: HAS

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Tuesday, May 10, 2022

Jessica Goin, PhD
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A2D0837 - Greene County - 201114-01.05 Task 09

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2D0837, which was received by the laboratory on 4/15/2022 at 11:55:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	0.7 degC

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
APC-GC-MW-1-20220413	A2D0837-01	Water	04/15/22 09:00	04/15/22 11:55
APC-GC-MW-5-20220413	A2D0837-02	Water	04/15/22 09:05	04/15/22 11:55
APC-GC-MW-10-20220413	A2D0837-03	Water	04/15/22 09:10	04/15/22 11:55
APC-GC-MW-14-20220413	A2D0837-04	Water	04/15/22 09:15	04/15/22 11:55
APC-GC-MW-14-D-20220413	A2D0837-05	Water	04/15/22 09:20	04/15/22 11:55
APC-GC-MW-17-20220413	A2D0837-06	Water	04/15/22 09:25	04/15/22 11:55
APC-GC-MW-44H-20220413	A2D0837-07	Water	04/15/22 09:30	04/15/22 11:55
APC-GC-MB-20220414	A2D0837-08	Water	04/15/22 09:35	04/15/22 11:55

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
APC-GC-MW-1-20220413 (A2D0837-01)				Matrix: Water				
Batch: 22E0059								
Arsenic	**10.4**	0.500	1.00	ug/L	1	05/03/22 21:02	EPA 6020B	
Cobalt	**294**	0.500	1.00	ug/L	1	05/03/22 21:02	EPA 6020B	
Lithium	**3.19**	2.50	5.00	ug/L	1	05/06/22 13:33	EPA 6020B	J
APC-GC-MW-1-20220413 (A2D0837-01RE1)				Matrix: Water				
Batch: 22E0059								
Iron	**193000**	250	500	ug/L	10	05/05/22 01:58	EPA 6020B	
Manganese	**14300**	5.00	10.0	ug/L	10	05/05/22 01:58	EPA 6020B	
APC-GC-MW-5-20220413 (A2D0837-02)				Matrix: Water				
Batch: 22E0059								
Arsenic	**314**	0.500	1.00	ug/L	1	05/03/22 21:07	EPA 6020B	
Cobalt	**8.75**	0.500	1.00	ug/L	1	05/03/22 21:07	EPA 6020B	
Iron	**27100**	25.0	50.0	ug/L	1	05/03/22 21:07	EPA 6020B	
Manganese	**1710**	0.500	1.00	ug/L	1	05/03/22 21:07	EPA 6020B	
Lithium	**98.9**	2.50	5.00	ug/L	1	05/06/22 13:37	EPA 6020B	
APC-GC-MW-10-20220413 (A2D0837-03)				Matrix: Water				
Batch: 22E0059								
Arsenic	**6.02**	0.500	1.00	ug/L	1	05/03/22 21:12	EPA 6020B	
Cobalt	**20.8**	0.500	1.00	ug/L	1	05/03/22 21:12	EPA 6020B	
Iron	**14600**	25.0	50.0	ug/L	1	05/03/22 21:12	EPA 6020B	
Lithium	**323**	2.50	5.00	ug/L	1	05/06/22 13:42	EPA 6020B	
APC-GC-MW-10-20220413 (A2D0837-03RE1)				Matrix: Water				
Batch: 22E0059								
Manganese	**2940**	5.00	10.0	ug/L	10	05/05/22 01:53	EPA 6020B	
APC-GC-MW-14-20220413 (A2D0837-04)				Matrix: Water				
Batch: 22E0059								
Arsenic	**13.4**	0.500	1.00	ug/L	1	05/03/22 21:17	EPA 6020B	
Cobalt	**39.7**	0.500	1.00	ug/L	1	05/03/22 21:17	EPA 6020B	
Iron	**45700**	25.0	50.0	ug/L	1	05/03/22 21:17	EPA 6020B	
Lithium	**615**	2.50	5.00	ug/L	1	05/06/22 13:51	EPA 6020B	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
APC-GC-MW-14-20220413 (A2D0837-04RE1)					**Matrix: Water**			
Batch: 22E0059								
Manganese	**4670**	5.00	10.0	ug/L	10	05/05/22 02:03	EPA 6020B	
APC-GC-MW-14-D-20220413 (A2D0837-05)					**Matrix: Water**			
Batch: 22E0059								
Arsenic	**12.8**	0.500	1.00	ug/L	1	05/03/22 21:22	EPA 6020B	
Cobalt	**39.3**	0.500	1.00	ug/L	1	05/03/22 21:22	EPA 6020B	
Iron	**45200**	25.0	50.0	ug/L	1	05/03/22 21:22	EPA 6020B	
Lithium	**619**	2.50	5.00	ug/L	1	05/06/22 14:04	EPA 6020B	
APC-GC-MW-14-D-20220413 (A2D0837-05RE1)					**Matrix: Water**			
Batch: 22E0059								
Manganese	**4620**	5.00	10.0	ug/L	10	05/05/22 02:08	EPA 6020B	
APC-GC-MW-17-20220413 (A2D0837-06)					**Matrix: Water**			
Batch: 22E0059								
Cobalt	**10.3**	0.500	1.00	ug/L	1	05/03/22 21:37	EPA 6020B	
Iron	**21500**	25.0	50.0	ug/L	1	05/03/22 21:37	EPA 6020B	
Manganese	**2090**	0.500	1.00	ug/L	1	05/03/22 21:37	EPA 6020B	
Lithium	**678**	2.50	5.00	ug/L	1	05/06/22 14:08	EPA 6020B	
APC-GC-MW-17-20220413 (A2D0837-06RE1)					**Matrix: Water**			
Batch: 22E0059								
Arsenic	**597**	5.00	10.0	ug/L	10	05/05/22 02:28	EPA 6020B	
APC-GC-MW-44H-20220413 (A2D0837-07)					**Matrix: Water**			
Batch: 22E0059								
Arsenic	**3.00**	0.500	1.00	ug/L	1	05/03/22 21:42	EPA 6020B	
Cobalt	**324**	0.500	1.00	ug/L	1	05/03/22 21:42	EPA 6020B	
Iron	**5320**	25.0	50.0	ug/L	1	05/03/22 21:42	EPA 6020B	
Lithium	**4.66**	2.50	5.00	ug/L	1	05/06/22 14:13	EPA 6020B	**J**
APC-GC-MW-44H-20220413 (A2D0837-07RE1)					**Matrix: Water**			
Batch: 22E0059								
Manganese	**9240**	5.00	10.0	ug/L	10	05/05/22 02:34	EPA 6020B	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
APC-GC-MB-20220414 (A2D0837-08)				**Matrix: Water**				
Batch: 22E0059								
Arsenic	ND	0.500	1.00	ug/L	1	05/03/22 21:47	EPA 6020B	
Cobalt	ND	0.500	1.00	ug/L	1	05/03/22 21:47	EPA 6020B	
Iron	ND	25.0	50.0	ug/L	1	05/03/22 21:47	EPA 6020B	
Manganese	ND	0.500	1.00	ug/L	1	05/03/22 21:47	EPA 6020B	
Lithium	ND	2.50	5.00	ug/L	1	05/06/22 14:17	EPA 6020B	

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22E0059 - EPA 3015A							Water					
Blank (22E0059-BLK1)			Prepared: 05/03/22 12:00		Analyzed: 05/03/22 19:51							
EPA 6020B												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Cobalt	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Blank (22E0059-BLK3)			Prepared: 05/03/22 12:00		Analyzed: 05/06/22 13:15							
EPA 6020B												
Lithium	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
LCS (22E0059-BS1)			Prepared: 05/03/22 12:00		Analyzed: 05/03/22 19:56							
EPA 6020B												
Arsenic	54.9	0.500	1.00	ug/L	1	55.6	---	99	80-120%	---	---	
Cobalt	57.0	0.500	1.00	ug/L	1	55.6	---	103	80-120%	---	---	
Iron	2840	25.0	50.0	ug/L	1	2780	---	102	80-120%	---	---	
Manganese	54.5	0.500	1.00	ug/L	1	55.6	---	98	80-120%	---	---	
LCS (22E0059-BS2)			Prepared: 05/03/22 12:00		Analyzed: 05/06/22 13:19							
EPA 6020B												
Lithium	468	2.50	5.00	ug/L	1	444	---	105	80-120%	---	---	
Duplicate (22E0059-DUP1)			Prepared: 05/03/22 12:00		Analyzed: 05/03/22 20:52							
QC Source Sample: Non-SDG (A2D0638-01)												
Arsenic	**1.64**	0.500	1.00	ug/L	1	---	1.22	---	---	**29**	**20%**	Q-05
Cobalt	**2.38**	0.500	1.00	ug/L	1	---	2.29	---	---	4	20%	
Iron	**5760**	25.0	50.0	ug/L	1	---	5240	---	---	9	20%	
Manganese	**154**	0.500	1.00	ug/L	1	---	149	---	---	3	20%	
Duplicate (22E0059-DUP3)			Prepared: 05/03/22 12:00		Analyzed: 05/06/22 13:28							
QC Source Sample: Non-SDG (A2D0638-01)												
Lithium	**4.66**	2.50	5.00	ug/L	1	---	4.48	---	---	4	20%	J
Matrix Spike (22E0059-MS1)			Prepared: 05/03/22 12:00		Analyzed: 05/03/22 20:57							

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22E0059 - EPA 3015A							**Water**					
Matrix Spike (22E0059-MS1)			Prepared: 05/03/22 12:00			Analyzed: 05/03/22 20:57						
QC Source Sample: Non-SDG (A2D0638-01)												
EPA 6020B												
Arsenic	56.6	0.500	1.00	ug/L	1	55.6	1.22	100	75-125%	---	---	
Cobalt	58.2	0.500	1.00	ug/L	1	55.6	2.29	101	75-125%	---	---	
Iron	8580	25.0	50.0	ug/L	1	2780	5240	120	75-125%	---	---	
Manganese	205	0.500	1.00	ug/L	1	55.6	149	101	75-125%	---	---	
Matrix Spike (22E0059-MS2)			Prepared: 05/03/22 12:00			Analyzed: 05/06/22 13:46						
QC Source Sample: APC-GC-MW-10-20220413 (A2D0837-03)												
EPA 6020B												
Lithium	789	2.50	5.00	ug/L	1	444	323	105	75-125%	---	---	

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22E0059							
A2D0837-01	Water	EPA 6020B	04/15/22 09:00	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-01RE1	Water	EPA 6020B	04/15/22 09:00	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-02	Water	EPA 6020B	04/15/22 09:05	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-03	Water	EPA 6020B	04/15/22 09:10	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-03RE1	Water	EPA 6020B	04/15/22 09:10	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-04	Water	EPA 6020B	04/15/22 09:15	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-04RE1	Water	EPA 6020B	04/15/22 09:15	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-05	Water	EPA 6020B	04/15/22 09:20	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-05RE1	Water	EPA 6020B	04/15/22 09:20	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-06	Water	EPA 6020B	04/15/22 09:25	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-06RE1	Water	EPA 6020B	04/15/22 09:25	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-07	Water	EPA 6020B	04/15/22 09:30	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-07RE1	Water	EPA 6020B	04/15/22 09:30	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00
A2D0837-08	Water	EPA 6020B	04/15/22 09:35	05/03/22 12:00	45mL/50mL	45mL/50mL	1.00

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET	Analyte DETECTED at or above the detection or reporting limit.
ND	Analyte NOT DETECTED at or above the detection or reporting limit.
NR	Result Not Reported
RPD	Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry"	Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry") See Percent Solids section for details of dry weight analysis.
" wet"	Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
" "	Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

‘B’ and ‘B-02’ qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

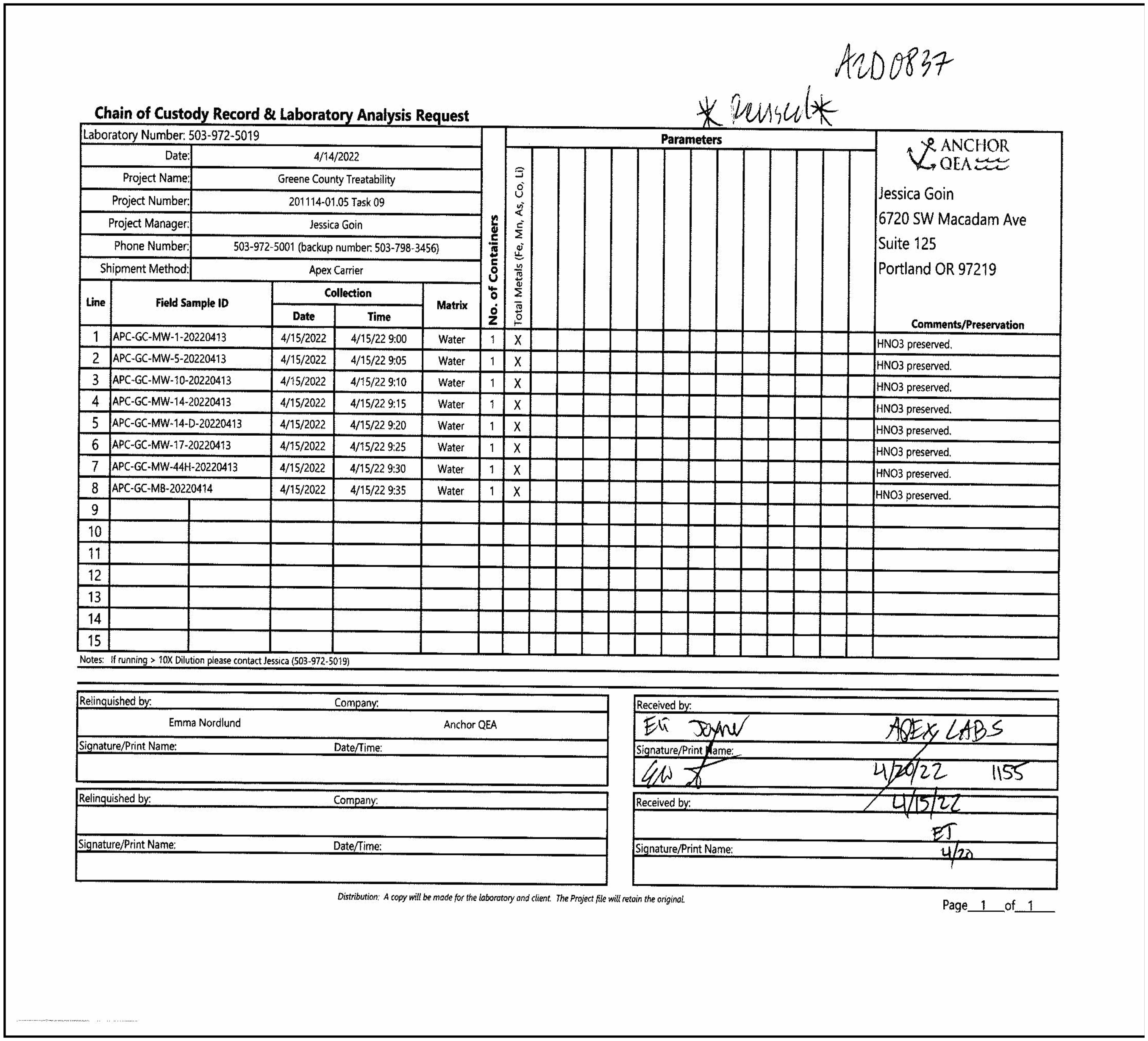
Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.



A2D0837

Rush

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	4/14/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	Apex Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Total Metals (Fe, Mn, As, Co, Li)	Comments/Preservation
1	APC-GC-MW-1-20220413	4/15/2022	4/15/22 9:00	Water	1	X	HNO3 preserved.
2	APC-GC-MW-5-20220413	4/15/2022	4/15/22 9:05	Water	1	X	HNO3 preserved.
3	APC-GC-MW-10-20220413	4/15/2022	4/15/22 9:10	Water	1	X	HNO3 preserved.
4	APC-GC-MW-14-20220413	4/15/2022	4/15/22 9:15	Water	1	X	HNO3 preserved.
5	APC-GC-MW-14-D-20220413	4/15/2022	4/15/22 9:20	Water	1	X	HNO3 preserved.
6	APC-GC-MW-17-20220413	4/15/2022	4/15/22 9:25	Water	1	X	HNO3 preserved.
7	APC-GC-MW-44H-20220413	4/15/2022	4/15/22 9:30	Water	1	X	HNO3 preserved.
8	APC-GC-MB-20220414	4/15/2022	4/15/22 9:35	Water	1	X	HNO3 preserved.
9							
10							
11							
12							
13							
14							
15							

Notes: If running > 10X Dilution please contact Jessica (503-972-5019)

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time:

Received by: Eli Joyner
Company: APEX LABS
Signature/Print Name:
Date/Time: 4/20/22 1155

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

~~4/15/22~~ ET 4/20

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

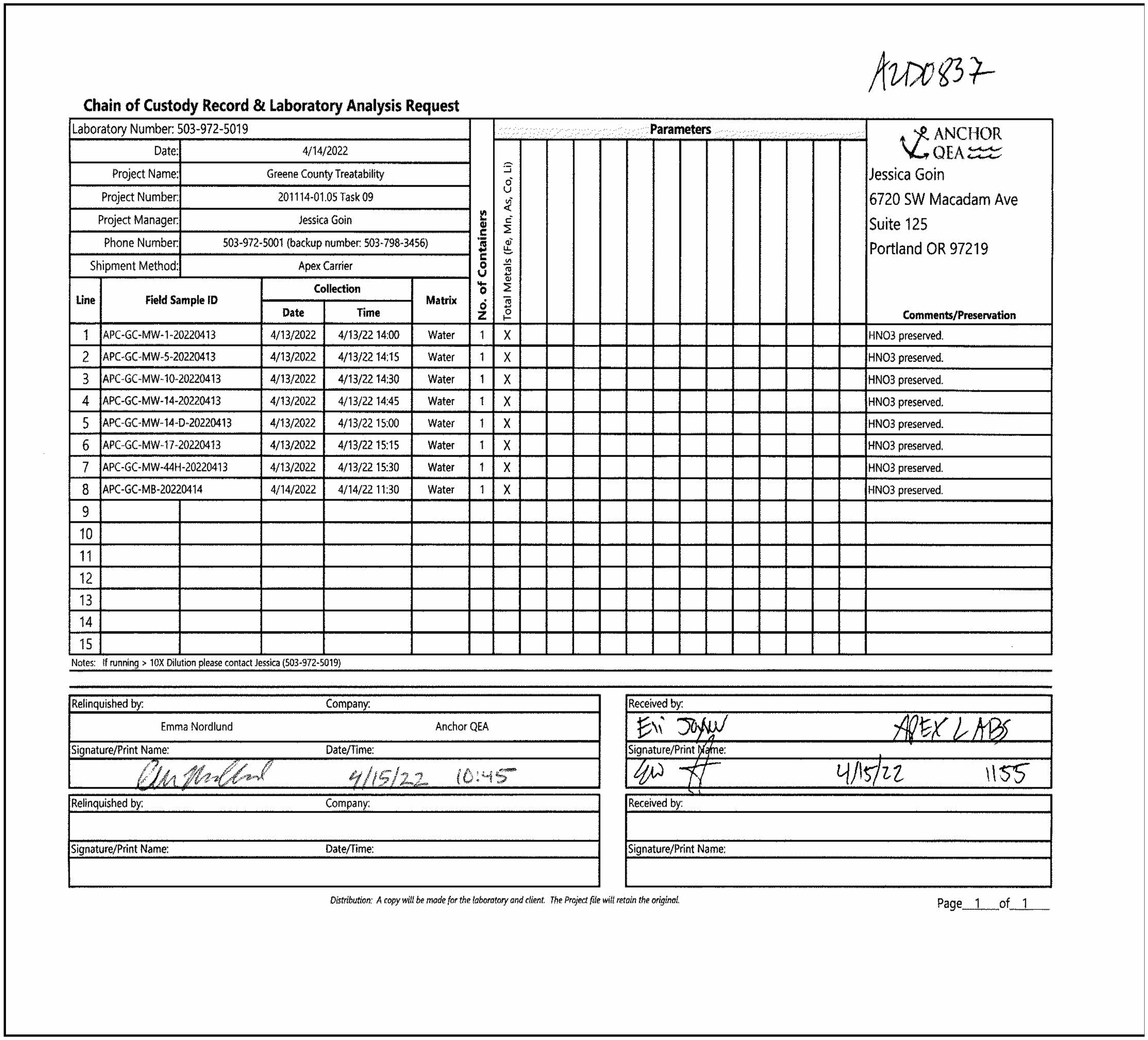
DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2D0837 - 05 10 22 2202



A2D0837

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	4/14/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	Apex Carrier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Total Metals (Fe, Mn, As, Co, Li)	Comments/Preservation
1	APC-GC-MW-1-20220413	4/13/2022	4/13/22 14:00	Water	1	X	HNO3 preserved.
2	APC-GC-MW-5-20220413	4/13/2022	4/13/22 14:15	Water	1	X	HNO3 preserved.
3	APC-GC-MW-10-20220413	4/13/2022	4/13/22 14:30	Water	1	X	HNO3 preserved.
4	APC-GC-MW-14-20220413	4/13/2022	4/13/22 14:45	Water	1	X	HNO3 preserved.
5	APC-GC-MW-14-D-20220413	4/13/2022	4/13/22 15:00	Water	1	X	HNO3 preserved.
6	APC-GC-MW-17-20220413	4/13/2022	4/13/22 15:15	Water	1	X	HNO3 preserved.
7	APC-GC-MW-44H-20220413	4/13/2022	4/13/22 15:30	Water	1	X	HNO3 preserved.
8	APC-GC-MB-20220414	4/14/2022	4/14/22 11:30	Water	1	X	HNO3 preserved.
9							
10							
11							
12							
13							
14							
15							

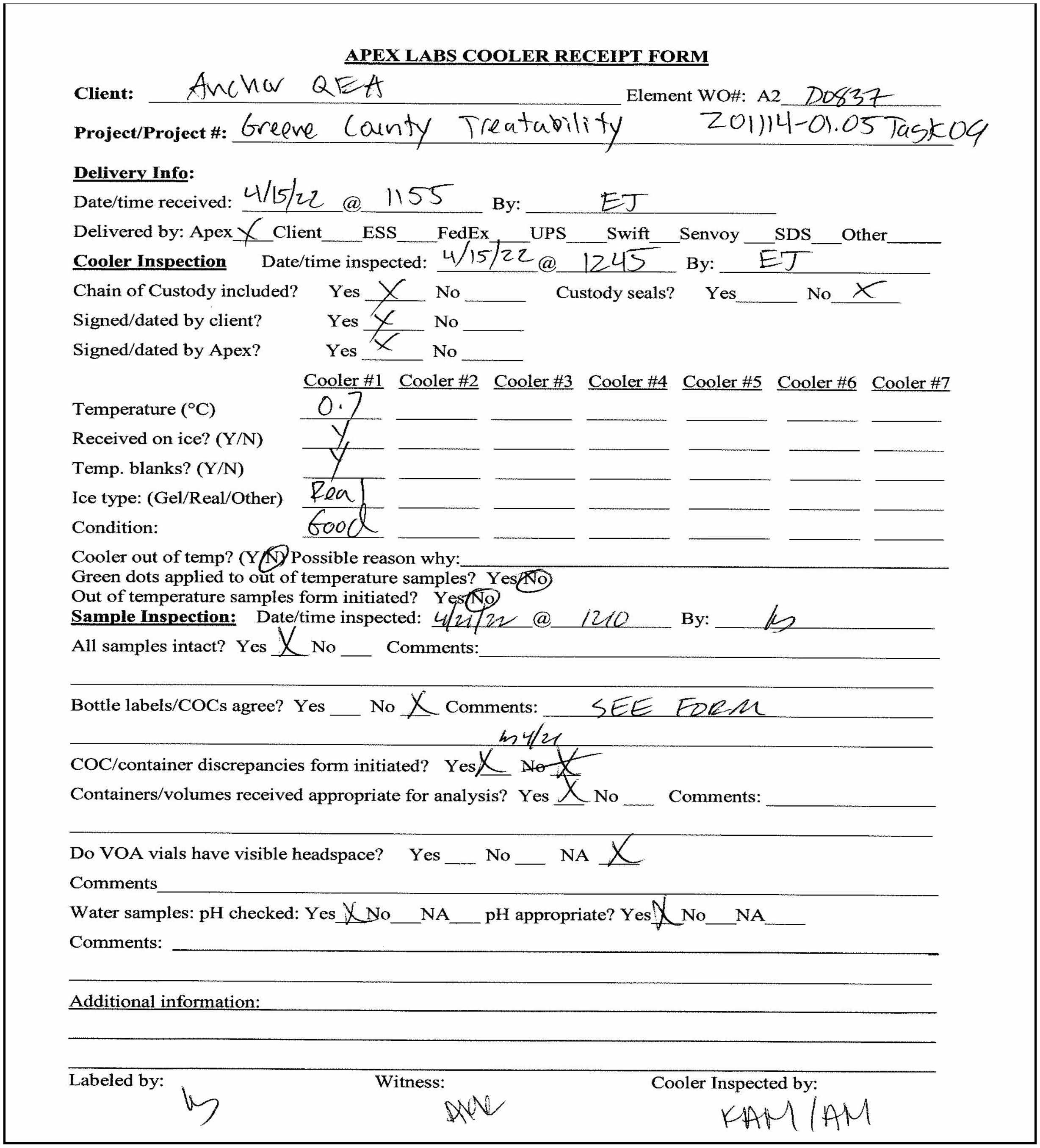
Notes: If running > 10X Dilution please contact Jessica (503-972-5019)

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	Eli Joyw	APEX LABS
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	4/15/22 10:45		4/15/22 1155
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.



APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A2 D0837

Project/Project #: Greene County Treatability 201114-01.05 Task 09

Delivery Info:

Date/time received: 4/15/22 @ 1155 By: EJ

Delivered by: Apex X Client___ ESS___ FedEx___ UPS___ Swift___ Senvoy___ SDS___ Other_____

Cooler Inspection Date/time inspected: 4/15/22 @ 1245 By: EJ

Chain of Custody included? Yes X No ______ Custody seals? Yes______ No X

Signed/dated by client? Yes X No ______

Signed/dated by Apex? Yes X No ______

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.7						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition:	Good						

Cooler out of temp? (Y/[✓ N]) Possible reason why:

Green dots applied to out of temperature samples? Yes/[✓ No]

Out of temperature samples form initiated? Yes/[✓ No]

Sample Inspection: Date/time inspected: 4/21/22 @ 1210 By:

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? Yes ___ No X Comments: SEE FORM

4/21

COC/container discrepancies form initiated? Yes X ~~No~~

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments

Water samples: pH checked: Yes X No___ NA___ pH appropriate? Yes X No___ NA___

Comments:

Additional information:

Labeled by:

Witness:

Cooler Inspected by: KAM/AM

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

September 09, 2022

Service Request No:K2210132

Anchor QEA, LLC
6720 SW Macadam Ave Ste125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Accounts Payable,

Enclosed are the results of the sample(s) submitted to our laboratory September 02, 2022
For your reference, these analyses have been assigned our service request number **K2210132.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2210132
Project: Greene County Treatability
Date Received: 09/02/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Eight water samples were received for analysis at ALS Environmental on 09/02/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 09/09/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-MW-1-20220831 **Lab ID: K2210132-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	16.9		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	13.9		0.09	0.50	ug/L	200.8
Cobalt	270		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	269		0.009	0.020	ug/L	200.8
Iron	204000		2	10	ug/L	200.8
Iron, Dissolved	198000		2	10	ug/L	200.8
Lithium	5.42		0.10	0.20	ug/L	200.8
Lithium, Dissolved	5.31		0.10	0.20	ug/L	200.8
Manganese	15400		0.2	1.0	ug/L	200.8
Manganese, Dissolved	15000		0.2	1.0	ug/L	200.8

CLIENT ID: GC-AP-MW-1-DUP-20220831 **Lab ID: K2210132-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	16.2		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	13.8		0.09	0.50	ug/L	200.8
Cobalt	268		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	269		0.009	0.020	ug/L	200.8
Iron	199000		2	10	ug/L	200.8
Iron, Dissolved	199000		2	10	ug/L	200.8
Lithium	5.33		0.10	0.20	ug/L	200.8
Lithium, Dissolved	5.24		0.10	0.20	ug/L	200.8
Manganese	15300		0.2	1.0	ug/L	200.8
Manganese, Dissolved	15200		0.2	1.0	ug/L	200.8

CLIENT ID: GC-AP-MW-10-20220831 **Lab ID: K2210132-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	10.9		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	5.15		0.09	0.50	ug/L	200.8
Cobalt	20.7		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	20.9		0.009	0.020	ug/L	200.8
Iron	19800		0.3	2.0	ug/L	200.8
Iron, Dissolved	15900		0.3	2.0	ug/L	200.8
Lithium	251		0.10	0.20	ug/L	200.8
Lithium, Dissolved	243		0.10	0.20	ug/L	200.8
Manganese	3270		0.04	0.20	ug/L	200.8
Manganese, Dissolved	3300		0.04	0.20	ug/L	200.8

CLIENT ID: GC-AP-MW-14-20220831 **Lab ID: K2210132-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	25.5		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	15.7		0.09	0.50	ug/L	200.8
Cobalt	36.2		0.009	0.020	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-MW-14-20220831 **Lab ID: K2210132-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	35.8		0.009	0.020	ug/L	200.8
Iron	52000		2	10	ug/L	200.8
Iron, Dissolved	47400		2	10	ug/L	200.8
Lithium	561		0.10	0.20	ug/L	200.8
Lithium, Dissolved	543		0.10	0.20	ug/L	200.8
Manganese	5080		0.04	0.20	ug/L	200.8
Manganese, Dissolved	4960		0.04	0.20	ug/L	200.8

CLIENT ID: GC-AP-MW-17-20220831 **Lab ID: K2210132-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	886		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	550		0.09	0.50	ug/L	200.8
Cobalt	8.10		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	7.95		0.009	0.020	ug/L	200.8
Iron	26400		0.3	2.0	ug/L	200.8
Iron, Dissolved	19600		0.3	2.0	ug/L	200.8
Lithium	578		0.10	0.20	ug/L	200.8
Lithium, Dissolved	564		0.10	0.20	ug/L	200.8
Manganese	1780		0.04	0.20	ug/L	200.8
Manganese, Dissolved	1750		0.04	0.20	ug/L	200.8

CLIENT ID: GC-AP-MW-23-20220831 **Lab ID: K2210132-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.15	J	0.09	0.50	ug/L	200.8
Cobalt	0.032		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	0.034		0.009	0.020	ug/L	200.8
Iron	6.5		0.3	2.0	ug/L	200.8
Iron, Dissolved	1.3	J	0.3	2.0	ug/L	200.8
Lithium	1.65		0.10	0.20	ug/L	200.8
Lithium, Dissolved	1.41		0.10	0.20	ug/L	200.8
Manganese	0.90		0.04	0.20	ug/L	200.8
Manganese, Dissolved	0.66		0.04	0.20	ug/L	200.8

CLIENT ID: GC-AP-MW-44H-20220831 **Lab ID: K2210132-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	1.73		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	1.64		0.09	0.50	ug/L	200.8
Cobalt	276		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	273		0.009	0.020	ug/L	200.8
Iron	5430		0.3	2.0	ug/L	200.8
Iron, Dissolved	5350		0.3	2.0	ug/L	200.8
Lithium	3.33		0.10	0.20	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-MW-44H-20220831 **Lab ID: K2210132-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	3.26		0.10	0.20	ug/L	200.8
Manganese	7770		0.04	0.20	ug/L	200.8
Manganese, Dissolved	7660		0.04	0.20	ug/L	200.8

CLIENT ID: GC-AP-MW-5-20220831 **Lab ID: K2210132-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	310		0.09	0.50	ug/L	200.8
Arsenic, Dissolved	140		0.09	0.50	ug/L	200.8
Cobalt	5.46		0.009	0.020	ug/L	200.8
Cobalt, Dissolved	5.68		0.009	0.020	ug/L	200.8
Iron	22500		0.3	2.0	ug/L	200.8
Iron, Dissolved	16900		0.3	2.0	ug/L	200.8
Lithium	83.1		0.10	0.20	ug/L	200.8
Lithium, Dissolved	82.2		0.10	0.20	ug/L	200.8
Manganese	1520		0.04	0.20	ug/L	200.8
Manganese, Dissolved	1560		0.04	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2210132
Project: Greene County Treatability/221114-01.05 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2210132-001	GC-AP-MW-1-20220831	8/31/2022	1300
K2210132-002	GC-AP-MW-1-DUP-20220831	8/31/2022	1305
K2210132-003	GC-AP-MW-10-20220831	8/31/2022	1310
K2210132-004	GC-AP-MW-14-20220831	8/31/2022	1315
K2210132-005	GC-AP-MW-17-20220831	8/31/2022	1320
K2210132-006	GC-AP-MW-23-20220831	8/31/2022	1325
K2210132-007	GC-AP-MW-44H-20220831	8/31/2022	1330
K2210132-008	GC-AP-MW-5-20220831	8/31/2022	1335

K2210132

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	8/31/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Parameters

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Total Metals (Fe, Mn, As, Co, Li)	Dissolved Metals (Fe, Mn, As, Co, Li)
1	GC-AP-MW-1-20220831	8/31/2022	13:00	Water	2	X	X
2	GC-AP-MW-1-DUP-20220831	8/31/2022	13:05	Water	2	X	X
3	GC-AP-MW-10-20220831	8/31/2022	13:10	Water	2	X	X
4	GC-AP-MW-14-20220831	8/31/2022	13:15	Water	2	X	X
5	GC-AP-MW-17-20220831	8/31/2022	13:20	Water	2	X	X
6	GC-AP-MW-23-20220831	8/31/2022	13:25	Water	2	X	X
7	GC-AP-MW-44H-20220831	8/31/2022	13:30	Water	2	X	X
8	GC-AP-MW-5-20220831	8/31/2022	13:35	Water	2	X	X
9							
10							
11							
12							
13							
14							
15							

Comments/Preservation

HNO3 preserved.
1 filtered bottle for dissolved metals, 1 unfiltered bottle for total metals.
3-Day TAT.
ICP-MS Method 200.8.

Notes: Please Contact Masa (503-972-5001, mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 13:00 9/1/22

Received by: Hollander
Signature/Print Name: 0945 9/2/22

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request **K22** 10132

Received: 9/2/22 Opened: 9/2/22 By: _____ Unloaded: 9/2/22 By: _____

1. Samples were received via? *USPS* [✓ *Fed Ex*] *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 2 front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.2		1801				277503001484	

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

RUSH

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

1/13/22 *Page* ____ *of* ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-AP-MW-1-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-001	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-MW-1-DUP-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-002	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-MW-10-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-003	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-MW-14-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-004	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-MW-17-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-005	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-AP-MW-23-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-006	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-MW-44H-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-007	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-MW-5-20220831	**Date Collected:**	08/31/22
Lab Code:	K2210132-008	**Date Received:**	09/2/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:00
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-1-20220831	**Basis:**	NA
Lab Code:	K2210132-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**13.9**	ug/L	0.50	0.09	1	09/08/22 17:58	09/07/22	
Cobalt	200.8	**269**	ug/L	0.020	0.009	1	09/08/22 17:58	09/07/22	
Iron	200.8	**198000**	ug/L	10	2	5	09/08/22 17:23	09/07/22	
Lithium	200.8	**5.31**	ug/L	0.20	0.10	1	09/08/22 17:58	09/07/22	
Manganese	200.8	**15000**	ug/L	1.0	0.2	5	09/08/22 17:23	09/07/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:00
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-1-20220831	**Basis:**	NA
Lab Code:	K2210132-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**16.9**	ug/L	0.50	0.09	1	09/08/22 17:48	09/07/22	
Cobalt	200.8	**270**	ug/L	0.020	0.009	1	09/08/22 17:48	09/07/22	
Iron	200.8	**204000**	ug/L	10	2	5	09/08/22 17:00	09/07/22	
Lithium	200.8	**5.42**	ug/L	0.20	0.10	1	09/08/22 17:48	09/07/22	
Manganese	200.8	**15400**	ug/L	1.0	0.2	5	09/08/22 17:00	09/07/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:05
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-1-DUP-20220831	**Basis:**	NA
Lab Code:	K2210132-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**13.8**	ug/L	0.50	0.09	1	09/08/22 17:59	09/07/22	
Cobalt	200.8	**269**	ug/L	0.020	0.009	1	09/08/22 17:59	09/07/22	
Iron	200.8	**199000**	ug/L	10	2	5	09/08/22 17:25	09/07/22	
Lithium	200.8	**5.24**	ug/L	0.20	0.10	1	09/08/22 17:59	09/07/22	
Manganese	200.8	**15200**	ug/L	1.0	0.2	5	09/08/22 17:25	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:05
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-1-DUP-20220831	**Basis:**	NA
Lab Code:	K2210132-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**16.2**	ug/L	0.50	0.09	1	09/08/22 17:53	09/07/22	
Cobalt	200.8	**268**	ug/L	0.020	0.009	1	09/08/22 17:53	09/07/22	
Iron	200.8	**199000**	ug/L	10	2	5	09/08/22 17:04	09/07/22	
Lithium	200.8	**5.33**	ug/L	0.20	0.10	1	09/08/22 17:53	09/07/22	
Manganese	200.8	**15300**	ug/L	1.0	0.2	5	09/08/22 17:04	09/07/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:10
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-10-20220831	**Basis:**	NA
Lab Code:	K2210132-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.15**	ug/L	0.50	0.09	1	09/08/22 17:26	09/07/22	
Cobalt	200.8	**20.9**	ug/L	0.020	0.009	1	09/08/22 17:26	09/07/22	
Iron	200.8	**15900**	ug/L	2.0	0.3	1	09/08/22 17:26	09/07/22	
Lithium	200.8	**243**	ug/L	0.20	0.10	1	09/08/22 17:26	09/07/22	
Manganese	200.8	**3300**	ug/L	0.20	0.04	1	09/08/22 17:26	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:10
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-10-20220831	**Basis:**	NA
Lab Code:	K2210132-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.9**	ug/L	0.50	0.09	1	09/08/22 17:09	09/07/22	
Cobalt	200.8	**20.7**	ug/L	0.020	0.009	1	09/08/22 17:09	09/07/22	
Iron	200.8	**19800**	ug/L	2.0	0.3	1	09/08/22 17:09	09/07/22	
Lithium	200.8	**251**	ug/L	0.20	0.10	1	09/08/22 17:09	09/07/22	
Manganese	200.8	**3270**	ug/L	0.20	0.04	1	09/08/22 17:09	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:15
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-14-20220831	**Basis:**	NA
Lab Code:	K2210132-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**15.7**	ug/L	0.50	0.09	1	09/08/22 17:28	09/07/22	
Cobalt	200.8	**35.8**	ug/L	0.020	0.009	1	09/08/22 17:28	09/07/22	
Iron	200.8	**47400**	ug/L	10	2	5	09/08/22 17:43	09/07/22	
Lithium	200.8	**543**	ug/L	0.20	0.10	1	09/08/22 17:28	09/07/22	
Manganese	200.8	**4960**	ug/L	0.20	0.04	1	09/08/22 17:28	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:15
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-14-20220831	**Basis:**	NA
Lab Code:	K2210132-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**25.5**	ug/L	0.50	0.09	1	09/08/22 17:10	09/07/22	
Cobalt	200.8	**36.2**	ug/L	0.020	0.009	1	09/08/22 17:10	09/07/22	
Iron	200.8	**52000**	ug/L	10	2	5	09/08/22 17:21	09/07/22	
Lithium	200.8	**561**	ug/L	0.20	0.10	1	09/08/22 17:10	09/07/22	
Manganese	200.8	**5080**	ug/L	0.20	0.04	1	09/08/22 17:10	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:20
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-17-20220831	**Basis:**	NA
Lab Code:	K2210132-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**550**	ug/L	0.50	0.09	1	09/08/22 17:29	09/07/22	
Cobalt	200.8	**7.95**	ug/L	0.020	0.009	1	09/08/22 17:29	09/07/22	
Iron	200.8	**19600**	ug/L	2.0	0.3	1	09/08/22 17:29	09/07/22	
Lithium	200.8	**564**	ug/L	0.20	0.10	1	09/08/22 17:29	09/07/22	
Manganese	200.8	**1750**	ug/L	0.20	0.04	1	09/08/22 17:29	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:20
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-17-20220831	**Basis:**	NA
Lab Code:	K2210132-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**886**	ug/L	0.50	0.09	1	09/08/22 17:15	09/07/22	
Cobalt	200.8	**8.10**	ug/L	0.020	0.009	1	09/08/22 17:15	09/07/22	
Iron	200.8	**26400**	ug/L	2.0	0.3	1	09/08/22 17:15	09/07/22	
Lithium	200.8	**578**	ug/L	0.20	0.10	1	09/08/22 17:15	09/07/22	
Manganese	200.8	**1780**	ug/L	0.20	0.04	1	09/08/22 17:15	09/07/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:25
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-23-20220831	**Basis:**	NA
Lab Code:	K2210132-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	09/08/22 17:38	09/07/22	
Cobalt	200.8	**0.034**	ug/L	0.020	0.009	1	09/08/22 17:38	09/07/22	
Iron	200.8	**1.3 J**	ug/L	2.0	0.3	1	09/08/22 17:38	09/07/22	
Lithium	200.8	**1.41**	ug/L	0.20	0.10	1	09/08/22 17:38	09/07/22	
Manganese	200.8	**0.66**	ug/L	0.20	0.04	1	09/08/22 17:38	09/07/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:25
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-23-20220831	**Basis:**	NA
Lab Code:	K2210132-006		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.15 J**	ug/L	0.50	0.09	1	09/08/22 17:17	09/07/22	
Cobalt	200.8	**0.032**	ug/L	0.020	0.009	1	09/08/22 17:17	09/07/22	
Iron	200.8	**6.5**	ug/L	2.0	0.3	1	09/08/22 17:17	09/07/22	
Lithium	200.8	**1.65**	ug/L	0.20	0.10	1	09/08/22 17:17	09/07/22	
Manganese	200.8	**0.90**	ug/L	0.20	0.04	1	09/08/22 17:17	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:30
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-44H-20220831	**Basis:**	NA
Lab Code:	K2210132-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.64**	ug/L	0.50	0.09	1	09/08/22 17:40	09/07/22	
Cobalt	200.8	**273**	ug/L	0.020	0.009	1	09/08/22 17:40	09/07/22	
Iron	200.8	**5350**	ug/L	2.0	0.3	1	09/08/22 17:40	09/07/22	
Lithium	200.8	**3.26**	ug/L	0.20	0.10	1	09/08/22 17:40	09/07/22	
Manganese	200.8	**7660**	ug/L	0.20	0.04	1	09/08/22 17:40	09/07/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:30
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-44H-20220831	**Basis:**	NA
Lab Code:	K2210132-007		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.73**	ug/L	0.50	0.09	1	09/08/22 17:18	09/07/22	
Cobalt	200.8	**276**	ug/L	0.020	0.009	1	09/08/22 17:18	09/07/22	
Iron	200.8	**5430**	ug/L	2.0	0.3	1	09/08/22 17:18	09/07/22	
Lithium	200.8	**3.33**	ug/L	0.20	0.10	1	09/08/22 17:18	09/07/22	
Manganese	200.8	**7770**	ug/L	0.20	0.04	1	09/08/22 17:18	09/07/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:35
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-5-20220831	**Basis:**	NA
Lab Code:	K2210132-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**140**	ug/L	0.50	0.09	1	09/08/22 17:42	09/07/22	
Cobalt	200.8	**5.68**	ug/L	0.020	0.009	1	09/08/22 17:42	09/07/22	
Iron	200.8	**16900**	ug/L	2.0	0.3	1	09/08/22 17:42	09/07/22	
Lithium	200.8	**82.2**	ug/L	0.20	0.10	1	09/08/22 17:42	09/07/22	
Manganese	200.8	**1560**	ug/L	0.20	0.04	1	09/08/22 17:42	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22 13:35
Sample Matrix:	Water	**Date Received:**	09/02/22 09:45
Sample Name:	GC-AP-MW-5-20220831	**Basis:**	NA
Lab Code:	K2210132-008		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**310**	ug/L	0.50	0.09	1	09/08/22 17:20	09/07/22	
Cobalt	200.8	**5.46**	ug/L	0.020	0.009	1	09/08/22 17:20	09/07/22	
Iron	200.8	**22500**	ug/L	2.0	0.3	1	09/08/22 17:20	09/07/22	
Lithium	200.8	**83.1**	ug/L	0.20	0.10	1	09/08/22 17:20	09/07/22	
Manganese	200.8	**1520**	ug/L	0.20	0.04	1	09/08/22 17:20	09/07/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2215053-01		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/08/22 16:56	09/07/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	09/08/22 16:56	09/07/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	09/08/22 16:56	09/07/22	
Lithium	200.8	ND	U	ug/L	0.20	0.10	1	09/08/22 16:56	09/07/22	
Manganese	200.8	**0.06**	**J**	ug/L	0.20	0.04	1	09/08/22 16:56	09/07/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22
Sample Matrix:	Water	**Date Received:**	09/02/22
		Date Analyzed:	09/8/22
		Date Extracted:	09/7/22

Matrix Spike Summary
Total Metals

Sample Name:	GC-AP-MW-1-20220831	**Units:**	ug/L
Lab Code:	K2210132-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2215053-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	16.9	65.7	50.0	98	70-130
Cobalt	270	299	25.0	116 #	70-130
Iron	204000	204000	50	1557 #	70-130
Lithium	5.42	53.4	50.0	96	70-130
Manganese	15400	15500	25.0	353 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22
Sample Matrix:	Water	**Date Received:**	09/02/22
		Date Analyzed:	09/8/22
		Date Extracted:	09/7/22

Matrix Spike Summary
Total Metals

Sample Name:	GC-AP-MW-1-DUP-20220831	**Units:**	ug/L
Lab Code:	K2210132-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2215053-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	16.2	63.5	50.0	95	70-130
Cobalt	268	291	25.0	92 #	70-130
Iron	199000	204000	50	8617 #	70-130
Lithium	5.33	50.6	50.0	90	70-130
Manganese	15300	15500	25.0	769 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22
Sample Matrix:	Water	**Date Received:**	09/02/22
		Date Analyzed:	09/08/22

Replicate Sample Summary
Total Metals

Sample Name:	GC-AP-MW-1-20220831	**Units:**	ug/L
Lab Code:	K2210132-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2215053-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	16.9	17.0	17.0	<1	20
Cobalt	200.8	0.020	0.009	270	275	273	2	20
Iron	200.8	10	2	204000	202000	203000	<1	20
Lithium	200.8	0.20	0.10	5.42	5.38	5.40	<1	20
Manganese	200.8	1.0	0.2	15400	15300	15400	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	08/31/22
Sample Matrix:	Water	**Date Received:**	09/02/22
		Date Analyzed:	09/08/22

Replicate Sample Summary
Total Metals

Sample Name:	GC-AP-MW-1-DUP-20220831	**Units:**	ug/L
Lab Code:	K2210132-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2215053-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	16.2	16.8	16.5	4	20
Cobalt	200.8	0.020	0.009	268	266	267	<1	20
Iron	200.8	10	2	199000	202000	201000	1	20
Lithium	200.8	0.20	0.10	5.33	5.33	5.33	<1	20
Manganese	200.8	1.0	0.2	15300	15300	15300	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210132
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	09/08/22
Sample Matrix:	Water		

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2215053-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.3	50.0	97	85-115
Cobalt	200.8	25.1	25.0	100	85-115
Iron	200.8	49.0	50.0	98	85-115
Lithium	200.8	49.8	50.0	100	85-115
Manganese	200.8	24.7	25.0	99	85-115

ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Tuesday, April 19, 2022

Jessica Goin, PhD
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A2C0591 - Alabama Power-Greene County - 201114-01.05

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2C0591, which was received by the laboratory on 3/10/2022 at 2:26:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1 4.9 degC

Anchor QEA, LLC	Project: **Alabama Power-Greene County**	
6720 SW Macadam Ave. Suite 125	Project Number: **201114-01.05**	**Report ID:**
Portland, OR 97219	Project Manager: **Jessica Goin, PhD**	**A2C0591 - 04 19 22 0926**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GC-AP-PT-1	A2C0591-01	SO	03/10/22 10:30	03/10/22 14:26
GC-AP-PT-101	A2C0591-02	SO	03/10/22 10:35	03/10/22 14:26
GC-AP-PT-2	A2C0591-03	SO	03/10/22 10:40	03/10/22 14:26
GC-AP-PT-3	A2C0591-04	SO	03/10/22 10:45	03/10/22 14:26
GC-AP-PT-4	A2C0591-05	SO	03/10/22 10:50	03/10/22 14:26
GC-AP-PT-5	A2C0591-06	SO	03/10/22 10:55	03/10/22 14:26

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Alabama Power-Greene County**
Project Number: **201114-01.05**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2C0591 - 04 19 22 0926

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2C0591-01)				**Matrix: SO**				
Batch: 22C0831								
Arsenic	**0.852**	0.504	1.01	mg/kg	10	03/21/22 15:43	EPA 6020B	**J**
Cobalt	**0.580**	0.504	1.01	mg/kg	10	03/21/22 15:43	EPA 6020B	**J**
Lithium	ND	2.52	5.04	mg/kg	10	03/24/22 21:11	EPA 6020B	
GC-AP-PT-101 (A2C0591-02)				**Matrix: SO**				
Batch: 22C0831								
Arsenic	**1.05**	0.541	1.08	mg/kg	10	03/21/22 16:03	EPA 6020B	**J**
Cobalt	ND	0.541	1.08	mg/kg	10	03/21/22 16:03	EPA 6020B	
Lithium	ND	2.71	5.41	mg/kg	10	03/24/22 21:25	EPA 6020B	
GC-AP-PT-2 (A2C0591-03)				**Matrix: SO**				
Batch: 22C0831								
Arsenic	**1.77**	0.494	0.988	mg/kg	10	03/21/22 16:08	EPA 6020B	
Cobalt	**1.22**	0.494	0.988	mg/kg	10	03/21/22 16:08	EPA 6020B	
Lithium	**3.05**	2.47	4.94	mg/kg	10	03/24/22 21:29	EPA 6020B	**J**
GC-AP-PT-3 (A2C0591-04)				**Matrix: SO**				
Batch: 22C0831								
Arsenic	**1.53**	0.492	0.984	mg/kg	10	03/21/22 16:13	EPA 6020B	
Cobalt	**0.609**	0.492	0.984	mg/kg	10	03/21/22 16:13	EPA 6020B	**J**
Lithium	**4.25**	2.46	4.92	mg/kg	10	03/24/22 21:34	EPA 6020B	**J**
GC-AP-PT-4 (A2C0591-05)				**Matrix: SO**				
Batch: 22C0831								
Arsenic	**0.914**	0.518	1.04	mg/kg	10	03/21/22 16:17	EPA 6020B	**J**
Cobalt	**0.940**	0.518	1.04	mg/kg	10	03/21/22 16:17	EPA 6020B	**J**
Lithium	ND	2.59	5.18	mg/kg	10	03/24/22 21:39	EPA 6020B	
GC-AP-PT-5 (A2C0591-06)				**Matrix: SO**				
Batch: 22C0831								
Arsenic	**6.99**	0.540	1.08	mg/kg	10	03/21/22 16:32	EPA 6020B	
Cobalt	**7.64**	0.540	1.08	mg/kg	10	03/21/22 16:32	EPA 6020B	
Lithium	ND	2.70	5.40	mg/kg	10	03/24/22 21:53	EPA 6020B	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Alabama Power-Greene County**
Project Number: **201114-01.05**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2C0591 - 04 19 22 0926

ANALYTICAL SAMPLE RESULTS

Demand Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2C0591-01)				**Matrix: SO**				
Batch: 22C0724								
Total Organic Carbon	ND	200	200	mg/kg	1	03/24/22 16:53	EPA 9060Amod	
GC-AP-PT-101 (A2C0591-02)				**Matrix: SO**				
Batch: 22C0724								
Total Organic Carbon	ND	200	200	mg/kg	1	03/24/22 17:03	EPA 9060Amod	
GC-AP-PT-2 (A2C0591-03)				**Matrix: SO**				
Batch: 22C0724								
Total Organic Carbon	**220**	200	200	mg/kg	1	03/24/22 17:14	EPA 9060Amod	
GC-AP-PT-3 (A2C0591-04)				**Matrix: SO**				
Batch: 22C0724								
Total Organic Carbon	ND	200	200	mg/kg	1	03/24/22 17:25	EPA 9060Amod	
GC-AP-PT-4 (A2C0591-05)				**Matrix: SO**				
Batch: 22C0724								
Total Organic Carbon	ND	200	200	mg/kg	1	03/24/22 17:36	EPA 9060Amod	
GC-AP-PT-5 (A2C0591-06)				**Matrix: SO**				
Batch: 22C0724								
Total Organic Carbon	ND	200	200	mg/kg	1	03/24/22 17:47	EPA 9060Amod	

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/RSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2C0591-01)				**Matrix: SO**		**Batch: 22C0662**		
Gravel (>2.00mm)	**3.31**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**94.0**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**0.90**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Clay (< 0.005 mm)	**1.70**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 4.75 mm sieve (#4)	**2.24**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 2.00 mm sieve (#10)	**1.08**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.85 mm sieve (#20)	**3.77**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.425 mm sieve (#40)	**27.5**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.250 mm sieve (#60)	**47.9**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.150 mm sieve (#100)	**13.2**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.106 mm sieve (#140)	**1.10**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.075 mm sieve (#200)	**0.36**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.063 mm sieve (#230)	**0.12**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
GC-AP-PT-101 (A2C0591-02)				**Matrix: SO**		**Batch: 22C0662**		
Gravel (>2.00mm)	**3.33**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**94.3**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**1.20**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Clay (< 0.005 mm)	**1.20**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 4.75 mm sieve (#4)	**2.32**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 2.00 mm sieve (#10)	**1.01**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.85 mm sieve (#20)	**3.37**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.425 mm sieve (#40)	**27.7**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.250 mm sieve (#60)	**48.8**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.150 mm sieve (#100)	**13.0**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.106 mm sieve (#140)	**1.07**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.075 mm sieve (#200)	**0.32**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.063 mm sieve (#230)	**0.11**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
GC-AP-PT-2 (A2C0591-03)				**Matrix: SO**		**Batch: 22C0662**		
Gravel (>2.00mm)	**0.40**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**90.8**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**6.10**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/RSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-2 (A2C0591-03)				**Matrix: SO**		**Batch: 22C0662**		
Clay (< 0.005 mm)	**2.70**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 4.75 mm sieve (#4)	**0.14**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 2.00 mm sieve (#10)	**0.25**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.85 mm sieve (#20)	**0.75**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.425 mm sieve (#40)	**5.77**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.250 mm sieve (#60)	**42.4**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.150 mm sieve (#100)	**33.8**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.106 mm sieve (#140)	**4.78**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.075 mm sieve (#200)	**2.34**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.063 mm sieve (#230)	**0.90**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
GC-AP-PT-3 (A2C0591-04)				**Matrix: SO**		**Batch: 22C0662**		
Gravel (>2.00mm)	**0.26**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**93.1**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**5.40**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Clay (< 0.005 mm)	**1.30**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 4.75 mm sieve (#4)	**0.17**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 2.00 mm sieve (#10)	**0.10**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.85 mm sieve (#20)	**0.89**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.425 mm sieve (#40)	**16.7**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.250 mm sieve (#60)	**40.7**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.150 mm sieve (#100)	**25.3**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.106 mm sieve (#140)	**5.41**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.075 mm sieve (#200)	**3.06**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.063 mm sieve (#230)	**1.01**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
GC-AP-PT-4 (A2C0591-05)				**Matrix: SO**		**Batch: 22C0662**		
Gravel (>2.00mm)	**1.84**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**93.9**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**3.10**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Clay (< 0.005 mm)	**1.20**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 4.75 mm sieve (#4)	**1.04**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 2.00 mm sieve (#10)	**0.80**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**

Anchor QEA, LLC	Project:	**Alabama Power-Greene County**	
6720 SW Macadam Ave. Suite 125	Project Number:	**201114-01.05**	**Report ID:**
Portland, OR 97219	Project Manager:	**Jessica Goin, PhD**	**A2C0591 - 04 19 22 0926**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/RSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-4 (A2C0591-05)				**Matrix: SO**		**Batch: 22C0662**		
% Retained 0.85 mm sieve (#20)	**1.31**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.425 mm sieve (#40)	**16.4**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.250 mm sieve (#60)	**51.5**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.150 mm sieve (#100)	**20.5**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.106 mm sieve (#140)	**2.28**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.075 mm sieve (#200)	**1.37**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.063 mm sieve (#230)	**0.56**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
GC-AP-PT-5 (A2C0591-06)				**Matrix: SO**		**Batch: 22C0662**		
Gravel (>2.00mm)	**12.4**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**83.4**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**2.10**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
Clay (< 0.005 mm)	**2.10**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 4.75 mm sieve (#4)	**10.1**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 2.00 mm sieve (#10)	**2.30**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.85 mm sieve (#20)	**3.29**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.425 mm sieve (#40)	**13.0**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.250 mm sieve (#60)	**23.7**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.150 mm sieve (#100)	**37.3**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.106 mm sieve (#140)	**4.42**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.075 mm sieve (#200)	**1.32**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**
% Retained 0.063 mm sieve (#230)	**0.33**	0.01	0.01	% of Total	1	03/24/22 17:06	D422mod	**GS-01**

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Alabama Power-Greene County**
Project Number: **201114-01.05**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2C0591 - 04 19 22 0926

Analytical Resources, LLC

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Wet Chemistry

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2C0591-01)				**Matrix: SO**		**Batch: BKC0380**		
Batch: BKC0380								
Sulfide	ND	1.18	1.18	mg/kg dry	1	03/17/22 09:58	SM 4500-S2 D-00	U
Batch: BKC0425								
Total Solids, Sulfide	**77.54**	0.04	0.04	%	1	03/17/22 12:40	PSEP 1986	
GC-AP-PT-101 (A2C0591-02)				**Matrix: SO**		**Batch: BKC0380**		
Batch: BKC0380								
Sulfide	ND	1.17	1.17	mg/kg dry	1	03/17/22 10:00	SM 4500-S2 D-00	U
Batch: BKC0425								
Total Solids, Sulfide	**82.21**	0.04	0.04	%	1	03/17/22 12:40	PSEP 1986	
GC-AP-PT-2 (A2C0591-03)				**Matrix: SO**		**Batch: BKC0380**		
Batch: BKC0380								
Sulfide	ND	1.28	1.28	mg/kg dry	1	03/17/22 10:01	SM 4500-S2 D-00	U
Batch: BKC0425								
Total Solids, Sulfide	**75.64**	0.04	0.04	%	1	03/17/22 12:40	PSEP 1986	
GC-AP-PT-3 (A2C0591-04)				**Matrix: SO**		**Batch: BKC0380**		
Batch: BKC0380								
Sulfide	ND	1.28	1.28	mg/kg dry	1	03/17/22 10:02	SM 4500-S2 D-00	U
Batch: BKC0425								
Total Solids, Sulfide	**76.88**	0.04	0.04	%	1	03/17/22 12:40	PSEP 1986	
GC-AP-PT-4 (A2C0591-05)				**Matrix: SO**		**Batch: BKC0380**		
Batch: BKC0380								
Sulfide	ND	1.24	1.24	mg/kg dry	1	03/17/22 10:03	SM 4500-S2 D-00	U
Batch: BKC0425								
Total Solids, Sulfide	**75.29**	0.04	0.04	%	1	03/17/22 12:40	PSEP 1986	
GC-AP-PT-5 (A2C0591-06)				**Matrix: SO**		**Batch: BKC0380**		
Batch: BKC0380								
Sulfide	ND	1.29	1.29	mg/kg dry	1	03/17/22 10:04	SM 4500-S2 D-00	U
Batch: BKC0425								
Total Solids, Sulfide	**77.04**	0.04	0.04	%	1	03/17/22 12:40	PSEP 1986	

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Batch 22C0831 - EPA 3051A — **Solid**

Blank (22C0831-BLK2) — Prepared: 03/21/22 11:56 Analyzed: 03/21/22 15:48

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Arsenic	ND	0.500	1.00	mg/kg	10	---	---	---	---	---	---	Q-16
Cobalt	ND	0.500	1.00	mg/kg	10	---	---	---	---	---	---	Q-16

Blank (22C0831-BLK3) — Prepared: 03/21/22 11:56 Analyzed: 03/24/22 21:02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Lithium	ND	2.50	5.00	mg/kg	10	---	---	---	---	---	---	

LCS (22C0831-BS1) — Prepared: 03/21/22 11:56 Analyzed: 03/21/22 15:39

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Arsenic	44.1	0.500	1.00	mg/kg	10	50.0	---	88	80-120%	---	---	
Cobalt	43.6	0.500	1.00	mg/kg	10	50.0	---	87	80-120%	---	---	

LCS (22C0831-BS2) — Prepared: 03/21/22 11:56 Analyzed: 03/24/22 21:07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Lithium	438	2.50	5.00	mg/kg	10	400	---	110	80-120%	---	---	

Duplicate (22C0831-DUP1) — Prepared: 03/21/22 11:56 Analyzed: 03/21/22 15:53

QC Source Sample: GC-AP-PT-1 (A2C0591-01)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Arsenic	**0.899**	0.488	0.977	mg/kg	10	---	0.852	---	---	5	20%	J
Cobalt	**0.611**	0.488	0.977	mg/kg	10	---	0.580	---	---	5	20%	J

Duplicate (22C0831-DUP2) — Prepared: 03/21/22 11:56 Analyzed: 03/24/22 21:16

QC Source Sample: GC-AP-PT-1 (A2C0591-01)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Lithium	ND	2.44	4.88	mg/kg	10	---	ND	---	---	---	20%	

Matrix Spike (22C0831-MS1) — Prepared: 03/21/22 11:56 Analyzed: 03/21/22 15:58

QC Source Sample: GC-AP-PT-1 (A2C0591-01)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
EPA 6020B												
Arsenic	51.2	0.534	1.07	mg/kg	10	53.4	0.852	94	75-125%	---	---	
Cobalt	49.0	0.534	1.07	mg/kg	10	53.4	0.580	91	75-125%	---	---	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Batch 22C0831 - EPA 3051A **Solid**

Matrix Spike (22C0831-MS2) Prepared: 03/21/22 11:56 Analyzed: 03/24/22 21:20

QC Source Sample: GC-AP-PT-1 (A2C0591-01)

EPA 6020B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Lithium	411	2.56	5.12	mg/kg	10	410	ND	100	75-125%	---	---	

QUALITY CONTROL (QC) SAMPLE RESULTS

Demand Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0724 - PSEP-5310B TOC							**Soil**					
Blank (22C0724-BLK1)			Prepared: 03/17/22 16:08	Analyzed: 03/24/22 16:31								
EPA 9060Amod												
Total Organic Carbon	ND	200	200	mg/kg	1	---	---	---	---	---	---	
LCS (22C0724-BS1)			Prepared: 03/17/22 16:08	Analyzed: 03/24/22 16:42								
EPA 9060Amod												
Total Organic Carbon	9900	200	200	mg/kg	1	10000	---	99	88-111%	---	---	
Duplicate (22C0724-DUP1)			Prepared: 03/17/22 16:08	Analyzed: 03/24/22 17:57								
QC Source Sample: GC-AP-PT-5 (A2C0591-06)												
EPA 9060Amod												
Total Organic Carbon	ND	200	200	mg/kg	1	---	ND	---	---	---	27%	
Duplicate (22C0724-DUP2)			Prepared: 03/17/22 16:08	Analyzed: 03/24/22 18:08								
QC Source Sample: GC-AP-PT-5 (A2C0591-06)												
EPA 9060Amod												
Total Organic Carbon	ND	200	200	mg/kg	1	---	ND	---	---	---	27%	

Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Wet Chemistry

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BKC0380 - EPA 9030B							**Solid**					
Blank (BKC0380-BLK1)				Prepared: 03/16/22 09:28		Analyzed: 03/17/22 09:56						
SM 4500-S2 D-00												
Sulfide	ND	1.00	1.00	mg/kg wet	1	---	---	---	---	---	---	U
LCS (BKC0380-BS1)				Prepared: 03/16/22 09:28		Analyzed: 03/17/22 09:57						
SM 4500-S2 D-00												
Sulfide	196	20.0	20.0	mg/kg wet	20	208.89	---	93.8	75-125%	---	---	D
Duplicate (BKC0380-DUP1)				Prepared: 03/16/22 09:28		Analyzed: 03/17/22 09:59						
QC Source Sample: A2C0591-01 (A2C0591-01)												
SM 4500-S2 D-00												
Sulfide	ND	1.26	1.26	mg/kg dry	1	---	ND	---	---	---	20%	U
Matrix Spike (BKC0380-MS1)				Prepared: 03/16/22 09:28		Analyzed: 03/17/22 09:59						
QC Source Sample: A2C0591-01 (A2C0591-01)												
SM 4500-S2 D-00												
Sulfide	167	24.0	24.0	mg/kg dry	20	250.56	ND	**66.6**	**75-125%**	---	---	*, D

Analytical Resources, LLC

QUALITY CONTROL (QC) SAMPLE RESULTS

Wet Chemistry

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch BKC0425 - No Prep Wet Chem							**Solid**					
Blank (BKC0425-BLK1)			Prepared: 03/17/22 12:37 Analyzed: 03/17/22 12:40									
PSEP 1986												
Total Solids, Sulfide	ND	0.04	0.04	%	1	---	---	---	---	---	---	U
Duplicate (BKC0425-DUP1)			Prepared: 03/17/22 12:37 Analyzed: 03/17/22 12:40									
QC Source Sample: A2C0591-01 (A2C0591-01)												
PSEP 1986												
Total Solids, Sulfide	**76.93**	0.04	0.04	%	1	---	77.54	---	---	0.789	20%	
Duplicate (BKC0425-DUP2)			Prepared: 03/17/22 12:37 Analyzed: 03/17/22 12:40									
QC Source Sample: A2C0591-01 (A2C0591-01)												
PSEP 1986												
Total Solids, Sulfide	**76.70**	0.04	0.04	%	1	---	77.54	---	---	1.08	20%	

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0831							
A2C0591-01	SO	EPA 6020B	03/10/22 10:30	03/21/22 11:56	0.496g/50mL	0.5g/50mL	1.01
A2C0591-02	SO	EPA 6020B	03/10/22 10:35	03/21/22 11:56	0.462g/50mL	0.5g/50mL	1.08
A2C0591-03	SO	EPA 6020B	03/10/22 10:40	03/21/22 11:56	0.506g/50mL	0.5g/50mL	0.99
A2C0591-04	SO	EPA 6020B	03/10/22 10:45	03/21/22 11:56	0.508g/50mL	0.5g/50mL	0.98
A2C0591-05	SO	EPA 6020B	03/10/22 10:50	03/21/22 11:56	0.483g/50mL	0.5g/50mL	1.04
A2C0591-06	SO	EPA 6020B	03/10/22 10:55	03/21/22 11:56	0.463g/50mL	0.5g/50mL	1.08

Demand Parameters

Prep: PSEP-5310B TOC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0724							
A2C0591-01	SO	EPA 9060Amod	03/10/22 10:30	03/17/22 16:08			NA
A2C0591-02	SO	EPA 9060Amod	03/10/22 10:35	03/17/22 16:08			NA
A2C0591-03	SO	EPA 9060Amod	03/10/22 10:40	03/17/22 16:08			NA
A2C0591-04	SO	EPA 9060Amod	03/10/22 10:45	03/17/22 16:08			NA
A2C0591-05	SO	EPA 9060Amod	03/10/22 10:50	03/17/22 16:08			NA
A2C0591-06	SO	EPA 9060Amod	03/10/22 10:55	03/17/22 16:08			NA

Grain Size by ASTM D 422m/RSET Parameters

Prep: ASTM D 421

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0662							
A2C0591-01	SO	D422mod	03/10/22 10:30	03/17/22 10:17			NA
A2C0591-02	SO	D422mod	03/10/22 10:35	03/17/22 10:31			NA
A2C0591-03	SO	D422mod	03/10/22 10:40	03/17/22 10:43			NA
A2C0591-04	SO	D422mod	03/10/22 10:45	03/17/22 11:04			NA
A2C0591-05	SO	D422mod	03/10/22 10:50	03/17/22 11:19			NA
A2C0591-06	SO	D422mod	03/10/22 10:55	03/17/22 11:32			NA

Analytical Resources, LLC

SAMPLE PREPARATION INFORMATION

Wet Chemistry

Prep: EPA 9030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: BKC0380							
A2C0591-01	SO	SM 4500-S2 D-00	03/10/22 10:30	03/16/22 09:28	5.485g/100mL	5g/100mL	0.91
A2C0591-02	SO	SM 4500-S2 D-00	03/10/22 10:35	03/16/22 09:28	5.207g/100mL	5g/100mL	0.96
A2C0591-03	SO	SM 4500-S2 D-00	03/10/22 10:40	03/16/22 09:28	5.176g/100mL	5g/100mL	0.97
A2C0591-04	SO	SM 4500-S2 D-00	03/10/22 10:45	03/16/22 09:28	5.071g/100mL	5g/100mL	0.99
A2C0591-05	SO	SM 4500-S2 D-00	03/10/22 10:50	03/16/22 09:28	5.364g/100mL	5g/100mL	0.93
A2C0591-06	SO	SM 4500-S2 D-00	03/10/22 10:55	03/16/22 09:28	5.047g/100mL	5g/100mL	0.99

Prep: No Prep Wet Chem

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: BKC0425							
A2C0591-01	SO	PSEP 1986	03/10/22 10:30	03/17/22 12:37	5g/5g	5g/5g	1.00
A2C0591-02	SO	PSEP 1986	03/10/22 10:35	03/17/22 12:37	5g/5g	5g/5g	1.00
A2C0591-03	SO	PSEP 1986	03/10/22 10:40	03/17/22 12:37	5g/5g	5g/5g	1.00
A2C0591-04	SO	PSEP 1986	03/10/22 10:45	03/17/22 12:37	5g/5g	5g/5g	1.00
A2C0591-05	SO	PSEP 1986	03/10/22 10:50	03/17/22 12:37	5g/5g	5g/5g	1.00
A2C0591-06	SO	PSEP 1986	03/10/22 10:55	03/17/22 12:37	5g/5g	5g/5g	1.00

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

GS-01	See detailed Particle Size Analysis results, accumulation curves, and Case Narratives at the end of this report.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-16	Reanalysis of an original Batch QC sample.

Analytical Resources, LLC

*****	Flagged value is not within established control limits.
D	The reported value is from a dilution
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET	Analyte DETECTED at or above the detection or reporting limit.
ND	Analyte NOT DETECTED at or above the detection or reporting limit.
NR	Result Not Reported
RPD	Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry"	Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry") See Percent Solids section for details of dry weight analysis.
" wet"	Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
" "	Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- "	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
" *** "	Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

‘B’ and ‘B-02’ qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Anchor QEA, LLC	Project:	**Alabama Power-Greene County**	
6720 SW Macadam Ave. Suite 125	Project Number:	**201114-01.05**	**Report ID:**
Portland, OR 97219	Project Manager:	**Jessica Goin, PhD**	**A2C0591 - 04 19 22 0926**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

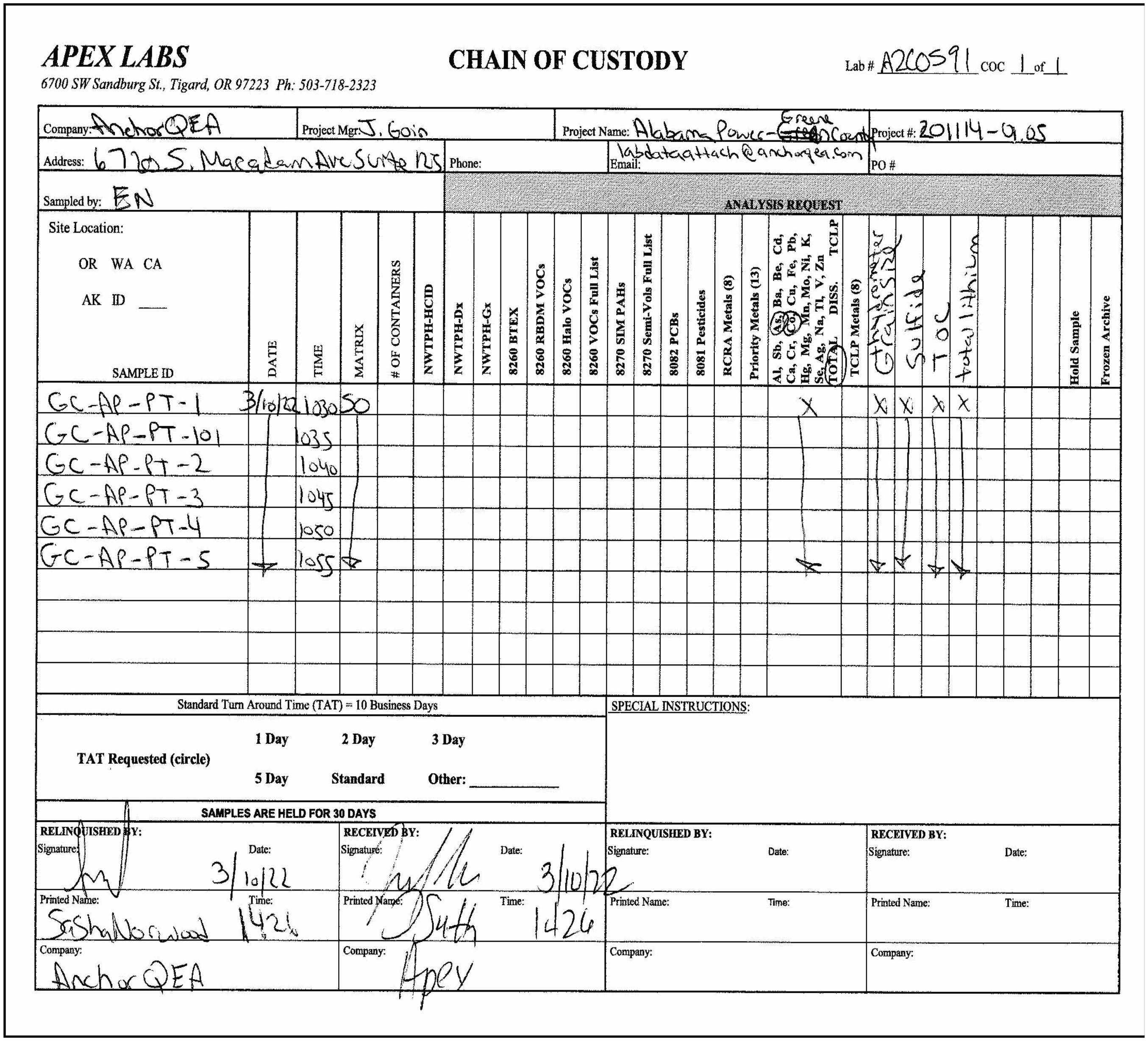
Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A2C0591 COC 1 of 1

Company: AnchorQEA	Project Mgr: J. Goin	Project Name: Alabama Power-~~Green~~ Greene County	Project #: 201114-01.05
Address: 6720 S. Macadam Ave Suite 125	Phone:	Email: labdataattach@anchorqea.com	PO #
Sampled by: EN			

Site Location:
OR WA CA
AK ID ___

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, [✓ As], Ba, Be, Cd, Ca, Cr, [✓ Co], Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn [✓ TOTAL] DISS. TCLP	TCLP Metals (8)	Hydrometer Grainsize	Sulfide	TOC	total lithium				Hold Sample	Frozen Archive
GC-AP-PT-1	3/10/22	1030	SO															X		X	X	X	X					
GC-AP-PT-101		1035																										
GC-AP-PT-2		1040																										
GC-AP-PT-3		1045																										
GC-AP-PT-4		1050																										
GC-AP-PT-5		1055																										

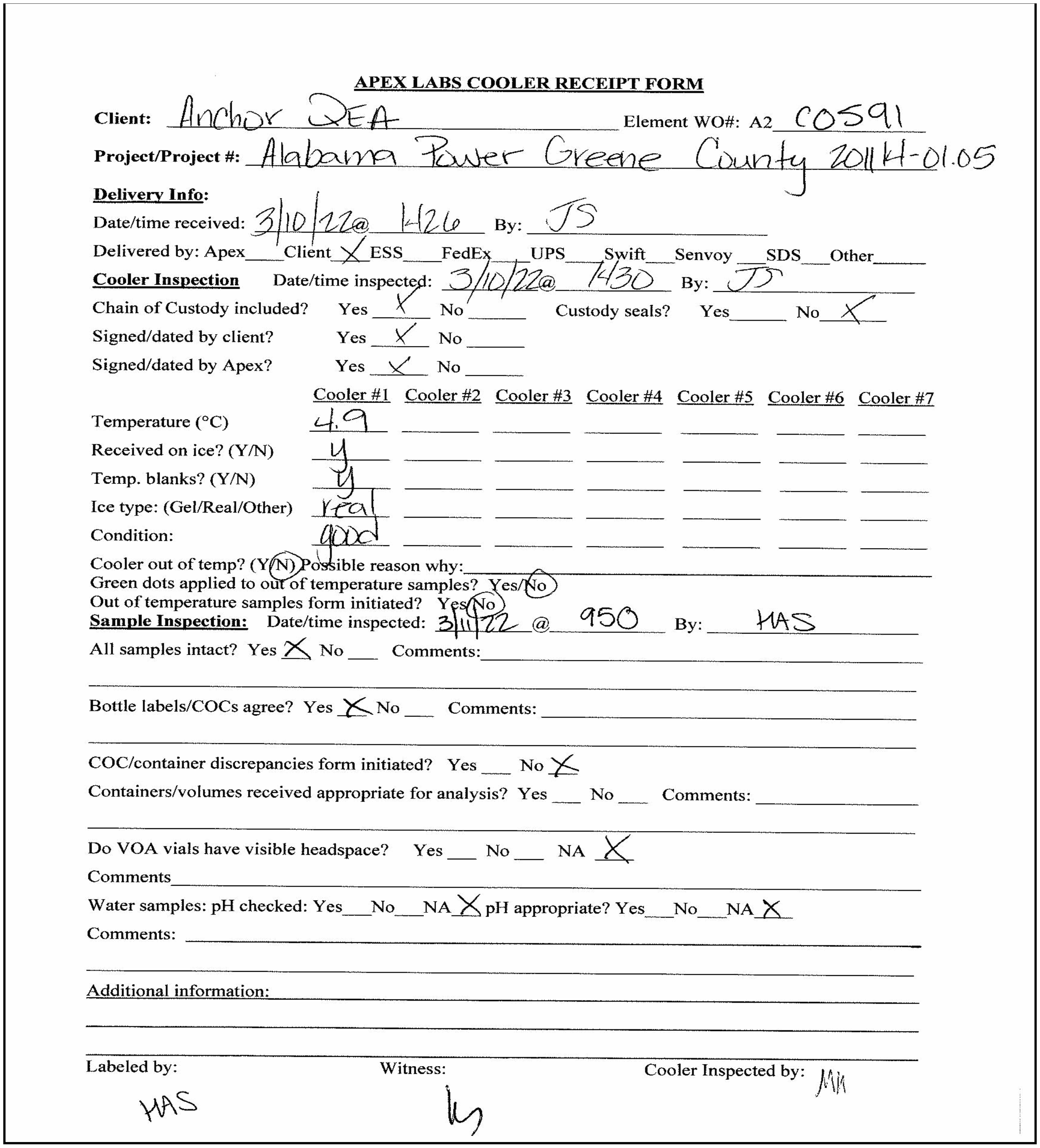
Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: ___

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Date: 3/10/22	RECEIVED BY: Signature: Date: 3/10/22	RELINQUISHED BY: Signature: Date:	RECEIVED BY: Signature: Date:
Printed Name: Sasha Norwood Time: 1426	Printed Name: D Suth Time: 1426	Printed Name: Time:	Printed Name: Time:
Company: AnchorQEA	Company: Apex	Company:	Company:



APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A2 C0591

Project/Project #: Alabama Power Greene County 201114-01.05

Delivery Info:

Date/time received: 3/10/22@ 1426 By: JS

Delivered by: Apex___Client X ESS___FedEx___UPS___Swift___Senvoy___SDS___Other___

Cooler Inspection Date/time inspected: 3/10/22@ 1430 By: JS

Chain of Custody included? Yes X No ___ Custody seals? Yes___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	4.9						
Received on ice? (Y/N)	y						
Temp. blanks? (Y/N)	y						
Ice type: (Gel/Real/Other)	real						
Condition:	good						

Cooler out of temp? (Y/[✓ N]) Possible reason why:___

Green dots applied to out of temperature samples? Yes/[✓ No]

Out of temperature samples form initiated? Yes/[✓ No]

Sample Inspection: Date/time inspected: 3/11/22 @ 950 By: HAS

All samples intact? Yes X No ___ Comments:___

Bottle labels/COCs agree? Yes X No ___ Comments: ___

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes ___ No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments___

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: ___

Additional information: ___

Labeled by: HAS Witness: Cooler Inspected by:

ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Thursday, April 28, 2022

Jessica Goin, PhD
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A2C1102 - Greene County - 201114-01.05 Task 09

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2C1102, which was received by the laboratory on 3/22/2022 at 1:41:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1 1.8 degC

Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: **Greene County** Project Number: **201114-01.05 Task 09** Project Manager: **Jessica Goin, PhD**	**Report ID:** A2C1102 - 04 28 22 1644

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GC-AP-PT-1-CEC	A2C1102-01	Water	03/15/22 08:00	03/22/22 13:41
GC-AP-PT-2-CEC	A2C1102-02	Water	03/15/22 08:05	03/22/22 13:41
GC-AP-PT-3-CEC	A2C1102-03	Water	03/15/22 08:10	03/22/22 13:41
GC-AP-PT-4-CEC	A2C1102-04	Water	03/15/22 08:15	03/22/22 13:41
GC-AP-PT-5-CEC	A2C1102-05	Water	03/15/22 08:20	03/22/22 13:41
GC-AP-PT-101-DUP-CEC	A2C1102-06	Water	03/15/22 08:25	03/22/22 13:41
GC-MB-CEC	A2C1102-07	Water	03/15/22 08:30	03/22/22 13:41
GC-AP-PT-1-AAO	A2C1102-08	Water	03/18/22 13:35	03/22/22 13:41
GC-AP-PT-2-AAO	A2C1102-09	Water	03/18/22 13:40	03/22/22 13:41
GC-AP-PT-3-AAO	A2C1102-10	Water	03/18/22 13:45	03/22/22 13:41
GC-AP-PT-4-AAO	A2C1102-11	Water	03/18/22 13:50	03/22/22 13:41
GC-AP-PT-5-AAO	A2C1102-12	Water	03/18/22 13:55	03/22/22 13:41
GC-AP-PT-101-DUP-AAO	A2C1102-13	Water	03/18/22 14:00	03/22/22 13:41
GC-MB-AAO	A2C1102-14	Water	03/18/22 14:05	03/22/22 13:41

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1-CEC (A2C1102-01)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	**1.97**	0.500	1.00	ug/L	1	04/04/22 18:54	EPA 6020B (Diss)	
Calcium	**6690**	300	600	ug/L	1	04/04/22 18:54	EPA 6020B (Diss)	
Cobalt	**2.41**	0.500	1.00	ug/L	1	04/04/22 18:54	EPA 6020B (Diss)	
Magnesium	**1030**	75.0	150	ug/L	1	04/04/22 18:54	EPA 6020B (Diss)	
Potassium	**506**	50.0	100	ug/L	1	04/04/22 18:54	EPA 6020B (Diss)	
Sodium	**582**	50.0	100	ug/L	1	04/04/22 18:54	EPA 6020B (Diss)	
GC-AP-PT-1-CEC (A2C1102-01RE1)				**Matrix: Water**				
Batch: 22D0075								
Lithium	ND	12.5	25.0	ug/L	5	04/22/22 21:14	EPA 6020B (Diss)	R-04
GC-AP-PT-2-CEC (A2C1102-02)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	**3.32**	0.500	1.00	ug/L	1	04/04/22 19:04	EPA 6020B (Diss)	**Q-42**
Calcium	**9640**	300	600	ug/L	1	04/04/22 19:04	EPA 6020B (Diss)	
Cobalt	**9.57**	0.500	1.00	ug/L	1	04/04/22 19:04	EPA 6020B (Diss)	**Q-42**
Magnesium	**3150**	75.0	150	ug/L	1	04/04/22 19:04	EPA 6020B (Diss)	**Q-42**
Potassium	**1610**	50.0	100	ug/L	1	04/04/22 19:04	EPA 6020B (Diss)	**Q-42**
Sodium	**1420**	50.0	100	ug/L	1	04/04/22 19:04	EPA 6020B (Diss)	**Q-42**
Lithium	**3.82**	2.50	5.00	ug/L	1	04/22/22 20:51	EPA 6020B (Diss)	**J**
GC-AP-PT-3-CEC (A2C1102-03)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	**2.70**	0.500	1.00	ug/L	1	04/04/22 19:23	EPA 6020B (Diss)	
Calcium	**12400**	300	600	ug/L	1	04/04/22 19:23	EPA 6020B (Diss)	
Cobalt	**1.35**	0.500	1.00	ug/L	1	04/04/22 19:23	EPA 6020B (Diss)	
Magnesium	**3070**	75.0	150	ug/L	1	04/04/22 19:23	EPA 6020B (Diss)	
Potassium	**1600**	50.0	100	ug/L	1	04/04/22 19:23	EPA 6020B (Diss)	
Sodium	**1100**	50.0	100	ug/L	1	04/04/22 19:23	EPA 6020B (Diss)	
GC-AP-PT-3-CEC (A2C1102-03RE1)				**Matrix: Water**				
Batch: 22D0075								
Lithium	**18.8**	12.5	25.0	ug/L	5	04/22/22 21:28	EPA 6020B (Diss)	**J, R-04**

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-4-CEC (A2C1102-04)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	**0.654**	0.500	1.00	ug/L	1	04/04/22 19:28	EPA 6020B (Diss)	J
Calcium	**4430**	300	600	ug/L	1	04/04/22 19:28	EPA 6020B (Diss)	
Cobalt	**2.68**	0.500	1.00	ug/L	1	04/04/22 19:28	EPA 6020B (Diss)	
Magnesium	**1070**	75.0	150	ug/L	1	04/04/22 19:28	EPA 6020B (Diss)	
Potassium	**680**	50.0	100	ug/L	1	04/04/22 19:28	EPA 6020B (Diss)	
Sodium	**537**	50.0	100	ug/L	1	04/04/22 19:28	EPA 6020B (Diss)	
GC-AP-PT-4-CEC (A2C1102-04RE1)				**Matrix: Water**				
Batch: 22D0075								
Lithium	ND	12.5	25.0	ug/L	5	04/22/22 21:37	EPA 6020B (Diss)	R-04
GC-AP-PT-5-CEC (A2C1102-05)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	**5.42**	0.500	1.00	ug/L	1	04/04/22 19:33	EPA 6020B (Diss)	
Calcium	**8480**	300	600	ug/L	1	04/04/22 19:33	EPA 6020B (Diss)	
Cobalt	**59.7**	0.500	1.00	ug/L	1	04/04/22 19:33	EPA 6020B (Diss)	
Magnesium	**1850**	75.0	150	ug/L	1	04/04/22 19:33	EPA 6020B (Diss)	
Potassium	**1250**	50.0	100	ug/L	1	04/04/22 19:33	EPA 6020B (Diss)	
Sodium	**582**	50.0	100	ug/L	1	04/04/22 19:33	EPA 6020B (Diss)	
GC-AP-PT-5-CEC (A2C1102-05RE1)				**Matrix: Water**				
Batch: 22D0075								
Lithium	ND	12.5	25.0	ug/L	5	04/22/22 21:42	EPA 6020B (Diss)	R-04
GC-AP-PT-101-DUP-CEC (A2C1102-06)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	**1.92**	0.500	1.00	ug/L	1	04/04/22 19:38	EPA 6020B (Diss)	
Calcium	**7030**	300	600	ug/L	1	04/04/22 19:38	EPA 6020B (Diss)	
Cobalt	**2.52**	0.500	1.00	ug/L	1	04/04/22 19:38	EPA 6020B (Diss)	
Magnesium	**1100**	75.0	150	ug/L	1	04/04/22 19:38	EPA 6020B (Diss)	
Potassium	**536**	50.0	100	ug/L	1	04/04/22 19:38	EPA 6020B (Diss)	
Sodium	**622**	50.0	100	ug/L	1	04/04/22 19:38	EPA 6020B (Diss)	
GC-AP-PT-101-DUP-CEC (A2C1102-06RE1)				**Matrix: Water**				

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2C1102 - 04 28 22 1644

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-101-DUP-CEC (A2C1102-06RE1)				**Matrix: Water**				
Batch: 22D0075								
Lithium	ND	12.5	25.0	ug/L	5	04/22/22 21:46	EPA 6020B (Diss)	R-04
GC-MB-CEC (A2C1102-07)				**Matrix: Water**				
Batch: 22D0075								
Arsenic	ND	0.500	1.00	ug/L	1	04/04/22 19:43	EPA 6020B (Diss)	
Calcium	ND	300	600	ug/L	1	04/04/22 19:43	EPA 6020B (Diss)	
Cobalt	ND	0.500	1.00	ug/L	1	04/04/22 19:43	EPA 6020B (Diss)	
Magnesium	ND	75.0	150	ug/L	1	04/04/22 19:43	EPA 6020B (Diss)	
Potassium	**152**	50.0	100	ug/L	1	04/04/22 19:43	EPA 6020B (Diss)	
Sodium	**114**	50.0	100	ug/L	1	04/04/22 19:43	EPA 6020B (Diss)	
GC-MB-CEC (A2C1102-07RE1)				**Matrix: Water**				
Batch: 22D0075								
Lithium	ND	12.5	25.0	ug/L	5	04/22/22 21:51	EPA 6020B (Diss)	R-04
GC-AP-PT-1-AAO (A2C1102-08)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	**440**	25.0	50.0	ug/L	1	04/04/22 19:47	EPA 6020B (Diss)	
Arsenic	**2.71**	0.500	1.00	ug/L	1	04/04/22 19:47	EPA 6020B (Diss)	
Cobalt	**4.31**	0.500	1.00	ug/L	1	04/04/22 19:47	EPA 6020B (Diss)	
Iron	**1880**	25.0	50.0	ug/L	1	04/04/22 19:47	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:08	EPA 6020B (Diss)	
GC-AP-PT-2-AAO (A2C1102-09)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	**798**	25.0	50.0	ug/L	1	04/04/22 19:52	EPA 6020B (Diss)	
Arsenic	**8.69**	0.500	1.00	ug/L	1	04/04/22 19:52	EPA 6020B (Diss)	
Cobalt	**5.40**	0.500	1.00	ug/L	1	04/04/22 19:52	EPA 6020B (Diss)	
Iron	**2980**	25.0	50.0	ug/L	1	04/04/22 19:52	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:13	EPA 6020B (Diss)	
GC-AP-PT-3-AAO (A2C1102-10)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	**365**	25.0	50.0	ug/L	1	04/04/22 19:57	EPA 6020B (Diss)	

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-3-AAO (A2C1102-10)				**Matrix: Water**				
Arsenic	**5.05**	0.500	1.00	ug/L	1	04/04/22 19:57	EPA 6020B (Diss)	
Cobalt	**4.42**	0.500	1.00	ug/L	1	04/04/22 19:57	EPA 6020B (Diss)	
Iron	**2060**	25.0	50.0	ug/L	1	04/04/22 19:57	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:27	EPA 6020B (Diss)	
GC-AP-PT-4-AAO (A2C1102-11)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	**377**	25.0	50.0	ug/L	1	04/04/22 20:02	EPA 6020B (Diss)	
Arsenic	**4.29**	0.500	1.00	ug/L	1	04/04/22 20:02	EPA 6020B (Diss)	
Cobalt	**6.39**	0.500	1.00	ug/L	1	04/04/22 20:02	EPA 6020B (Diss)	
Iron	**2150**	25.0	50.0	ug/L	1	04/04/22 20:02	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:31	EPA 6020B (Diss)	
GC-AP-PT-5-AAO (A2C1102-12)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	**760**	25.0	50.0	ug/L	1	04/04/22 20:17	EPA 6020B (Diss)	
Arsenic	**34.9**	0.500	1.00	ug/L	1	04/04/22 20:17	EPA 6020B (Diss)	
Cobalt	**41.4**	0.500	1.00	ug/L	1	04/04/22 20:17	EPA 6020B (Diss)	
Iron	**6800**	25.0	50.0	ug/L	1	04/04/22 20:17	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:36	EPA 6020B (Diss)	
GC-AP-PT-101-DUP-AAO (A2C1102-13)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	**435**	25.0	50.0	ug/L	1	04/04/22 20:22	EPA 6020B (Diss)	
Arsenic	**2.59**	0.500	1.00	ug/L	1	04/04/22 20:22	EPA 6020B (Diss)	
Cobalt	**4.20**	0.500	1.00	ug/L	1	04/04/22 20:22	EPA 6020B (Diss)	
Iron	**1880**	25.0	50.0	ug/L	1	04/04/22 20:22	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:40	EPA 6020B (Diss)	
GC-MB-AAO (A2C1102-14)				**Matrix: Water**				
Batch: 22D0075								
Aluminum	ND	25.0	50.0	ug/L	1	04/04/22 20:26	EPA 6020B (Diss)	
Arsenic	**0.574**	0.500	1.00	ug/L	1	04/04/22 20:26	EPA 6020B (Diss)	**J**
Cobalt	**3.36**	0.500	1.00	ug/L	1	04/04/22 20:26	EPA 6020B (Diss)	

Anchor QEA, LLC **6720 SW Macadam Ave. Suite 125** **Portland, OR 97219**	Project: **Greene County** Project Number: **201114-01.05 Task 09** Project Manager: **Jessica Goin, PhD**	**Report ID:** **A2C1102 - 04 28 22 1644**

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-MB-AAO (A2C1102-14)					Matrix: Water			
Iron	**180**	25.0	50.0	ug/L	1	04/04/22 20:26	EPA 6020B (Diss)	
Lithium	ND	2.50	5.00	ug/L	1	04/22/22 20:55	EPA 6020B (Diss)	

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Batch 22D0075 - Matrix Matched Direct Inject **Water**

Blank (22D0075-BLK1) Prepared: 04/04/22 10:25 Analyzed: 04/04/22 18:44

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Aluminum	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Calcium	ND	300	600	ug/L	1	---	---	---	---	---	---	
Cobalt	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Iron	ND	25.0	50.0	ug/L	1	---	---	---	---	---	---	
Magnesium	ND	75.0	150	ug/L	1	---	---	---	---	---	---	
Potassium	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Sodium	ND	50.0	100	ug/L	1	---	---	---	---	---	---	

Blank (22D0075-BLK2) Prepared: 04/04/22 10:25 Analyzed: 04/22/22 19:14

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Lithium	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	

LCS (22D0075-BS1) Prepared: 04/04/22 10:25 Analyzed: 04/04/22 18:49

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Aluminum	2970	25.0	50.0	ug/L	1	2780	---	107	80-120%	---	---	
Arsenic	57.6	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Calcium	2970	300	600	ug/L	1	2780	---	107	80-120%	---	---	
Cobalt	59.3	0.500	1.00	ug/L	1	55.6	---	107	80-120%	---	---	
Iron	3230	25.0	50.0	ug/L	1	2780	---	116	80-120%	---	---	
Magnesium	3080	75.0	150	ug/L	1	2780	---	111	80-120%	---	---	
Potassium	3020	50.0	100	ug/L	1	2780	---	109	80-120%	---	---	
Sodium	3050	50.0	100	ug/L	1	2780	---	110	80-120%	---	---	

LCS (22D0075-BS2) Prepared: 04/04/22 10:25 Analyzed: 04/22/22 19:18

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Lithium	495	2.50	5.00	ug/L	1	444	---	111	80-120%	---	---	

Duplicate (22D0075-DUP1) Prepared: 04/04/22 10:25 Analyzed: 04/04/22 18:59

QC Source Sample: GC-AP-PT-1-CEC (A2C1102-01)

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Aluminum	ND	25.0	50.0	ug/L	1	---	ND	---	---	---	20%	

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Batch 22D0075 - Matrix Matched Direct Inject Water

Duplicate (22D0075-DUP1) Prepared: 04/04/22 10:25 Analyzed: 04/04/22 18:59

QC Source Sample: GC-AP-PT-1-CEC (A2C1102-01)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Arsenic	**1.94**	0.500	1.00	ug/L	1	---	1.97	---	---	2	20%	
Calcium	**6920**	300	600	ug/L	1	---	6690	---	---	3	20%	
Cobalt	**2.48**	0.500	1.00	ug/L	1	---	2.41	---	---	3	20%	
Iron	ND	25.0	50.0	ug/L	1	---	ND	---	---	---	20%	
Magnesium	**1060**	75.0	150	ug/L	1	---	1030	---	---	3	20%	
Potassium	**519**	50.0	100	ug/L	1	---	506	---	---	2	20%	
Sodium	**608**	50.0	100	ug/L	1	---	582	---	---	4	20%	

Duplicate (22D0075-DUP3) Prepared: 04/04/22 10:25 Analyzed: 04/22/22 21:19

QC Source Sample: GC-AP-PT-1-CEC (A2C1102-01RE1)

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Lithium	ND	12.5	25.0	ug/L	5	---	ND	---	---	---	20%	Q-16

Matrix Spike (22D0075-MS1) Prepared: 04/04/22 10:25 Analyzed: 04/04/22 19:18

QC Source Sample: GC-AP-PT-2-CEC (A2C1102-02)

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Aluminum	4060	25.0	50.0	ug/L	1	2780	ND	**146**	**75-125%**	---	---	Q-01
Arsenic	159	0.500	1.00	ug/L	1	55.6	3.32	**280**	**75-125%**	---	---	Q-02
Calcium	13500	300	600	ug/L	1	2780	9640	**140**	**75-125%**	---	---	Q-03
Cobalt	87.9	0.500	1.00	ug/L	1	55.6	9.57	**141**	**75-125%**	---	---	Q-01
Iron	4350	25.0	50.0	ug/L	1	2780	ND	**157**	**75-125%**	---	---	Q-01
Magnesium	7330	75.0	150	ug/L	1	2780	3150	**150**	**75-125%**	---	---	Q-01
Potassium	5650	50.0	100	ug/L	1	2780	1610	**145**	**75-125%**	---	---	Q-01
Sodium	5810	50.0	100	ug/L	1	2780	1420	**158**	**75-125%**	---	---	Q-01

Matrix Spike (22D0075-MS3) Prepared: 04/04/22 10:25 Analyzed: 04/22/22 21:33

QC Source Sample: GC-AP-PT-3-CEC (A2C1102-03RE1)

EPA 6020B (Diss)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Lithium	498	12.5	25.0	ug/L	5	444	18.8	108	75-125%	---	---	Q-16

DRAFT REPORT

SAMPLE PREPARATION INFORMATION

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22D0075							
A2C1102-01	Water	EPA 6020B (Diss)	03/15/22 08:00	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-01RE1	Water	EPA 6020B (Diss)	03/15/22 08:00	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-02	Water	EPA 6020B (Diss)	03/15/22 08:05	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-03	Water	EPA 6020B (Diss)	03/15/22 08:10	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-03RE1	Water	EPA 6020B (Diss)	03/15/22 08:10	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-04	Water	EPA 6020B (Diss)	03/15/22 08:15	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-04RE1	Water	EPA 6020B (Diss)	03/15/22 08:15	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-05	Water	EPA 6020B (Diss)	03/15/22 08:20	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-05RE1	Water	EPA 6020B (Diss)	03/15/22 08:20	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-06	Water	EPA 6020B (Diss)	03/15/22 08:25	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-06RE1	Water	EPA 6020B (Diss)	03/15/22 08:25	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-07	Water	EPA 6020B (Diss)	03/15/22 08:30	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-07RE1	Water	EPA 6020B (Diss)	03/15/22 08:30	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-08	Water	EPA 6020B (Diss)	03/18/22 13:35	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-09	Water	EPA 6020B (Diss)	03/18/22 13:40	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-10	Water	EPA 6020B (Diss)	03/18/22 13:45	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-11	Water	EPA 6020B (Diss)	03/18/22 13:50	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-12	Water	EPA 6020B (Diss)	03/18/22 13:55	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-13	Water	EPA 6020B (Diss)	03/18/22 14:00	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00
A2C1102-14	Water	EPA 6020B (Diss)	03/18/22 14:05	04/04/22 10:25	45mL/50mL	45mL/50mL	1.00

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-02	Spike recovery is outside of established control limits due to matrix interference.
Q-03	Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
Q-16	Reanalysis of an original Batch QC sample.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
R-04	Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET	Analyte DETECTED at or above the detection or reporting limit.
ND	Analyte NOT DETECTED at or above the detection or reporting limit.
NR	Result Not Reported
RPD	Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry"	Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry") See Percent Solids section for details of dry weight analysis.
" wet"	Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
" "	Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a ‘B-02’ qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a ‘B’ qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

‘B’ and ‘B-02’ qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
All reported analytes are included in Apex Laboratories' current ORELAP scope.					

Secondary Accreditations

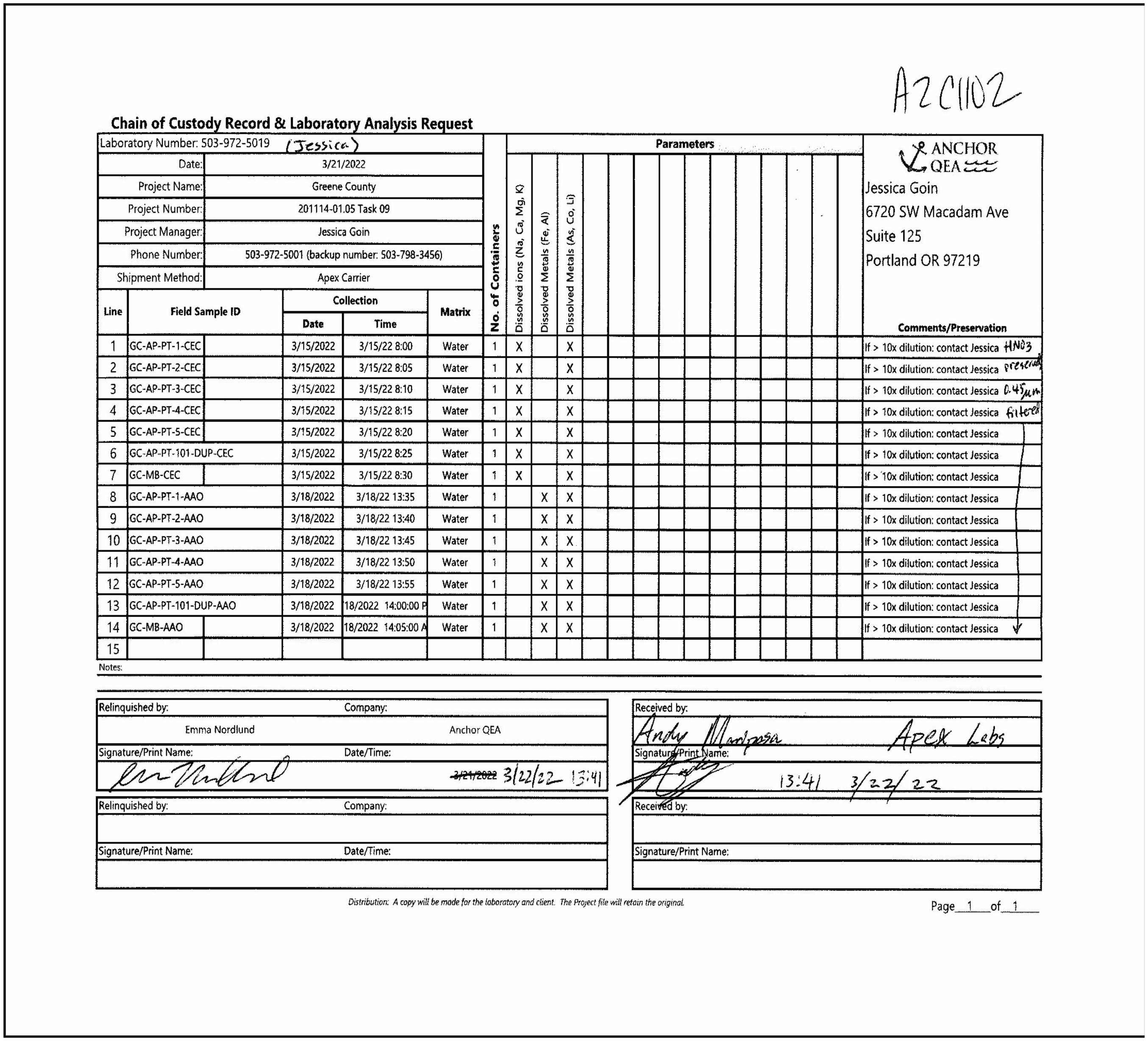
Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.



A2C1102

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019 (Jessica)
Date: 3/21/2022
Project Name: Greene County
Project Number: 201114-01.05 Task 09
Project Manager: Jessica Goin
Phone Number: 503-972-5001 (backup number: 503-798-3456)
Shipment Method: Apex Carrier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved ions (Na, Ca, Mg, K)	Dissolved Metals (Fe, Al)	Dissolved Metals (As, Co, Li)	Comments/Preservation
1	GC-AP-PT-1-CEC	3/15/2022	3/15/22 8:00	Water	1	X		X	If > 10x dilution: contact Jessica HNO3
2	GC-AP-PT-2-CEC	3/15/2022	3/15/22 8:05	Water	1	X		X	If > 10x dilution: contact Jessica preserved
3	GC-AP-PT-3-CEC	3/15/2022	3/15/22 8:10	Water	1	X		X	If > 10x dilution: contact Jessica 0.45μm
4	GC-AP-PT-4-CEC	3/15/2022	3/15/22 8:15	Water	1	X		X	If > 10x dilution: contact Jessica filtered
5	GC-AP-PT-5-CEC	3/15/2022	3/15/22 8:20	Water	1	X		X	If > 10x dilution: contact Jessica
6	GC-AP-PT-101-DUP-CEC	3/15/2022	3/15/22 8:25	Water	1	X		X	If > 10x dilution: contact Jessica
7	GC-MB-CEC	3/15/2022	3/15/22 8:30	Water	1	X		X	If > 10x dilution: contact Jessica
8	GC-AP-PT-1-AAO	3/18/2022	3/18/22 13:35	Water	1		X	X	If > 10x dilution: contact Jessica
9	GC-AP-PT-2-AAO	3/18/2022	3/18/22 13:40	Water	1		X	X	If > 10x dilution: contact Jessica
10	GC-AP-PT-3-AAO	3/18/2022	3/18/22 13:45	Water	1		X	X	If > 10x dilution: contact Jessica
11	GC-AP-PT-4-AAO	3/18/2022	3/18/22 13:50	Water	1		X	X	If > 10x dilution: contact Jessica
12	GC-AP-PT-5-AAO	3/18/2022	3/18/22 13:55	Water	1		X	X	If > 10x dilution: contact Jessica
13	GC-AP-PT-101-DUP-AAO	3/18/2022	18/2022 14:00:00 P	Water	1		X	X	If > 10x dilution: contact Jessica
14	GC-MB-AAO	3/18/2022	18/2022 14:05:00 A	Water	1		X	X	If > 10x dilution: contact Jessica
15									

Notes:

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: ~~3/21/2022~~ 3/22/22 13:41
Received by: Andy Mariposa	Apex Labs
Signature/Print Name:	13:41 3/22/22
Relinquished by:	Company:
Signature/Print Name:	Date/Time:
Received by:	
Signature/Print Name:	

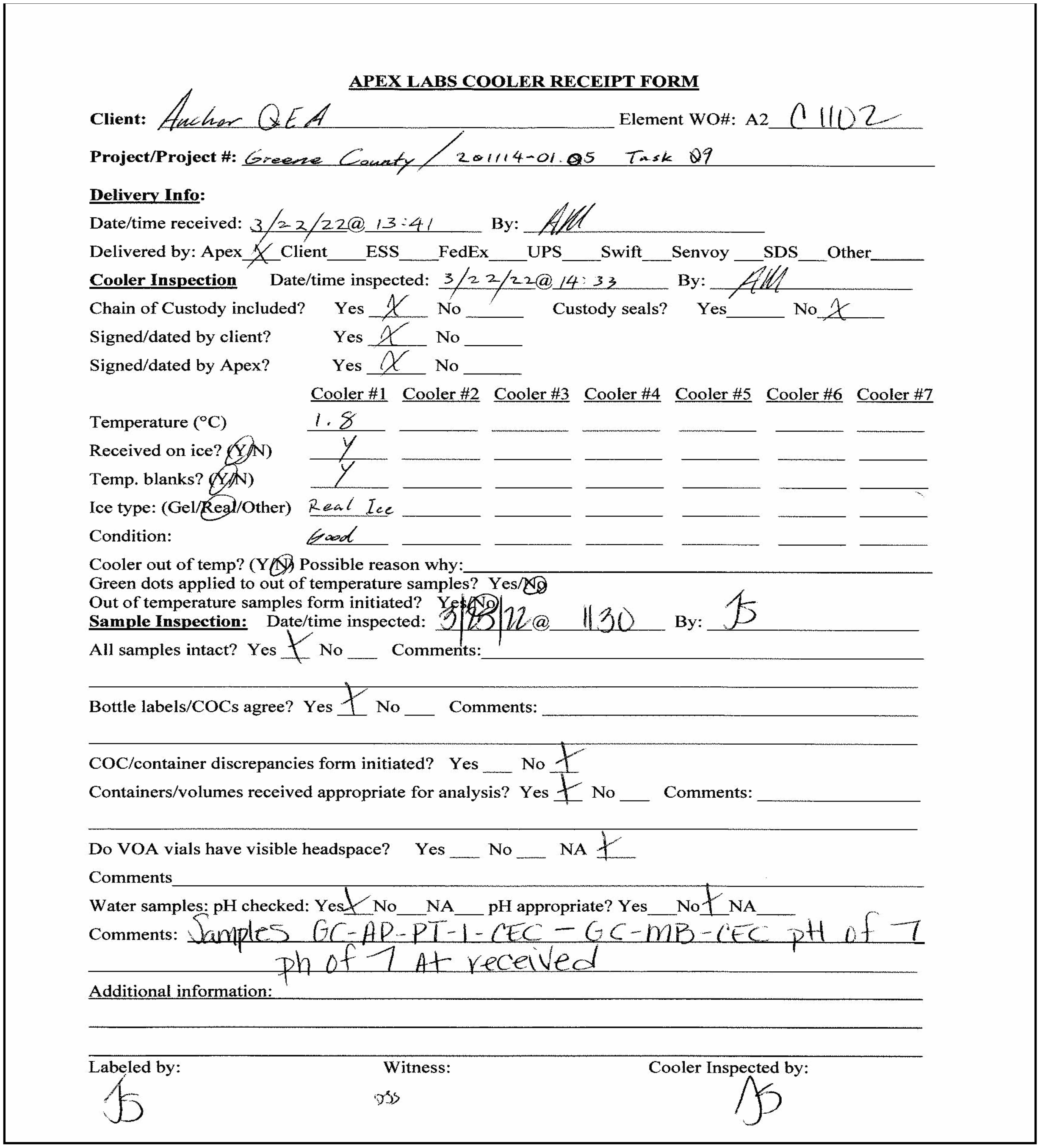
Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2C1102 - 04 28 22 1644



APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A2 C1102

Project/Project #: Greene County / 201114-01.05 Task 09

Delivery Info:

Date/time received: 3/22/22@ 13:41 By: AM

Delivered by: Apex X Client____ESS____FedEx____UPS____Swift___Senvoy ___SDS___Other______

Cooler Inspection Date/time inspected: 3/22/22@ 14:33 By: AM

Chain of Custody included? Yes X No ______ Custody seals? Yes______ No X

Signed/dated by client? Yes X No ______

Signed/dated by Apex? Yes X No ______

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.8						
Received on ice? ([✓ Y]/N)	Y						
Temp. blanks? ([✓ Y]/N)	Y						
Ice type: (Gel/[✓ Real]/Other)	Real Ice						
Condition:	Good						

Cooler out of temp? (Y/[✓ N]) Possible reason why:____________________

Green dots applied to out of temperature samples? Yes/[✓ No]

Out of temperature samples form initiated? Yes/[✓ No]

Sample Inspection: Date/time inspected: 3/23/22@ 1130 By: JS

All samples intact? Yes X No ___ Comments:____________________

Bottle labels/COCs agree? Yes X No ___ Comments: ____________________

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ________________

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments____

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes___No X NA____

Comments: Samples GC-AP-PT-1-CEC - GC-MB-CEC pH of 7
ph of 7 At received

Additional information:____________________________________

Labeled by: JS
Witness:
Cooler Inspected by: JS

ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Tuesday, April 19, 2022

Jessica Goin, PhD
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A2C1228 - Greene County - 201114-01.05 Task 09

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2C1228, which was received by the laboratory on 3/29/2022 at 12:55:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	2.6 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Anchor QEA, LLC	Project:	**Greene County**	
6720 SW Macadam Ave. Suite 125	Project Number:	201114-01.05 Task 09	**Report ID:**
Portland, OR 97219	Project Manager:	Jessica Goin, PhD	A2C1228 - 04 19 22 1443

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GC-AP-PT-1-Mn	A2C1228-01	Water	03/25/22 14:00	03/29/22 12:55
GC-AP-PT-101-DUP-Mn	A2C1228-02	Water	03/25/22 14:05	03/29/22 12:55
GC-AP-PT-2-Mn	A2C1228-03	Water	03/25/22 14:10	03/29/22 12:55
GC-AP-PT-3-Mn	A2C1228-04	Water	03/25/22 14:15	03/29/22 12:55
GC-AP-PT-4-Mn	A2C1228-05	Water	03/25/22 14:20	03/29/22 12:55
GC-AP-PT-5-Mn	A2C1228-06	Water	03/25/22 14:25	03/29/22 12:55
GC-MB-Mn	A2C1228-07	Water	03/25/22 14:30	03/29/22 12:55

Anchor QEA, LLC	Project: **Greene County**	
6720 SW Macadam Ave. Suite 125	Project Number: **201114-01.05 Task 09**	**Report ID:**
Portland, OR 97219	Project Manager: **Jessica Goin, PhD**	**A2C1228 - 04 19 22 1443**

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1-Mn (A2C1228-01RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	**94.0**	0.500	1.00	ug/L	1	04/13/22 12:02	EPA 6020B (Diss)	
GC-AP-PT-101-DUP-Mn (A2C1228-02RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	**83.3**	0.500	1.00	ug/L	1	04/13/22 12:07	EPA 6020B (Diss)	
GC-AP-PT-2-Mn (A2C1228-03RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	**147**	0.500	1.00	ug/L	1	04/13/22 12:12	EPA 6020B (Diss)	
GC-AP-PT-3-Mn (A2C1228-04RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	**130**	0.500	1.00	ug/L	1	04/13/22 12:17	EPA 6020B (Diss)	
GC-AP-PT-4-Mn (A2C1228-05RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	**284**	0.500	1.00	ug/L	1	04/13/22 12:22	EPA 6020B (Diss)	
GC-AP-PT-5-Mn (A2C1228-06RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	**89.3**	0.500	1.00	ug/L	1	04/13/22 12:27	EPA 6020B (Diss)	
GC-MB-Mn (A2C1228-07RE1)				**Matrix: Water**				
Batch: 22D0334								
Manganese	ND	0.500	1.00	ug/L	1	04/13/22 12:32	EPA 6020B (Diss)	

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0334 - Matrix Matched Direct Inject							**Water**					
Blank (22D0334-BLK2)			Prepared: 04/11/22 10:53		Analyzed: 04/13/22 12:48							
EPA 6020B (Diss)												
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	Q-16
LCS (22D0334-BS1)			Prepared: 04/11/22 10:53		Analyzed: 04/12/22 17:41							
EPA 6020B (Diss)												
Manganese	52.6	0.500	1.00	ug/L	1	55.6	---	95	80-120%	---	---	
Matrix Spike (22D0334-MS2)			Prepared: 04/11/22 10:53		Analyzed: 04/13/22 11:52							
QC Source Sample: Non-SDG (A2C1187-08RE1)												
EPA 6020B (Diss)												
Manganese	3740	5.00	10.0	ug/L	10	55.6	4010	**-473**	**75-125%**	---	---	Q-03, Q-16
Matrix Spike Dup (22D0334-MSD2)			Prepared: 04/11/22 10:53		Analyzed: 04/13/22 11:57							
QC Source Sample: Non-SDG (A2C1187-08RE1)												
Manganese	4070	5.00	10.0	ug/L	10	55.6	4010	115	75-125%	8	20%	Q-16

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2C1228 - 04 19 22 1443

SAMPLE PREPARATION INFORMATION

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22D0334							
A2C1228-01RE1	Water	EPA 6020B (Diss)	03/25/22 14:00	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00
A2C1228-02RE1	Water	EPA 6020B (Diss)	03/25/22 14:05	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00
A2C1228-03RE1	Water	EPA 6020B (Diss)	03/25/22 14:10	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00
A2C1228-04RE1	Water	EPA 6020B (Diss)	03/25/22 14:15	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00
A2C1228-05RE1	Water	EPA 6020B (Diss)	03/25/22 14:20	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00
A2C1228-06RE1	Water	EPA 6020B (Diss)	03/25/22 14:25	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00
A2C1228-07RE1	Water	EPA 6020B (Diss)	03/25/22 14:30	04/11/22 10:53	22.5mL/25mL	45mL/50mL	1.00

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-03	Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
Q-16	Reanalysis of an original Batch QC sample.

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET	Analyte DETECTED at or above the detection or reporting limit.
ND	Analyte NOT DETECTED at or above the detection or reporting limit.
NR	Result Not Reported
RPD	Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry"	Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry") See Percent Solids section for details of dry weight analysis.
" wet"	Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
" "	Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- "	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
" *** "	Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

‘B’ and ‘B-02’ qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

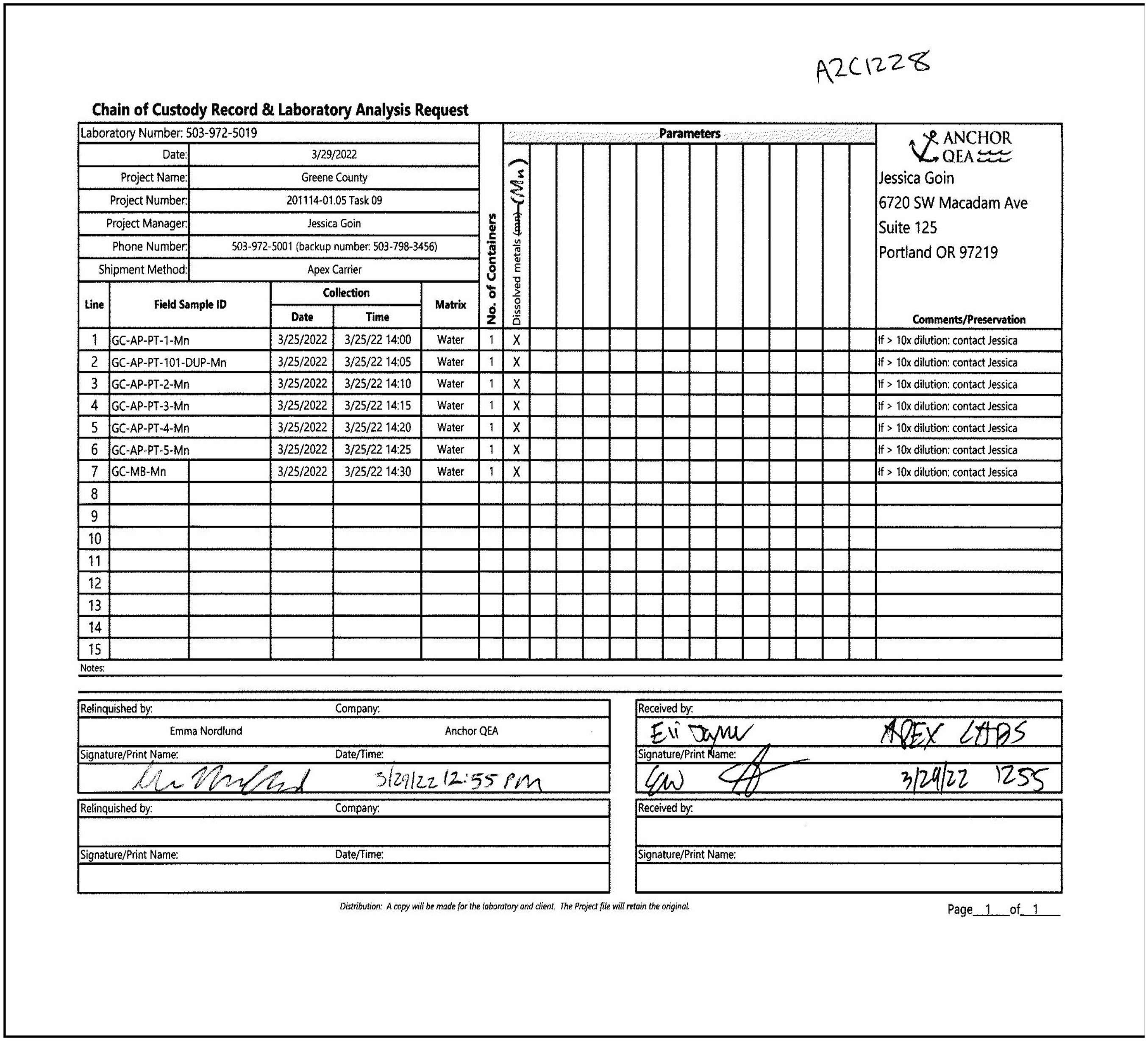
Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.



A2C1228

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	3/29/2022
Project Name:	Greene County
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	Apex Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved metals ~~(mn)~~ (Mn)	Comments/Preservation
1	GC-AP-PT-1-Mn	3/25/2022	3/25/22 14:00	Water	1	X	If > 10x dilution: contact Jessica
2	GC-AP-PT-101-DUP-Mn	3/25/2022	3/25/22 14:05	Water	1	X	If > 10x dilution: contact Jessica
3	GC-AP-PT-2-Mn	3/25/2022	3/25/22 14:10	Water	1	X	If > 10x dilution: contact Jessica
4	GC-AP-PT-3-Mn	3/25/2022	3/25/22 14:15	Water	1	X	If > 10x dilution: contact Jessica
5	GC-AP-PT-4-Mn	3/25/2022	3/25/22 14:20	Water	1	X	If > 10x dilution: contact Jessica
6	GC-AP-PT-5-Mn	3/25/2022	3/25/22 14:25	Water	1	X	If > 10x dilution: contact Jessica
7	GC-MB-Mn	3/25/2022	3/25/22 14:30	Water	1	X	If > 10x dilution: contact Jessica
8							
9							
10							
11							
12							
13							
14							
15							

Notes:

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 3/29/22 12:55 PM

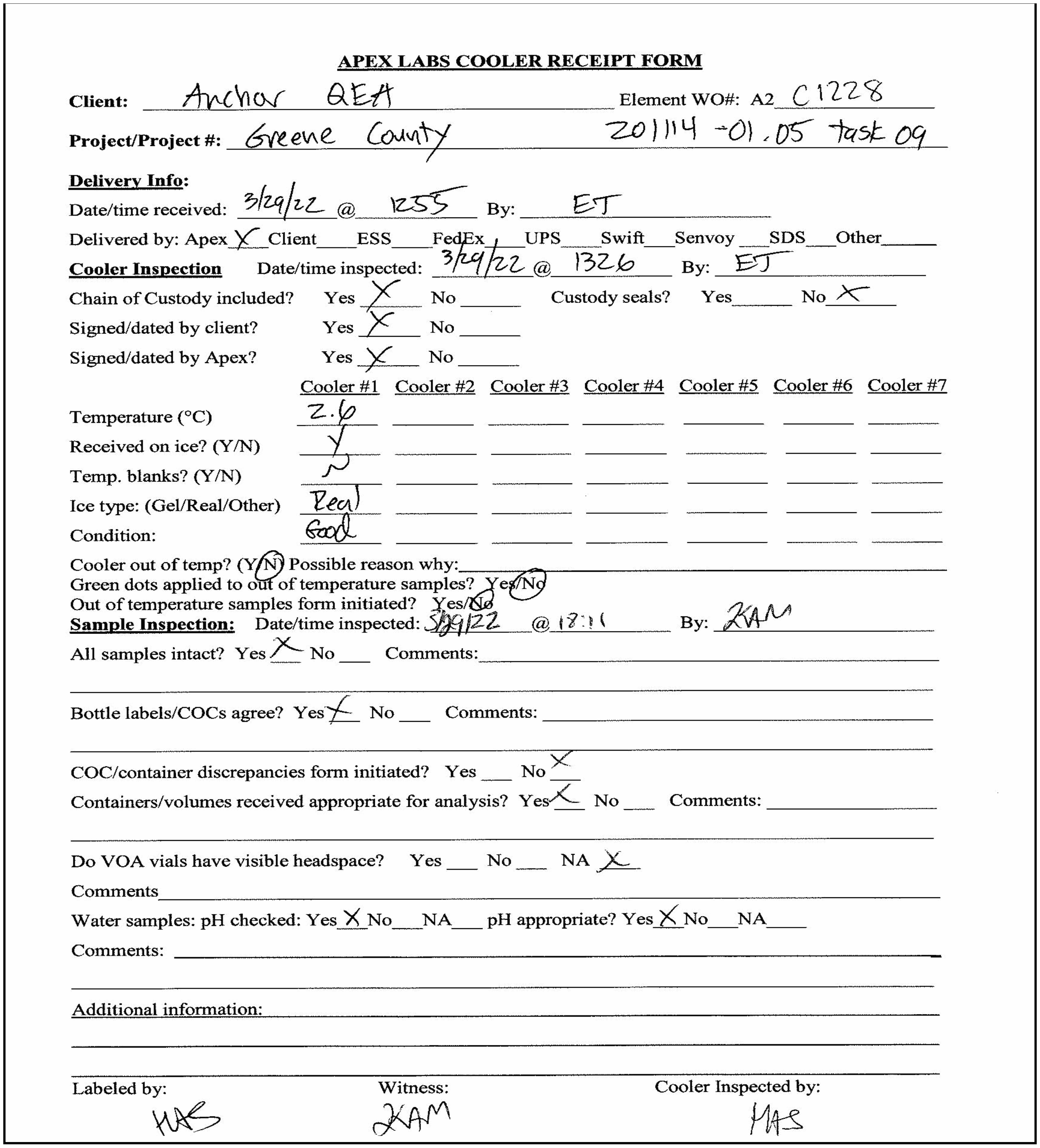
Received by: Eli Dyw APEX LABS
Signature/Print Name: EW
3/29/22 1255

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1



APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA **Element WO#:** A2 C1228

Project/Project #: Greene County 201114-01.05 task 09

Delivery Info:

Date/time received: 3/29/22 @ 1255 By: ET

Delivered by: Apex X Client___ESS___FedEx___UPS___Swift___Senvoy___SDS___Other_____

Cooler Inspection Date/time inspected: 3/29/22 @ 1326 By: ET

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.6						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Real						
Condition:	Good						

Cooler out of temp? (Y/[✓ N]) Possible reason why:___

Green dots applied to out of temperature samples? Yes/[✓ No]

Out of temperature samples form initiated? Yes/[✓ No]

Sample Inspection: Date/time inspected: 3/29/22 @ 18:11 By: KAM

All samples intact? Yes X No ___ Comments:___

Bottle labels/COCs agree? Yes X No ___ Comments:___

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments___

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes X No___NA___

Comments:___

Additional information:___

Labeled by: HAS Witness: KAM Cooler Inspected by: HAS

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Monday, June 20, 2022

Jessica Goin, PhD
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A2E0641 - Greene County - 201114-01.05 Task 09

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2E0641, which was received by the laboratory on 5/16/2022 at 1:08:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	3.4 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Anchor QEA, LLC **6720 SW Macadam Ave. Suite 125** **Portland, OR 97219**	Project: **Greene County** Project Number: **201114-01.05 Task 09** Project Manager: **Jessica Goin, PhD**	**Report ID:** **A2E0641 - 06 20 22 0548**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GC-AP-PT-1	A2E0641-01	Soil	05/13/22 14:30	05/16/22 13:08
GC-AP-PT-101	A2E0641-02	Soil	05/13/22 14:35	05/16/22 13:08
GC-AP-PT-2	A2E0641-03	Soil	05/13/22 14:40	05/16/22 13:08
GC-AP-PT-3	A2E0641-04	Soil	05/13/22 14:45	05/16/22 13:08
GC-AP-PT-4	A2E0641-05	Soil	05/13/22 14:50	05/16/22 13:08
GC-AP-PT-5	A2E0641-06	Soil	05/13/22 14:55	05/16/22 13:08

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2E0641 - 06 20 22 0548

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2E0641-01)				**Matrix: Soil**				
Batch: 22E1057								
Antimony	ND	0.552	1.10	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Barium	**3.83**	0.552	1.10	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Beryllium	ND	0.110	0.221	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Cadmium	ND	0.110	0.221	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Chromium	**2.60**	0.552	1.10	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Iron	**2970**	27.6	55.2	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Lead	**0.918**	0.110	0.221	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Manganese	**9.56**	0.552	1.10	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Mercury	ND	0.0442	0.0884	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Molybdenum	ND	0.552	1.10	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Selenium	ND	0.552	1.10	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
Thallium	ND	0.110	0.221	mg/kg dry	10	05/27/22 21:04	EPA 6020B	
GC-AP-PT-101 (A2E0641-02)				**Matrix: Soil**				
Batch: 22E1057								
Antimony	ND	0.581	1.16	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Barium	**4.73**	0.581	1.16	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Beryllium	ND	0.116	0.232	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Cadmium	ND	0.116	0.232	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Chromium	**4.35**	0.581	1.16	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Iron	**4110**	29.1	58.1	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Lead	**1.04**	0.116	0.232	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Manganese	**14.3**	0.581	1.16	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Mercury	ND	0.0465	0.0930	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Molybdenum	ND	0.581	1.16	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Selenium	ND	0.581	1.16	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
Thallium	ND	0.116	0.232	mg/kg dry	10	05/27/22 21:24	EPA 6020B	
GC-AP-PT-2 (A2E0641-03)				**Matrix: Soil**				
Batch: 22E1057								
Antimony	ND	0.612	1.22	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Barium	**12.5**	0.612	1.22	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Beryllium	**0.216**	0.122	0.245	mg/kg dry	10	05/27/22 21:29	EPA 6020B	**J**

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-2 (A2E0641-03)				**Matrix: Soil**				
Cadmium	ND	0.122	0.245	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Chromium	**3.60**	0.612	1.22	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Iron	**4670**	30.6	61.2	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Lead	**1.75**	0.122	0.245	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Manganese	**25.5**	0.612	1.22	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Mercury	ND	0.0489	0.0978	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Molybdenum	ND	0.612	1.22	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Selenium	ND	0.612	1.22	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
Thallium	ND	0.122	0.245	mg/kg dry	10	05/27/22 21:29	EPA 6020B	
GC-AP-PT-3 (A2E0641-04)				**Matrix: Soil**				
Batch: 22E1057								
Antimony	ND	0.629	1.26	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Barium	**8.15**	0.629	1.26	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Beryllium	ND	0.126	0.252	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Cadmium	ND	0.126	0.252	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Chromium	**3.98**	0.629	1.26	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Iron	**2990**	31.5	62.9	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Lead	**1.74**	0.126	0.252	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Manganese	**20.2**	0.629	1.26	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Mercury	ND	0.0503	0.101	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Molybdenum	**0.981**	0.629	1.26	mg/kg dry	10	05/27/22 21:34	EPA 6020B	**J**
Selenium	ND	0.629	1.26	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
Thallium	ND	0.126	0.252	mg/kg dry	10	05/27/22 21:34	EPA 6020B	
GC-AP-PT-4 (A2E0641-05)				**Matrix: Soil**				
Batch: 22E1057								
Antimony	ND	0.663	1.33	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Barium	**6.62**	0.663	1.33	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Beryllium	ND	0.133	0.265	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Cadmium	ND	0.133	0.265	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Chromium	**3.09**	0.663	1.33	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Iron	**3280**	33.2	66.3	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Lead	**1.16**	0.133	0.265	mg/kg dry	10	05/27/22 22:01	EPA 6020B	

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2E0641 - 06 20 22 0548

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-4 (A2E0641-05)				**Matrix: Soil**				
Manganese	**40.7**	0.663	1.33	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Mercury	ND	0.0530	0.106	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Molybdenum	**0.672**	0.663	1.33	mg/kg dry	10	05/27/22 22:01	EPA 6020B	J
Selenium	ND	0.663	1.33	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
Thallium	ND	0.133	0.265	mg/kg dry	10	05/27/22 22:01	EPA 6020B	
GC-AP-PT-5 (A2E0641-06)				**Matrix: Soil**				
Batch: 22E1057								
Antimony	ND	0.610	1.22	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Barium	**9.46**	0.610	1.22	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Beryllium	**0.180**	0.122	0.244	mg/kg dry	10	05/27/22 22:07	EPA 6020B	J
Cadmium	ND	0.122	0.244	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Chromium	**4.74**	0.610	1.22	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Iron	**6550**	30.5	61.0	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Lead	**1.29**	0.122	0.244	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Manganese	**24.7**	0.610	1.22	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Mercury	ND	0.0488	0.0976	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Molybdenum	ND	0.610	1.22	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Selenium	ND	0.610	1.22	mg/kg dry	10	05/27/22 22:07	EPA 6020B	
Thallium	ND	0.122	0.244	mg/kg dry	10	05/27/22 22:07	EPA 6020B	

Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

Project: **Greene County**
Project Number: **201114-01.05 Task 09**
Project Manager: **Jessica Goin, PhD**

Report ID:
A2E0641 - 06 20 22 0548

ANALYTICAL SAMPLE RESULTS

Soluble Fluoride by Ion-Specific Electrode (Water Leach/Non-Distilled)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2E0641-01RE1)				**Matrix: Soil**		**Batch: 22E0832**		
Fluoride	ND	0.557	1.11	mg/kg dry	1	05/26/22 15:15	SM 4500-F C	
GC-AP-PT-101 (A2E0641-02RE1)				**Matrix: Soil**		**Batch: 22E0832**		
Fluoride	ND	0.563	1.13	mg/kg dry	1	05/26/22 15:25	SM 4500-F C	
GC-AP-PT-2 (A2E0641-03RE1)				**Matrix: Soil**		**Batch: 22E0832**		
Fluoride	**0.714**	0.605	1.21	mg/kg dry	1	05/26/22 15:29	SM 4500-F C	J
GC-AP-PT-3 (A2E0641-04RE1)				**Matrix: Soil**		**Batch: 22E0832**		
Fluoride	**0.832**	0.611	1.22	mg/kg dry	1	05/26/22 15:33	SM 4500-F C	J
GC-AP-PT-4 (A2E0641-05)				**Matrix: Soil**		**Batch: 22E0832**		
Fluoride	**0.667**	0.607	1.21	mg/kg dry	1	05/26/22 13:43	SM 4500-F C	J
GC-AP-PT-5 (A2E0641-06)				**Matrix: Soil**		**Batch: 22E0832**		
Fluoride	ND	0.603	1.21	mg/kg dry	1	05/26/22 13:47	SM 4500-F C	

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GC-AP-PT-1 (A2E0641-01)				**Matrix: Soil**		**Batch: 22E0794**		
% Solids	**89.6**	1.00	1.00	%	1	05/21/22 18:40	EPA 8000D	
GC-AP-PT-101 (A2E0641-02)				**Matrix: Soil**		**Batch: 22E0794**		
% Solids	**88.3**	1.00	1.00	%	1	05/21/22 18:40	EPA 8000D	
GC-AP-PT-2 (A2E0641-03)				**Matrix: Soil**		**Batch: 22E0794**		
% Solids	**82.6**	1.00	1.00	%	1	05/21/22 18:40	EPA 8000D	
GC-AP-PT-3 (A2E0641-04)				**Matrix: Soil**		**Batch: 22E0794**		
% Solids	**81.7**	1.00	1.00	%	1	05/21/22 18:40	EPA 8000D	
GC-AP-PT-4 (A2E0641-05)				**Matrix: Soil**		**Batch: 22E0794**		
% Solids	**82.0**	1.00	1.00	%	1	05/21/22 18:40	EPA 8000D	
GC-AP-PT-5 (A2E0641-06)				**Matrix: Soil**		**Batch: 22E0794**		
% Solids	**82.8**	1.00	1.00	%	1	05/21/22 18:40	EPA 8000D	

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22E1057 - EPA 3051A								**Soil**				
Blank (22E1057-BLK1)				Prepared: 05/27/22 13:23 Analyzed: 05/27/22 20:59								
EPA 6020B												
Antimony	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Iron	ND	24.0	48.1	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Manganese	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	0.0385	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Molybdenum	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (22E1057-BS1)				Prepared: 05/27/22 13:23 Analyzed: 05/27/22 20:54								
EPA 6020B												
Antimony	25.5	0.500	1.00	mg/kg wet	10	25.0	---	102	80-120%	---	---	
Barium	48.4	0.500	1.00	mg/kg wet	10	50.0	---	97	80-120%	---	---	
Beryllium	23.5	0.100	0.200	mg/kg wet	10	25.0	---	94	80-120%	---	---	
Cadmium	47.9	0.100	0.200	mg/kg wet	10	50.0	---	96	80-120%	---	---	
Chromium	50.0	0.500	1.00	mg/kg wet	10	50.0	---	100	80-120%	---	---	
Iron	2610	25.0	50.0	mg/kg wet	10	2500	---	104	80-120%	---	---	
Lead	47.8	0.100	0.200	mg/kg wet	10	50.0	---	96	80-120%	---	---	
Manganese	48.4	0.500	1.00	mg/kg wet	10	50.0	---	97	80-120%	---	---	
Mercury	0.979	0.0400	0.0800	mg/kg wet	10	1.00	---	98	80-120%	---	---	
Molybdenum	25.0	0.500	1.00	mg/kg wet	10	25.0	---	100	80-120%	---	---	
Selenium	24.0	0.500	1.00	mg/kg wet	10	25.0	---	96	80-120%	---	---	
Thallium	24.0	0.100	0.200	mg/kg wet	10	25.0	---	96	80-120%	---	---	
Duplicate (22E1057-DUP1)				Prepared: 05/27/22 13:23 Analyzed: 05/27/22 21:10								
QC Source Sample: GC-AP-PT-1 (A2E0641-01)												
EPA 6020B												
Antimony	ND	0.612	1.22	mg/kg dry	10	---	ND	---	---	---	20%	
Barium	**3.82**	0.612	1.22	mg/kg dry	10	---	3.83	---	---	0.1	20%	

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Batch 22E1057 - EPA 3051A **Soil**

Duplicate (22E1057-DUP1) Prepared: 05/27/22 13:23 Analyzed: 05/27/22 21:10

QC Source Sample: GC-AP-PT-1 (A2E0641-01)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Beryllium	ND	0.122	0.245	mg/kg dry	10	---	ND	---	---	---	20%	
Cadmium	ND	0.122	0.245	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	**2.70**	0.612	1.22	mg/kg dry	10	---	2.60	---	---	4	20%	
Iron	**3130**	30.6	61.2	mg/kg dry	10	---	2970	---	---	5	20%	
Lead	**0.980**	0.122	0.245	mg/kg dry	10	---	0.918	---	---	7	20%	
Manganese	**10.4**	0.612	1.22	mg/kg dry	10	---	9.56	---	---	8	20%	
Mercury	ND	0.0489	0.0979	mg/kg dry	10	---	ND	---	---	---	20%	
Molybdenum	ND	0.612	1.22	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	0.612	1.22	mg/kg dry	10	---	ND	---	---	---	20%	
Thallium	ND	0.122	0.245	mg/kg dry	10	---	ND	---	---	---	20%	

Matrix Spike (22E1057-MS1) Prepared: 05/27/22 13:23 Analyzed: 05/27/22 21:18

QC Source Sample: GC-AP-PT-1 (A2E0641-01)

EPA 6020B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Antimony	31.5	0.618	1.24	mg/kg dry	10	30.9	ND	102	75-125%	---	---	
Barium	65.6	0.618	1.24	mg/kg dry	10	61.8	3.83	100	75-125%	---	---	
Beryllium	29.2	0.124	0.247	mg/kg dry	10	30.9	ND	94	75-125%	---	---	
Cadmium	58.2	0.124	0.247	mg/kg dry	10	61.8	ND	94	75-125%	---	---	
Chromium	64.9	0.618	1.24	mg/kg dry	10	61.8	2.60	101	75-125%	---	---	
Iron	6700	30.9	61.8	mg/kg dry	10	3090	2970	121	75-125%	---	---	
Lead	61.5	0.124	0.247	mg/kg dry	10	61.8	0.918	98	75-125%	---	---	
Manganese	69.4	0.618	1.24	mg/kg dry	10	61.8	9.56	97	75-125%	---	---	
Mercury	1.20	0.0495	0.0989	mg/kg dry	10	1.24	ND	97	75-125%	---	---	
Molybdenum	30.2	0.618	1.24	mg/kg dry	10	30.9	ND	98	75-125%	---	---	
Selenium	27.9	0.618	1.24	mg/kg dry	10	30.9	ND	90	75-125%	---	---	
Thallium	28.6	0.124	0.247	mg/kg dry	10	30.9	ND	92	75-125%	---	---	

QUALITY CONTROL (QC) SAMPLE RESULTS

Soluble Fluoride by Ion-Specific Electrode (Water Leach/Non-Distilled)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22E0832 - DI Leach							**Soil**					
Blank (22E0832-BLK1)				Prepared: 05/23/22 09:57 Analyzed: 05/26/22 12:58								
SM 4500-F C												
Fluoride	ND	0.500	1.00	mg/kg wet	1	---	---	---	---	---	---	
LCS (22E0832-BS1)				Prepared: 05/23/22 09:57 Analyzed: 05/26/22 13:02								
SM 4500-F C												
Fluoride	104	0.500	1.00	mg/kg wet	1	100	---	104	90-112%	---	---	
Matrix Spike (22E0832-MS1)				Prepared: 05/23/22 09:57 Analyzed: 05/26/22 13:55								
QC Source Sample: Non-SDG (A2E0774-02)												
SM 4500-F C												
Fluoride	141	0.898	1.80	mg/kg dry	1	180	10.8	**72**	**80-120%**	---	---	Q-02
Matrix Spike Dup (22E0832-MSD1)				Prepared: 05/23/22 09:57 Analyzed: 05/26/22 15:11								
QC Source Sample: Non-SDG (A2E0774-02)												
Fluoride	148	0.903	1.81	mg/kg dry	1	181	10.8	**76**	**80-120%**	5	15%	Q-02

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22E0794 - Total Solids (Dry Weight)							**Soil**					
Duplicate (22E0794-DUP1)			Prepared: 05/20/22 10:54			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0582-01)												
% Solids	**69.3**	1.00	1.00	%	1	---	69.9	---	---	0.9	10%	
Duplicate (22E0794-DUP2)			Prepared: 05/20/22 10:54			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0582-03)												
% Solids	**82.3**	1.00	1.00	%	1	---	83.7	---	---	2	10%	
Duplicate (22E0794-DUP3)			Prepared: 05/20/22 10:54			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0582-06)												
% Solids	**71.1**	1.00	1.00	%	1	---	71.0	---	---	0.1	10%	
Duplicate (22E0794-DUP4)			Prepared: 05/20/22 10:54			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0582-09)												
% Solids	**74.6**	1.00	1.00	%	1	---	75.5	---	---	1	10%	
Duplicate (22E0794-DUP5)			Prepared: 05/20/22 10:54			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0609-01)												
% Solids	**80.3**	1.00	1.00	%	1	---	80.6	---	---	0.3	10%	
Duplicate (22E0794-DUP6)			Prepared: 05/20/22 10:54			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0640-02)												
% Solids	**70.8**	1.00	1.00	%	1	---	70.3	---	---	0.7	10%	
Duplicate (22E0794-DUP7)			Prepared: 05/20/22 18:02			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0556-01)												
% Solids	**83.4**	1.00	1.00	%	1	---	83.0	---	---	0.4	10%	
Duplicate (22E0794-DUP8)			Prepared: 05/20/22 18:02			Analyzed: 05/21/22 18:40						
QC Source Sample: Non-SDG (A2E0780-01)												
% Solids	**85.6**	1.00	1.00	%	1	---	88.1	---	---	3	10%	

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22E0794 - Total Solids (Dry Weight)							Soil					
Duplicate (22E0794-DUP9)			Prepared: 05/20/22 18:02	Analyzed: 05/21/22 18:40								
QC Source Sample: Non-SDG (A2E0781-01)												
% Solids	**78.5**	1.00	1.00	%	1	---	79.0	---	---	0.7	10%	
Duplicate (22E0794-DUPA)			Prepared: 05/20/22 18:02	Analyzed: 05/21/22 18:40								
QC Source Sample: Non-SDG (A2E0782-02)												
% Solids	**81.2**	1.00	1.00	%	1	---	80.7	---	---	0.7	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22E1057							
A2E0641-01	Soil	EPA 6020B	05/13/22 14:30	05/27/22 13:23	0.505g/50mL	0.5g/50mL	0.99
A2E0641-02	Soil	EPA 6020B	05/13/22 14:35	05/27/22 13:23	0.487g/50mL	0.5g/50mL	1.03
A2E0641-03	Soil	EPA 6020B	05/13/22 14:40	05/27/22 13:23	0.495g/50mL	0.5g/50mL	1.01
A2E0641-04	Soil	EPA 6020B	05/13/22 14:45	05/27/22 13:23	0.486g/50mL	0.5g/50mL	1.03
A2E0641-05	Soil	EPA 6020B	05/13/22 14:50	05/27/22 13:23	0.46g/50mL	0.5g/50mL	1.09
A2E0641-06	Soil	EPA 6020B	05/13/22 14:55	05/27/22 13:23	0.495g/50mL	0.5g/50mL	1.01

Soluble Fluoride by Ion-Specific Electrode (Water Leach/Non-Distilled)

Prep: DI Leach

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22E0832							
A2E0641-01RE1	Soil	SM 4500-F C	05/13/22 14:30	05/23/22 09:57	5.0074g/50mL	5g/50mL	1.00
A2E0641-02RE1	Soil	SM 4500-F C	05/13/22 14:35	05/23/22 09:57	5.03g/50mL	5g/50mL	0.99
A2E0641-03RE1	Soil	SM 4500-F C	05/13/22 14:40	05/23/22 09:57	5.0035g/50mL	5g/50mL	1.00
A2E0641-04RE1	Soil	SM 4500-F C	05/13/22 14:45	05/23/22 09:57	5.0022g/50mL	5g/50mL	1.00
A2E0641-05	Soil	SM 4500-F C	05/13/22 14:50	05/23/22 09:57	5.0268g/50mL	5g/50mL	1.00
A2E0641-06	Soil	SM 4500-F C	05/13/22 14:55	05/23/22 09:57	5.008g/50mL	5g/50mL	1.00

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22E0794							
A2E0641-01	Soil	EPA 8000D	05/13/22 14:30	05/20/22 10:54			NA
A2E0641-02	Soil	EPA 8000D	05/13/22 14:35	05/20/22 10:54			NA
A2E0641-03	Soil	EPA 8000D	05/13/22 14:40	05/20/22 10:54			NA
A2E0641-04	Soil	EPA 8000D	05/13/22 14:45	05/20/22 10:54			NA
A2E0641-05	Soil	EPA 8000D	05/13/22 14:50	05/20/22 10:54			NA
A2E0641-06	Soil	EPA 8000D	05/13/22 14:55	05/20/22 10:54			NA

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-02	Spike recovery is outside of established control limits due to matrix interference.

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET	Analyte DETECTED at or above the detection or reporting limit.
ND	Analyte NOT DETECTED at or above the detection or reporting limit.
NR	Result Not Reported
RPD	Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry"	Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry") See Percent Solids section for details of dry weight analysis.
" wet"	Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
" "	Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

‘B’ and ‘B-02’ qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

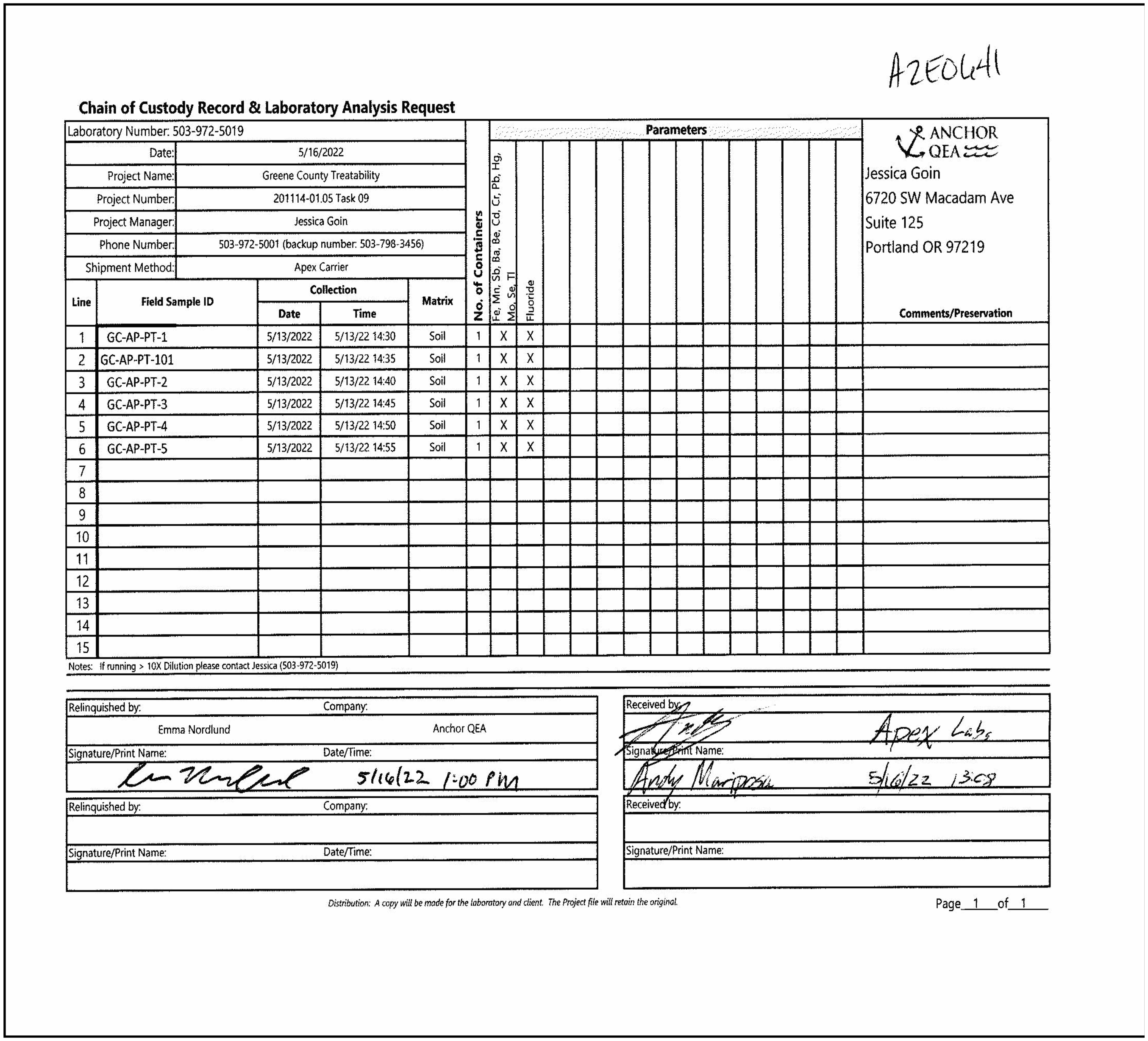
Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.



A2E0641

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	5/16/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	Apex Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Fe, Mn, Sb, Ba, Be, Cd, Cr, Pb, Hg, Mo, Se, Tl	Fluoride	Comments/Preservation
1	GC-AP-PT-1	5/13/2022	5/13/22 14:30	Soil	1	X	X	
2	GC-AP-PT-101	5/13/2022	5/13/22 14:35	Soil	1	X	X	
3	GC-AP-PT-2	5/13/2022	5/13/22 14:40	Soil	1	X	X	
4	GC-AP-PT-3	5/13/2022	5/13/22 14:45	Soil	1	X	X	
5	GC-AP-PT-4	5/13/2022	5/13/22 14:50	Soil	1	X	X	
6	GC-AP-PT-5	5/13/2022	5/13/22 14:55	Soil	1	X	X	
7								
8								
9								
10								
11								
12								
13								
14								
15								

Notes: If running > 10X Dilution please contact Jessica (503-972-5019)

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 5/16/22 1:00 PM

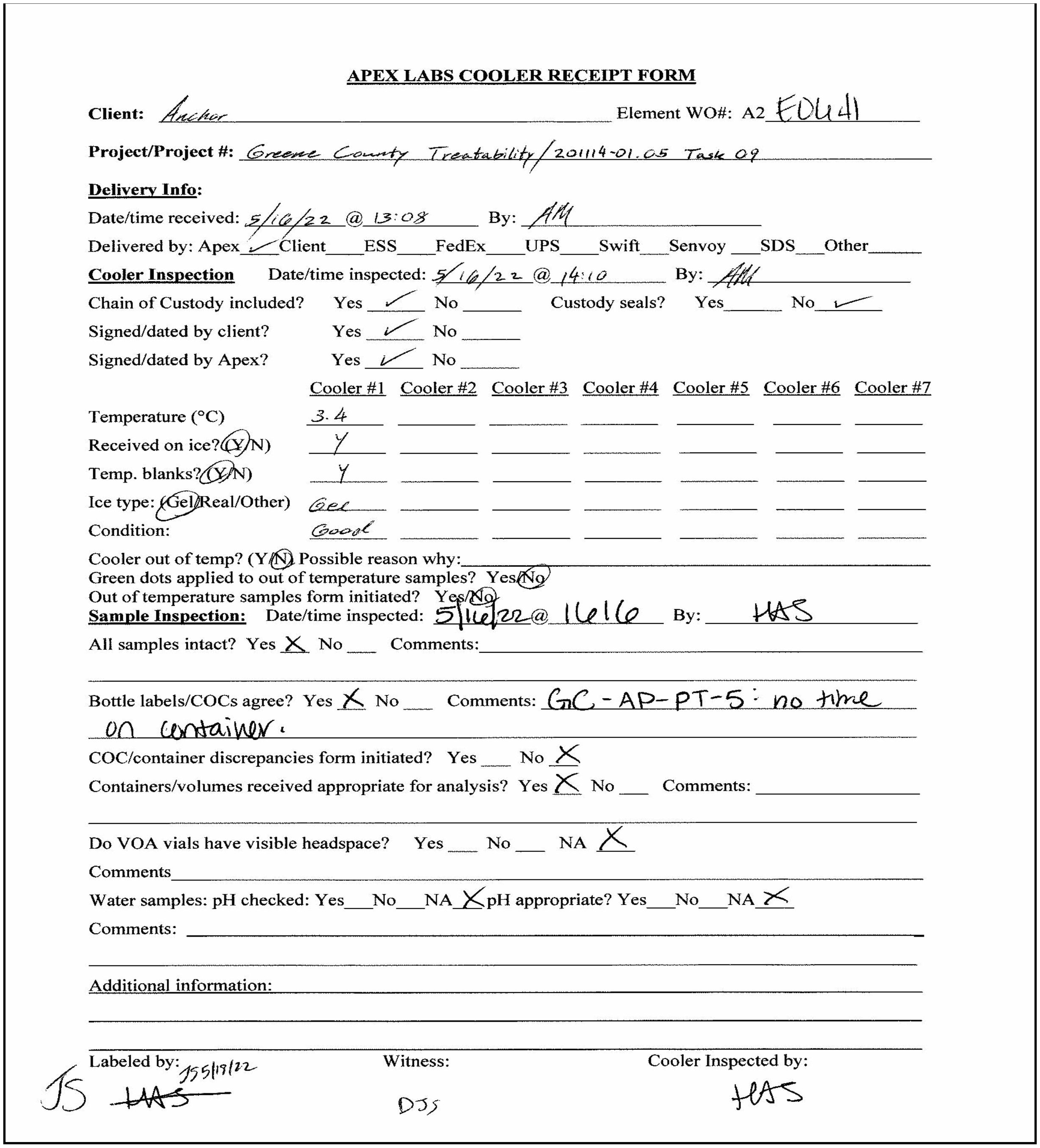
Received by:
Company: Apex Labs
Signature/Print Name: Andy Mariposa
Date/Time: 5/16/22 13:58

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1



APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A2 E0641

Project/Project #: Greene County Treatability/201114-01.05 Task 09

Delivery Info:

Date/time received: 5/16/22 @ 13:08 By: AM

Delivered by: Apex ✓ Client____ESS____FedEx____UPS____Swift___Senvoy ___SDS___Other______

Cooler Inspection Date/time inspected: 5/16/22 @ 14:10 By: AM

Chain of Custody included? Yes ✓ No ______ Custody seals? Yes______ No ✓

Signed/dated by client? Yes ✓ No ______

Signed/dated by Apex? Yes ✓ No ______

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	3.4						
Received on ice? ([✓ Y]/N)	Y						
Temp. blanks? ([✓ Y]/N)	Y						
Ice type: ([✓ Gel]/Real/Other)	Gel						
Condition:	Good						

Cooler out of temp? (Y/[✓ N]) Possible reason why:____________

Green dots applied to out of temperature samples? Yes/[✓ No]

Out of temperature samples form initiated? Yes/[✓ No]

Sample Inspection: Date/time inspected: 5/16/22 @ 1616 By: HAS

All samples intact? Yes X No ___ Comments:____________

Bottle labels/COCs agree? Yes X No ___ Comments: GC-AP-PT-5: no time on container.

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____________

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments____________

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: ____________

Additional information:____________

Labeled by: JS ~~HAS~~ JS 5/19/22

Witness: DJS

Cooler Inspected by: HAS

May 18, 2022 Service Request No:K2205023

Modi Raduma
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Green County Treatability

Dear Modi,

Enclosed are the results of the sample(s) submitted to our laboratory May 10, 2022
For your reference, these analyses have been assigned our service request number **K2205023.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Green County Treatability
Sample Matrix: Water

Service Request: K2205023
Date Received: 05/10/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 05/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 05/18/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-14-FS **Lab ID: K2205023-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	27.2		0.05	0.10	ug/L	200.8
Lithium, Dissolved	616		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-FC **Lab ID: K2205023-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	33.0		0.05	0.10	ug/L	200.8
Lithium, Dissolved	614		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-CER **Lab ID: K2205023-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	28.5		0.05	0.10	ug/L	200.8
Lithium, Dissolved	613		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-PM **Lab ID: K2205023-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	610		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-FS-PM **Lab ID: K2205023-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	17.6		0.05	0.10	ug/L	200.8
Lithium, Dissolved	626		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-FC-PM-MC **Lab ID: K2205023-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	631		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-BC **Lab ID: K2205023-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	34.4		0.05	0.10	ug/L	200.8
Lithium, Dissolved	601		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-AIR **Lab ID: K2205023-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	20.6		0.05	0.10	ug/L	200.8
Lithium, Dissolved	630		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-FS-DUP **Lab ID: K2205023-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	28.7		0.05	0.10	ug/L	200.8
Lithium, Dissolved	608		1.0	1.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-14-MB **Lab ID: K2205023-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	33.5		0.05	0.10	ug/L	200.8
Lithium, Dissolved	631		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-FS **Lab ID: K2205023-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	17.9		0.05	0.10	ug/L	200.8
Lithium, Dissolved	593		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-FC **Lab ID: K2205023-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	24.6		0.05	0.10	ug/L	200.8
Lithium, Dissolved	616		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-CER **Lab ID: K2205023-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	14.2		0.05	0.10	ug/L	200.8
Lithium, Dissolved	618		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-PM **Lab ID: K2205023-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	603		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-FS-PM **Lab ID: K2205023-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	20.1		0.05	0.10	ug/L	200.8
Lithium, Dissolved	608		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-FC-PM-MC **Lab ID: K2205023-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	640		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-BC **Lab ID: K2205023-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	15.5		0.05	0.10	ug/L	200.8
Lithium, Dissolved	612		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-AIR **Lab ID: K2205023-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	5.34		0.05	0.10	ug/L	200.8
Lithium, Dissolved	613		1.0	1.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-14-FS-DUP **Lab ID: K2205023-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	18.4		0.05	0.10	ug/L	200.8
Lithium, Dissolved	628		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-MB **Lab ID: K2205023-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	14.6		0.05	0.10	ug/L	200.8
Lithium, Dissolved	596		1.0	1.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205023-001	GC-GBT-MW-14-FS	5/9/2022	1320
K2205023-002	GC-GBT-MW-14-FC	5/9/2022	1325
K2205023-003	GC-GBT-MW-14-CER	5/9/2022	1330
K2205023-004	GC-GBT-MW-14-PM	5/9/2022	1335
K2205023-005	GC-GBT-MW-14-FS-PM	5/9/2022	1340
K2205023-006	GC-GBT-MW-14-FC-PM-MC	5/9/2022	1345
K2205023-007	GC-GBT-MW-14-BC	5/9/2022	1350
K2205023-008	GC-GBT-MW-14-AIR	5/9/2022	1355
K2205023-009	GC-GBT-MW-14-FS-DUP	5/9/2022	1400
K2205023-010	GC-GBT-MW-14-MB	5/9/2022	1405
K2205023-011	GC-SBT-MW-14-FS	5/9/2022	1410
K2205023-012	GC-SBT-MW-14-FC	5/9/2022	1415
K2205023-013	GC-SBT-MW-14-CER	5/9/2022	1420
K2205023-014	GC-SBT-MW-14-PM	5/9/2022	1425
K2205023-015	GC-SBT-MW-14-FS-PM	5/9/2022	1430
K2205023-016	GC-SBT-MW-14-FC-PM-MC	5/9/2022	1435
K2205023-017	GC-SBT-MW-14-BC	5/9/2022	1440
K2205023-018	GC-SBT-MW-14-AIR	5/9/2022	1445
K2205023-019	GC-SBT-MW-14-FS-DUP	5/9/2022	1450
K2205023-020	GC-SBT-MW-14-MB	5/9/2022	1455

K2205023

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019
Date: 5/10/2022
Project Name: Greene County Treatability
Project Number: 201114-01.05 Task 09
Project Manager: Masa Kanematsu
Phone Number: 503-972-5001 (backup number: 530-400-5375)
Shipment Method: ALS Carrier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Co, Li)														Comments/Preservation
1	GC-GBT-MW-14-FS	5/9/2022	13:20	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-14-FC	5/9/2022	13:25	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-14-CER	5/9/2022	13:30	Water	1	X														HNO3 preserved.
4	GC-GBT-MW-14-PM	5/9/2022	13:35	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-GBT-MW-14-FS-PM	5/9/2022	13:40	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-GBT-MW-14-FC-PM-MC	5/9/2022	13:45	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-GBT-MW-14-BC	5/9/2022	13:50	Water	1	X														HNO3 preserved.
8	GC-GBT-MW-14-AIR	5/9/2022	13:55	Water	1	X														HNO3 preserved.
9	GC-GBT-MW-14-FS-DUP	5/9/2022	14:00	Water	1	X														HNO3 preserved.
10	GC-GBT-MW-14-MB	5/9/2022	14:05	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have residual purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 5/10/22 9:00 AM

Received by: Mike Taylor
Signature/Print Name:

Relinquished by: Mike Taylor
Company:
Signature/Print Name:
Date/Time: 5/10/22 12:15

Received by: Cody Graves ALS
Signature/Print Name: 5/10/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2205023

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	5/10/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Co, Li)														
1	GC-SBT-MW-14-FS	5/9/2022	14:10	Water	1	X														HNO3 preserved.
2	GC-SBT-MW-14-FC	5/9/2022	14:15	Water	1	X														HNO3 preserved.
3	GC-SBT-MW-14-CER	5/9/2022	14:20	Water	1	X														HNO3 preserved.
4	GC-SBT-MW-14-PM	5/9/2022	14:25	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-SBT-MW-14-FS-PM	5/9/2022	14:30	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-SBT-MW-14-FC-PM-MC	5/9/2022	14:35	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-SBT-MW-14-BC	5/9/2022	14:40	Water	1	X														HNO3 preserved.
8	GC-SBT-MW-14-AIR	5/9/2022	14:45	Water	1	X														HNO3 preserved.
9	GC-SBT-MW-14-FS-DUP	5/9/2022	14:50	Water	1	X														HNO3 preserved.
10	GC-SBT-MW-14-MB	5/9/2022	14:55	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have residual purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	5/10/22 9:00 AM

Received by:
Signature/Print Name:
Mike Taylor

Relinquished by:	Company:
Mike Taylor	ALS
Signature/Print Name:	Date/Time:
	5/10/22 12:15

Received by:	
Cody Graves	ALS
Signature/Print Name:	
	5/10/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 05023

Received: 5/10/22 Opened: 5/10/22 By: CB Unloaded: 5/10/22 By: CB

1. Samples were received via? USPS ~~Fed Ex~~ CS 5/10 UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other________ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
3.6		IR02				~~5325 5608 4355~~ CS 5/10	

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-GBT-MW-14-FS	**Date Collected:**	05/9/22
Lab Code:	K2205023-001	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-14-FC	**Date Collected:**	05/9/22
Lab Code:	K2205023-002	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-14-CER	**Date Collected:**	05/9/22
Lab Code:	K2205023-003	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-14-PM	**Date Collected:**	05/9/22
Lab Code:	K2205023-004	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-14-FS-PM	**Date Collected:**	05/9/22
Lab Code:	K2205023-005	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205023
Project: Green County Treatability/201114-01.05 Task 09

Sample Name: GC-GBT-MW-14-FC-PM-MC **Date Collected:** 05/9/22
Lab Code: K2205023-006 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-14-BC **Date Collected:** 05/9/22
Lab Code: K2205023-007 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-14-AIR **Date Collected:** 05/9/22
Lab Code: K2205023-008 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-14-FS-DUP **Date Collected:** 05/9/22
Lab Code: K2205023-009 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-14-MB **Date Collected:** 05/9/22
Lab Code: K2205023-010 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC
Service Request: K2205023
Project: Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-14-FS
Date Collected: 05/9/22
Lab Code: K2205023-011
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-FC
Date Collected: 05/9/22
Lab Code: K2205023-012
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-CER
Date Collected: 05/9/22
Lab Code: K2205023-013
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-PM
Date Collected: 05/9/22
Lab Code: K2205023-014
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-FS-PM
Date Collected: 05/9/22
Lab Code: K2205023-015
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC
Service Request: K2205023
Project: Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-14-FC-PM-MC
Date Collected: 05/9/22
Lab Code: K2205023-016
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-BC
Date Collected: 05/9/22
Lab Code: K2205023-017
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-AIR
Date Collected: 05/9/22
Lab Code: K2205023-018
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-FS-DUP
Date Collected: 05/9/22
Lab Code: K2205023-019
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-14-MB
Date Collected: 05/9/22
Lab Code: K2205023-020
Date Received: 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:20
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-FS	**Basis:**	NA
Lab Code:	K2205023-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:04	05/16/22	
Cobalt	200.8	**27.2**		ug/L	0.10	0.05	5	05/17/22 14:04	05/16/22	
Lithium	200.8	**616**		ug/L	1.0	1.0	5	05/17/22 14:04	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:25
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-FC	**Basis:**	NA
Lab Code:	K2205023-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 14:08	05/16/22	
Cobalt	200.8	**33.0**	ug/L	0.10	0.05	5	05/17/22 14:08	05/16/22	
Lithium	200.8	**614**	ug/L	1.0	1.0	5	05/17/22 14:08	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:30
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-CER	**Basis:**	NA
Lab Code:	K2205023-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:15	05/16/22	
Cobalt	200.8	**28.5**		ug/L	0.10	0.05	5	05/17/22 14:15	05/16/22	
Lithium	200.8	**613**		ug/L	1.0	1.0	5	05/17/22 14:15	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:35
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-PM	**Basis:**	NA
Lab Code:	K2205023-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 14:16	05/16/22	
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	05/17/22 14:16	05/16/22	
Lithium	200.8	**610**	ug/L	1.0	1.0	5	05/17/22 14:16	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:40
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-FS-PM	**Basis:**	NA
Lab Code:	K2205023-005		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:23	05/16/22	
Cobalt	200.8	**17.6**		ug/L	0.10	0.05	5	05/17/22 14:23	05/16/22	
Lithium	200.8	**626**		ug/L	1.0	1.0	5	05/17/22 14:23	05/16/22	

Client: Anchor QEA, LLC
Project: Green County Treatability/201114-01.05 Task 09
Sample Matrix: Water

Service Request: K2205023
Date Collected: 05/09/22 13:45
Date Received: 05/10/22 12:15

Sample Name: GC-GBT-MW-14-FC-PM-MC
Lab Code: K2205023-006

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 14:24	05/16/22	
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	05/17/22 14:24	05/16/22	
Lithium	200.8	**631**	ug/L	1.0	1.0	5	05/17/22 14:24	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:50
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-BC	**Basis:**	NA
Lab Code:	K2205023-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7 J**	ug/L	2.5	0.5	5	05/17/22 14:26	05/16/22	
Cobalt	200.8	**34.4**	ug/L	0.10	0.05	5	05/17/22 14:26	05/16/22	
Lithium	200.8	**601**	ug/L	1.0	1.0	5	05/17/22 14:26	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:55
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-AIR	**Basis:**	NA
Lab Code:	K2205023-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5**	**J**	ug/L	2.5	0.5	5	05/17/22 14:27	05/16/22	
Cobalt	200.8	**20.6**		ug/L	0.10	0.05	5	05/17/22 14:27	05/16/22	
Lithium	200.8	**630**		ug/L	1.0	1.0	5	05/17/22 14:27	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:00
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-FS-DUP	**Basis:**	NA
Lab Code:	K2205023-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:29	05/16/22	
Cobalt	200.8	**28.7**		ug/L	0.10	0.05	5	05/17/22 14:29	05/16/22	
Lithium	200.8	**608**		ug/L	1.0	1.0	5	05/17/22 14:29	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:05
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-14-MB	**Basis:**	NA
Lab Code:	K2205023-010		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5**	**J**	ug/L	2.5	0.5	5	05/17/22 14:30	05/16/22	
Cobalt	200.8	**33.5**		ug/L	0.10	0.05	5	05/17/22 14:30	05/16/22	
Lithium	200.8	**631**		ug/L	1.0	1.0	5	05/17/22 14:30	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:10
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-FS	**Basis:**	NA
Lab Code:	K2205023-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:31	05/16/22	
Cobalt	200.8	**17.9**		ug/L	0.10	0.05	5	05/17/22 14:31	05/16/22	
Lithium	200.8	**593**		ug/L	1.0	1.0	5	05/17/22 14:31	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:15
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-FC	**Basis:**	NA
Lab Code:	K2205023-012		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:33	05/16/22	
Cobalt	200.8	**24.6**		ug/L	0.10	0.05	5	05/17/22 14:33	05/16/22	
Lithium	200.8	**616**		ug/L	1.0	1.0	5	05/17/22 14:33	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:20
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-CER	**Basis:**	NA
Lab Code:	K2205023-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7**	**J**	ug/L	2.5	0.5	5	05/17/22 14:34	05/16/22	
Cobalt	200.8	**14.2**		ug/L	0.10	0.05	5	05/17/22 14:34	05/16/22	
Lithium	200.8	**618**		ug/L	1.0	1.0	5	05/17/22 14:34	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:25
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-PM	**Basis:**	NA
Lab Code:	K2205023-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 14:36	05/16/22	
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	05/17/22 14:36	05/16/22	
Lithium	200.8	**603**	ug/L	1.0	1.0	5	05/17/22 14:36	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:30
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-FS-PM	**Basis:**	NA
Lab Code:	K2205023-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 14:40	05/16/22	
Cobalt	200.8	**20.1**	ug/L	0.10	0.05	5	05/17/22 14:40	05/16/22	
Lithium	200.8	**608**	ug/L	1.0	1.0	5	05/17/22 14:40	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:35
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205023-016		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:42	05/16/22	
Cobalt	200.8	ND	U	ug/L	0.10	0.05	5	05/17/22 14:42	05/16/22	
Lithium	200.8	**640**		ug/L	1.0	1.0	5	05/17/22 14:42	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:40
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-BC	**Basis:**	NA
Lab Code:	K2205023-017		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:43	05/16/22	
Cobalt	200.8	**15.5**		ug/L	0.10	0.05	5	05/17/22 14:43	05/16/22	
Lithium	200.8	**612**		ug/L	1.0	1.0	5	05/17/22 14:43	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:45
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-AIR	**Basis:**	NA
Lab Code:	K2205023-018		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:44	05/16/22	
Cobalt	200.8	**5.34**		ug/L	0.10	0.05	5	05/17/22 14:44	05/16/22	
Lithium	200.8	**613**		ug/L	1.0	1.0	5	05/17/22 14:44	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:50
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-FS-DUP	**Basis:**	NA
Lab Code:	K2205023-019		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:46	05/16/22	
Cobalt	200.8	**18.4**		ug/L	0.10	0.05	5	05/17/22 14:46	05/16/22	
Lithium	200.8	**628**		ug/L	1.0	1.0	5	05/17/22 14:46	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 14:55
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-14-MB	**Basis:**	NA
Lab Code:	K2205023-020		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	05/17/22 14:47	05/16/22	
Cobalt	200.8	**14.6**		ug/L	0.10	0.05	5	05/17/22 14:47	05/16/22	
Lithium	200.8	**596**		ug/L	1.0	1.0	5	05/17/22 14:47	05/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2207578-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	05/17/22 14:01	05/16/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	05/17/22 14:01	05/16/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	05/17/22 14:01	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-14-FS	**Units:**	ug/L
Lab Code:	K2205023-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207578-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	48.8	50.0	98	70-130
Cobalt	27.2	50.4	25.0	93	70-130
Lithium	616	644	50.0	55 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-14-FC	**Units:**	ug/L
Lab Code:	K2205023-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207578-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	50.3	50.0	101	70-130
Cobalt	33.0	57.3	25.0	97	70-130
Lithium	614	671	50.0	115 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-14-FS	**Units:**	ug/L
Lab Code:	K2205023-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207578-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Cobalt	200.8	0.10	0.05	27.2	27.0	27.1	<1	20
Lithium	200.8	1.0	1.0	616	599	608	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-14-FC	**Units:**	ug/L
Lab Code:	K2205023-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207578-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Cobalt	200.8	0.10	0.05	33.0	32.9	33.0	<1	20
Lithium	200.8	1.0	1.0	614	621	618	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205023
Project:	Green County Treatability/201114-01.05 Task 09	**Date Analyzed:**	05/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2207578-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.7	50.0	95	85-115
Cobalt	200.8	23.8	25.0	95	85-115
Lithium	200.8	51.6	50.0	103	85-115

May 18, 2022 Service Request No:K2205025

Modi Raduma
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Green County Treatability

Dear Modi,

Enclosed are the results of the sample(s) submitted to our laboratory May 10, 2022
For your reference, these analyses have been assigned our service request number **K2205025.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Anchor QEA, LLC
Project: Green County Treatability
Sample Matrix: Water

Service Request: K2205025
Date Received: 05/10/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 05/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 05/18/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-17-FS **Lab ID: K2205025-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.3	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	678		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-FC **Lab ID: K2205025-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.4	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	715		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-CER **Lab ID: K2205025-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	10.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	678		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-PM **Lab ID: K2205025-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.4		0.5	2.5	ug/L	200.8
Lithium, Dissolved	970		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-FS-PM **Lab ID: K2205025-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.9	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	673		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-FC-PM-MC **Lab ID: K2205025-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.2	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	667		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-BC **Lab ID: K2205025-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	49.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	693		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-AIR **Lab ID: K2205025-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	47.4		0.5	2.5	ug/L	200.8
Lithium, Dissolved	692		1.0	1.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-FS-DUP **Lab ID: K2205025-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.9	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	671		1.0	1.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-17-MB **Lab ID: K2205025-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	46.3		0.5	2.5	ug/L	200.8
Lithium, Dissolved	675		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-FS **Lab ID: K2205025-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.0	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	870		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-FC **Lab ID: K2205025-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	608		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-CER **Lab ID: K2205025-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.1		0.5	2.5	ug/L	200.8
Lithium, Dissolved	618		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-PM **Lab ID: K2205025-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.4		0.5	2.5	ug/L	200.8
Lithium, Dissolved	581		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-FS-PM **Lab ID: K2205025-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.2	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	611		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-FC-PM-MC **Lab ID: K2205025-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.1	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	593		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-BC **Lab ID: K2205025-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.7		0.5	2.5	ug/L	200.8
Lithium, Dissolved	603		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-AIR **Lab ID: K2205025-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	10.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	617		1.0	1.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-17-FS-DUP **Lab ID: K2205025-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.7		0.5	2.5	ug/L	200.8
Lithium, Dissolved	612		1.0	1.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-MB **Lab ID: K2205025-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.1		0.5	2.5	ug/L	200.8
Lithium, Dissolved	594		1.0	1.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205025-001	GC-GBT-MW-17-FS	5/9/2022	1140
K2205025-002	GC-GBT-MW-17-FC	5/9/2022	1145
K2205025-003	GC-GBT-MW-17-CER	5/9/2022	1150
K2205025-004	GC-GBT-MW-17-PM	5/9/2022	1155
K2205025-005	GC-GBT-MW-17-FS-PM	5/9/2022	1200
K2205025-006	GC-GBT-MW-17-FC-PM-MC	5/9/2022	1205
K2205025-007	GC-GBT-MW-17-BC	5/9/2022	1210
K2205025-008	GC-GBT-MW-17-AIR	5/9/2022	1215
K2205025-009	GC-GBT-MW-17-FS-DUP	5/9/2022	1220
K2205025-010	GC-GBT-MW-17-MB	5/9/2022	1225
K2205025-011	GC-SBT-MW-17-FS	5/9/2022	1230
K2205025-012	GC-SBT-MW-17-FC	5/9/2022	1235
K2205025-013	GC-SBT-MW-17-CER	5/9/2022	1240
K2205025-014	GC-SBT-MW-17-PM	5/9/2022	1245
K2205025-015	GC-SBT-MW-17-FS-PM	5/9/2022	1250
K2205025-016	GC-SBT-MW-17-FC-PM-MC	5/9/2022	1255
K2205025-017	GC-SBT-MW-17-BC	5/9/2022	1300
K2205025-018	GC-SBT-MW-17-AIR	5/9/2022	1305
K2205025-019	GC-SBT-MW-17-FS-DUP	5/9/2022	1310
K2205025-020	GC-SBT-MW-17-MB	5/9/2022	1315

K2205025

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/10/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters	Comments/Preservation
		Date	Time			Dissolved Metals (As, Li)	
1	GC-GBT-MW-17-FS	5/9/2022	11:40	Water	1	X	HNO3 preserved.
2	GC-GBT-MW-17-FC	5/9/2022	11:45	Water	1	X	HNO3 preserved.
3	GC-GBT-MW-17-CER	5/9/2022	11:50	Water	1	X	HNO3 preserved.
4	GC-GBT-MW-17-PM	5/9/2022	11:55	Water	1	X	HNO3 preserved. KMnO4 added.
5	GC-GBT-MW-17-FS-PM	5/9/2022	12:00	Water	1	X	HNO3 preserved. KMnO4 added.
6	GC-GBT-MW-17-FC-PM-MC	5/9/2022	12:05	Water	1	X	HNO3 preserved. KMnO4 added.
7	GC-GBT-MW-17-BC	5/9/2022	12:10	Water	1	X	HNO3 preserved.
8	GC-GBT-MW-17-AIR	5/9/2022	12:15	Water	1	X	HNO3 preserved.
9	GC-GBT-MW-17-FS-DUP	5/9/2022	12:20	Water	1	X	HNO3 preserved.
10	GC-GBT-MW-17-MB	5/9/2022	12:25	Water	1	X	HNO3 preserved.
11							
12							
13							
14							
15							

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: Mike Taylor	
Signature/Print Name: Em Nordlund	Date/Time: 5/10/22 9:00AM	Signature/Print Name:	
Relinquished by: Mike Taylor	Company: ALS	Received by: Cody Graves	ALS
Signature/Print Name:	Date/Time: 5/10/22 12:15	Signature/Print Name:	5/10/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2205025

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/10/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li)														
1	GC-SBT-MW-17-FS	5/9/2022	12:30	Water	1	X														HNO3 preserved.
2	GC-SBT-MW-17-FC	5/9/2022	12:35	Water	1	X														HNO3 preserved.
3	GC-SBT-MW-17-CER	5/9/2022	12:40	Water	1	X														HNO3 preserved.
4	GC-SBT-MW-17-PM	5/9/2022	12:45	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-SBT-MW-17-FS-PM	5/9/2022	12:50	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-SBT-MW-17-FC-PM-MC	5/9/2022	12:55	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-SBT-MW-17-BC	5/9/2022	13:00	Water	1	X														HNO3 preserved.
8	GC-SBT-MW-17-AIR	5/9/2022	13:05	Water	1	X														HNO3 preserved.
9	GC-SBT-MW-17-FS-DUP	5/9/2022	13:10	Water	1	X														HNO3 preserved.
10	GC-SBT-MW-17-MB	5/9/2022	13:15	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:	Received by:
Emma Nordlund	Anchor QEA	Mike Taylor
Signature/Print Name:	Date/Time:	Signature/Print Name:
	5/10/22 9:00AM	

Relinquished by:	Company:	Received by:
Mike Taylor	ALS	Cody Graves ALS
Signature/Print Name:	Date/Time:	Signature/Print Name:
	5/10/22 12:15	5/10/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 05025

Received: 5/10/22 Opened: 5/10/22 By: CG Unloaded: 5/10/22 By: CG

1. Samples were received via? USPS ~~Fed Ex~~ CG 5/10 UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
3.6		IR02				~~5325 5608 1135~~ CG 5/10	

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:______

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2205025
Project: Green County Treatability/201114-01.05 Task 09

Sample Name: GC-GBT-MW-17-FS **Date Collected:** 05/9/22
Lab Code: K2205025-001 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-17-FC **Date Collected:** 05/9/22
Lab Code: K2205025-002 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-17-CER **Date Collected:** 05/9/22
Lab Code: K2205025-003 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-17-PM **Date Collected:** 05/9/22
Lab Code: K2205025-004 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-17-FS-PM **Date Collected:** 05/9/22
Lab Code: K2205025-005 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-GBT-MW-17-FC-PM-MC	**Date Collected:**	05/9/22
Lab Code:	K2205025-006	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-17-BC	**Date Collected:**	05/9/22
Lab Code:	K2205025-007	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-17-AIR	**Date Collected:**	05/9/22
Lab Code:	K2205025-008	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-17-FS-DUP	**Date Collected:**	05/9/22
Lab Code:	K2205025-009	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-17-MB	**Date Collected:**	05/9/22
Lab Code:	K2205025-010	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205025
Project: Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-17-FS **Date Collected:** 05/9/22
Lab Code: K2205025-011 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-17-FC **Date Collected:** 05/9/22
Lab Code: K2205025-012 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-17-CER **Date Collected:** 05/9/22
Lab Code: K2205025-013 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-17-PM **Date Collected:** 05/9/22
Lab Code: K2205025-014 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-17-FS-PM **Date Collected:** 05/9/22
Lab Code: K2205025-015 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-SBT-MW-17-FC-PM-MC	**Date Collected:**	05/9/22
Lab Code:	K2205025-016	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-17-BC	**Date Collected:**	05/9/22
Lab Code:	K2205025-017	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-17-AIR	**Date Collected:**	05/9/22
Lab Code:	K2205025-018	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-17-FS-DUP	**Date Collected:**	05/9/22
Lab Code:	K2205025-019	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-17-MB	**Date Collected:**	05/9/22
Lab Code:	K2205025-020	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:40
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-FS	**Basis:**	NA
Lab Code:	K2205025-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.3 J**	ug/L	2.5	0.5	5	05/17/22 14:55	05/16/22	
Lithium	200.8	**678**	ug/L	1.0	1.0	5	05/17/22 14:55	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:45
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-FC	**Basis:**	NA
Lab Code:	K2205025-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.4 J**	ug/L	2.5	0.5	5	05/17/22 14:59	05/16/22	
Lithium	200.8	**715**	ug/L	1.0	1.0	5	05/17/22 14:59	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:50
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-CER	**Basis:**	NA
Lab Code:	K2205025-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.0**	ug/L	2.5	0.5	5	05/17/22 15:04	05/16/22	
Lithium	200.8	**678**	ug/L	1.0	1.0	5	05/17/22 15:04	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:55
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-PM	**Basis:**	NA
Lab Code:	K2205025-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.4**	ug/L	2.5	0.5	5	05/17/22 15:05	05/16/22	
Lithium	200.8	**970**	ug/L	1.0	1.0	5	05/17/22 15:05	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:00
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-FS-PM	**Basis:**	NA
Lab Code:	K2205025-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.9 J**	ug/L	2.5	0.5	5	05/17/22 15:19	05/16/22	
Lithium	200.8	**673**	ug/L	1.0	1.0	5	05/17/22 15:19	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:05
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205025-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.2 J**	ug/L	2.5	0.5	5	05/17/22 15:20	05/16/22	
Lithium	200.8	**667**	ug/L	1.0	1.0	5	05/17/22 15:20	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:10
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-BC	**Basis:**	NA
Lab Code:	K2205025-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**49.0**	ug/L	2.5	0.5	5	05/17/22 15:22	05/16/22	
Lithium	200.8	**693**	ug/L	1.0	1.0	5	05/17/22 15:22	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:15
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-AIR	**Basis:**	NA
Lab Code:	K2205025-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**47.4**	ug/L	2.5	0.5	5	05/17/22 15:23	05/16/22	
Lithium	200.8	**692**	ug/L	1.0	1.0	5	05/17/22 15:23	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:20
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-FS-DUP	**Basis:**	NA
Lab Code:	K2205025-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.9 J**	ug/L	2.5	0.5	5	05/17/22 15:25	05/16/22	
Lithium	200.8	**671**	ug/L	1.0	1.0	5	05/17/22 15:25	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:25
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-17-MB	**Basis:**	NA
Lab Code:	K2205025-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**46.3**	ug/L	2.5	0.5	5	05/17/22 15:26	05/16/22	
Lithium	200.8	**675**	ug/L	1.0	1.0	5	05/17/22 15:26	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:30
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-FS	**Basis:**	NA
Lab Code:	K2205025-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.0 J**	ug/L	2.5	0.5	5	05/17/22 15:28	05/16/22	
Lithium	200.8	**870**	ug/L	1.0	1.0	5	05/17/22 15:28	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:35
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-FC	**Basis:**	NA
Lab Code:	K2205025-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.5 J**	ug/L	2.5	0.5	5	05/17/22 15:29	05/16/22	
Lithium	200.8	**608**	ug/L	1.0	1.0	5	05/17/22 15:29	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:40
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-CER	**Basis:**	NA
Lab Code:	K2205025-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.1**	ug/L	2.5	0.5	5	05/17/22 15:31	05/16/22	
Lithium	200.8	**618**	ug/L	1.0	1.0	5	05/17/22 15:31	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:45
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-PM	**Basis:**	NA
Lab Code:	K2205025-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.4**	ug/L	2.5	0.5	5	05/17/22 15:32	05/16/22	
Lithium	200.8	**581**	ug/L	1.0	1.0	5	05/17/22 15:32	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:50
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-FS-PM	**Basis:**	NA
Lab Code:	K2205025-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.2 J**	ug/L	2.5	0.5	5	05/17/22 15:46	05/16/22	
Lithium	200.8	**611**	ug/L	1.0	1.0	5	05/17/22 15:46	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 12:55
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205025-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.1 J**	ug/L	2.5	0.5	5	05/17/22 15:48	05/16/22	
Lithium	200.8	**593**	ug/L	1.0	1.0	5	05/17/22 15:48	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:00
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-BC	**Basis:**	NA
Lab Code:	K2205025-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.7**	ug/L	2.5	0.5	5	05/17/22 15:49	05/16/22	
Lithium	200.8	**603**	ug/L	1.0	1.0	5	05/17/22 15:49	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:05
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-AIR	**Basis:**	NA
Lab Code:	K2205025-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.0**	ug/L	2.5	0.5	5	05/17/22 15:51	05/16/22	
Lithium	200.8	**617**	ug/L	1.0	1.0	5	05/17/22 15:51	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:10
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-FS-DUP	**Basis:**	NA
Lab Code:	K2205025-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.7**	ug/L	2.5	0.5	5	05/17/22 15:52	05/16/22	
Lithium	200.8	**612**	ug/L	1.0	1.0	5	05/17/22 15:52	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 13:15
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-17-MB	**Basis:**	NA
Lab Code:	K2205025-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.1**	ug/L	2.5	0.5	5	05/17/22 15:53	05/16/22	
Lithium	200.8	**594**	ug/L	1.0	1.0	5	05/17/22 15:53	05/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2207799-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	05/17/22 14:52	05/16/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	05/17/22 14:52	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-17-FS	**Units:**	ug/L
Lab Code:	K2205025-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207799-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	2.3 J	50.1	50.0	96	70-130
Lithium	678	736	50.0	116 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-17-FC	**Units:**	ug/L
Lab Code:	K2205025-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207799-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	2.4 J	51.5	50.0	98	70-130
Lithium	715	727	50.0	23 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-17-FS	**Units:**	ug/L
Lab Code:	K2205025-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207799-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	2.3 J	1.9 J	2.1	19	20
Lithium	200.8	1.0	1.0	678	659	669	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22

Replicate Sample Summary

Dissolved Metals

Sample Name:	GC-GBT-MW-17-FC	**Units:**	ug/L
Lab Code:	K2205025-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207799-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	2.4 J	2.3 J	2.4	4	20
Lithium	200.8	1.0	1.0	715	678	697	5	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205025
Project:	Green County Treatability/201114-01.05 Task 09	**Date Analyzed:**	05/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2207799-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Lithium	200.8	51.3	50.0	103	85-115

May 18, 2022 Service Request No:K2205027

Modi Raduma
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Green County Treatability

Dear Modi,

Enclosed are the results of the sample(s) submitted to our laboratory May 10, 2022
For your reference, these analyses have been assigned our service request number **K2205027.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability	**Date Received:**	05/10/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 05/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 05/18/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-1-FS **Lab ID: K2205027-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	294		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-FC **Lab ID: K2205027-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.3	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	294		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-CER **Lab ID: K2205027-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.2	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	294		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-PM **Lab ID: K2205027-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.4	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	319		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-FS-PM **Lab ID: K2205027-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	298		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-FC-PM-MC **Lab ID: K2205027-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.0	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	294		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-BC **Lab ID: K2205027-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	297		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-AIR **Lab ID: K2205027-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	304		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-FS-DUP **Lab ID: K2205027-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.6	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	289		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-MB **Lab ID: K2205027-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	297		0.05	0.10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-1-FS **Lab ID: K2205027-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.3		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	295		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FC **Lab ID: K2205027-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.8		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	295		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-CER **Lab ID: K2205027-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.4		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	272		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-PM **Lab ID: K2205027-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.4		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	313		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FS-PM **Lab ID: K2205027-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.6		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	298		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FC-PM-MC **Lab ID: K2205027-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.1		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	298		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-BC **Lab ID: K2205027-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.0		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	291		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-AIR **Lab ID: K2205027-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.7		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	291		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FS-DUP **Lab ID: K2205027-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.6		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	293		0.05	0.10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-1-MB **Lab ID: K2205027-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.6		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	300		0.05	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2205027
Project: Green County Treatability/201114-01.05 Task 09

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205027-001	GC-GBT-MW-1-FS	5/9/2022	1000
K2205027-002	GC-GBT-MW-1-FC	5/9/2022	1005
K2205027-003	GC-GBT-MW-1-CER	5/9/2022	1010
K2205027-004	GC-GBT-MW-1-PM	5/9/2022	1015
K2205027-005	GC-GBT-MW-1-FS-PM	5/9/2022	1020
K2205027-006	GC-GBT-MW-1-FC-PM-MC	5/9/2022	1025
K2205027-007	GC-GBT-MW-1-BC	5/9/2022	1030
K2205027-008	GC-GBT-MW-1-AIR	5/9/2022	1035
K2205027-009	GC-GBT-MW-1-FS-DUP	5/9/2022	1040
K2205027-010	GC-GBT-MW-1-MB	5/9/2022	1045
K2205027-011	GC-SBT-MW-1-FS	5/9/2022	1050
K2205027-012	GC-SBT-MW-1-FC	5/9/2022	1055
K2205027-013	GC-SBT-MW-1-CER	5/9/2022	1100
K2205027-014	GC-SBT-MW-1-PM	5/9/2022	1105
K2205027-015	GC-SBT-MW-1-FS-PM	5/9/2022	1110
K2205027-016	GC-SBT-MW-1-FC-PM-MC	5/9/2022	1115
K2205027-017	GC-SBT-MW-1-BC	5/9/2022	1120
K2205027-018	GC-SBT-MW-1-AIR	5/9/2022	1125
K2205027-019	GC-SBT-MW-1-FS-DUP	5/9/2022	1130
K2205027-020	GC-SBT-MW-1-MB	5/9/2022	1135

K2205027

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/10/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Co)														
1	GC-GBT-MW-1-FS	5/9/2022	10:00	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-1-FC	5/9/2022	10:05	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-1-CER	5/9/2022	10:10	Water	1	X														HNO3 preserved.
4	GC-GBT-MW-1-PM	5/9/2022	10:15	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-GBT-MW-1-FS-PM	5/9/2022	10:20	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-GBT-MW-1-FC-PM-MC	5/9/2022	10:25	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-GBT-MW-1-BC	5/9/2022	10:30	Water	1	X														HNO3 preserved.
8	GC-GBT-MW-1-AIR	5/9/2022	10:35	Water	1	X														HNO3 preserved.
9	GC-GBT-MW-1-FS-DUP	5/9/2022	10:40	Water	1	X														HNO3 preserved.
10	GC-GBT-MW-1-MB	5/9/2022	10:45	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	5/10/22 9:00 AM

Received by:
Mike Taylor
Signature/Print Name:

Relinquished by:	Company:
Mike Taylor	AS
Signature/Print Name:	Date/Time:
	5/10/22 12:15

Received by:	
Cody Graves	ALS
Signature/Print Name:	
	5/10/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2205027

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/10/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved Metals (As, Co)	Comments/Preservation
1	GC-SBT-MW-1-FS	5/9/2022	10:50	Water	1	X	HNO3 preserved.
2	GC-SBT-MW-1-FC	5/9/2022	10:55	Water	1	X	HNO3 preserved.
3	GC-SBT-MW-1-CER	5/9/2022	11:00	Water	1	X	HNO3 preserved.
4	GC-SBT-MW-1-PM	5/9/2022	11:05	Water	1	X	HNO3 preserved. KMnO4 added.
5	GC-SBT-MW-1-FS-PM	5/9/2022	11:10	Water	1	X	HNO3 preserved. KMnO4 added.
6	GC-SBT-MW-1-FC-PM-MC	5/9/2022	11:15	Water	1	X	HNO3 preserved. KMnO4 added.
7	GC-SBT-MW-1-BC	5/9/2022	11:20	Water	1	X	HNO3 preserved.
8	GC-SBT-MW-1-AIR	5/9/2022	11:25	Water	1	X	HNO3 preserved.
9	GC-SBT-MW-1-FS-DUP	5/9/2022	11:30	Water	1	X	HNO3 preserved.
10	GC-SBT-MW-1-MB	5/9/2022	11:35	Water	1	X	HNO3 preserved.
11							
12							
13							
14							
15							

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have residual purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 5/10/22 9:00 AM
Received by: Mike Taylor	
Signature/Print Name:	
Relinquished by: Mike Taylor	Company: ALS
Signature/Print Name:	Date/Time: 5/10/22 12:15
Received by: Cody Graves	ALS
Signature/Print Name:	5/10/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 05027

Received: 5/10/22 Opened: 5/10/22 By: CG Unloaded: 5/10/22 By: CG

1. Samples were received via? *USPS* ~~*Fed Ex*~~ CG 5/10 *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID/ [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
3.6		IR02				~~5325 5608 1355~~ CG 5/10	

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-GBT-MW-1-FS	**Date Collected:**	05/9/22
Lab Code:	K2205027-001	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-FC	**Date Collected:**	05/9/22
Lab Code:	K2205027-002	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-CER	**Date Collected:**	05/9/22
Lab Code:	K2205027-003	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-PM	**Date Collected:**	05/9/22
Lab Code:	K2205027-004	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-FS-PM	**Date Collected:**	05/9/22
Lab Code:	K2205027-005	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-GBT-MW-1-FC-PM-MC	**Date Collected:**	05/9/22
Lab Code:	K2205027-006	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-BC	**Date Collected:**	05/9/22
Lab Code:	K2205027-007	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-AIR	**Date Collected:**	05/9/22
Lab Code:	K2205027-008	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-FS-DUP	**Date Collected:**	05/9/22
Lab Code:	K2205027-009	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-1-MB	**Date Collected:**	05/9/22
Lab Code:	K2205027-010	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC **Service Request:** K2205027
Project: Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-1-FS **Date Collected:** 05/9/22
Lab Code: K2205027-011 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-1-FC **Date Collected:** 05/9/22
Lab Code: K2205027-012 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-1-CER **Date Collected:** 05/9/22
Lab Code: K2205027-013 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-1-PM **Date Collected:** 05/9/22
Lab Code: K2205027-014 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-1-FS-PM **Date Collected:** 05/9/22
Lab Code: K2205027-015 **Date Received:** 05/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-SBT-MW-1-FC-PM-MC	**Date Collected:**	05/9/22
Lab Code:	K2205027-016	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-1-BC	**Date Collected:**	05/9/22
Lab Code:	K2205027-017	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-1-AIR	**Date Collected:**	05/9/22
Lab Code:	K2205027-018	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-1-FS-DUP	**Date Collected:**	05/9/22
Lab Code:	K2205027-019	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-1-MB	**Date Collected:**	05/9/22
Lab Code:	K2205027-020	**Date Received:**	05/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:00
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-FS	**Basis:**	NA
Lab Code:	K2205027-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7 J**	ug/L	2.5	0.5	5	05/17/22 16:05	05/16/22	
Cobalt	200.8	**294**	ug/L	0.10	0.05	5	05/17/22 16:05	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:05
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-FC	**Basis:**	NA
Lab Code:	K2205027-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.3 J**	ug/L	2.5	0.5	5	05/17/22 16:10	05/16/22	
Cobalt	200.8	**294**	ug/L	0.10	0.05	5	05/17/22 16:10	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:10
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-CER	**Basis:**	NA
Lab Code:	K2205027-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.2 J**	ug/L	2.5	0.5	5	05/17/22 16:14	05/16/22	
Cobalt	200.8	**294**	ug/L	0.10	0.05	5	05/17/22 16:14	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:15
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-PM	**Basis:**	NA
Lab Code:	K2205027-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.4 J**	ug/L	2.5	0.5	5	05/17/22 16:15	05/16/22	
Cobalt	200.8	**319**	ug/L	0.10	0.05	5	05/17/22 16:15	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:20
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-FS-PM	**Basis:**	NA
Lab Code:	K2205027-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7 J**	ug/L	2.5	0.5	5	05/17/22 16:20	05/16/22	
Cobalt	200.8	**298**	ug/L	0.10	0.05	5	05/17/22 16:20	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:25
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205027-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.0**	**J**	ug/L	2.5	0.5	5	05/17/22 16:21	05/16/22	
Cobalt	200.8	**294**		ug/L	0.10	0.05	5	05/17/22 16:21	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:30
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-BC	**Basis:**	NA
Lab Code:	K2205027-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 16:23	05/16/22	
Cobalt	200.8	**297**	ug/L	0.10	0.05	5	05/17/22 16:23	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:35
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-AIR	**Basis:**	NA
Lab Code:	K2205027-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 16:24	05/16/22	
Cobalt	200.8	**304**	ug/L	0.10	0.05	5	05/17/22 16:24	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:40
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-FS-DUP	**Basis:**	NA
Lab Code:	K2205027-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.6 J**	ug/L	2.5	0.5	5	05/17/22 16:26	05/16/22	
Cobalt	200.8	**289**	ug/L	0.10	0.05	5	05/17/22 16:26	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:45
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-GBT-MW-1-MB	**Basis:**	NA
Lab Code:	K2205027-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/17/22 16:27	05/16/22	
Cobalt	200.8	**297**	ug/L	0.10	0.05	5	05/17/22 16:27	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:50
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-FS	**Basis:**	NA
Lab Code:	K2205027-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.3**	ug/L	2.5	0.5	5	05/17/22 16:29	05/16/22	
Cobalt	200.8	**295**	ug/L	0.10	0.05	5	05/17/22 16:29	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 10:55
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-FC	**Basis:**	NA
Lab Code:	K2205027-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.8**	ug/L	2.5	0.5	5	05/17/22 16:30	05/16/22	
Cobalt	200.8	**295**	ug/L	0.10	0.05	5	05/17/22 16:30	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:00
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-CER	**Basis:**	NA
Lab Code:	K2205027-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.4**	ug/L	2.5	0.5	5	05/17/22 16:31	05/16/22	
Cobalt	200.8	**272**	ug/L	0.10	0.05	5	05/17/22 16:31	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:05
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-PM	**Basis:**	NA
Lab Code:	K2205027-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.4**	ug/L	2.5	0.5	5	05/17/22 16:33	05/16/22	
Cobalt	200.8	**313**	ug/L	0.10	0.05	5	05/17/22 16:33	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:10
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-FS-PM	**Basis:**	NA
Lab Code:	K2205027-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.6**	ug/L	2.5	0.5	5	05/17/22 16:37	05/16/22	
Cobalt	200.8	**298**	ug/L	0.10	0.05	5	05/17/22 16:37	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:15
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205027-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.1**	ug/L	2.5	0.5	5	05/17/22 16:39	05/16/22	
Cobalt	200.8	**298**	ug/L	0.10	0.05	5	05/17/22 16:39	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:20
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-BC	**Basis:**	NA
Lab Code:	K2205027-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.0**	ug/L	2.5	0.5	5	05/17/22 16:40	05/16/22	
Cobalt	200.8	**291**	ug/L	0.10	0.05	5	05/17/22 16:40	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:25
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-AIR	**Basis:**	NA
Lab Code:	K2205027-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.7**	ug/L	2.5	0.5	5	05/17/22 16:42	05/16/22	
Cobalt	200.8	**291**	ug/L	0.10	0.05	5	05/17/22 16:42	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:30
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-FS-DUP	**Basis:**	NA
Lab Code:	K2205027-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.6**	ug/L	2.5	0.5	5	05/17/22 16:43	05/16/22	
Cobalt	200.8	**293**	ug/L	0.10	0.05	5	05/17/22 16:43	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22 11:35
Sample Matrix:	Water	**Date Received:**	05/10/22 12:15
Sample Name:	GC-SBT-MW-1-MB	**Basis:**	NA
Lab Code:	K2205027-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.6**	ug/L	2.5	0.5	5	05/17/22 16:45	05/16/22	
Cobalt	200.8	**300**	ug/L	0.10	0.05	5	05/17/22 16:45	05/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2207800-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	05/17/22 16:02	05/16/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	05/17/22 16:02	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-1-FS	**Units:**	ug/L
Lab Code:	K2205027-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207800-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.7 J	47.1	50.0	93	70-130
Cobalt	294	314	25.0	81 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-1-FC	**Units:**	ug/L
Lab Code:	K2205027-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207800-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	2.3 J	49.7	50.0	95	70-130
Cobalt	294	315	25.0	84 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-1-FS	**Units:**	ug/L
Lab Code:	K2205027-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207800-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	0.7 J	0.6 J	0.7	15	20
Cobalt	200.8	0.10	0.05	294	295	295	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project	Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/09/22
Sample Matrix:	Water	**Date Received:**	05/10/22
		Date Analyzed:	05/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-1-FC	**Units:**	ug/L
Lab Code:	K2205027-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207800-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	2.3 J	2.3 J	2.3	<1	20
Cobalt	200.8	0.10	0.05	294	293	294	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205027
Project:	Green County Treatability/201114-01.05 Task 09	**Date Analyzed:**	05/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2207800-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Cobalt	200.8	23.7	25.0	95	85-115

May 19, 2022 Service Request No:K2205114

Modi Raduma
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Green County Treatability

Dear Modi,

Enclosed are the results of the sample(s) submitted to our laboratory May 11, 2022
For your reference, these analyses have been assigned our service request number **K2205114.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability	**Date Received:**	05/11/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 05/11/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ____________________ Date 05/19/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-44H-FS **Lab ID: K2205114-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	326		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-FC **Lab ID: K2205114-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	348		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-CER **Lab ID: K2205114-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	347		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-PM **Lab ID: K2205114-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.15		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-FS-PM **Lab ID: K2205114-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	332		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-FC-PM-MC **Lab ID: K2205114-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	23.5		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-BC **Lab ID: K2205114-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	326		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-AIR **Lab ID: K2205114-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	330		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-FS-DUP **Lab ID: K2205114-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	324		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-MB **Lab ID: K2205114-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	339		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FS **Lab ID: K2205114-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	697		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FC **Lab ID: K2205114-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	789		0.05	0.10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-44H-CER **Lab ID: K2205114-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	251		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-PM **Lab ID: K2205114-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.14		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FS-PM **Lab ID: K2205114-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	526		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FC-PM-MC **Lab ID: K2205114-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	7.75		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-BC **Lab ID: K2205114-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	262		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-AIR **Lab ID: K2205114-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	105		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FS-DUP **Lab ID: K2205114-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	738		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-MB **Lab ID: K2205114-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	184		0.05	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205114-001	GC-GBT-MW-44H-FS	5/10/2022	2020
K2205114-002	GC-GBT-MW-44H-FC	5/10/2022	2025
K2205114-003	GC-GBT-MW-44H-CER	5/10/2022	2030
K2205114-004	GC-GBT-MW-44H-PM	5/10/2022	2035
K2205114-005	GC-GBT-MW-44H-FS-PM	5/10/2022	2040
K2205114-006	GC-GBT-MW-44H-FC-PM-MC	5/10/2022	2045
K2205114-007	GC-GBT-MW-44H-BC	5/10/2022	2050
K2205114-008	GC-GBT-MW-44H-AIR	5/10/2022	2055
K2205114-009	GC-GBT-MW-44H-FS-DUP	5/10/2022	2100
K2205114-010	GC-GBT-MW-44H-MB	5/10/2022	2105
K2205114-011	GC-SBT-MW-44H-FS	5/10/2022	2110
K2205114-012	GC-SBT-MW-44H-FC	5/10/2022	2115
K2205114-013	GC-SBT-MW-44H-CER	5/10/2022	2120
K2205114-014	GC-SBT-MW-44H-PM	5/10/2022	2125
K2205114-015	GC-SBT-MW-44H-FS-PM	5/10/2022	2130
K2205114-016	GC-SBT-MW-44H-FC-PM-MC	5/10/2022	2135
K2205114-017	GC-SBT-MW-44H-BC	5/10/2022	2140
K2205114-018	GC-SBT-MW-44H-AIR	5/10/2022	2145
K2205114-019	GC-SBT-MW-44H-FS-DUP	5/10/2022	2150
K2205114-020	GC-SBT-MW-44H-MB	5/10/2022	2155

K2205114

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:	503-972-5019
Date:	5/11/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved Metals (Co)														Comments/Preservation
1	GC-GBT-MW-44H-FS	5/10/2022	20:20	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-44H-FC	5/10/2022	20:25	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-44H-CER	5/10/2022	20:30	Water	1	X														HNO3 preserved.
4	GC-GBT-MW-44H-PM	5/10/2022	20:35	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-GBT-MW-44H-FS-PM	5/10/2022	20:40	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-GBT-MW-44H-FC-PM-MC	5/10/2022	20:45	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-GBT-MW-44H-BC	5/10/2022	20:50	Water	1	X														HNO3 preserved.
8	GC-GBT-MW-44H-AIR	5/10/2022	20:55	Water	1	X														HNO3 preserved.
9	GC-GBT-MW-44H-FS-DUP	5/10/2022	21:00	Water	1	X														HNO3 preserved.
10	GC-GBT-MW-44H-MB	5/10/2022	21:05	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 5/11/22 9:00 AM
Relinquished by: K Morrow	Company: ALS
Signature/Print Name:	Date/Time: 5/11/22 1455

Received by:
Signature/Print Name: K Morrow ALS 5/11/22 1310
Received by: M. Mullegan
Signature/Print Name: ALS 5/11/22 1455

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2205114

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/11/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved Metals (Co)	Comments/Preservation
1	GC-SBT-MW-44H-FS	5/10/2022	21:10	Water	1	X	HNO3 preserved.
2	GC-SBT-MW-44H-FC	5/10/2022	21:15	Water	1	X	HNO3 preserved.
3	GC-SBT-MW-44H-CER	5/10/2022	21:20	Water	1	X	HNO3 preserved.
4	GC-SBT-MW-44H-PM	5/10/2022	21:25	Water	1	X	HNO3 preserved. KMnO4 added.
5	GC-SBT-MW-44H-FS-PM	5/10/2022	21:30	Water	1	X	HNO3 preserved. KMnO4 added.
6	GC-SBT-MW-44H-FC-PM-MC	5/10/2022	21:35	Water	1	X	HNO3 preserved. KMnO4 added.
7	GC-SBT-MW-44H-BC	5/10/2022	21:40	Water	1	X	HNO3 preserved.
8	GC-SBT-MW-44H-AIR	5/10/2022	21:45	Water	1	X	HNO3 preserved.
9	GC-SBT-MW-44H-FS-DUP	5/10/2022	21:50	Water	1	X	HNO3 preserved.
10	GC-SBT-MW-44H-MB	5/10/2022	21:55	Water	1	X	HNO3 preserved.
11							
12							
13							
14							
15							

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 5/11/22 9:00 AM
Received by:	
Signature/Print Name: K Morrow ALS 5/11/22 1310	
Relinquished by: K Mor	Company: ALS
Signature/Print Name:	Date/Time: 5/11/22 1455
Received by: M. Mulligan	
Signature/Print Name: ALS 5/11/22 1455	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 05114

Received: 5/11/22 Opened: 5/11/22 By: MM Unloaded: 5/11/22 By: MM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
6.0		IR01		—			

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not ph due to limited volume

1/13/22 *Page* *of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC
Service Request: K2205114
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-GBT-MW-44H-FS
Date Collected: 05/10/22
Lab Code: K2205114-001
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-44H-FC
Date Collected: 05/10/22
Lab Code: K2205114-002
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-44H-CER
Date Collected: 05/10/22
Lab Code: K2205114-003
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-44H-PM
Date Collected: 05/10/22
Lab Code: K2205114-004
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-44H-FS-PM
Date Collected: 05/10/22
Lab Code: K2205114-005
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-GBT-MW-44H-FC-PM-MC	**Date Collected:**	05/10/22
Lab Code:	K2205114-006	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-44H-BC	**Date Collected:**	05/10/22
Lab Code:	K2205114-007	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-44H-AIR	**Date Collected:**	05/10/22
Lab Code:	K2205114-008	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-44H-FS-DUP	**Date Collected:**	05/10/22
Lab Code:	K2205114-009	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-44H-MB	**Date Collected:**	05/10/22
Lab Code:	K2205114-010	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC
Service Request: K2205114
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-44H-FS
Date Collected: 05/10/22
Lab Code: K2205114-011
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-44H-FC
Date Collected: 05/10/22
Lab Code: K2205114-012
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-44H-CER
Date Collected: 05/10/22
Lab Code: K2205114-013
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-44H-PM
Date Collected: 05/10/22
Lab Code: K2205114-014
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-44H-FS-PM
Date Collected: 05/10/22
Lab Code: K2205114-015
Date Received: 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-SBT-MW-44H-FC-PM-MC	**Date Collected:**	05/10/22
Lab Code:	K2205114-016	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-44H-BC	**Date Collected:**	05/10/22
Lab Code:	K2205114-017	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-44H-AIR	**Date Collected:**	05/10/22
Lab Code:	K2205114-018	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-44H-FS-DUP	**Date Collected:**	05/10/22
Lab Code:	K2205114-019	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-44H-MB	**Date Collected:**	05/10/22
Lab Code:	K2205114-020	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:20
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-FS	**Basis:**	NA
Lab Code:	K2205114-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**326**	ug/L	0.10	0.05	5	05/18/22 13:27	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:25
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-FC	**Basis:**	NA
Lab Code:	K2205114-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**348**	ug/L	0.10	0.05	5	05/18/22 13:32	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:30
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-CER	**Basis:**	NA
Lab Code:	K2205114-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**347**	ug/L	0.10	0.05	5	05/18/22 13:36	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:35
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-PM	**Basis:**	NA
Lab Code:	K2205114-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.15**	ug/L	0.10	0.05	5	05/18/22 13:37	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:40
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-FS-PM	**Basis:**	NA
Lab Code:	K2205114-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**332**	ug/L	0.10	0.05	5	05/18/22 13:42	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:45
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205114-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**23.5**	ug/L	0.10	0.05	5	05/18/22 13:43	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:50
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-BC	**Basis:**	NA
Lab Code:	K2205114-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**326**	ug/L	0.10	0.05	5	05/18/22 13:45	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:55
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-AIR	**Basis:**	NA
Lab Code:	K2205114-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**330**	ug/L	0.10	0.05	5	05/18/22 13:46	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:00
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-FS-DUP	**Basis:**	NA
Lab Code:	K2205114-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**324**	ug/L	0.10	0.05	5	05/18/22 13:48	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:05
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-44H-MB	**Basis:**	NA
Lab Code:	K2205114-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**339**	ug/L	0.10	0.05	5	05/18/22 13:49	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:10
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-FS	**Basis:**	NA
Lab Code:	K2205114-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**697**	ug/L	0.10	0.05	5	05/18/22 13:50	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:15
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-FC	**Basis:**	NA
Lab Code:	K2205114-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**789**	ug/L	0.10	0.05	5	05/18/22 13:52	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:20
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-CER	**Basis:**	NA
Lab Code:	K2205114-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**251**	ug/L	0.10	0.05	5	05/18/22 13:53	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:25
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-PM	**Basis:**	NA
Lab Code:	K2205114-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.14**	ug/L	0.10	0.05	5	05/18/22 13:55	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:30
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-FS-PM	**Basis:**	NA
Lab Code:	K2205114-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**526**	ug/L	0.10	0.05	5	05/18/22 13:59	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:35
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205114-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**7.75**	ug/L	0.10	0.05	5	05/18/22 14:01	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:40
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-BC	**Basis:**	NA
Lab Code:	K2205114-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**262**	ug/L	0.10	0.05	5	05/18/22 14:02	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:45
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-AIR	**Basis:**	NA
Lab Code:	K2205114-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**105**	ug/L	0.10	0.05	5	05/18/22 14:04	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:50
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-FS-DUP	**Basis:**	NA
Lab Code:	K2205114-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**738**	ug/L	0.10	0.05	5	05/18/22 14:05	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 21:55
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-44H-MB	**Basis:**	NA
Lab Code:	K2205114-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**184**	ug/L	0.10	0.05	5	05/18/22 14:06	05/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2207820-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	05/18/22 13:24	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-FS	**Units:**	ug/L
Lab Code:	K2205114-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207820-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	326	355	25.0	116 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-FC	**Units:**	ug/L
Lab Code:	K2205114-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207820-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	348	371	25.0	94 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-FS	**Units:**	ug/L
Lab Code:	K2205114-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207820-03 Result	Average	RPD	RPD Limit
Cobalt	200.8	0.10	0.05	326	327	327	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-FC	**Units:**	ug/L
Lab Code:	K2205114-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207820-05 Result	Average	RPD	RPD Limit
Cobalt	200.8	0.10	0.05	348	334	341	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205114
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Analyzed:**	05/18/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2207820-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	25.6	25.0	103	85-115

May 19, 2022 Service Request No:K2205115

Modi Raduma
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Green County Treatability

Dear Modi,

Enclosed are the results of the sample(s) submitted to our laboratory May 11, 2022
For your reference, these analyses have been assigned our service request number **K2205115.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability	**Date Received:**	05/11/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 05/11/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 05/19/2022

ALS Environmental

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-10-FS **Lab ID: K2205115-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.9	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	303		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-FC **Lab ID: K2205115-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	300		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-CER **Lab ID: K2205115-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.2	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	289		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-PM **Lab ID: K2205115-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	298		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-FS-PM **Lab ID: K2205115-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	297		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-FC-PM-MC **Lab ID: K2205115-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	328		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-BC **Lab ID: K2205115-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.3	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	291		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-AIR **Lab ID: K2205115-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.1		0.5	2.5	ug/L	200.8
Lithium, Dissolved	292		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-FS-DUP **Lab ID: K2205115-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	292		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-MB **Lab ID: K2205115-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.0	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	294		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-10-FS **Lab ID: K2205115-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	293		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-FC **Lab ID: K2205115-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	296		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-CER **Lab ID: K2205115-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.0	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	305		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-PM **Lab ID: K2205115-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.0	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	306		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-FS-PM **Lab ID: K2205115-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	302		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-FC-PM-MC **Lab ID: K2205115-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	301		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-BC **Lab ID: K2205115-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	303		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-AIR **Lab ID: K2205115-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.4		0.5	2.5	ug/L	200.8
Lithium, Dissolved	317		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-FS-DUP **Lab ID: K2205115-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	307		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-MB **Lab ID: K2205115-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.8	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	314		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205115-001	GC-SBT-MW-10-FS	5/10/2022	1750
K2205115-002	GC-SBT-MW-10-FC	5/10/2022	1755
K2205115-003	GC-SBT-MW-10-CER	5/10/2022	1800
K2205115-004	GC-SBT-MW-10-PM	5/10/2022	1805
K2205115-005	GC-SBT-MW-10-FS-PM	5/10/2022	1810
K2205115-006	GC-SBT-MW-10-FC-PM-MC	5/10/2022	1815
K2205115-007	GC-SBT-MW-10-BC	5/10/2022	1820
K2205115-008	GC-SBT-MW-10-AIR	5/10/2022	1825
K2205115-009	GC-SBT-MW-10-FS-DUP	5/10/2022	1830
K2205115-010	GC-SBT-MW-10-MB	5/10/2022	1835
K2205115-011	GC-GBT-MW-10-FS	5/10/2022	1700
K2205115-012	GC-GBT-MW-10-FC	5/10/2022	1705
K2205115-013	GC-GBT-MW-10-CER	5/10/2022	1710
K2205115-014	GC-GBT-MW-10-PM	5/10/2022	1715
K2205115-015	GC-GBT-MW-10-FS-PM	5/10/2022	1720
K2205115-016	GC-GBT-MW-10-FC-PM-MC	5/10/2022	1725
K2205115-017	GC-GBT-MW-10-BC	5/10/2022	1730
K2205115-018	GC-GBT-MW-10-AIR	5/10/2022	1735
K2205115-019	GC-GBT-MW-10-FS-DUP	5/10/2022	1740
K2205115-020	GC-GBT-MW-10-MB	5/10/2022	1745

K2205115

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/11/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li)														
1	GC-SBT-MW-10-FS	5/10/2022	17:50	Water	1	X														HNO3 preserved.
2	GC-SBT-MW-10-FC	5/10/2022	17:55	Water	1	X														HNO3 preserved.
3	GC-SBT-MW-10-CER	5/10/2022	18:00	Water	1	X														HNO3 preserved.
4	GC-SBT-MW-10-PM	5/10/2022	18:05	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-SBT-MW-10-FS-PM	5/10/2022	18:10	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-SBT-MW-10-FC-PM-MC	5/10/2022	18:15	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-SBT-MW-10-BC	5/10/2022	18:20	Water	1	X														HNO3 preserved.
8	GC-SBT-MW-10-AIR	5/10/2022	18:25	Water	1	X														HNO3 preserved.
9	GC-SBT-MW-10-FS-DUP	5/10/2022	18:30	Water	1	X														HNO3 preserved.
10	GC-SBT-MW-10-MB	5/10/2022	18:35	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have residual purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	5/11/22 9:00 AM	K Morrow ALS	5/11/22 1310
Relinquished by:	Company:	Received by:	
	ALS	M. Mulligan	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
KMorrow	5/11/22 1455	ALS	5/11/22 1455

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2205115

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	5/11/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li)														
1	GC-GBT-MW-10-FS	5/10/2022	17:00	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-10-FC	5/10/2022	17:05	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-10-CER	5/10/2022	17:10	Water	1	X														HNO3 preserved.
4	GC-GBT-MW-10-PM	5/10/2022	17:15	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-GBT-MW-10-FS-PM	5/10/2022	17:20	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-GBT-MW-10-FC-PM-MC	5/10/2022	17:25	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-GBT-MW-10-BC	5/10/2022	17:30	Water	1	X														HNO3 preserved.
8	GC-GBT-MW-10-AIR	5/10/2022	17:35	Water	1	X														HNO3 preserved.
9	GC-GBT-MW-10-FS-DUP	5/10/2022	17:40	Water	1	X														HNO3 preserved.
10	GC-GBT-MW-10-MB	5/10/2022	17:45	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com). Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have residual purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 5/11/22 9:00 AM

Received by:
Signature/Print Name: KMor ALS 5/11/22 1310

Relinquished by: ALS
Company:
Signature/Print Name: KManor
Date/Time: 5/11/22 1455

Received by: M. Mulligan
Signature/Print Name: ALS 5/11/22 1455

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K2205115

Received: 5/11/22 Opened: 5/11/22 By: MM Unloaded: 5/11/22 By: MM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ____ NA
3. Were custody seals on coolers? ~~NA~~ Y [✓ N] If yes, how many and where? ____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number / [✓ NA]	Filed
6.0		IR01		—			

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not ph due to limited volume

:

1/13/22 *Page of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2205115
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-10-FS **Date Collected:** 05/10/22
Lab Code: K2205115-001 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-FC **Date Collected:** 05/10/22
Lab Code: K2205115-002 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-CER **Date Collected:** 05/10/22
Lab Code: K2205115-003 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-PM **Date Collected:** 05/10/22
Lab Code: K2205115-004 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-FS-PM **Date Collected:** 05/10/22
Lab Code: K2205115-005 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205115
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-10-FC-PM-MC **Date Collected:** 05/10/22
Lab Code: K2205115-006 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-BC **Date Collected:** 05/10/22
Lab Code: K2205115-007 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-AIR **Date Collected:** 05/10/22
Lab Code: K2205115-008 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-FS-DUP **Date Collected:** 05/10/22
Lab Code: K2205115-009 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-10-MB **Date Collected:** 05/10/22
Lab Code: K2205115-010 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205115
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-GBT-MW-10-FS **Date Collected:** 05/10/22
Lab Code: K2205115-011 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-FC **Date Collected:** 05/10/22
Lab Code: K2205115-012 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-CER **Date Collected:** 05/10/22
Lab Code: K2205115-013 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-PM **Date Collected:** 05/10/22
Lab Code: K2205115-014 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-FS-PM **Date Collected:** 05/10/22
Lab Code: K2205115-015 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205115
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-GBT-MW-10-FC-PM-MC **Date Collected:** 05/10/22
Lab Code: K2205115-016 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-BC **Date Collected:** 05/10/22
Lab Code: K2205115-017 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-AIR **Date Collected:** 05/10/22
Lab Code: K2205115-018 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-FS-DUP **Date Collected:** 05/10/22
Lab Code: K2205115-019 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-10-MB **Date Collected:** 05/10/22
Lab Code: K2205115-020 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:50
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-FS	**Basis:**	NA
Lab Code:	K2205115-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.9 J**	ug/L	2.5	0.5	5	05/18/22 14:28	05/16/22	
Lithium	200.8	**303**	ug/L	0.50	0.50	5	05/18/22 14:28	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:55
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-FC	**Basis:**	NA
Lab Code:	K2205115-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 14:33	05/16/22	
Lithium	200.8	**300**	ug/L	0.50	0.50	5	05/18/22 14:33	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:00
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-CER	**Basis:**	NA
Lab Code:	K2205115-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.2 J**	ug/L	2.5	0.5	5	05/18/22 14:37	05/16/22	
Lithium	200.8	**289**	ug/L	0.50	0.50	5	05/18/22 14:37	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:05
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-PM	**Basis:**	NA
Lab Code:	K2205115-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7 J**	ug/L	2.5	0.5	5	05/18/22 14:38	05/16/22	
Lithium	200.8	**298**	ug/L	0.50	0.50	5	05/18/22 14:38	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:10
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-FS-PM	**Basis:**	NA
Lab Code:	K2205115-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 14:43	05/16/22	
Lithium	200.8	**297**	ug/L	0.50	0.50	5	05/18/22 14:43	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:15
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205115-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 14:44	05/16/22	
Lithium	200.8	**328**	ug/L	0.50	0.50	5	05/18/22 14:44	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:20
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-BC	**Basis:**	NA
Lab Code:	K2205115-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.3 J**	ug/L	2.5	0.5	5	05/18/22 14:46	05/16/22	
Lithium	200.8	**291**	ug/L	0.50	0.50	5	05/18/22 14:46	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:25
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-AIR	**Basis:**	NA
Lab Code:	K2205115-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.1**	ug/L	2.5	0.5	5	05/18/22 14:47	05/16/22	
Lithium	200.8	**292**	ug/L	0.50	0.50	5	05/18/22 14:47	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:30
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-FS-DUP	**Basis:**	NA
Lab Code:	K2205115-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5**	**J**	ug/L	2.5	0.5	5	05/18/22 14:49	05/16/22	
Lithium	200.8	**292**		ug/L	0.50	0.50	5	05/18/22 14:49	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:35
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-10-MB	**Basis:**	NA
Lab Code:	K2205115-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.0 J**	ug/L	2.5	0.5	5	05/18/22 14:50	05/16/22	
Lithium	200.8	**294**	ug/L	0.50	0.50	5	05/18/22 14:50	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:00
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-FS	**Basis:**	NA
Lab Code:	K2205115-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 14:52	05/16/22	
Lithium	200.8	**293**	ug/L	0.50	0.50	5	05/18/22 14:52	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:05
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-FC	**Basis:**	NA
Lab Code:	K2205115-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8 J**	ug/L	2.5	0.5	5	05/18/22 14:53	05/16/22	
Lithium	200.8	**296**	ug/L	0.50	0.50	5	05/18/22 14:53	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:10
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-CER	**Basis:**	NA
Lab Code:	K2205115-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.0 J**	ug/L	2.5	0.5	5	05/18/22 14:54	05/16/22	
Lithium	200.8	**305**	ug/L	0.50	0.50	5	05/18/22 14:54	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:15
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-PM	**Basis:**	NA
Lab Code:	K2205115-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.0 J**	ug/L	2.5	0.5	5	05/18/22 14:56	05/16/22	
Lithium	200.8	**306**	ug/L	0.50	0.50	5	05/18/22 14:56	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:20
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-FS-PM	**Basis:**	NA
Lab Code:	K2205115-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:00	05/16/22	
Lithium	200.8	**302**	ug/L	0.50	0.50	5	05/18/22 15:00	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:25
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205115-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:02	05/16/22	
Lithium	200.8	**301**	ug/L	0.50	0.50	5	05/18/22 15:02	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:30
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-BC	**Basis:**	NA
Lab Code:	K2205115-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.5 J**	ug/L	2.5	0.5	5	05/18/22 15:03	05/16/22	
Lithium	200.8	**303**	ug/L	0.50	0.50	5	05/18/22 15:03	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:35
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-AIR	**Basis:**	NA
Lab Code:	K2205115-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.4**	ug/L	2.5	0.5	5	05/18/22 15:05	05/16/22	
Lithium	200.8	**317**	ug/L	0.50	0.50	5	05/18/22 15:05	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:40
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-FS-DUP	**Basis:**	NA
Lab Code:	K2205115-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:06	05/16/22	
Lithium	200.8	**307**	ug/L	0.50	0.50	5	05/18/22 15:06	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 17:45
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-10-MB	**Basis:**	NA
Lab Code:	K2205115-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.8 J**	ug/L	2.5	0.5	5	05/18/22 15:08	05/16/22	
Lithium	200.8	**314**	ug/L	0.50	0.50	5	05/18/22 15:08	05/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2207823-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	05/18/22 14:25	05/16/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	05/18/22 14:25	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-SBT-MW-10-FS	**Units:**	ug/L
Lab Code:	K2205115-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207823-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.9 J	50.5	50.0	99	70-130
Lithium	303	340	50.0	74 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-SBT-MW-10-FC	**Units:**	ug/L
Lab Code:	K2205115-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207823-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	51.5	50.0	103	70-130
Lithium	300	338	50.0	76 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-SBT-MW-10-FS	**Units:**	ug/L
Lab Code:	K2205115-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207823-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	0.9 J	0.5 J	0.7	57 #	20
Lithium	200.8	0.50	0.50	303	293	298	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-SBT-MW-10-FC	**Units:**	ug/L
Lab Code:	K2205115-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207823-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	300	290	295	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205115
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Analyzed:**	05/18/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2207823-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.2	50.0	100	85-115
Lithium	200.8	48.0	50.0	96	85-115

May 19, 2022 Service Request No:K2205117

Modi Raduma
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Green County Treatability

Dear Modi,

Enclosed are the results of the sample(s) submitted to our laboratory May 11, 2022
For your reference, these analyses have been assigned our service request number **K2205117.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | **FAX** +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2205117
Project: 2022-Green County Treatability
Date Received: 05/11/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 05/11/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 05/19/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-5-FS **Lab ID: K2205117-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.0	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	99.7		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-FC **Lab ID: K2205117-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	106		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-CER **Lab ID: K2205117-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.1	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	97.6		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-PM **Lab ID: K2205117-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	97.8		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-FS-PM **Lab ID: K2205117-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.4	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	98.5		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-FC-PM-MC **Lab ID: K2205117-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	99.3		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-BC **Lab ID: K2205117-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	7.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	102		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-AIR **Lab ID: K2205117-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.3		0.5	2.5	ug/L	200.8
Lithium, Dissolved	104		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-FS-DUP **Lab ID: K2205117-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	101		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-MB **Lab ID: K2205117-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.6		0.5	2.5	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-5-MB **Lab ID: K2205117-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	119		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-FS **Lab ID: K2205117-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	17.1		0.5	2.5	ug/L	200.8
Lithium, Dissolved	82.5		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-FC **Lab ID: K2205117-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	91.7		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-CER **Lab ID: K2205117-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	81.0		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-PM **Lab ID: K2205117-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	71.2		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-FS-PM **Lab ID: K2205117-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.9	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	76.3		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-FC-PM-MC **Lab ID: K2205117-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	80.7		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-BC **Lab ID: K2205117-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.9	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	71.1		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-AIR **Lab ID: K2205117-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.7	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	67.0		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-FS-DUP **Lab ID: K2205117-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.6	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	80.3		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-5-MB **Lab ID: K2205117-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.3	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	71.8		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2205117-001	GC-GBT-MW-5-FS	5/10/2022	1840
K2205117-002	GC-GBT-MW-5-FC	5/10/2022	1845
K2205117-003	GC-GBT-MW-5-CER	5/10/2022	1850
K2205117-004	GC-GBT-MW-5-PM	5/10/2022	1855
K2205117-005	GC-GBT-MW-5-FS-PM	5/10/2022	1900
K2205117-006	GC-GBT-MW-5-FC-PM-MC	5/10/2022	1905
K2205117-007	GC-GBT-MW-5-BC	5/10/2022	1910
K2205117-008	GC-GBT-MW-5-AIR	5/10/2022	1915
K2205117-009	GC-GBT-MW-5-FS-DUP	5/10/2022	1920
K2205117-010	GC-GBT-MW-5-MB	5/10/2022	1925
K2205117-011	GC-SBT-MW-5-FS	5/10/2022	1930
K2205117-012	GC-SBT-MW-5-FC	5/10/2022	1935
K2205117-013	GC-SBT-MW-5-CER	5/10/2022	1940
K2205117-014	GC-SBT-MW-5-PM	5/10/2022	1945
K2205117-015	GC-SBT-MW-5-FS-PM	5/10/2022	1950
K2205117-016	GC-SBT-MW-5-FC-PM-MC	5/10/2022	1955
K2205117-017	GC-SBT-MW-5-BC	5/10/2022	2000
K2205117-018	GC-SBT-MW-5-AIR	5/10/2022	2005
K2205117-019	GC-SBT-MW-5-FS-DUP	5/10/2022	2010
K2205117-020	GC-SBT-MW-5-MB	5/10/2022	2015

K2205117

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	5/11/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li)														
1	GC-GBT-MW-5-FS	5/10/2022	18:40	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-5-FC	5/10/2022	18:45	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-5-CER	5/10/2022	18:50	Water	1	X														HNO3 preserved.
4	GC-GBT-MW-5-PM	5/10/2022	18:55	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-GBT-MW-5-FS-PM	5/10/2022	19:00	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-GBT-MW-5-FC-PM-MC	5/10/2022	19:05	Water	1	X														HNO3 preserved. KMnO4 added.
7	GC-GBT-MW-5-BC	5/10/2022	19:10	Water	1	X														HNO3 preserved.
8	GC-GBT-MW-5-AIR	5/10/2022	19:15	Water	1	X														HNO3 preserved.
9	GC-GBT-MW-5-FS-DUP	5/10/2022	19:20	Water	1	X														HNO3 preserved.
10	GC-GBT-MW-5-MB	5/10/2022	19:25	Water	1	X														HNO3 preserved.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:	
Signature/Print Name:	Date/Time: 5/11/22 9:00 AM	Signature/Print Name: K Morrow ALS	5/11/22 1310
Relinquished by:	Company: ALS	Received by: M. Mulligan	
Signature/Print Name: K Morrow	Date/Time: 5/11/22 1455	Signature/Print Name: ALS	5/11/22 1455

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2205117

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	5/11/2022
Project Name:	Greene County Treatability
Project Number:	201114-01.05 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters	Comments/Preservation
		Date	Time			Dissolved Metals (As, Li)	
1	GC-SBT-MW-5-FS	5/10/2022	19:30	Water	1	X	HNO3 preserved.
2	GC-SBT-MW-5-FC	5/10/2022	19:35	Water	1	X	HNO3 preserved.
3	GC-SBT-MW-5-CER	5/10/2022	19:40	Water	1	X	HNO3 preserved.
4	GC-SBT-MW-5-PM	5/10/2022	19:45	Water	1	X	HNO3 preserved. KMnO4 added.
5	GC-SBT-MW-5-FS-PM	5/10/2022	19:50	Water	1	X	HNO3 preserved. KMnO4 added.
6	GC-SBT-MW-5-FC-PM-MC	5/10/2022	19:55	Water	1	X	HNO3 preserved. KMnO4 added.
7	GC-SBT-MW-5-BC	5/10/2022	20:00	Water	1	X	HNO3 preserved.
8	GC-SBT-MW-5-AIR	5/10/2022	20:05	Water	1	X	HNO3 preserved.
9	GC-SBT-MW-5-FS-DUP	5/10/2022	20:10	Water	1	X	HNO3 preserved.
10	GC-SBT-MW-5-MB	5/10/2022	20:15	Water	1	X	HNO3 preserved.
11							
12							
13							
14							
15							

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL ≤ 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	5/11/22 9:00AM	KMorrow ALS 5/11/22 1310	
Relinquished by:	Company:	Received by:	
	ALS	M. Mulligan 5/11/22	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
KMorrow	5/11/22 1455	ALS 1455	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM INIT

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 05117

Received: 5/11/22 Opened: 5/11/22 By: MM Unloaded: 5/11/22 By: MM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other________ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number / [✓ NA]	Filed
60		1201		—			

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not Ph due to Limited Volume

:________

1/13/22

Page of

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-GBT-MW-5-FS	**Date Collected:**	05/10/22
Lab Code:	K2205117-001	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-5-FC	**Date Collected:**	05/10/22
Lab Code:	K2205117-002	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-5-CER	**Date Collected:**	05/10/22
Lab Code:	K2205117-003	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-5-PM	**Date Collected:**	05/10/22
Lab Code:	K2205117-004	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name:	GC-GBT-MW-5-FS-PM	**Date Collected:**	05/10/22
Lab Code:	K2205117-005	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205117
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-GBT-MW-5-FC-PM-MC **Date Collected:** 05/10/22
Lab Code: K2205117-006 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-5-BC **Date Collected:** 05/10/22
Lab Code: K2205117-007 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-5-AIR **Date Collected:** 05/10/22
Lab Code: K2205117-008 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-5-FS-DUP **Date Collected:** 05/10/22
Lab Code: K2205117-009 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-GBT-MW-5-MB **Date Collected:** 05/10/22
Lab Code: K2205117-010 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2205117
Project: 2022-Green County Treatability/201114-01.05 Task 09

Sample Name: GC-SBT-MW-5-FS **Date Collected:** 05/10/22
Lab Code: K2205117-011 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-5-FC **Date Collected:** 05/10/22
Lab Code: K2205117-012 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-5-CER **Date Collected:** 05/10/22
Lab Code: K2205117-013 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-5-PM **Date Collected:** 05/10/22
Lab Code: K2205117-014 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-SBT-MW-5-FS-PM **Date Collected:** 05/10/22
Lab Code: K2205117-015 **Date Received:** 05/11/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09		

Sample Name:	GC-SBT-MW-5-FC-PM-MC	**Date Collected:**	05/10/22
Lab Code:	K2205117-016	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-5-BC	**Date Collected:**	05/10/22
Lab Code:	K2205117-017	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-5-AIR	**Date Collected:**	05/10/22
Lab Code:	K2205117-018	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-5-FS-DUP	**Date Collected:**	05/10/22
Lab Code:	K2205117-019	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name:	GC-SBT-MW-5-MB	**Date Collected:**	05/10/22
Lab Code:	K2205117-020	**Date Received:**	05/11/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:40
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-FS	**Basis:**	NA
Lab Code:	K2205117-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.0 J**	ug/L	2.5	0.5	5	05/18/22 15:15	05/16/22	
Lithium	200.8	**99.7**	ug/L	0.50	0.50	5	05/18/22 15:15	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:45
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-FC	**Basis:**	NA
Lab Code:	K2205117-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8 J**	ug/L	2.5	0.5	5	05/18/22 15:19	05/16/22	
Lithium	200.8	**106**	ug/L	0.50	0.50	5	05/18/22 15:19	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:50
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-CER	**Basis:**	NA
Lab Code:	K2205117-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.1 J**	ug/L	2.5	0.5	5	05/18/22 15:24	05/16/22	
Lithium	200.8	**97.6**	ug/L	0.50	0.50	5	05/18/22 15:24	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 18:55
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-PM	**Basis:**	NA
Lab Code:	K2205117-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8 J**	ug/L	2.5	0.5	5	05/18/22 15:25	05/16/22	
Lithium	200.8	**97.8**	ug/L	0.50	0.50	5	05/18/22 15:25	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:00
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-FS-PM	**Basis:**	NA
Lab Code:	K2205117-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.4 J**	ug/L	2.5	0.5	5	05/18/22 15:29	05/16/22	
Lithium	200.8	**98.5**	ug/L	0.50	0.50	5	05/18/22 15:29	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:05
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205117-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.0**	ug/L	2.5	0.5	5	05/18/22 15:31	05/16/22	
Lithium	200.8	**99.3**	ug/L	0.50	0.50	5	05/18/22 15:31	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:10
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-BC	**Basis:**	NA
Lab Code:	K2205117-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.0**	ug/L	2.5	0.5	5	05/18/22 15:32	05/16/22	
Lithium	200.8	**102**	ug/L	0.50	0.50	5	05/18/22 15:32	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:15
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-AIR	**Basis:**	NA
Lab Code:	K2205117-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.3**	ug/L	2.5	0.5	5	05/18/22 15:34	05/16/22	
Lithium	200.8	**104**	ug/L	0.50	0.50	5	05/18/22 15:34	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:20
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-FS-DUP	**Basis:**	NA
Lab Code:	K2205117-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:35	05/16/22	
Lithium	200.8	**101**	ug/L	0.50	0.50	5	05/18/22 15:35	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:25
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-GBT-MW-5-MB	**Basis:**	NA
Lab Code:	K2205117-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.6**	ug/L	2.5	0.5	5	05/18/22 15:37	05/16/22	
Lithium	200.8	**119**	ug/L	0.50	0.50	5	05/18/22 15:37	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:30
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-FS	**Basis:**	NA
Lab Code:	K2205117-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**17.1**	ug/L	2.5	0.5	5	05/18/22 15:38	05/16/22	
Lithium	200.8	**82.5**	ug/L	0.50	0.50	5	05/18/22 15:38	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:35
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-FC	**Basis:**	NA
Lab Code:	K2205117-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:39	05/16/22	
Lithium	200.8	**91.7**	ug/L	0.50	0.50	5	05/18/22 15:39	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:40
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-CER	**Basis:**	NA
Lab Code:	K2205117-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.0**	ug/L	2.5	0.5	5	05/18/22 15:41	05/16/22	
Lithium	200.8	**81.0**	ug/L	0.50	0.50	5	05/18/22 15:41	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:45
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-PM	**Basis:**	NA
Lab Code:	K2205117-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:42	05/16/22	
Lithium	200.8	**71.2**	ug/L	0.50	0.50	5	05/18/22 15:42	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:50
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-FS-PM	**Basis:**	NA
Lab Code:	K2205117-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.9 J**	ug/L	2.5	0.5	5	05/18/22 15:47	05/16/22	
Lithium	200.8	**76.3**	ug/L	0.50	0.50	5	05/18/22 15:47	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 19:55
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-FC-PM-MC	**Basis:**	NA
Lab Code:	K2205117-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	05/18/22 15:48	05/16/22	
Lithium	200.8	**80.7**	ug/L	0.50	0.50	5	05/18/22 15:48	05/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:00
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-BC	**Basis:**	NA
Lab Code:	K2205117-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.9 J**	ug/L	2.5	0.5	5	05/18/22 15:50	05/16/22	
Lithium	200.8	**71.1**	ug/L	0.50	0.50	5	05/18/22 15:50	05/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:05
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-AIR	**Basis:**	NA
Lab Code:	K2205117-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.7 J**	ug/L	2.5	0.5	5	05/18/22 15:51	05/16/22	
Lithium	200.8	**67.0**	ug/L	0.50	0.50	5	05/18/22 15:51	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:10
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-FS-DUP	**Basis:**	NA
Lab Code:	K2205117-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.6 J**	ug/L	2.5	0.5	5	05/18/22 15:53	05/16/22	
Lithium	200.8	**80.3**	ug/L	0.50	0.50	5	05/18/22 15:53	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22 20:15
Sample Matrix:	Water	**Date Received:**	05/11/22 14:55
Sample Name:	GC-SBT-MW-5-MB	**Basis:**	NA
Lab Code:	K2205117-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.3 J**	ug/L	2.5	0.5	5	05/18/22 15:54	05/16/22	
Lithium	200.8	**71.8**	ug/L	0.50	0.50	5	05/18/22 15:54	05/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2207901-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	05/18/22 15:12	05/16/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	05/18/22 15:12	05/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-FC	**Units:**	ug/L
Lab Code:	K2205117-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207901-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.8 J	50.8	50.0	100	70-130
Lithium	106	151	50.0	91	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22
		Date Extracted:	05/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-FS	**Units:**	ug/L
Lab Code:	K2205117-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2207901-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.0 J	51.7	50.0	101	70-130
Lithium	99.7	145	50.0	91	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-FC	**Units:**	ug/L
Lab Code:	K2205117-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207901-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	0.8 J	0.6 J	0.7	29 #	20
Lithium	200.8	0.50	0.50	106	103	105	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project	2022-Green County Treatability/201114-01.05 Task 09	**Date Collected:**	05/10/22
Sample Matrix:	Water	**Date Received:**	05/11/22
		Date Analyzed:	05/18/22

Replicate Sample Summary

Dissolved Metals

Sample Name:	GC-GBT-MW-5-FS	**Units:**	ug/L
Lab Code:	K2205117-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2207901-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	1.0 J	0.8 J	0.9	22 #	20
Lithium	200.8	0.50	0.50	99.7	104	102	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2205117
Project:	2022-Green County Treatability/201114-01.05 Task 09	**Date Analyzed:**	05/18/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2207901-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.8	50.0	98	85-115
Lithium	200.8	50.7	50.0	101	85-115

October 21, 2022 Service Request No:K2212017

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 13, 2022
For your reference, these analyses have been assigned our service request number **K2212017.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2212017
Project: Greene County Treatability
Date Received: 10/13/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 10/13/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ____________________ Date 10/21/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-44H-CNTRL **Lab ID: K2212017-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	283		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.6	J	0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-HEL **Lab ID: K2212017-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	59.5		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.5	J	0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-LS **Lab ID: K2212017-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	54.0		0.009	0.020	ug/L	200.8
Iron, Dissolved	4.3		0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-CDQ **Lab ID: K2212017-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.042		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.2	J	0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-CNTRL **Lab ID: K2212017-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	184		0.009	0.020	ug/L	200.8
Iron, Dissolved	43.2		0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-HEL **Lab ID: K2212017-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	33.3		0.009	0.020	ug/L	200.8
Iron, Dissolved	3.2		0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-LS **Lab ID: K2212017-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	27.9		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.7	J	0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-CDQ **Lab ID: K2212017-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.651		0.009	0.020	ug/L	200.8
Iron, Dissolved	3.2		0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-HEL_DUP **Lab ID: K2212017-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	51.7		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.8	J	0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-44H-HEL_DUP **Lab ID: K2212017-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	40.6		0.009	0.020	ug/L	200.8
Iron, Dissolved	2.4		0.3	2.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2212017
Project: Greene County Treatability/221114-01.05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212017-001	GC-GBT-MW-44H-CNTRL	10/11/2022	1220
K2212017-002	GC-GBT-MW-44H-HEL	10/11/2022	1225
K2212017-003	GC-GBT-MW-44H-LS	10/11/2022	1230
K2212017-004	GC-GBT-MW-44H-CDQ	10/11/2022	1235
K2212017-005	GC-SBT-MW-44H-CNTRL	10/11/2022	1240
K2212017-006	GC-SBT-MW-44H-HEL	10/11/2022	1245
K2212017-007	GC-SBT-MW-44H-LS	10/11/2022	1250
K2212017-008	GC-SBT-MW-44H-CDQ	10/11/2022	1255
K2212017-009	GC-GBT-MW-44H-HEL_DUP	10/11/2022	1300
K2212017-010	GC-SBT-MW-44H-HEL_DUP	10/11/2022	1305

K2212017

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (Co, Fe)														
1	GC-GBT-MW-44H-CNTRL	10/11/2022	12:20	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
2	GC-GBT-MW-44H-HEL	10/11/2022	12:25	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
3	GC-GBT-MW-44H-LS	10/11/2022	12:30	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
4	GC-GBT-MW-44H-CDQ	10/11/2022	12:35	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
5	GC-SBT-MW-44H-CNTRL	10/11/2022	12:40	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
6	GC-SBT-MW-44H-HEL	10/11/2022	12:45	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
7	GC-SBT-MW-44H-LS	10/11/2022	12:50	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
8	GC-SBT-MW-44H-CDQ	10/11/2022	12:55	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
9	GC-GBT-MW-44H-HEL_DUP	10/11/2022	13:00	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
10	GC-SBT-MW-44H-HEL_DUP	10/11/2022	13:05	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/13/22 8:00 AM

Received by:
Signature/Print Name:
KMorrow ALS 10/13/22 1220

Relinquished by:	Company:
Signature/Print Name:	Date/Time:
KMorrow ALS	10/13/22 1330

Received by:
Josh McPherson ALS Kelso 10/13/22 1320
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12017

Received: 10·13·22 Opened: 10·13·22 By: VM Unloaded: 10·13·22 By: VM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ________ NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6		IR02					
3.8							

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap [✓ Gel Packs] Wet Ice Dry Ice Sleeves ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was Cl2/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: COULD not PH Due to low Volume

:

1/13/22 Page ____ of ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC
Service Request: K2212017
Project: Greene County Treatability/221114-01.05

Sample Name: GC-GBT-MW-44H-CNTRL
Date Collected: 10/11/22
Lab Code: K2212017-001
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-44H-HEL
Date Collected: 10/11/22
Lab Code: K2212017-002
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-44H-LS
Date Collected: 10/11/22
Lab Code: K2212017-003
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-44H-CDQ
Date Collected: 10/11/22
Lab Code: K2212017-004
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-44H-CNTRL
Date Collected: 10/11/22
Lab Code: K2212017-005
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05		

Sample Name:	GC-SBT-MW-44H-HEL	**Date Collected:**	10/11/22
Lab Code:	K2212017-006	**Date Received:**	10/13/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-44H-LS	**Date Collected:**	10/11/22
Lab Code:	K2212017-007	**Date Received:**	10/13/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-44H-CDQ	**Date Collected:**	10/11/22
Lab Code:	K2212017-008	**Date Received:**	10/13/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-44H-HEL_DUP	**Date Collected:**	10/11/22
Lab Code:	K2212017-009	**Date Received:**	10/13/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-44H-HEL_DUP	**Date Collected:**	10/11/22
Lab Code:	K2212017-010	**Date Received:**	10/13/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:20
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-GBT-MW-44H-CNTRL	**Basis:**	NA
Lab Code:	K2212017-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**283**	ug/L	0.020	0.009	1	10/20/22 09:36	10/18/22	
Iron	200.8	**1.6 J**	ug/L	2.0	0.3	1	10/20/22 09:36	10/18/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:25
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-GBT-MW-44H-HEL	**Basis:**	NA
Lab Code:	K2212017-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**59.5**	ug/L	0.020	0.009	1	10/20/22 09:43	10/18/22	
Iron	200.8	**1.5 J**	ug/L	2.0	0.3	1	10/20/22 09:43	10/18/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:30
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-GBT-MW-44H-LS	**Basis:**	NA
Lab Code:	K2212017-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**54.0**	ug/L	0.020	0.009	1	10/20/22 09:46	10/18/22	
Iron	200.8	**4.3**	ug/L	2.0	0.3	1	10/20/22 09:46	10/18/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:35
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-GBT-MW-44H-CDQ	**Basis:**	NA
Lab Code:	K2212017-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.042**	ug/L	0.020	0.009	1	10/20/22 09:48	10/18/22	
Iron	200.8	**1.2 J**	ug/L	2.0	0.3	1	10/20/22 09:48	10/18/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:40
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-SBT-MW-44H-CNTRL	**Basis:**	NA
Lab Code:	K2212017-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**184**	ug/L	0.020	0.009	1	10/20/22 09:50	10/18/22	
Iron	200.8	**43.2**	ug/L	2.0	0.3	1	10/20/22 09:50	10/18/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:45
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-SBT-MW-44H-HEL	**Basis:**	NA
Lab Code:	K2212017-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**33.3**	ug/L	0.020	0.009	1	10/20/22 09:53	10/18/22	
Iron	200.8	**3.2**	ug/L	2.0	0.3	1	10/20/22 09:53	10/18/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:50
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-SBT-MW-44H-LS	**Basis:**	NA
Lab Code:	K2212017-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**27.9**	ug/L	0.020	0.009	1	10/20/22 09:59	10/18/22	
Iron	200.8	**1.7 J**	ug/L	2.0	0.3	1	10/20/22 09:59	10/18/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 12:55
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-SBT-MW-44H-CDQ	**Basis:**	NA
Lab Code:	K2212017-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.651**	ug/L	0.020	0.009	1	10/20/22 10:02	10/18/22	
Iron	200.8	**3.2**	ug/L	2.0	0.3	1	10/20/22 10:02	10/18/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 13:00
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-GBT-MW-44H-HEL_DUP	**Basis:**	NA
Lab Code:	K2212017-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**51.7**	ug/L	0.020	0.009	1	10/20/22 10:04	10/18/22	
Iron	200.8	**1.8 J**	ug/L	2.0	0.3	1	10/20/22 10:04	10/18/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22 13:05
Sample Matrix:	Water	**Date Received:**	10/13/22 13:20
Sample Name:	GC-SBT-MW-44H-HEL_DUP	**Basis:**	NA
Lab Code:	K2212017-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**40.6**	ug/L	0.020	0.009	1	10/20/22 10:06	10/18/22	
Iron	200.8	**2.4**	ug/L	2.0	0.3	1	10/20/22 10:06	10/18/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2218105-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/20/22 09:32	10/18/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	10/20/22 09:32	10/18/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/13/22
		Date Analyzed:	10/20/22
		Date Extracted:	10/18/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-CNTRL	**Units:**	ug/L
Lab Code:	K2212017-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2218105-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	283	308	25.0	99 #	70-130
Iron	1.6 J	48.3	50.0	94	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project	Greene County Treatability/221114-01.05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/13/22
		Date Analyzed:	10/20/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-CNTRL	**Units:**	ug/L
Lab Code:	K2212017-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2218105-05 Result	Average	RPD	RPD Limit
Cobalt	200.8	0.020	0.009	283	280	282	1	20
Iron	200.8	2.0	0.3	1.6 J	1.4 J	1.5	13	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/20/2022 5:52:25 PM

Superset Reference:22-0000643174 rev 00

Client:	Anchor QEA, LLC	**Service Request:**	K2212017
Project:	Greene County Treatability/221114-01.05	**Date Analyzed:**	10/20/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2218105-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	24.5	25.0	98	85-115
Iron	200.8	47.5	50.0	95	85-115

October 20, 2022 Service Request No:K2212042

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 13, 2022
For your reference, these analyses have been assigned our service request number **K2212042.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2212042
Date Received: 10/13/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 10/13/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/20/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-17-CNTRL **Lab ID: K2212042-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	67.4		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.8	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	633		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-HEL **Lab ID: K2212042-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	12.0		0.09	0.50	ug/L	200.8
Iron, Dissolved	33.0		0.3	2.0	ug/L	200.8
Lithium, Dissolved	608		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-LS **Lab ID: K2212042-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.9		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.2		0.3	2.0	ug/L	200.8
Lithium, Dissolved	628		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-CDQ **Lab ID: K2212042-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.10	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	2.0	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	679		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-CNTRL **Lab ID: K2212042-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.81		0.09	0.50	ug/L	200.8
Iron, Dissolved	78.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	558		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-HEL **Lab ID: K2212042-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	10.4		0.09	0.50	ug/L	200.8
Iron, Dissolved	30.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	553		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-LS **Lab ID: K2212042-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	10.1		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	558		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-CDQ **Lab ID: K2212042-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.22	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	7.8		0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-17-CDQ **Lab ID: K2212042-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	445		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-HEL_DUP **Lab ID: K2212042-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.5		0.09	0.50	ug/L	200.8
Iron, Dissolved	12.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	624		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-HEL_DUP **Lab ID: K2212042-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.44		0.09	0.50	ug/L	200.8
Iron, Dissolved	10.7		0.3	2.0	ug/L	200.8
Lithium, Dissolved	546		0.30	0.30	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212042-001	GC-GBT-MW-17-CNTRL	10/11/2022	1130
K2212042-002	GC-GBT-MW-17-HEL	10/11/2022	1135
K2212042-003	GC-GBT-MW-17-LS	10/11/2022	1140
K2212042-004	GC-GBT-MW-17-CDQ	10/11/2022	1145
K2212042-005	GC-SBT-MW-17-CNTRL	10/11/2022	1150
K2212042-006	GC-SBT-MW-17-HEL	10/11/2022	1155
K2212042-007	GC-SBT-MW-17-LS	10/11/2022	1200
K2212042-008	GC-SBT-MW-17-CDQ	10/11/2022	1205
K2212042-009	GC-GBT-MW-17-HEL_DUP	10/11/2022	1210
K2212042-010	GC-SBT-MW-17-HEL_DUP	10/11/2022	1215

K2212042

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li, Fe)														
1	GC-GBT-MW-17-CNTRL	10/11/2022	11:30	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
2	GC-GBT-MW-17-HEL	10/11/2022	11:35	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
3	GC-GBT-MW-17-LS	10/11/2022	11:40	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
4	GC-GBT-MW-17-CDQ	10/11/2022	11:45	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
5	GC-SBT-MW-17-CNTRL	10/11/2022	11:50	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
6	GC-SBT-MW-17-HEL	10/11/2022	11:55	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
7	GC-SBT-MW-17-LS	10/11/2022	12:00	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
8	GC-SBT-MW-17-CDQ	10/11/2022	12:05	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
9	GC-GBT-MW-17-HEL_DUP	10/11/2022	12:10	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
10	GC-SBT-MW-17-HEL_DUP	10/11/2022	12:15	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:	
Signature/Print Name:	Date/Time: 10/13/22 8:00 AM	Signature/Print Name: KMorrow ALS	10/13/22 1220
Relinquished by:	Company:	Received by:	
Signature/Print Name: KMorrow ALS	Date/Time: 10/13/22 1330	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12042

Received: 10·18·22 Opened: 10·13·22 By: VM Unloaded: 10·13·22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6		IR02					
3.8							

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* [✓ *Gel Packs*] *Wet Ice* *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: could not PH Due to low Volume

:________

1/13/22 *Page* ____ *of* ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2212042
Project: Greene County Treatability/221114-01.05 Task 05

Sample Name: GC-GBT-MW-17-CNTRL **Date Collected:** 10/11/22
Lab Code: K2212042-001 **Date Received:** 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-17-HEL **Date Collected:** 10/11/22
Lab Code: K2212042-002 **Date Received:** 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-17-LS **Date Collected:** 10/11/22
Lab Code: K2212042-003 **Date Received:** 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-17-CDQ **Date Collected:** 10/11/22
Lab Code: K2212042-004 **Date Received:** 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-17-CNTRL **Date Collected:** 10/11/22
Lab Code: K2212042-005 **Date Received:** 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Client: Anchor QEA, LLC
Service Request: K2212042
Project: Greene County Treatability/221114-01.05 Task 05

Sample Name: GC-SBT-MW-17-HEL
Date Collected: 10/11/22
Lab Code: K2212042-006
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-17-LS
Date Collected: 10/11/22
Lab Code: K2212042-007
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-17-CDQ
Date Collected: 10/11/22
Lab Code: K2212042-008
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-17-HEL_DUP
Date Collected: 10/11/22
Lab Code: K2212042-009
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-17-HEL_DUP
Date Collected: 10/11/22
Lab Code: K2212042-010
Date Received: 10/13/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:30
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-GBT-MW-17-CNTRL	**Basis:**	NA
Lab Code:	K2212042-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**67.4**		ug/L	0.50	0.09	1	10/19/22 12:21	10/17/22	
Iron	200.8	**1.8**	**J**	ug/L	2.0	0.3	1	10/19/22 12:21	10/17/22	
Lithium	200.8	**633**		ug/L	0.30	0.30	1	10/19/22 12:21	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:35
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-GBT-MW-17-HEL	**Basis:**	NA
Lab Code:	K2212042-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**12.0**	ug/L	0.50	0.09	1	10/19/22 12:26	10/17/22	
Iron	200.8	**33.0**	ug/L	2.0	0.3	1	10/19/22 12:26	10/17/22	
Lithium	200.8	**608**	ug/L	0.30	0.30	1	10/19/22 12:26	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:40
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-GBT-MW-17-LS	**Basis:**	NA
Lab Code:	K2212042-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.9**	ug/L	0.50	0.09	1	10/19/22 12:27	10/17/22	
Iron	200.8	**3.2**	ug/L	2.0	0.3	1	10/19/22 12:27	10/17/22	
Lithium	200.8	**628**	ug/L	0.30	0.30	1	10/19/22 12:27	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:45
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-GBT-MW-17-CDQ	**Basis:**	NA
Lab Code:	K2212042-004		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	10/19/22 12:29	10/17/22	
Iron	200.8	**2.0**	**J**	ug/L	2.0	0.3	1	10/19/22 12:29	10/17/22	
Lithium	200.8	**679**		ug/L	0.30	0.30	1	10/19/22 12:29	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:50
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-SBT-MW-17-CNTRL	**Basis:**	NA
Lab Code:	K2212042-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.81**	ug/L	0.50	0.09	1	10/19/22 12:30	10/17/22	
Iron	200.8	**78.4**	ug/L	2.0	0.3	1	10/19/22 12:30	10/17/22	
Lithium	200.8	**558**	ug/L	0.30	0.30	1	10/19/22 12:30	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:55
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-SBT-MW-17-HEL	**Basis:**	NA
Lab Code:	K2212042-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.4**	ug/L	0.50	0.09	1	10/19/22 12:32	10/17/22	
Iron	200.8	**30.4**	ug/L	2.0	0.3	1	10/19/22 12:32	10/17/22	
Lithium	200.8	**553**	ug/L	0.30	0.30	1	10/19/22 12:32	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:00
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-SBT-MW-17-LS	**Basis:**	NA
Lab Code:	K2212042-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.1**	ug/L	0.50	0.09	1	10/19/22 12:47	10/17/22	
Iron	200.8	**3.1**	ug/L	2.0	0.3	1	10/19/22 12:47	10/17/22	
Lithium	200.8	**558**	ug/L	0.30	0.30	1	10/19/22 12:47	10/17/22	

Analytical Report

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2212042
Date Collected: 10/11/22 12:05
Date Received: 10/13/22 13:30

Sample Name: GC-SBT-MW-17-CDQ
Lab Code: K2212042-008

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.22 J**	ug/L	0.50	0.09	1	10/19/22 12:49	10/17/22	
Iron	200.8	**7.8**	ug/L	2.0	0.3	1	10/19/22 12:49	10/17/22	
Lithium	200.8	**445**	ug/L	0.30	0.30	1	10/19/22 12:49	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:10
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-GBT-MW-17-HEL_DUP	**Basis:**	NA
Lab Code:	K2212042-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.5**	ug/L	0.50	0.09	1	10/19/22 12:50	10/17/22	
Iron	200.8	**12.4**	ug/L	2.0	0.3	1	10/19/22 12:50	10/17/22	
Lithium	200.8	**624**	ug/L	0.30	0.30	1	10/19/22 12:50	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:15
Sample Matrix:	Water	**Date Received:**	10/13/22 13:30
Sample Name:	GC-SBT-MW-17-HEL_DUP	**Basis:**	NA
Lab Code:	K2212042-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.44**	ug/L	0.50	0.09	1	10/19/22 12:52	10/17/22	
Iron	200.8	**10.7**	ug/L	2.0	0.3	1	10/19/22 12:52	10/17/22	
Lithium	200.8	**546**	ug/L	0.30	0.30	1	10/19/22 12:52	10/17/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217922-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/19/22 12:19	10/17/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	10/19/22 12:19	10/17/22	
Lithium	200.8	ND U	ug/L	0.30	0.30	1	10/19/22 12:19	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/13/22
		Date Analyzed:	10/19/22
		Date Extracted:	10/17/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-17-CNTRL	**Units:**	ug/L
Lab Code:	K2212042-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217922-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	67.4	115	50.0	95	70-130
Iron	1.8 J	48.7	50.0	94	70-130
Lithium	633	682	50.0	98 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/13/22
		Date Analyzed:	10/19/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-17-CNTRL	**Units:**	ug/L
Lab Code:	K2212042-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217922-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	67.4	67.2	67.3	<1	20
Iron	200.8	2.0	0.3	1.8 J	1.8 J	1.8	<1	20
Lithium	200.8	0.30	0.30	633	644	639	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212042
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217922-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.1	50.0	100	85-115
Iron	200.8	49.2	50.0	98	85-115
Lithium	200.8	49.5	50.0	99	85-115

October 20, 2022 Service Request No:K2212043

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 14, 2022
For your reference, these analyses have been assigned our service request number **K2212043.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability	**Date Received:**	10/14/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 10/14/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/20/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-10-CNTRL **Lab ID: K2212043-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.42		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.6	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	271		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-HEL **Lab ID: K2212043-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.5		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.6		0.3	2.0	ug/L	200.8
Lithium, Dissolved	267		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-LS **Lab ID: K2212043-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	19.4		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.8	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	276		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-CDQ **Lab ID: K2212043-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.10	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	1.1	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	337		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-CNTRL **Lab ID: K2212043-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.73		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.4	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	263		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-HEL **Lab ID: K2212043-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.37		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.6		0.3	2.0	ug/L	200.8
Lithium, Dissolved	244		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-LS **Lab ID: K2212043-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.35		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	253		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-CDQ **Lab ID: K2212043-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.12	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	1.1	J	0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-10-CDQ **Lab ID: K2212043-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	245		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-HEL_DUP **Lab ID: K2212043-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.85		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.8		0.3	2.0	ug/L	200.8
Lithium, Dissolved	274		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-HEL_DUP **Lab ID: K2212043-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.58		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.0	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	249		0.30	0.30	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212043-001	GC-GBT-MW-10-CNTRL	10/11/2022	0950
K2212043-002	GC-GBT-MW-10-HEL	10/11/2022	0955
K2212043-003	GC-GBT-MW-10-LS	10/11/2022	1000
K2212043-004	GC-GBT-MW-10-CDQ	10/11/2022	1005
K2212043-005	GC-SBT-MW-10-CNTRL	10/11/2022	1010
K2212043-006	GC-SBT-MW-10-HEL	10/11/2022	1015
K2212043-007	GC-SBT-MW-10-LS	10/11/2022	1020
K2212043-008	GC-SBT-MW-10-CDQ	10/11/2022	1025
K2212043-009	GC-GBT-MW-10-HEL_DUP	10/11/2022	1030
K2212043-010	GC-SBT-MW-10-HEL_DUP	10/11/2022	1035

K2212043

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	10/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li, Fe)														
1	GC-GBT-MW-10-CNTRL	10/11/2022	9:50	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
2	GC-GBT-MW-10-HEL	10/11/2022	9:55	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
3	GC-GBT-MW-10-LS	10/11/2022	10:00	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
4	GC-GBT-MW-10-CDQ	10/11/2022	10:05	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
5	GC-SBT-MW-10-CNTRL	10/11/2022	10:10	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
6	GC-SBT-MW-10-HEL	10/11/2022	10:15	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
7	GC-SBT-MW-10-LS	10/11/2022	10:20	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
8	GC-SBT-MW-10-CDQ	10/11/2022	10:25	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
9	GC-GBT-MW-10-HEL_DUP	10/11/2022	10:30	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
10	GC-SBT-MW-10-HEL_DUP	10/11/2022	10:35	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/13/22 8:00 AM

Received by:
Signature/Print Name:
KMorrow ALS 10/13/22 ~~22~~ [illegible] D28

Relinquished by:	Company:
Signature/Print Name:	Date/Time:
KMorrow ALS	10/13/22 1330

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request **K22** 12043

Received: 10·13·22 Opened: 10·13·22 By: VM Unloaded: 10·13·22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6		IR02					
3.8							

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* [✓ *Gel Packs*] *Wet Ice* *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: COULD not PH Due to low Volume

:________

1/13/22 ***Page*** ____ ***of*** ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2212043
Project: Greene County Treatability/221114-01.05 Task 05

Sample Name: GC-GBT-MW-10-CNTRL **Date Collected:** 10/11/22
Lab Code: K2212043-001 **Date Received:** 10/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-10-HEL **Date Collected:** 10/11/22
Lab Code: K2212043-002 **Date Received:** 10/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-10-LS **Date Collected:** 10/11/22
Lab Code: K2212043-003 **Date Received:** 10/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-10-CDQ **Date Collected:** 10/11/22
Lab Code: K2212043-004 **Date Received:** 10/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-10-CNTRL **Date Collected:** 10/11/22
Lab Code: K2212043-005 **Date Received:** 10/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Client: Anchor QEA, LLC
Service Request: K2212043
Project: Greene County Treatability/221114-01.05 Task 05

Sample Name: GC-SBT-MW-10-HEL
Date Collected: 10/11/22
Lab Code: K2212043-006
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-10-LS
Date Collected: 10/11/22
Lab Code: K2212043-007
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-10-CDQ
Date Collected: 10/11/22
Lab Code: K2212043-008
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-10-HEL_DUP
Date Collected: 10/11/22
Lab Code: K2212043-009
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-10-HEL_DUP
Date Collected: 10/11/22
Lab Code: K2212043-010
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:50
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-10-CNTRL	**Basis:**	NA
Lab Code:	K2212043-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.42**	ug/L	0.50	0.09	1	10/19/22 12:53	10/17/22	
Iron	200.8	**1.6 J**	ug/L	2.0	0.3	1	10/19/22 12:53	10/17/22	
Lithium	200.8	**271**	ug/L	0.30	0.30	1	10/19/22 12:53	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:55
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-10-HEL	**Basis:**	NA
Lab Code:	K2212043-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.5**	ug/L	0.50	0.09	1	10/19/22 12:58	10/17/22	
Iron	200.8	**2.6**	ug/L	2.0	0.3	1	10/19/22 12:58	10/17/22	
Lithium	200.8	**267**	ug/L	0.30	0.30	1	10/19/22 12:58	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:00
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-10-LS	**Basis:**	NA
Lab Code:	K2212043-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**19.4**	ug/L	0.50	0.09	1	10/19/22 12:59	10/17/22	
Iron	200.8	**0.8 J**	ug/L	2.0	0.3	1	10/19/22 12:59	10/17/22	
Lithium	200.8	**276**	ug/L	0.30	0.30	1	10/19/22 12:59	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:05
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-10-CDQ	**Basis:**	NA
Lab Code:	K2212043-004		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	10/19/22 13:00	10/17/22	
Iron	200.8	**1.1**	**J**	ug/L	2.0	0.3	1	10/19/22 13:00	10/17/22	
Lithium	200.8	**337**		ug/L	0.30	0.30	1	10/19/22 13:00	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:10
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-10-CNTRL	**Basis:**	NA
Lab Code:	K2212043-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.73**	ug/L	0.50	0.09	1	10/19/22 13:11	10/17/22	
Iron	200.8	**1.4 J**	ug/L	2.0	0.3	1	10/19/22 13:11	10/17/22	
Lithium	200.8	**263**	ug/L	0.30	0.30	1	10/19/22 13:11	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:15
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-10-HEL	**Basis:**	NA
Lab Code:	K2212043-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.37**	ug/L	0.50	0.09	1	10/19/22 13:13	10/17/22	
Iron	200.8	**3.6**	ug/L	2.0	0.3	1	10/19/22 13:13	10/17/22	
Lithium	200.8	**244**	ug/L	0.30	0.30	1	10/19/22 13:13	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:20
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-10-LS	**Basis:**	NA
Lab Code:	K2212043-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.35**	ug/L	0.50	0.09	1	10/19/22 13:14	10/17/22	
Iron	200.8	**0.9 J**	ug/L	2.0	0.3	1	10/19/22 13:14	10/17/22	
Lithium	200.8	**253**	ug/L	0.30	0.30	1	10/19/22 13:14	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:25
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-10-CDQ	**Basis:**	NA
Lab Code:	K2212043-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.12**	**J**	ug/L	0.50	0.09	1	10/19/22 13:16	10/17/22	
Iron	200.8	**1.1**	**J**	ug/L	2.0	0.3	1	10/19/22 13:16	10/17/22	
Lithium	200.8	**245**		ug/L	0.30	0.30	1	10/19/22 13:16	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:30
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-10-HEL_DUP	**Basis:**	NA
Lab Code:	K2212043-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.85**	ug/L	0.50	0.09	1	10/19/22 13:17	10/17/22	
Iron	200.8	**2.8**	ug/L	2.0	0.3	1	10/19/22 13:17	10/17/22	
Lithium	200.8	**274**	ug/L	0.30	0.30	1	10/19/22 13:17	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:35
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-10-HEL_DUP	**Basis:**	NA
Lab Code:	K2212043-010		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.58**		ug/L	0.50	0.09	1	10/19/22 13:18	10/17/22	
Iron	200.8	**1.0**	**J**	ug/L	2.0	0.3	1	10/19/22 13:18	10/17/22	
Lithium	200.8	**249**		ug/L	0.30	0.30	1	10/19/22 13:18	10/17/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217922-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/19/22 12:19	10/17/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	10/19/22 12:19	10/17/22	
Lithium	200.8	ND U	ug/L	0.30	0.30	1	10/19/22 12:19	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22
		Date Extracted:	10/17/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-10-CNTRL	**Units:**	ug/L
Lab Code:	K2212043-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217922-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6.42	55.5	50.0	98	70-130
Iron	1.6 J	50.7	50.0	98	70-130
Lithium	271	323	50.0	105 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-10-CNTRL	**Units:**	ug/L
Lab Code:	K2212043-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217922-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	6.42	6.48	6.45	<1	20
Iron	200.8	2.0	0.3	1.6 J	1.6 J	1.6	<1	20
Lithium	200.8	0.30	0.30	271	266	269	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212043
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217922-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.1	50.0	100	85-115
Iron	200.8	49.2	50.0	98	85-115
Lithium	200.8	49.5	50.0	99	85-115

October 20, 2022 Service Request No:K2212044

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 14, 2022
For your reference, these analyses have been assigned our service request number **K2212044.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client: Anchor QEA, LLC
Service Request: K2212044
Project: Greene County Treatability
Date Received: 10/14/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 10/14/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 10/20/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-1-CNTRL **Lab ID: K2212044-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.59		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	258		0.009	0.020	ug/L	200.8
Iron, Dissolved	176000		20	100	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-HEL **Lab ID: K2212044-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.12	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	169		0.009	0.020	ug/L	200.8
Iron, Dissolved	72.5		0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-LS **Lab ID: K2212044-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.09	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	133		0.009	0.020	ug/L	200.8
Iron, Dissolved	2910		0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-CDQ **Lab ID: K2212044-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.13	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.059		0.009	0.020	ug/L	200.8
Iron, Dissolved	31.2		0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-CNTRL **Lab ID: K2212044-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.04		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	255		0.009	0.020	ug/L	200.8
Iron, Dissolved	117000		20	100	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-HEL **Lab ID: K2212044-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.20	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	167		0.009	0.020	ug/L	200.8
Iron, Dissolved	2150		0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-LS **Lab ID: K2212044-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.22	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	120		0.009	0.020	ug/L	200.8
Iron, Dissolved	2040		0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-CDQ **Lab ID: K2212044-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.21	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.047		0.009	0.020	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-1-CDQ **Lab ID: K2212044-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	2.1		0.3	2.0	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-HEL_DUP **Lab ID: K2212044-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.15	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	187		0.009	0.020	ug/L	200.8
Iron, Dissolved	9660		0.3	2.0	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-HEL_DUP **Lab ID: K2212044-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.15	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	171		0.009	0.020	ug/L	200.8
Iron, Dissolved	4220		0.3	2.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212044-001	GC-GBT-MW-1-CNTRL	10/11/2022	0900
K2212044-002	GC-GBT-MW-1-HEL	10/11/2022	0905
K2212044-003	GC-GBT-MW-1-LS	10/11/2022	0910
K2212044-004	GC-GBT-MW-1-CDQ	10/11/2022	0915
K2212044-005	GC-SBT-MW-1-CNTRL	10/11/2022	0920
K2212044-006	GC-SBT-MW-1-HEL	10/11/2022	0925
K2212044-007	GC-SBT-MW-1-LS	10/11/2022	0930
K2212044-008	GC-SBT-MW-1-CDQ	10/11/2022	0935
K2212044-009	GC-GBT-MW-1-HEL_DUP	10/11/2022	0940
K2212044-010	GC-SBT-MW-1-HEL_DUP	10/11/2022	0945

K2212044

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Co, Fe)														
1	GC-GBT-MW-1-CNTRL	10/11/2022	9:00	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
2	GC-GBT-MW-1-HEL	10/11/2022	9:05	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
3	GC-GBT-MW-1-LS	10/11/2022	9:10	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
4	GC-GBT-MW-1-CDQ	10/11/2022	9:15	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
5	GC-SBT-MW-1-CNTRL	10/11/2022	9:20	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
6	GC-SBT-MW-1-HEL	10/11/2022	9:25	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
7	GC-SBT-MW-1-LS	10/11/2022	9:30	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
8	GC-SBT-MW-1-CDQ	10/11/2022	9:35	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
9	GC-GBT-MW-1-HEL_DUP	10/11/2022	9:40	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
10	GC-SBT-MW-1-HEL_DUP	10/11/2022	9:45	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:	
Signature/Print Name:	Date/Time: 10/13/22 8:00 AM	Signature/Print Name: KMorrow ALS 10/13/22 1220	
Relinquished by:	Company: ALS 10/13/22 1330	Received by:	
Signature/Print Name: KMorrow	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12044

Received: 10·13·22 Opened: 10·13·22 By: VM Unloaded: 10·13·22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*______ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6		IR02					
3.8							

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* [✓ *Gel Packs*] *Wet Ice* *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: COULD not PH Due to low Volume

:______

1/13/22 **Page ___ of ___**

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	**Web Site**	**Number**
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-GBT-MW-1-CNTRL	**Date Collected:**	10/11/22
Lab Code:	K2212044-001	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-1-HEL	**Date Collected:**	10/11/22
Lab Code:	K2212044-002	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-1-LS	**Date Collected:**	10/11/22
Lab Code:	K2212044-003	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-1-CDQ	**Date Collected:**	10/11/22
Lab Code:	K2212044-004	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-1-CNTRL	**Date Collected:**	10/11/22
Lab Code:	K2212044-005	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-SBT-MW-1-HEL	**Date Collected:**	10/11/22
Lab Code:	K2212044-006	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-1-LS	**Date Collected:**	10/11/22
Lab Code:	K2212044-007	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-1-CDQ	**Date Collected:**	10/11/22
Lab Code:	K2212044-008	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-1-HEL_DUP	**Date Collected:**	10/11/22
Lab Code:	K2212044-009	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-1-HEL_DUP	**Date Collected:**	10/11/22
Lab Code:	K2212044-010	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:00
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-1-CNTRL	**Basis:**	NA
Lab Code:	K2212044-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.59**	ug/L	0.50	0.09	1	10/19/22 13:29	10/17/22	
Cobalt	200.8	**258**	ug/L	0.020	0.009	1	10/19/22 13:29	10/17/22	
Iron	200.8	**176000**	ug/L	100	20	50	10/19/22 14:18	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:05
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-1-HEL	**Basis:**	NA
Lab Code:	K2212044-002		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.12**	**J**	ug/L	0.50	0.09	1	10/19/22 13:34	10/17/22	
Cobalt	200.8	**169**		ug/L	0.020	0.009	1	10/19/22 13:34	10/17/22	
Iron	200.8	**72.5**		ug/L	2.0	0.3	1	10/19/22 13:34	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:10
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-1-LS	**Basis:**	NA
Lab Code:	K2212044-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.09 J**	ug/L	0.50	0.09	1	10/19/22 13:35	10/17/22	
Cobalt	200.8	**133**	ug/L	0.020	0.009	1	10/19/22 13:35	10/17/22	
Iron	200.8	**2910**	ug/L	2.0	0.3	1	10/19/22 13:35	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:15
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-1-CDQ	**Basis:**	NA
Lab Code:	K2212044-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	10/19/22 13:37	10/17/22	
Cobalt	200.8	**0.059**	ug/L	0.020	0.009	1	10/19/22 13:37	10/17/22	
Iron	200.8	**31.2**	ug/L	2.0	0.3	1	10/19/22 13:37	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:20
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-1-CNTRL	**Basis:**	NA
Lab Code:	K2212044-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.04**	ug/L	0.50	0.09	1	10/19/22 13:38	10/17/22	
Cobalt	200.8	**255**	ug/L	0.020	0.009	1	10/19/22 13:38	10/17/22	
Iron	200.8	**117000**	ug/L	100	20	50	10/19/22 14:22	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:25
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-1-HEL	**Basis:**	NA
Lab Code:	K2212044-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.20**	**J**	ug/L	0.50	0.09	1	10/19/22 13:39	10/17/22	
Cobalt	200.8	**167**		ug/L	0.020	0.009	1	10/19/22 13:39	10/17/22	
Iron	200.8	**2150**		ug/L	2.0	0.3	1	10/19/22 13:39	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:30
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-1-LS	**Basis:**	NA
Lab Code:	K2212044-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.22 J**	ug/L	0.50	0.09	1	10/19/22 13:44	10/17/22	
Cobalt	200.8	**120**	ug/L	0.020	0.009	1	10/19/22 13:44	10/17/22	
Iron	200.8	**2040**	ug/L	2.0	0.3	1	10/19/22 13:44	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:35
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-1-CDQ	**Basis:**	NA
Lab Code:	K2212044-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21**	**J**	ug/L	0.50	0.09	1	10/19/22 13:46	10/17/22	
Cobalt	200.8	**0.047**		ug/L	0.020	0.009	1	10/19/22 13:46	10/17/22	
Iron	200.8	**2.1**		ug/L	2.0	0.3	1	10/19/22 13:46	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:40
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-1-HEL_DUP	**Basis:**	NA
Lab Code:	K2212044-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.15**	**J**	ug/L	0.50	0.09	1	10/19/22 13:47	10/17/22	
Cobalt	200.8	**187**		ug/L	0.020	0.009	1	10/19/22 13:47	10/17/22	
Iron	200.8	**9660**		ug/L	2.0	0.3	1	10/19/22 13:47	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 09:45
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-1-HEL_DUP	**Basis:**	NA
Lab Code:	K2212044-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.15 J**	ug/L	0.50	0.09	1	10/19/22 13:49	10/17/22	
Cobalt	200.8	**171**	ug/L	0.020	0.009	1	10/19/22 13:49	10/17/22	
Iron	200.8	**4220**	ug/L	2.0	0.3	1	10/19/22 13:49	10/17/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217923-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/19/22 13:26	10/17/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/19/22 13:26	10/17/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/19/22 13:26	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22
		Date Extracted:	10/17/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-1-CNTRL	**Units:**	ug/L
Lab Code:	K2212044-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217923-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.59	48.8	50.0	94	70-130
Cobalt	258	282	25.0	98 #	70-130
Iron	176000	180000	50	7973 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-1-CNTRL	**Units:**	ug/L
Lab Code:	K2212044-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217923-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	1.59	1.61	1.60	1	20
Cobalt	200.8	0.020	0.009	258	260	259	<1	20
Iron	200.8	100	20	176000	181000	179000	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212044
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217923-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.0	50.0	96	85-115
Cobalt	200.8	24.1	25.0	96	85-115
Iron	200.8	48.8	50.0	98	85-115

October 20, 2022

Service Request No:K2212045

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 14, 2022
For your reference, these analyses have been assigned our service request number **K2212045.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2212045
Project: Greene County Treatability
Date Received: 10/14/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 10/14/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/20/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-14-CNTRL **Lab ID: K2212045-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.61		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	25.8		0.009	0.020	ug/L	200.8
Iron, Dissolved	2.2		0.3	2.0	ug/L	200.8
Lithium, Dissolved	590		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-HEL **Lab ID: K2212045-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.22		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	17.4		0.009	0.020	ug/L	200.8
Iron, Dissolved	6.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	578		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-LS **Lab ID: K2212045-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.17		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	11.9		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.6	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	577		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-CNTRL **Lab ID: K2212045-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.99		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	6.60		0.009	0.020	ug/L	200.8
Iron, Dissolved	230		0.3	2.0	ug/L	200.8
Lithium, Dissolved	446		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-HEL **Lab ID: K2212045-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.63		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	12.5		0.009	0.020	ug/L	200.8
Iron, Dissolved	7.5		0.3	2.0	ug/L	200.8
Lithium, Dissolved	569		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-LS **Lab ID: K2212045-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.63		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	9.89		0.009	0.020	ug/L	200.8
Iron, Dissolved	2.6		0.3	2.0	ug/L	200.8
Lithium, Dissolved	579		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-CDQ **Lab ID: K2212045-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.18	J	0.09	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-14-CDQ **Lab ID: K2212045-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.035		0.009	0.020	ug/L	200.8
Iron, Dissolved	1.6	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	505		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-HEL_DUP **Lab ID: K2212045-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.02		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	17.6		0.009	0.020	ug/L	200.8
Iron, Dissolved	2.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	579		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-HEL_DUP **Lab ID: K2212045-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.67		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	13.0		0.009	0.020	ug/L	200.8
Iron, Dissolved	3.9		0.3	2.0	ug/L	200.8
Lithium, Dissolved	541		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-14-CDQ **Lab ID: K2212045-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.017	J	0.009	0.020	ug/L	200.8
Iron, Dissolved	1.2	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	647		0.30	0.30	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212045-001	GC-GBT-MW-14-CNTRL	10/11/2022	1040
K2212045-002	GC-GBT-MW-14-HEL	10/11/2022	1045
K2212045-003	GC-GBT-MW-14-LS	10/11/2022	1050
K2212045-004	GC-GBT-MW-14-CDQ	10/11/2022	1055
K2212045-005	GC-SBT-MW-14-CNTRL	10/11/2022	1100
K2212045-006	GC-SBT-MW-14-HEL	10/11/2022	1105
K2212045-007	GC-SBT-MW-14-LS	10/11/2022	1110
K2212045-008	GC-SBT-MW-14-CDQ	10/11/2022	1115
K2212045-009	GC-GBT-MW-14-HEL_DUP	10/11/2022	1120
K2212045-010	GC-SBT-MW-14-HEL_DUP	10/11/2022	1125

K2214045

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li, Co, Fe)														
1	GC-GBT-MW-14-CNTRL	10/11/2022	10:40	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
2	GC-GBT-MW-14-HEL	10/11/2022	10:45	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
3	GC-GBT-MW-14-LS	10/11/2022	10:50	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
4	GC-GBT-MW-14-CDQ	10/11/2022	10:55	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
5	GC-SBT-MW-14-CNTRL	10/11/2022	11:00	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
6	GC-SBT-MW-14-HEL	10/11/2022	11:05	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
7	GC-SBT-MW-14-LS	10/11/2022	11:10	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
8	GC-SBT-MW-14-CDQ	10/11/2022	11:15	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
9	GC-GBT-MW-14-HEL_DUP	10/11/2022	11:20	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
10	GC-SBT-MW-14-HEL_DUP	10/11/2022	11:25	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:	Received by:
Emma Nordlund	Anchor QEA	
Signature/Print Name:	Date/Time:	Signature/Print Name:
	10/13/22 8:00 Am	KMorrow ALS 10/13/22 1220
Relinquished by:	Company:	Received by:
Signature/Print Name:	Date/Time:	Signature/Print Name:
KMorrow ALS	10/13/22 1330	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12045

Received: 10·13·22 Opened: 10·13·22 By: VM Unloaded: 10·13·22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6		IR02					
3.8							

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* [✓ *Gel Packs*] *Wet Ice* *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: could not PH due to low volume

1/13/22

Page ___ of ___

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-GBT-MW-14-CNTRL	**Date Collected:**	10/11/22
Lab Code:	K2212045-001	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-14-HEL	**Date Collected:**	10/11/22
Lab Code:	K2212045-002	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-14-LS	**Date Collected:**	10/11/22
Lab Code:	K2212045-003	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-14-CDQ	**Date Collected:**	10/11/22
Lab Code:	K2212045-004	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-14-CNTRL	**Date Collected:**	10/11/22
Lab Code:	K2212045-005	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Analyst Summary report

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Service Request: K2212045

Sample Name: GC-SBT-MW-14-HEL
Lab Code: K2212045-006
Sample Matrix: Water
Date Collected: 10/11/22
Date Received: 10/14/22

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-14-LS
Lab Code: K2212045-007
Sample Matrix: Water
Date Collected: 10/11/22
Date Received: 10/14/22

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-14-CDQ
Lab Code: K2212045-008
Sample Matrix: Water
Date Collected: 10/11/22
Date Received: 10/14/22

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-14-HEL_DUP
Lab Code: K2212045-009
Sample Matrix: Water
Date Collected: 10/11/22
Date Received: 10/14/22

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-14-HEL_DUP
Lab Code: K2212045-010
Sample Matrix: Water
Date Collected: 10/11/22
Date Received: 10/14/22

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:40
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-14-CNTRL	**Basis:**	NA
Lab Code:	K2212045-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.61**	ug/L	0.50	0.09	1	10/19/22 13:50	10/17/22	
Cobalt	200.8	**25.8**	ug/L	0.020	0.009	1	10/19/22 13:50	10/17/22	
Iron	200.8	**2.2**	ug/L	2.0	0.3	1	10/19/22 13:50	10/17/22	
Lithium	200.8	**590**	ug/L	0.30	0.30	1	10/19/22 13:50	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:45
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-14-HEL	**Basis:**	NA
Lab Code:	K2212045-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.22**	ug/L	0.50	0.09	1	10/19/22 13:54	10/17/22	
Cobalt	200.8	**17.4**	ug/L	0.020	0.009	1	10/19/22 13:54	10/17/22	
Iron	200.8	**6.1**	ug/L	2.0	0.3	1	10/19/22 13:54	10/17/22	
Lithium	200.8	**578**	ug/L	0.30	0.30	1	10/19/22 13:54	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:50
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-14-LS	**Basis:**	NA
Lab Code:	K2212045-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.17**		ug/L	0.50	0.09	1	10/19/22 13:56	10/17/22	
Cobalt	200.8	**11.9**		ug/L	0.020	0.009	1	10/19/22 13:56	10/17/22	
Iron	200.8	**1.6**	**J**	ug/L	2.0	0.3	1	10/19/22 13:56	10/17/22	
Lithium	200.8	**577**		ug/L	0.30	0.30	1	10/19/22 13:56	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 10:55
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-14-CDQ	**Basis:**	NA
Lab Code:	K2212045-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/19/22 13:57	10/17/22	
Cobalt	200.8	**0.017 J**	ug/L	0.020	0.009	1	10/19/22 13:57	10/17/22	
Iron	200.8	**1.2 J**	ug/L	2.0	0.3	1	10/19/22 13:57	10/17/22	
Lithium	200.8	**647**	ug/L	0.30	0.30	1	10/19/22 13:57	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:00
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-14-CNTRL	**Basis:**	NA
Lab Code:	K2212045-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.99**	ug/L	0.50	0.09	1	10/19/22 14:09	10/17/22	
Cobalt	200.8	**6.60**	ug/L	0.020	0.009	1	10/19/22 14:09	10/17/22	
Iron	200.8	**230**	ug/L	2.0	0.3	1	10/19/22 14:09	10/17/22	
Lithium	200.8	**446**	ug/L	0.30	0.30	1	10/19/22 14:09	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:05
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-14-HEL	**Basis:**	NA
Lab Code:	K2212045-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.63**	ug/L	0.50	0.09	1	10/19/22 14:11	10/17/22	
Cobalt	200.8	**12.5**	ug/L	0.020	0.009	1	10/19/22 14:11	10/17/22	
Iron	200.8	**7.5**	ug/L	2.0	0.3	1	10/19/22 14:11	10/17/22	
Lithium	200.8	**569**	ug/L	0.30	0.30	1	10/19/22 14:11	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:10
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-14-LS	**Basis:**	NA
Lab Code:	K2212045-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.63**	ug/L	0.50	0.09	1	10/19/22 14:12	10/17/22	
Cobalt	200.8	**9.89**	ug/L	0.020	0.009	1	10/19/22 14:12	10/17/22	
Iron	200.8	**2.6**	ug/L	2.0	0.3	1	10/19/22 14:12	10/17/22	
Lithium	200.8	**579**	ug/L	0.30	0.30	1	10/19/22 14:12	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:15
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-14-CDQ	**Basis:**	NA
Lab Code:	K2212045-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.18**	**J**	ug/L	0.50	0.09	1	10/19/22 14:13	10/17/22	
Cobalt	200.8	**0.035**		ug/L	0.020	0.009	1	10/19/22 14:13	10/17/22	
Iron	200.8	**1.6**	**J**	ug/L	2.0	0.3	1	10/19/22 14:13	10/17/22	
Lithium	200.8	**505**		ug/L	0.30	0.30	1	10/19/22 14:13	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:20
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-14-HEL_DUP	**Basis:**	NA
Lab Code:	K2212045-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.02**	ug/L	0.50	0.09	1	10/19/22 14:15	10/17/22	
Cobalt	200.8	**17.6**	ug/L	0.020	0.009	1	10/19/22 14:15	10/17/22	
Iron	200.8	**2.4**	ug/L	2.0	0.3	1	10/19/22 14:15	10/17/22	
Lithium	200.8	**579**	ug/L	0.30	0.30	1	10/19/22 14:15	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 11:25
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-14-HEL_DUP	**Basis:**	NA
Lab Code:	K2212045-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.67**	ug/L	0.50	0.09	1	10/19/22 14:16	10/17/22	
Cobalt	200.8	**13.0**	ug/L	0.020	0.009	1	10/19/22 14:16	10/17/22	
Iron	200.8	**3.9**	ug/L	2.0	0.3	1	10/19/22 14:16	10/17/22	
Lithium	200.8	**541**	ug/L	0.30	0.30	1	10/19/22 14:16	10/17/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217923-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/19/22 13:26	10/17/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/19/22 13:26	10/17/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/19/22 13:26	10/17/22	
Lithium	200.8	ND	U	ug/L	0.30	0.30	1	10/19/22 13:26	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22
		Date Extracted:	10/17/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-14-CNTRL	**Units:**	ug/L
Lab Code:	K2212045-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217923-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.61	49.3	50.0	95	70-130
Cobalt	25.8	48.3	25.0	90	70-130
Iron	2.2	49.2	50.0	94	70-130
Lithium	590	626	50.0	72 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC		**Service Request:**	K2212045
Project	Greene County Treatability/221114-01.05 Task 05		**Date Collected:**	10/11/22
Sample Matrix:	Water		**Date Received:**	10/14/22
			Date Analyzed:	10/19/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-14-CNTRL		**Units:**	ug/L
Lab Code:	K2212045-001		**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217923-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	1.61	1.66	1.64	3	20
Cobalt	200.8	0.020	0.009	25.8	25.4	25.6	2	20
Iron	200.8	2.0	0.3	2.2	2.0	2.1	10	20
Lithium	200.8	0.30	0.30	590	580	585	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212045
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217923-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.0	50.0	96	85-115
Cobalt	200.8	24.1	25.0	96	85-115
Iron	200.8	48.8	50.0	98	85-115
Lithium	200.8	51.6	50.0	103	85-115

October 20, 2022 Service Request No:K2212046

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene CountyTreatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 14, 2022
For your reference, these analyses have been assigned our service request number **K2212046.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability	**Date Received:**	10/14/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Fifteen water samples were received for analysis at ALS Environmental on 10/14/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/20/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-5-CNTRL **Lab ID: K2212046-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	10.1		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.3		0.3	2.0	ug/L	200.8
Lithium, Dissolved	88.8		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-HEL **Lab ID: K2212046-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.40		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	89.4		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-LS **Lab ID: K2212046-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	12.8		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.6		0.3	2.0	ug/L	200.8
Lithium, Dissolved	91.8		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-CNTRL **Lab ID: K2212046-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.12		0.09	0.50	ug/L	200.8
Iron, Dissolved	4.2		0.3	2.0	ug/L	200.8
Lithium, Dissolved	65.4		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-HEL **Lab ID: K2212046-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.90		0.09	0.50	ug/L	200.8
Iron, Dissolved	5.3		0.3	2.0	ug/L	200.8
Lithium, Dissolved	58.6		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-LS **Lab ID: K2212046-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.44		0.09	0.50	ug/L	200.8
Iron, Dissolved	37.0		0.3	2.0	ug/L	200.8
Lithium, Dissolved	61.4		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-CDQ **Lab ID: K2212046-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.16	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	1.4	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	61.5		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-HEL_DUP **Lab ID: K2212046-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	7.09		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.1		0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-5-HEL_DUP **Lab ID: K2212046-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	87.4		0.30	0.30	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-HEL_DUP **Lab ID: K2212046-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.48		0.09	0.50	ug/L	200.8
Iron, Dissolved	38.8		0.3	2.0	ug/L	200.8
Lithium, Dissolved	58.4		0.30	0.30	ug/L	200.8

CLIENT ID: GC-DI-CON-HEL **Lab ID: K2212046-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.17		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.015	J	0.009	0.020	ug/L	200.8
Iron, Dissolved	0.8	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	1.04		0.30	0.30	ug/L	200.8

CLIENT ID: GC-DI-CON-LS **Lab ID: K2212046-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.95		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.040		0.009	0.020	ug/L	200.8
Iron, Dissolved	0.7	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	2.48		0.30	0.30	ug/L	200.8

CLIENT ID: GC-DI-CON-HEL_DUP **Lab ID: K2212046-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.02		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.013	J	0.009	0.020	ug/L	200.8
Iron, Dissolved	2.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	1.02		0.30	0.30	ug/L	200.8

CLIENT ID: Method Blank **Lab ID: K2212046-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.013	J	0.009	0.020	ug/L	200.8
Iron, Dissolved	1.0	J	0.3	2.0	ug/L	200.8

CLIENT ID: GC-DI-CON-CDQ **Lab ID: K2212046-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.011	J	0.009	0.020	ug/L	200.8
Iron, Dissolved	1.2	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	61.8		0.30	0.30	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-CDQ **Lab ID: K2212046-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	1.4	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	153		0.30	0.30	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-5-CDQ **Lab ID: K2212046-004**

Analyte	Results	Flag	MDL	MRL	Units	Method

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:**K2212046
Project: Greene CountyTreatability/221114-01.05 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212046-001	GC-GBT-MW-5-CNTRL	10/11/2022	1220
K2212046-002	GC-GBT-MW-5-HEL	10/11/2022	1225
K2212046-003	GC-GBT-MW-5-LS	10/11/2022	1230
K2212046-004	GC-GBT-MW-5-CDQ	10/11/2022	1235
K2212046-005	GC-SBT-MW-5-CNTRL	10/11/2022	1240
K2212046-006	GC-SBT-MW-5-HEL	10/11/2022	1245
K2212046-007	GC-SBT-MW-5-LS	10/11/2022	1250
K2212046-008	GC-SBT-MW-5-CDQ	10/11/2022	1255
K2212046-009	GC-GBT-MW-5-HEL_DUP	10/11/2022	1300
K2212046-010	GC-SBT-MW-5-HEL_DUP	10/11/2022	1305
K2212046-011	Method Blank	10/11/2022	1400
K2212046-012	GC-DI-CON-HEL	10/11/2022	1405
K2212046-013	GC-DI-CON-LS	10/11/2022	1410
K2212046-014	GC-DI-CON-CDQ	10/11/2022	1415
K2212046-015	GC-DI-CON-HEL_DUP	10/11/2022	1405

K2210416

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved Metals (As, Li, Fe)	Dissolved Metals (As, Co, Li, Fe)													Comments/Preservation
1	GC-GBT-MW-5-CNTRL	10/11/2022	12:20	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
2	GC-GBT-MW-5-HEL	10/11/2022	12:25	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
3	GC-GBT-MW-5-LS	10/11/2022	12:30	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
4	GC-GBT-MW-5-CDQ	10/11/2022	12:35	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
5	GC-SBT-MW-5-CNTRL	10/11/2022	12:40	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
6	GC-SBT-MW-5-HEL	10/11/2022	12:45	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
7	GC-SBT-MW-5-LS	10/11/2022	12:50	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
8	GC-SBT-MW-5-CDQ	10/11/2022	12:55	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
9	GC-GBT-MW-5-HEL_DUP	10/11/2022	13:00	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
10	GC-SBT-MW-5-HEL_DUP	10/11/2022	13:05	Water	1	X														HNO3 preserved. Filtered. 5-day TAT.
11	Method Blank	10/11/2022	14:00	Water	1		X													HNO3 preserved. Filtered. 5-day TAT.
12	GC-DI-CON-HEL	10/11/2022	14:05	Water	1		X													HNO3 preserved. Filtered. 5-day TAT.
13	GC-DI-CON-LS	10/11/2022	14:10	Water	1		X													HNO3 preserved. Filtered. 5-day TAT.
14	GC-DI-CON-CDQ	10/11/2022	14:15	Water	1		X													HNO3 preserved. Filtered. 5-day TAT.
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:
Signature/Print Name:	Date/Time: 10/13/22 8:00 AM	Signature/Print Name: K Morrow ALS 10/13/22 1220
Relinquished by:	Company:	Received by:
Signature/Print Name: K Morrow ALS	Date/Time: 10/13/22 1330	Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12046

Received: 10·13·22 Opened: 10·13·22 By: VM Unloaded: 10·13·22 By: VM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other________ NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6		IR02					
3.8							

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* [✓ *Gel Packs*] *Wet Ice* *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA ~~Y~~ [✓ N]
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: COLD, not PH due to low volume
: Rec'd GC-DI-CON-HE1-Dup not on COC

1/13/22 *Page ____ of ____*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05		

Sample Name:	GC-GBT-MW-5-CNTRL	**Date Collected:**	10/11/22
Lab Code:	K2212046-001	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-5-HEL	**Date Collected:**	10/11/22
Lab Code:	K2212046-002	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-5-LS	**Date Collected:**	10/11/22
Lab Code:	K2212046-003	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-GBT-MW-5-CDQ	**Date Collected:**	10/11/22
Lab Code:	K2212046-004	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-SBT-MW-5-CNTRL	**Date Collected:**	10/11/22
Lab Code:	K2212046-005	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Client: Anchor QEA, LLC
Service Request: K2212046
Project: Greene CountyTreatability/221114-01.05 Task 05

Sample Name: GC-SBT-MW-5-HEL
Date Collected: 10/11/22
Lab Code: K2212046-006
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-5-LS
Date Collected: 10/11/22
Lab Code: K2212046-007
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-5-CDQ
Date Collected: 10/11/22
Lab Code: K2212046-008
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-GBT-MW-5-HEL_DUP
Date Collected: 10/11/22
Lab Code: K2212046-009
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GC-SBT-MW-5-HEL_DUP
Date Collected: 10/11/22
Lab Code: K2212046-010
Date Received: 10/14/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05		

Sample Name:	Method Blank	**Date Collected:**	10/11/22
Lab Code:	K2212046-011	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-DI-CON-HEL	**Date Collected:**	10/11/22
Lab Code:	K2212046-012	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-DI-CON-LS	**Date Collected:**	10/11/22
Lab Code:	K2212046-013	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-DI-CON-CDQ	**Date Collected:**	10/11/22
Lab Code:	K2212046-014	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GC-DI-CON-HEL_DUP	**Date Collected:**	10/11/22
Lab Code:	K2212046-015	**Date Received:**	10/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:20
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-5-CNTRL	**Basis:**	NA
Lab Code:	K2212046-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.1**	ug/L	0.50	0.09	1	10/19/22 14:32	10/17/22	
Iron	200.8	**3.3**	ug/L	2.0	0.3	1	10/19/22 14:32	10/17/22	
Lithium	200.8	**88.8**	ug/L	0.30	0.30	1	10/19/22 14:32	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:25
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-5-HEL	**Basis:**	NA
Lab Code:	K2212046-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.40**	ug/L	0.50	0.09	1	10/19/22 14:36	10/17/22	
Iron	200.8	**3.1**	ug/L	2.0	0.3	1	10/19/22 14:36	10/17/22	
Lithium	200.8	**89.4**	ug/L	0.30	0.30	1	10/19/22 14:36	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:30
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-5-LS	**Basis:**	NA
Lab Code:	K2212046-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**12.8**	ug/L	0.50	0.09	1	10/19/22 14:40	10/17/22	
Iron	200.8	**2.6**	ug/L	2.0	0.3	1	10/19/22 14:40	10/17/22	
Lithium	200.8	**91.8**	ug/L	0.30	0.30	1	10/19/22 14:40	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:35
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-5-CDQ	**Basis:**	NA
Lab Code:	K2212046-004		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/19/22 14:42	10/17/22	
Iron	200.8	**1.4**	**J**	ug/L	2.0	0.3	1	10/19/22 14:42	10/17/22	
Lithium	200.8	**153**		ug/L	0.30	0.30	1	10/19/22 14:42	10/17/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:40
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-5-CNTRL	**Basis:**	NA
Lab Code:	K2212046-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.12**	ug/L	0.50	0.09	1	10/19/22 14:46	10/17/22	
Iron	200.8	**4.2**	ug/L	2.0	0.3	1	10/19/22 14:46	10/17/22	
Lithium	200.8	**65.4**	ug/L	0.30	0.30	1	10/19/22 14:46	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:45
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-5-HEL	**Basis:**	NA
Lab Code:	K2212046-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.90**	ug/L	0.50	0.09	1	10/19/22 14:48	10/17/22	
Iron	200.8	**5.3**	ug/L	2.0	0.3	1	10/19/22 14:48	10/17/22	
Lithium	200.8	**58.6**	ug/L	0.30	0.30	1	10/19/22 14:48	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:50
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-5-LS	**Basis:**	NA
Lab Code:	K2212046-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.44**	ug/L	0.50	0.09	1	10/19/22 14:49	10/17/22	
Iron	200.8	**37.0**	ug/L	2.0	0.3	1	10/19/22 14:49	10/17/22	
Lithium	200.8	**61.4**	ug/L	0.30	0.30	1	10/19/22 14:49	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 12:55
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-5-CDQ	**Basis:**	NA
Lab Code:	K2212046-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.16**	**J**	ug/L	0.50	0.09	1	10/19/22 14:51	10/17/22	
Iron	200.8	**1.4**	**J**	ug/L	2.0	0.3	1	10/19/22 14:51	10/17/22	
Lithium	200.8	**61.5**		ug/L	0.30	0.30	1	10/19/22 14:51	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 13:00
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-GBT-MW-5-HEL_DUP	**Basis:**	NA
Lab Code:	K2212046-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.09**	ug/L	0.50	0.09	1	10/19/22 14:52	10/17/22	
Iron	200.8	**3.1**	ug/L	2.0	0.3	1	10/19/22 14:52	10/17/22	
Lithium	200.8	**87.4**	ug/L	0.30	0.30	1	10/19/22 14:52	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 13:05
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-SBT-MW-5-HEL_DUP	**Basis:**	NA
Lab Code:	K2212046-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.48**	ug/L	0.50	0.09	1	10/19/22 14:54	10/17/22	
Iron	200.8	**38.8**	ug/L	2.0	0.3	1	10/19/22 14:54	10/17/22	
Lithium	200.8	**58.4**	ug/L	0.30	0.30	1	10/19/22 14:54	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 14:00
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2212046-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/19/22 14:55	10/17/22	
Cobalt	200.8	**0.013**	**J**	ug/L	0.020	0.009	1	10/19/22 14:55	10/17/22	
Iron	200.8	**1.0**	**J**	ug/L	2.0	0.3	1	10/19/22 14:55	10/17/22	
Lithium	200.8	ND	U	ug/L	0.30	0.30	1	10/19/22 14:55	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 14:05
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-DI-CON-HEL	**Basis:**	NA
Lab Code:	K2212046-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.17**	ug/L	0.50	0.09	1	10/19/22 14:57	10/17/22	
Cobalt	200.8	**0.015 J**	ug/L	0.020	0.009	1	10/19/22 14:57	10/17/22	
Iron	200.8	**0.8 J**	ug/L	2.0	0.3	1	10/19/22 14:57	10/17/22	
Lithium	200.8	**1.04**	ug/L	0.30	0.30	1	10/19/22 14:57	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 14:10
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-DI-CON-LS	**Basis:**	NA
Lab Code:	K2212046-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.95**		ug/L	0.50	0.09	1	10/19/22 14:58	10/17/22	
Cobalt	200.8	**0.040**		ug/L	0.020	0.009	1	10/19/22 14:58	10/17/22	
Iron	200.8	**0.7**	**J**	ug/L	2.0	0.3	1	10/19/22 14:58	10/17/22	
Lithium	200.8	**2.48**		ug/L	0.30	0.30	1	10/19/22 14:58	10/17/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 14:15
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-DI-CON-CDQ	**Basis:**	NA
Lab Code:	K2212046-014		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/19/22 15:00	10/17/22	
Cobalt	200.8	**0.011**	**J**	ug/L	0.020	0.009	1	10/19/22 15:00	10/17/22	
Iron	200.8	**1.2**	**J**	ug/L	2.0	0.3	1	10/19/22 15:00	10/17/22	
Lithium	200.8	**61.8**		ug/L	0.30	0.30	1	10/19/22 15:00	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22 14:05
Sample Matrix:	Water	**Date Received:**	10/14/22 13:30
Sample Name:	GC-DI-CON-HEL_DUP	**Basis:**	NA
Lab Code:	K2212046-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.02**	ug/L	0.50	0.09	1	10/19/22 15:04	10/17/22	
Cobalt	200.8	**0.013 J**	ug/L	0.020	0.009	1	10/19/22 15:04	10/17/22	
Iron	200.8	**2.1**	ug/L	2.0	0.3	1	10/19/22 15:04	10/17/22	
Lithium	200.8	**1.02**	ug/L	0.30	0.30	1	10/19/22 15:04	10/17/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217925-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/19/22 14:29	10/17/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/19/22 14:29	10/17/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	10/19/22 14:29	10/17/22	
Lithium	200.8	ND U	ug/L	0.30	0.30	1	10/19/22 14:29	10/17/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22
		Date Extracted:	10/17/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-CNTRL	**Units:**	ug/L
Lab Code:	K2212046-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217925-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	10.1	58.0	50.0	96	70-130
Cobalt	5.28	28.3	25.0	92	70-130
Iron	3.3	50.5	50.0	94	70-130
Lithium	88.8	142	50.0	107	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22
		Date Extracted:	10/17/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-HEL	**Units:**	ug/L
Lab Code:	K2212046-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217925-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	5.40	53.7	50.0	97	70-130
Cobalt	4.00	26.9	25.0	92	70-130
Iron	3.1	49.2	50.0	92	70-130
Lithium	89.4	144	50.0	108	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-CNTRL	**Units:**	ug/L
Lab Code:	K2212046-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217925-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	10.1	10.0	10.1	<1	20
Cobalt	200.8	0.020	0.009	5.28	5.32	5.30	<1	20
Iron	200.8	2.0	0.3	3.3	3.8	3.6	14	20
Lithium	200.8	0.30	0.30	88.8	90.4	89.6	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project	Greene CountyTreatability/221114-01.05 Task 05	**Date Collected:**	10/11/22
Sample Matrix:	Water	**Date Received:**	10/14/22
		Date Analyzed:	10/19/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-5-HEL	**Units:**	ug/L
Lab Code:	K2212046-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217925-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	5.40	5.76	5.58	6	20
Cobalt	200.8	0.020	0.009	4.00	3.98	3.99	<1	20
Iron	200.8	2.0	0.3	3.1	2.8	3.0	10	20
Lithium	200.8	0.30	0.30	89.4	87.1	88.3	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212046
Project:	Greene CountyTreatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217925-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.3	50.0	97	85-115
Cobalt	200.8	23.9	25.0	96	85-115
Iron	200.8	48.1	50.0	96	85-115
Lithium	200.8	51.9	50.0	104	85-115

August 17, 2022 Service Request No:K2209128

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209128.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability	**Date Received:**	08/10/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-10-FB **Lab ID: K2209128-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.8		0.5	2.5	ug/L	200.8
Lithium, Dissolved	138		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-10-FB-CTRL **Lab ID: K2209128-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	61.1		0.5	2.5	ug/L	200.8
Lithium, Dissolved	295		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-GHT-Dose-A **Lab ID: K2209128-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	76.9		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-GHT-Dose-A-DUP **Lab ID: K2209128-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	80.5		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-GHT-Dose-B **Lab ID: K2209128-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	70.7		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-MMO-pH-9.5-Dose-A **Lab ID: K2209128-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	208		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-MMO-pH-9.5-Dose-B **Lab ID: K2209128-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	248		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-HT-pH-9.5-Dose-A **Lab ID: K2209128-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	112		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-HT-pH-9.5-Dose-B **Lab ID: K2209128-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	47.5		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209128-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	35.0		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209128-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	11.4		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OSBT-MW-10-CTRL **Lab ID: K2209128-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	317		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209128-001	GC-OSBT-MW-10-GHT-Dose-A	8/8/2022	1100
K2209128-002	GC-OSBT-MW-10-GHT-Dose-A-DUP	8/8/2022	1105
K2209128-003	GC-OSBT-MW-10-GHT-Dose-B	8/8/2022	1110
K2209128-004	GC-OSBT-MW-10-MMO-pH-9.5-Dose-A	8/8/2022	1115
K2209128-005	GC-OSBT-MW-10-MMO-pH-9.5-Dose-B	8/8/2022	1120
K2209128-006	GC-OSBT-MW-10-HT-pH-9.5-Dose-A	8/8/2022	1125
K2209128-007	GC-OSBT-MW-10-HT-pH-9.5-Dose-B	8/8/2022	1130
K2209128-008	GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-A	8/8/2022	1135
K2209128-009	GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-B	8/8/2022	1140
K2209128-010	GC-SBT-MW-10-FB	8/8/2022	1145
K2209128-011	GC-OSBT-MW-10-CTRL	8/8/2022	1150
K2209128-012	GC-SBT-MW-10-FB-CTRL	8/8/2022	1155

Chain of Custody Record & Laboratory Analysis Request

K2209128

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Li	Dissolved As, Li													
1	GC-OSBT-MW-10-GHT-Dose-A	8/8/2022	8/8/22 11:00	Water	1	X														HNO3 preserved.
2	GC-OSBT-MW-10-GHT-Dose-A-DUP	8/8/2022	8/8/22 11:05	Water	1	X														HNO3 preserved.
3	GC-OSBT-MW-10-GHT-Dose-B	8/8/2022	8/8/22 11:10	Water	1	X														HNO3 preserved.
4	GC-OSBT-MW-10-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 11:15	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-OSBT-MW-10-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 11:20	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-OSBT-MW-10-HT-pH-9.5-Dose-A	8/8/2022	8/8/22 11:25	Water	1	X														HNO3 preserved.
7	GC-OSBT-MW-10-HT-pH-9.5-Dose-B	8/8/2022	8/8/22 11:30	Water	1	X														HNO3 preserved.
8	GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 11:35	Water	1	X														HNO3 preserved. KMnO4 added.
9	GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 11:40	Water	1	X														HNO3 preserved. KMnO4 added.
10	GC-SBT-MW-10-FB	8/8/2022	8/8/22 11:45	Water	1		X													HNO3 preserved.
11	GC-OSBT-MW-10-CTRL	8/8/2022	8/8/22 11:50	Water	1	X														HNO3 preserved.
12	GC-SBT-MW-10-FB-CTRL	8/8/2022	8/8/22 11:55	Water	1		X													HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: KMorrow ALS Courier	
Signature/Print Name:	Date/Time: 8:00 AM 8/10/22	Signature/Print Name:	8/10/22 1140
Relinquished by: ALS Courier	Company:	Received by: ALS SMO	
Signature/Print Name: KMorrow	Date/Time: 8/10/22 1400	Signature/Print Name: KMorrow	8·10·22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request **K22** 09128

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*____ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:____

1/13/22

Page ____ *of* ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-OSBT-MW-10-GHT-Dose-A	**Date Collected:**	08/8/22
Lab Code:	K2209128-001	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	KLINN

Sample Name:	GC-OSBT-MW-10-GHT-Dose-A-DUP	**Date Collected:**	08/8/22
Lab Code:	K2209128-002	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	KLINN

Sample Name:	GC-OSBT-MW-10-GHT-Dose-B	**Date Collected:**	08/8/22
Lab Code:	K2209128-003	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	KLINN

Sample Name:	GC-OSBT-MW-10-MMO-pH-9.5-Dose-A	**Date Collected:**	08/8/22
Lab Code:	K2209128-004	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	KLINN

Sample Name:	GC-OSBT-MW-10-MMO-pH-9.5-Dose-B	**Date Collected:**	08/8/22
Lab Code:	K2209128-005	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	KLINN

Client: Anchor QEA, LLC **Service Request:** K2209128
Project: Greene County Treatability/221114-05.01 Task 05

Sample Name: GC-OSBT-MW-10-HT-pH-9.5-Dose-A **Date Collected:** 08/8/22
Lab Code: K2209128-006 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name: GC-OSBT-MW-10-HT-pH-9.5-Dose-B **Date Collected:** 08/8/22
Lab Code: K2209128-007 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name: GC-OSBT-MW-10-HT-MMO-pH-9.5- **Date Collected:** 08/8/22
Lab Code: K2209128-008 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name: GC-OSBT-MW-10-HT-MMO-pH-9.5- **Date Collected:** 08/8/22
Lab Code: K2209128-009 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name: GC-SBT-MW-10-FB **Date Collected:** 08/8/22
Lab Code: K2209128-010 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-OSBT-MW-10-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209128-011	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name:	GC-SBT-MW-10-FB-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209128-012	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209128-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**76.9**	ug/L	0.50	0.50	5	08/17/22 11:39	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-GHT-Dose-A-DUP	**Basis:**	NA
Lab Code:	K2209128-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**80.5**	ug/L	0.50	0.50	5	08/17/22 11:43	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209128-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**70.7**	ug/L	0.50	0.50	5	08/17/22 11:45	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209128-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**208**	ug/L	0.50	0.50	5	08/17/22 11:46	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209128-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**248**	ug/L	0.50	0.50	5	08/17/22 11:48	08/12/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209128-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**112**	ug/L	0.50	0.50	5	08/17/22 11:49	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209128-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**47.5**	ug/L	0.50	0.50	5	08/17/22 11:54	08/12/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209128-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**35.0**	ug/L	0.50	0.50	5	08/17/22 11:56	08/12/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209128-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**11.4**	ug/L	0.50	0.50	5	08/17/22 11:57	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-10-FB	**Basis:**	NA
Lab Code:	K2209128-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.8**	ug/L	2.5	0.5	5	08/17/22 11:59	08/12/22	
Lithium	200.8	**138**	ug/L	0.50	0.50	5	08/17/22 11:59	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-10-CTRL	**Basis:**	NA
Lab Code:	K2209128-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**317**	ug/L	0.50	0.50	5	08/17/22 13:39	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 11:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-10-FB-CTRL	**Basis:**	NA
Lab Code:	K2209128-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**61.1**	ug/L	2.5	0.5	5	08/17/22 13:47	08/15/22	
Lithium	200.8	**295**	ug/L	0.50	0.50	5	08/17/22 13:47	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213475-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 11:36	08/12/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 11:36	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213483-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:36	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:36	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/12/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-10-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209128-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213475-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	51.1	50.0	102	70-130
Lithium	76.9	130	50.0	106	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-10-CTRL	**Units:**	ug/L
Lab Code:	K2209128-011	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213483-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	49.5	50.0	99	70-130
Lithium	317	350	50.0	66 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-10-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209128-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213475-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	76.9	76.6	76.8	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-10-CTRL	**Units:**	ug/L
Lab Code:	K2209128-011	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213483-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	317	309	313	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 8/17/2022 5:04:31 PM

Superset Reference:22-0000636656 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213475-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.9	50.0	98	85-115
Lithium	200.8	49.6	50.0	99	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2209128
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213483-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Lithium	200.8	51.8	50.0	104	85-115

August 17, 2022 Service Request No:K2209130

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209130.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2209130
Date Received: 08/10/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-14-FB **Lab ID: K2209130-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.8	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.15		0.05	0.10	ug/L	200.8
Lithium, Dissolved	440		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-14-FB-CTRL **Lab ID: K2209130-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.5		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	4.31		0.05	0.10	ug/L	200.8
Lithium, Dissolved	589		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-GHT-Dose-A **Lab ID: K2209130-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.07	J	0.05	0.10	ug/L	200.8
Lithium, Dissolved	170		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-HT-pH-9.5-Dose-A **Lab ID: K2209130-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.05	J	0.05	0.10	ug/L	200.8
Lithium, Dissolved	169		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-CTRL **Lab ID: K2209130-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	5.48		0.05	0.10	ug/L	200.8
Lithium, Dissolved	592		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-GHT-Dose-A-DUP **Lab ID: K2209130-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	158		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-GHT-Dose-B **Lab ID: K2209130-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	124		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-MMO-pH-9.5-Dose-A **Lab ID: K2209130-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	510		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-MMO-pH-9.5-Dose-B **Lab ID: K2209130-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	296		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-HT-pH-9.5-Dose-B **Lab ID: K2209130-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	187		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209130-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	116		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209130-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	50.1		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2209130
Project: Greene County Treatability/221114-05.01-Greene County Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209130-001	GC-OSBT-MW-14-GHT-Dose-A	8/9/2022	1000
K2209130-002	GC-OSBT-MW-14-GHT-Dose-A-DUP	8/9/2022	1005
K2209130-003	GC-OSBT-MW-14-GHT-Dose-B	8/9/2022	1010
K2209130-004	GC-OSBT-MW-14-MMO-pH-9.5-Dose-A	8/9/2022	1015
K2209130-005	GC-OSBT-MW-14-MMO-pH-9.5-Dose-B	8/9/2022	1020
K2209130-006	GC-OSBT-MW-14-HT-pH-9.5-Dose-A	8/9/2022	1025
K2209130-007	GC-OSBT-MW-14-HT-pH-9.5-Dose-B	8/9/2022	1030
K2209130-008	GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-A	8/9/2022	1035
K2209130-009	GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-B	8/9/2022	1040
K2209130-010	GC-OSBT-MW-14-CTRL	8/9/2022	1050
K2209130-011	GC-SBT-MW-14-FB	8/9/2022	0840
K2209130-012	GC-SBT-MW-14-FB-CTRL	8/9/2022	0845

K2209130

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (Co, Li)	Dissolved Metals (As, Co, Li)													
1	GC-OSBT-MW-14-GHT-Dose-A	8/9/2022	8/9/22 10:00	Water	1	X														HNO3 preserved.
2	GC-OSBT-MW-14-GHT-Dose-A-DUP	8/9/2022	8/9/22 10:05	Water	1	X														HNO3 preserved.
3	GC-OSBT-MW-14-GHT-Dose-B	8/9/2022	8/9/22 10:10	Water	1	X														HNO3 preserved.
4	GC-OSBT-MW-14-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 10:15	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-OSBT-MW-14-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 10:20	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-OSBT-MW-14-HT-pH-9.5-Dose-A	8/9/2022	8/9/22 10:25	Water	1	X														HNO3 preserved.
7	GC-OSBT-MW-14-HT-pH-9.5-Dose-B	8/9/2022	8/9/22 10:30	Water	1	X														HNO3 preserved.
8	GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 10:35	Water	1	X														HNO3 preserved. KMnO4 added.
9	GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 10:40	Water	1	X														HNO3 preserved. KMnO4 added.
10	GC-OSBT-MW-14-CTRL	8/9/2022	8/9/22 10:50	Water	1	X														HNO3 preserved.
11	GC-SBT-MW-14-FB	8/9/2022	8/9/22 8:40	Water	1		X													HNO3 preserved.
12	GC-SBT-MW-14-FB-CTRL	8/9/2022	8/9/22 8:45	Water	1		X													HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 8:00Am 8/10/22

Received by: ALS Courier
Signature/Print Name: KMorrow 8/10/22 1140

Relinquished by: ALS Courier
Signature/Print Name: KMorrow 8/10/22 1400
Company:
Date/Time:

Received by: ALS SMO
Signature/Print Name: KMorrow 8/10/22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request **K22** 09130

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

1/13/22 **Page**____ **of**____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05		

Sample Name:	GC-OSBT-MW-14-GHT-Dose-A	**Date Collected:**	08/9/22
Lab Code:	K2209130-001	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-GHT-Dose-A-DUP	**Date Collected:**	08/9/22
Lab Code:	K2209130-002	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-GHT-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209130-003	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-MMO-pH-9.5-Dose-A	**Date Collected:**	08/9/22
Lab Code:	K2209130-004	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-MMO-pH-9.5-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209130-005	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05		

Sample Name:	GC-OSBT-MW-14-HT-pH-9.5-Dose-A	**Date Collected:**	08/9/22
Lab Code:	K2209130-006	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-HT-pH-9.5-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209130-007	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-HT-MMO-pH-9.5-	**Date Collected:**	08/9/22
Lab Code:	K2209130-008	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-HT-MMO-pH-9.5-	**Date Collected:**	08/9/22
Lab Code:	K2209130-009	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-14-CTRL	**Date Collected:**	08/9/22
Lab Code:	K2209130-010	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05		

Sample Name:	GC-SBT-MW-14-FB	**Date Collected:**	08/9/22
Lab Code:	K2209130-011	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name:	GC-SBT-MW-14-FB-CTRL	**Date Collected:**	08/9/22
Lab Code:	K2209130-012	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209130-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.07 J**	ug/L	0.10	0.05	5	08/17/22 12:25	08/15/22	
Lithium	200.8	**170**	ug/L	0.50	0.50	5	08/17/22 12:25	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-GHT-Dose-A-DUP	**Basis:**	NA
Lab Code:	K2209130-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:33	08/15/22	
Lithium	200.8	**158**	ug/L	0.50	0.50	5	08/17/22 12:33	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209130-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:34	08/15/22	
Lithium	200.8	**124**	ug/L	0.50	0.50	5	08/17/22 12:34	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209130-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:36	08/15/22	
Lithium	200.8	**510**	ug/L	0.50	0.50	5	08/17/22 12:36	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209130-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:37	08/15/22	
Lithium	200.8	**296**	ug/L	0.50	0.50	5	08/17/22 12:37	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209130-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.05 J**	ug/L	0.10	0.05	5	08/17/22 12:39	08/15/22	
Lithium	200.8	**169**	ug/L	0.50	0.50	5	08/17/22 12:39	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209130-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:40	08/15/22	
Lithium	200.8	**187**	ug/L	0.50	0.50	5	08/17/22 12:40	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209130-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:42	08/15/22	
Lithium	200.8	**116**	ug/L	0.50	0.50	5	08/17/22 12:42	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209130-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:44	08/15/22	
Lithium	200.8	**50.1**	ug/L	0.50	0.50	5	08/17/22 12:44	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-14-CTRL	**Basis:**	NA
Lab Code:	K2209130-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**5.48**	ug/L	0.10	0.05	5	08/17/22 12:45	08/15/22	
Lithium	200.8	**592**	ug/L	0.50	0.50	5	08/17/22 12:45	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 08:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-14-FB	**Basis:**	NA
Lab Code:	K2209130-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.8 J**	ug/L	2.5	0.5	5	08/17/22 13:15	08/15/22	
Cobalt	200.8	**0.15**	ug/L	0.10	0.05	5	08/17/22 13:15	08/15/22	
Lithium	200.8	**440**	ug/L	0.50	0.50	5	08/17/22 13:15	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 08:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-14-FB-CTRL	**Basis:**	NA
Lab Code:	K2209130-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.5**	ug/L	2.5	0.5	5	08/17/22 13:16	08/15/22	
Cobalt	200.8	**4.31**	ug/L	0.10	0.05	5	08/17/22 13:16	08/15/22	
Lithium	200.8	**589**	ug/L	0.50	0.50	5	08/17/22 13:16	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213474-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 12:22	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 12:22	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213485-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:11	08/15/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 13:11	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:11	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-14-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209130-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213474-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	0.07 J	25.2	25.0	101	70-130
Lithium	170	218	50.0	97	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-14-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209130-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213474-04 Result	Average	RPD	RPD Limit
Cobalt	200.8	0.10	0.05	0.07 J	ND U	NC	NC	20
Lithium	200.8	0.50	0.50	170	168	169	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 8/17/2022 5:05:04 PM

Superset Reference:22-0000636657 rev 00

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213474-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	24.5	25.0	98	85-115
Lithium	200.8	50.2	50.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2209130
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213485-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.1	50.0	100	85-115
Cobalt	200.8	25.6	25.0	103	85-115
Lithium	200.8	52.6	50.0	105	85-115

August 17, 2022 Service Request No:K2209132

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209132.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2209132
Project: Greene County Treatability
Date Received: 08/10/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OGBT-MW-10-FB **Lab ID: K2209132-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	8.0		0.5	2.5	ug/L	200.8
Lithium, Dissolved	160		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-10-FB-CTRL **Lab ID: K2209132-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	319		0.5	2.5	ug/L	200.8
Lithium, Dissolved	320		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-GHT-Dose-A **Lab ID: K2209132-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	83.2		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-GHT-Dose-A-DUP **Lab ID: K2209132-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	80.1		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-GHT-Dose-B **Lab ID: K2209132-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	74.6		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-MMO-pH-9.5-Dose-A **Lab ID: K2209132-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	290		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-MMO-pH-9.5-Dose-B **Lab ID: K2209132-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	243		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-HT-pH-9.5-Dose-A **Lab ID: K2209132-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	142		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-HT-pH-9.5-Dose-B **Lab ID: K2209132-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	65.6		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-HT-MMO-pH-9.5-A **Lab ID: K2209132-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	26.6		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-10-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209132-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	10.1		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OGBT-MW-10-CTRL **Lab ID: K2209132-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	322		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209132-001	GC-OGBT-MW-10-GHT-Dose-A	8/8/2022	1000
K2209132-002	GC-OGBT-MW-10-GHT-Dose-A-DUP	8/8/2022	1005
K2209132-003	GC-OGBT-MW-10-GHT-Dose-B	8/8/2022	1010
K2209132-004	GC-OGBT-MW-10-MMO-pH-9.5-Dose-A	8/8/2022	1015
K2209132-005	GC-OGBT-MW-10-MMO-pH-9.5-Dose-B	8/8/2022	1020
K2209132-006	GC-OGBT-MW-10-HT-pH-9.5-Dose-A	8/8/2022	1025
K2209132-007	GC-OGBT-MW-10-HT-pH-9.5-Dose-B	8/8/2022	1030
K2209132-008	GC-OGBT-MW-10-HT-MMO-pH-9.5-A	8/8/2022	1035
K2209132-009	GC-OGBT-MW-10-HT-MMO-pH-9.5-Dose-B	8/8/2022	1040
K2209132-010	GC-OGBT-MW-10-FB	8/8/2022	1045
K2209132-011	GC-OGBT-MW-10-CTRL	8/8/2022	1050
K2209132-012	GC-GBT-MW-10-FB-CTRL	8/8/2022	1055

Chain of Custody Record & Laboratory Analysis Request

K2209132

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019

Date: 8/10/2022
Project Name: Greene County Treatability
Project Number: 221114-05.01 Task 05
Project Manager: Masa Kanematsu
Phone Number: 503-972-5001 (backup number: 503-798-3456)
Shipment Method: ALS Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Li	Dissolved As, Li													Comments/Preservation
1	GC-OGBT-MW-10-GHT-Dose-A	8/8/2022	8/8/22 10:00	Water	1	X														HNO3 preserved.
2	GC-OGBT-MW-10-GHT-Dose-A-DUP	8/8/2022	8/8/22 10:05	Water	1	X														HNO3 preserved.
3	GC-OGBT-MW-10-GHT-Dose-B	8/8/2022	8/8/22 10:10	Water	1	X														HNO3 preserved.
4	GC-OGBT-MW-10-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 10:15	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-OGBT-MW-10-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 10:20	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-OGBT-MW-10-HT-pH-9.5-Dose-A	8/8/2022	8/8/22 10:25	Water	1	X														HNO3 preserved.
7	GC-OGBT-MW-10-HT-pH-9.5-Dose-B	8/8/2022	8/8/22 10:30	Water	1	X														HNO3 preserved.
8	GC-OGBT-MW-10-HT-MMO-pH-9.5-Dose-	8/8/2022	8/8/22 10:35	Water	1	X														HNO3 preserved. KMnO4 added.
9	GC-OGBT-MW-10-HT-MMO-pH-9.5-Dose-	8/8/2022	8/8/22 10:40	Water	1	X														HNO3 preserved. KMnO4 added.
10	GC-GBT-MW-10-FB	8/8/2022	8/8/22 10:45	Water	1		X													HNO3 preserved.
11	GC-OGBT-MW-10-CTRL	8/8/2022	8/8/22 10:50	Water	1	X														HNO3 preserved.
12	GC-GBT-MW-10-FB-CTRL	8/8/2022	8/8/22 10:55	Water	1		X													HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 8:00AM 8/10/22

Received by: D Morrow ALS Carrier
Signature/Print Name: D Morrow 8-10-22 1140

Relinquished by: ALS Courier
Company:
Signature/Print Name: K Morrow
Date/Time: 8-10-22 1400

Received by: ALS SMO
Signature/Print Name: K Morrow 8/10/22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 09132

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		〃					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:______

1/13/22

Page ____ of ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-OGBT-MW-10-GHT-Dose-A	**Date Collected:**	08/8/22
Lab Code:	K2209132-001	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-GHT-Dose-A-DUP	**Date Collected:**	08/8/22
Lab Code:	K2209132-002	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-GHT-Dose-B	**Date Collected:**	08/8/22
Lab Code:	K2209132-003	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-MMO-pH-9.5-Dose-A	**Date Collected:**	08/8/22
Lab Code:	K2209132-004	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-MMO-pH-9.5-Dose-B	**Date Collected:**	08/8/22
Lab Code:	K2209132-005	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-OGBT-MW-10-HT-pH-9.5-Dose-A	**Date Collected:**	08/8/22
Lab Code:	K2209132-006	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-HT-pH-9.5-Dose-B	**Date Collected:**	08/8/22
Lab Code:	K2209132-007	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-HT-MMO-pH-9.5-A	**Date Collected:**	08/8/22
Lab Code:	K2209132-008	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-HT-MMO-pH-9.5-	**Date Collected:**	08/8/22
Lab Code:	K2209132-009	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Sample Name:	GC-OGBT-MW-10-FB	**Date Collected:**	08/8/22
Lab Code:	K2209132-010	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	KLINN

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-OGBT-MW-10-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209132-011	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name:	GC-GBT-MW-10-FB-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209132-012	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209132-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**83.2**	ug/L	0.50	0.50	5	08/17/22 12:00	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-GHT-Dose-A-DUP	**Basis:**	NA
Lab Code:	K2209132-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**80.1**	ug/L	0.50	0.50	5	08/17/22 12:05	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209132-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**74.6**	ug/L	0.50	0.50	5	08/17/22 12:07	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209132-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**290**	ug/L	0.50	0.50	5	08/17/22 12:08	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209132-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**243**	ug/L	0.50	0.50	5	08/17/22 12:13	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209132-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**142**	ug/L	0.50	0.50	5	08/17/22 12:14	08/12/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209132-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**65.6**	ug/L	0.50	0.50	5	08/17/22 12:16	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-HT-MMO-pH-9.5-A	**Basis:**	NA
Lab Code:	K2209132-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**26.6**	ug/L	0.50	0.50	5	08/17/22 12:17	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209132-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**10.1**	ug/L	0.50	0.50	5	08/17/22 12:19	08/12/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-FB	**Basis:**	NA
Lab Code:	K2209132-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.0**	ug/L	2.5	0.5	5	08/17/22 12:20	08/12/22	
Lithium	200.8	**160**	ug/L	0.50	0.50	5	08/17/22 12:20	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-10-CTRL	**Basis:**	NA
Lab Code:	K2209132-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**322**	ug/L	0.50	0.50	5	08/17/22 13:49	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 10:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-10-FB-CTRL	**Basis:**	NA
Lab Code:	K2209132-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**319**	ug/L	2.5	0.5	5	08/17/22 13:50	08/15/22	
Lithium	200.8	**320**	ug/L	0.50	0.50	5	08/17/22 13:50	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213475-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 11:36	08/12/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 11:36	08/12/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213483-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:36	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:36	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/12/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-10-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209132-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213475-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	49.0	50.0	98	70-130
Lithium	83.2	131	50.0	96	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-10-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209132-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213475-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	83.2	82.9	83.1	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 8/17/2022 5:08:06 PM

Superset Reference:22-0000636658 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209132
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213475-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.9	50.0	98	85-115
Lithium	200.8	49.6	50.0	99	85-115

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-05.01 Task 05
Sample Matrix: Water

Service Request: K2209132
Date Analyzed: 08/17/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213483-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Lithium	200.8	51.8	50.0	104	85-115

August 17, 2022 Service Request No:K2209138

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209138.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability	**Date Received:**	08/10/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Thirteen water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-17-FB **Lab ID: K2209138-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.7		0.5	2.5	ug/L	200.8
Lithium, Dissolved	429		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-17-FB-CTRL **Lab ID: K2209138-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.7		0.5	2.5	ug/L	200.8
Lithium, Dissolved	609		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-GHT-Dose-A **Lab ID: K2209138-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	205		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-GHT-Dose-A-Dup **Lab ID: K2209138-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	193		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-GHT-Dose-B **Lab ID: K2209138-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	143		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-MMO-pH-9.5-Dose-A **Lab ID: K2209138-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	287		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-MMO-pH-9.5-Dose-B **Lab ID: K2209138-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	44.9		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-HT-pH-9.5-Dose-A **Lab ID: K2209138-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	188		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-HT-pH-9.5-Dose-B **Lab ID: K2209138-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	137		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209138-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	54.5		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209138-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	14.3		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OSBT-MW-17-CTRL **Lab ID: K2209138-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	604		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OBT-MB **Lab ID: K2209138-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	1.13		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2209138
Project: Greene County Treatability/221114-05.01- Greene County Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209138-001	GC-OSBT-MW-17-GHT-Dose-A	8/9/2022	1145
K2209138-002	GC-OSBT-MW-17-GHT-Dose-A-Dup	8/9/2022	1150
K2209138-003	GC-OSBT-MW-17-GHT-Dose-B	8/9/2022	1155
K2209138-004	GC-OSBT-MW-17-MMO-pH-9.5-Dose-A	8/9/2022	1200
K2209138-005	GC-OSBT-MW-17-MMO-pH-9.5-Dose-B	8/9/2022	1205
K2209138-006	GC-OSBT-MW-17-HT-pH-9.5-Dose-A	8/9/2022	1210
K2209138-007	GC-OSBT-MW-17-HT-pH-9.5-Dose-B	8/9/2022	1215
K2209138-008	GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-A	8/9/2022	1220
K2209138-009	GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-B	8/9/2022	1225
K2209138-010	GC-OSBT-MW-17-CTRL	8/9/2022	1230
K2209138-011	GC-SBT-MW-17-FB	8/9/2022	0900
K2209138-012	GC-SBT-MW-17-FB-CTRL	8/9/2022	0905
K2209138-013	GC-OBT-MB	8/9/2022	1235

K2209138

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (Li)	Dissolved Metals (Li, As)	Dissolved Metals (As, Co, Li)												Comments/Preservation
1	GC-OSBT-MW-17-GHT-Dose-A	8/9/2022	8/9/22 11:45	Water	1	X														HNO3 preserved.
2	GC-OSBT-MW-17-GHT-Dose-A-DUP	8/9/2022	8/9/22 11:50	Water	1	X														HNO3 preserved.
3	GC-OSBT-MW-17-GHT-Dose-B	8/9/2022	8/9/22 11:55	Water	1	X														HNO3 preserved.
4	GC-OSBT-MW-17-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 12:00	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-OSBT-MW-17-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 12:05	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-OSBT-MW-17-HT-pH-9.5-Dose-A	8/9/2022	8/9/22 12:10	Water	1	X														HNO3 preserved.
7	GC-OSBT-MW-17-HT-pH-9.5-Dose-B	8/9/2022	8/9/22 12:15	Water	1	X														HNO3 preserved.
8	GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 12:20	Water	1	X														HNO3 preserved. KMnO4 added.
9	GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 12:25	Water	1	X														HNO3 preserved. KMnO4 added.
10	GC-OSBT-MW-17-CTRL	8/9/2022	8/9/22 12:30	Water	1	X														HNO3 preserved.
11	GC-SBT-MW-17-FB	8/9/2022	8/9/22 9:00	Water	1		X													HNO3 preserved.
12	GC-SBT-MW-17-FB-CTRL	8/9/2022	8/9/22 9:05	Water	1		X													HNO3 preserved.
13	GC-OBT-MB	8/9/2022	8/9/22 12:35	Water	1			X												HNO3 preserved.
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: ALS Courier	
Signature/Print Name:	Date/Time: 8:00 AM 8/10/22	Signature/Print Name: ~~A~~ 8-10-22 1140	
Relinquished by: ALS Courier	Company:	Received by: ALS SMO	
Signature/Print Name: KMorrow	Date/Time: 8/10/22 1400	Signature/Print Name: KMorrow ~~8-11~~ KM 8-10-22 1400	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request **K22** 09138

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

1/13/22 ***Page*** ____ ***of*** ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05		

Sample Name:	GC-OSBT-MW-17-GHT-Dose-A	**Date Collected:**	08/9/22
Lab Code:	K2209138-001	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-17-GHT-Dose-A-Dup	**Date Collected:**	08/9/22
Lab Code:	K2209138-002	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-17-GHT-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209138-003	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-17-MMO-pH-9.5-Dose-A	**Date Collected:**	08/9/22
Lab Code:	K2209138-004	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OSBT-MW-17-MMO-pH-9.5-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209138-005	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2209138
Project: Greene County Treatability/221114-05.01- Greene County Task 05

Sample Name: GC-OSBT-MW-17-HT-pH-9.5-Dose-A
Date Collected: 08/9/22
Lab Code: K2209138-006
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-17-HT-pH-9.5-Dose-B
Date Collected: 08/9/22
Lab Code: K2209138-007
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-17-HT-MMO-pH-9.5-
Date Collected: 08/9/22
Lab Code: K2209138-008
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-17-HT-MMO-pH-9.5-
Date Collected: 08/9/22
Lab Code: K2209138-009
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-17-CTRL
Date Collected: 08/9/22
Lab Code: K2209138-010
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2209138
Project: Greene County Treatability/221114-05.01- Greene County Task 05

Sample Name: GC-SBT-MW-17-FB
Date Collected: 08/9/22
Lab Code: K2209138-011
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-SBT-MW-17-FB-CTRL
Date Collected: 08/9/22
Lab Code: K2209138-012
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OBT-MB
Date Collected: 08/9/22
Lab Code: K2209138-013
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 11:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209138-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**205**	ug/L	0.50	0.50	5	08/17/22 15:18	08/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 11:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-GHT-Dose-A-Dup	**Basis:**	NA
Lab Code:	K2209138-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**193**	ug/L	0.50	0.50	5	08/17/22 15:23	08/16/22	

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-05.01- Greene County Task 05
Sample Matrix: Water
Service Request: K2209138
Date Collected: 08/09/22 11:55
Date Received: 08/10/22 14:00

Sample Name: GC-OSBT-MW-17-GHT-Dose-B
Lab Code: K2209138-003
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**143**	ug/L	0.50	0.50	5	08/17/22 15:24	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209138-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**287**	ug/L	0.50	0.50	5	08/17/22 15:29	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209138-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**44.9**	ug/L	0.50	0.50	5	08/17/22 15:31	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209138-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**188**	ug/L	0.50	0.50	5	08/17/22 15:32	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209138-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**137**	ug/L	0.50	0.50	5	08/17/22 15:37	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209138-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**54.5**	ug/L	0.50	0.50	5	08/17/22 15:38	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209138-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**14.3**	ug/L	0.50	0.50	5	08/17/22 15:40	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-17-CTRL	**Basis:**	NA
Lab Code:	K2209138-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**604**	ug/L	0.50	0.50	5	08/17/22 15:41	08/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 09:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-17-FB	**Basis:**	NA
Lab Code:	K2209138-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.7**	ug/L	2.5	0.5	5	08/17/22 15:43	08/16/22	
Lithium	200.8	**429**	ug/L	0.50	0.50	5	08/17/22 15:43	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 09:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-17-FB-CTRL	**Basis:**	NA
Lab Code:	K2209138-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.7**	ug/L	2.5	0.5	5	08/17/22 15:45	08/16/22	
Lithium	200.8	**609**	ug/L	0.50	0.50	5	08/17/22 15:45	08/16/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22 12:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OBT-MB	**Basis:**	NA
Lab Code:	K2209138-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	08/17/22 15:46	08/16/22	
Cobalt	200.8	ND	U	ug/L	0.10	0.05	5	08/17/22 15:46	08/16/22	
Lithium	200.8	**1.13**		ug/L	0.50	0.50	5	08/17/22 15:46	08/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213482-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 15:12	08/16/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 15:12	08/16/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 15:12	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-17-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209138-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213482-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.5 J	49.6	50.0	96	70-130
Cobalt	ND U	25.1	25.0	100	70-130
Lithium	205	253	50.0	96 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/16/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-17-GHT-Dose-B	**Units:**	ug/L
Lab Code:	K2209138-003	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213482-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.4 J	47.7	50.0	93	70-130
Cobalt	ND U	23.9	25.0	96	70-130
Lithium	143	194	50.0	101	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-17-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209138-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213482-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	1.5 J	1.3 J	1.4	14	20
Cobalt	200.8	0.10	0.05	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	205	202	204	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-17-GHT-Dose-B	**Units:**	ug/L
Lab Code:	K2209138-003	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213482-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	1.4 J	1.5 J	1.5	7	20
Cobalt	200.8	0.10	0.05	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	143	145	144	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2209138
Project:	Greene County Treatability/221114-05.01- Greene County Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213482-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.6	50.0	99	85-115
Cobalt	200.8	25.5	25.0	102	85-115
Lithium	200.8	52.6	50.0	105	85-115

August 17, 2022 Service Request No:K2209205

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209205.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2209205
Project: Greene County Treatability
Date Received: 08/10/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-17-FB **Lab ID: K2209205-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.2		0.5	2.5	ug/L	200.8
Lithium, Dissolved	539		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-17-FB-CTRL **Lab ID: K2209205-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	291		0.5	2.5	ug/L	200.8
Lithium, Dissolved	698		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-GHT-Dose- A **Lab ID: K2209205-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	189		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-GHT-Dose- A-DUP **Lab ID: K2209205-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	185		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-GHT-Dose-B **Lab ID: K2209205-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	149		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-MMO-pH-9.5-Dose-A **Lab ID: K2209205-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	257		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-MMO-pH-9.5-Dose-B **Lab ID: K2209205-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	57.1		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-HT-pH-9.5-Dose-A **Lab ID: K2209205-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	272		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-HT-pH-9.5-Dose-B **Lab ID: K2209205-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	146		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209205-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	23.9		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209205-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	71.1		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OGBT-MW-17-CTRL **Lab ID: K2209205-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	706		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2209205

Project: Greene County Treatability/221114-05.01-Greene County Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209205-001	GC-OGBT-MW-17-GHT-Dose- A	8/9/2022	1055
K2209205-002	GC-OGBT-MW-17-GHT-Dose- A-DUP	8/9/2022	1100
K2209205-003	GC-OGBT-MW-17-GHT-Dose-B	8/9/2022	1105
K2209205-004	GC-OGBT-MW-17-MMO-pH-9.5-Dose-A	8/9/2022	1110
K2209205-005	GC-OGBT-MW-17-MMO-pH-9.5-Dose-B	8/9/2022	1115
K2209205-006	GC-OGBT-MW-17-HT-pH-9.5-Dose-A	8/9/2022	1120
K2209205-007	GC-OGBT-MW-17-HT-pH-9.5-Dose-B	8/9/2022	1125
K2209205-008	GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-A	8/9/2022	1130
K2209205-009	GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-B	8/9/2022	1135
K2209205-010	GC-OGBT-MW-17-CTRL	8/9/2022	1140
K2209205-011	GC-GBT-MW-17-FB	8/9/2022	0850
K2209205-012	GC-GBT-MW-17-FB-CTRL	8/9/2022	0855

K2209205

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (Li)	Dissolved Metals (As, Li)													
1	GC-OGBT-MW-17-GHT-Dose-A	8/9/2022	8/9/22 10:55	Water	1	X														HNO3 preserved.
2	GC-OGBT-MW-17-GHT-Dose-A-DUP	8/9/2022	8/9/22 11:00	Water	1	X														HNO3 preserved.
3	GC-OGBT-MW-17-GHT-Dose-B	8/9/2022	8/9/22 11:05	Water	1	X														HNO3 preserved.
4	GC-OGBT-MW-17-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 11:10	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-OGBT-MW-17-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 11:15	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-OGBT-MW-17-HT-pH-9.5-Dose-A	8/9/2022	8/9/22 11:20	Water	1	X														HNO3 preserved.
7	GC-OGBT-MW-17-HT-pH-9.5-Dose-B	8/9/2022	8/9/22 11:25	Water	1	X														HNO3 preserved.
8	GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 11:30	Water	1	X														HNO3 preserved. KMnO4 added.
9	GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 11:35	Water	1	X														HNO3 preserved. KMnO4 added.
10	GC-OGBT-MW-17-CTRL	8/9/2022	8/9/22 11:40	Water	1	X														HNO3 preserved.
11	GC-GBT-MW-17-FB	8/9/2022	8/9/22 8:50	Water	1		X													HNO3 preserved.
12	GC-GBT-MW-17-FB-CTRL	8/9/2022	8/9/22 8:55	Water	1		X													HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL ≤ 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	8:00 AM 8/10/22

Received by:
ALS Courier
Signature/Print Name:
KMorrow 8/10/22 1140

Relinquished by:	Company:
ALS Courier	
Signature/Print Name:	Date/Time:
KMorrow	8/10/22 1400

Received by:
ALS SMO
Signature/Print Name:
KMorrow 8/10/22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM________

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 09205

Received: 8/10/22 Opened: 8/10/22 By: [illegible] Unloaded: 8/10/22 By: [illegible]

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

:________

1/13/22 *Page____ of____*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05		

Sample Name:	GC-OGBT-MW-17-GHT-Dose- A	**Date Collected:**	08/9/22
Lab Code:	K2209205-001	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OGBT-MW-17-GHT-Dose- A-DUP	**Date Collected:**	08/9/22
Lab Code:	K2209205-002	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OGBT-MW-17-GHT-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209205-003	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OGBT-MW-17-MMO-pH-9.5-Dose-A	**Date Collected:**	08/9/22
Lab Code:	K2209205-004	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-OGBT-MW-17-MMO-pH-9.5-Dose-B	**Date Collected:**	08/9/22
Lab Code:	K2209205-005	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Client: Anchor QEA, LLC **Service Request:** K2209205
Project: Greene County Treatability/221114-05.01-Greene County Task 05

Sample Name: GC-OGBT-MW-17-HT-pH-9.5-Dose-A **Date Collected:** 08/9/22
Lab Code: K2209205-006 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-17-HT-pH-9.5-Dose-B **Date Collected:** 08/9/22
Lab Code: K2209205-007 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-17-HT-MMO-pH-9.5- **Date Collected:** 08/9/22
Lab Code: K2209205-008 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-17-HT-MMO-pH-9.5- **Date Collected:** 08/9/22
Lab Code: K2209205-009 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-17-CTRL **Date Collected:** 08/9/22
Lab Code: K2209205-010 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05		

Sample Name:	GC-GBT-MW-17-FB	**Date Collected:**	08/9/22
Lab Code:	K2209205-011	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name:	GC-GBT-MW-17-FB-CTRL	**Date Collected:**	08/9/22
Lab Code:	K2209205-012	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 10:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-GHT-Dose- A	**Basis:**	NA
Lab Code:	K2209205-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**189**	ug/L	0.50	0.50	5	08/17/22 13:52	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-GHT-Dose- A-DUP	**Basis:**	NA
Lab Code:	K2209205-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**185**	ug/L	0.50	0.50	5	08/17/22 13:56	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209205-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**149**	ug/L	0.50	0.50	5	08/17/22 13:58	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209205-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**257**	ug/L	0.50	0.50	5	08/17/22 13:59	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209205-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**57.1**	ug/L	0.50	0.50	5	08/17/22 14:04	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209205-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**272**	ug/L	0.50	0.50	5	08/17/22 14:06	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209205-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**146**	ug/L	0.50	0.50	5	08/17/22 14:07	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209205-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**23.9**	ug/L	0.50	0.50	5	08/17/22 14:09	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209205-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**71.1**	ug/L	0.50	0.50	5	08/17/22 14:10	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 11:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-17-CTRL	**Basis:**	NA
Lab Code:	K2209205-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**706**	ug/L	0.50	0.50	5	08/17/22 14:12	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 08:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-17-FB	**Basis:**	NA
Lab Code:	K2209205-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.2**	ug/L	2.5	0.5	5	08/17/22 14:13	08/15/22	
Lithium	200.8	**539**	ug/L	0.50	0.50	5	08/17/22 14:13	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22 08:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-17-FB-CTRL	**Basis:**	NA
Lab Code:	K2209205-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**291**	ug/L	2.5	0.5	5	08/17/22 14:15	08/15/22	
Lithium	200.8	**698**	ug/L	0.50	0.50	5	08/17/22 14:15	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213483-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:36	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:36	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-17-GHT-Dose- A	**Units:**	ug/L
Lab Code:	K2209205-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213483-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	9.3	59.8	50.0	101	70-130
Lithium	189	247	50.0	117	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-17-GHT-Dose- A	**Units:**	ug/L
Lab Code:	K2209205-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213483-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	9.3	9.3	9.3	<1	20
Lithium	200.8	0.50	0.50	189	193	191	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2209205
Project:	Greene County Treatability/221114-05.01-Greene County Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213483-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Lithium	200.8	51.8	50.0	104	85-115

August 17, 2022

Service Request No:K2209223

Anchor QEA, LLC
6720 SW Macadam Ave Ste125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Accounts Payable,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209223.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC

Project: Greene County Treatability

Sample Matrix: Water

Service Request: K2209223

Date Received: 08/10/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-SBT-MW-5-FB **Lab ID: K2209223-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.9		0.5	2.5	ug/L	200.8
Lithium, Dissolved	18.2		0.50	0.50	ug/L	200.8

CLIENT ID: GC-SBT-MW-5-FB-CTRL **Lab ID: K2209223-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.3		0.5	2.5	ug/L	200.8
Lithium, Dissolved	74.8		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-GHT-Dose-A **Lab ID: K2209223-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	24.1		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-GHT-Dose-A-DUP **Lab ID: K2209223-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	17.4		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-GHT-Dose-B **Lab ID: K2209223-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	11.3		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-MMO-pH-9.5-Dose-A **Lab ID: K2209223-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	43.2		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-MMO-pH-9.5-Dose-B **Lab ID: K2209223-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	33.8		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-HT-pH-9.5-Dose-A **Lab ID: K2209223-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	14.4		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-HT-pH-9.5-Dose-B **Lab ID: K2209223-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	23.3		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209223-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	6.84		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209223-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	1.61		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OSBT-MW-5-CTRL **Lab ID: K2209223-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	73.0		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2209223
Project: Greene County Treatability/221114-05.01 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209223-001	GC-OSBT-MW-5-GHT-Dose-A	8/8/2022	0900
K2209223-002	GC-OSBT-MW-5-GHT-Dose-A-DUP	8/8/2022	0905
K2209223-003	GC-OSBT-MW-5-GHT-Dose-B	8/8/2022	0910
K2209223-004	GC-OSBT-MW-5-MMO-pH-9.5-Dose-A	8/8/2022	0915
K2209223-005	GC-OSBT-MW-5-MMO-pH-9.5-Dose-B	8/8/2022	0920
K2209223-006	GC-OSBT-MW-5-HT-pH-9.5-Dose-A	8/8/2022	0925
K2209223-007	GC-OSBT-MW-5-HT-pH-9.5-Dose-B	8/8/2022	0930
K2209223-008	GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-A	8/8/2022	0935
K2209223-009	GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-B	8/8/2022	0940
K2209223-010	GC-SBT-MW-5-FB	8/8/2022	0945
K2209223-011	GC-OSBT-MW-5-CTRL	8/8/2022	0950
K2209223-012	GC-SBT-MW-5-FB-CTRL	8/8/2022	0955

K2209223

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Li	Dissolved As, Li													
1	GC-OSBT-MW-5-GHT-Dose-A	8/8/2022	8/8/22 9:00	Water	1	X														HNO3 preserved.
2	GC-OSBT-MW-5-GHT-Dose-A-DUP	8/8/2022	8/8/22 9:05	Water	1	X														HNO3 preserved.
3	GC-OSBT-MW-5-GHT-Dose-B	8/8/2022	8/8/22 9:10	Water	1	X														HNO3 preserved.
4	GC-OSBT-MW-5-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 9:15	Water	1	X														HNO3 preserved. KMnO4 added.
5	GC-OSBT-MW-5-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 9:20	Water	1	X														HNO3 preserved. KMnO4 added.
6	GC-OSBT-MW-5-HT-pH-9.5-Dose-A	8/8/2022	8/8/22 9:25	Water	1	X														HNO3 preserved.
7	GC-OSBT-MW-5-HT-pH-9.5-Dose-B	8/8/2022	8/8/22 9:30	Water	1	X														HNO3 preserved.
8	GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 9:35	Water	1	X														HNO3 preserved. KMnO4 added.
9	GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 9:40	Water	1	X														HNO3 preserved. KMnO4 added.
10	GC-SBT-MW-5-FB	8/8/2022	8/8/22 9:45	Water	1		X													HNO3 preserved.
11	GC-OSBT-MW-5-CTRL	8/8/2022	8/8/22 9:50	Water	1	X														HNO3 preserved.
12	GC-SBT-MW-5-FB-CTRL	8/8/2022	8/8/22 9:55	Water	1		X													HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:

Received by:
ALS Courier
Signature/Print Name:
KMonroe 8/10/22 1140

Relinquished by:	Company:
ALS Courier	
Signature/Print Name:	Date/Time:
KMonroe	8/10/22 1400

Received by:
ALS SMO
Signature/Print Name:
8/10/22 1400 KMonroe

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 09223

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

1/13/22 *Page ___ of ___*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2209223
Project: Greene County Treatability/221114-05.01 Task 05

Sample Name: GC-OSBT-MW-5-GHT-Dose-A
Date Collected: 08/8/22
Lab Code: K2209223-001
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-GHT-Dose-A-DUP
Date Collected: 08/8/22
Lab Code: K2209223-002
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-GHT-Dose-B
Date Collected: 08/8/22
Lab Code: K2209223-003
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-MMO-pH-9.5-Dose-A
Date Collected: 08/8/22
Lab Code: K2209223-004
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-MMO-pH-9.5-Dose-B
Date Collected: 08/8/22
Lab Code: K2209223-005
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Client: Anchor QEA, LLC **Service Request:** K2209223
Project: Greene County Treatability/221114-05.01 Task 05

Sample Name: GC-OSBT-MW-5-HT-pH-9.5-Dose-A **Date Collected:** 08/8/22
Lab Code: K2209223-006 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-HT-pH-9.5-Dose-B **Date Collected:** 08/8/22
Lab Code: K2209223-007 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose **Date Collected:** 08/8/22
Lab Code: K2209223-008 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose **Date Collected:** 08/8/22
Lab Code: K2209223-009 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-SBT-MW-5-FB **Date Collected:** 08/8/22
Lab Code: K2209223-010 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-OSBT-MW-5-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209223-011	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name:	GC-SBT-MW-5-FB-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209223-012	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209223-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**24.1**	ug/L	0.50	0.50	5	08/17/22 14:29	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-GHT-Dose-A-DUP	**Basis:**	NA
Lab Code:	K2209223-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**17.4**	ug/L	0.50	0.50	5	08/17/22 14:33	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209223-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**11.3**	ug/L	0.50	0.50	5	08/17/22 14:35	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209223-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**43.2**	ug/L	0.50	0.50	5	08/17/22 14:36	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209223-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**33.8**	ug/L	0.50	0.50	5	08/17/22 14:41	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209223-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**14.4**	ug/L	0.50	0.50	5	08/17/22 14:43	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209223-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**23.3**	ug/L	0.50	0.50	5	08/17/22 14:44	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209223-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**6.84**	ug/L	0.50	0.50	5	08/17/22 14:46	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209223-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**1.61**	ug/L	0.50	0.50	5	08/17/22 14:47	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-5-FB	**Basis:**	NA
Lab Code:	K2209223-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.9**	ug/L	2.5	0.5	5	08/17/22 14:49	08/15/22	
Lithium	200.8	**18.2**	ug/L	0.50	0.50	5	08/17/22 14:49	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OSBT-MW-5-CTRL	**Basis:**	NA
Lab Code:	K2209223-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**73.0**	ug/L	0.50	0.50	5	08/17/22 14:16	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 09:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-5-FB-CTRL	**Basis:**	NA
Lab Code:	K2209223-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.3**	ug/L	2.5	0.5	5	08/17/22 14:18	08/15/22	
Lithium	200.8	**74.8**	ug/L	0.50	0.50	5	08/17/22 14:18	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213477-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 14:26	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 14:26	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213483-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:36	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:36	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-5-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209223-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213477-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.9 J	48.6	50.0	95	70-130
Lithium	24.1	74.2	50.0	100	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OSBT-MW-5-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209223-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213477-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	0.9 J	0.7 J	0.8	25 #	20
Lithium	200.8	0.50	0.50	24.1	23.5	23.8	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2209223
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213477-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.5	50.0	97	85-115
Lithium	200.8	50.8	50.0	102	85-115

Client: Anchor QEA, LLC
Service Request: K2209223
Project: Greene County Treatability/221114-05.01 Task 05
Date Analyzed: 08/17/22
Sample Matrix: Water

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213483-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Lithium	200.8	51.8	50.0	104	85-115

August 17, 2022 Service Request No:K2209225

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209225.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2209225
Date Received: 08/10/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-5-FB **Lab ID: K2209225-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	11.4		0.5	2.5	ug/L	200.8
Lithium, Dissolved	27.2		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-5-FB-CTRL **Lab ID: K2209225-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	150		0.5	2.5	ug/L	200.8
Lithium, Dissolved	102		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-GHT-Dose-A **Lab ID: K2209225-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	18.8		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-GHT-Dose-A-DUP **Lab ID: K2209225-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	18.7		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-GHT-Dose-B **Lab ID: K2209225-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	14.5		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-MMO-pH-9.5-Dose-A **Lab ID: K2209225-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	88.4		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-MMO-pH-9.5-Dose-B **Lab ID: K2209225-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	81.1		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-HT-pH-9.5-Dose-A **Lab ID: K2209225-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	59.6		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-HT-pH-9.5-Dose-B **Lab ID: K2209225-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	54.1		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209225-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	6.54		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209225-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	1.87		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OGBT-MW-5-CTRL **Lab ID: K2209225-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	102		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2209225
Project: Greene County Treatability/221114-05.01 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209225-001	GC-OGBT-MW-5-GHT-Dose-A	8/8/2022	0800
K2209225-002	GC-OGBT-MW-5-GHT-Dose-A-DUP	8/8/2022	0805
K2209225-003	GC-OGBT-MW-5-GHT-Dose-B	8/8/2022	0810
K2209225-004	GC-OGBT-MW-5-MMO-pH-9.5-Dose-A	8/8/2022	0815
K2209225-005	GC-OGBT-MW-5-MMO-pH-9.5-Dose-B	8/8/2022	0820
K2209225-006	GC-OGBT-MW-5-HT-pH-9.5-Dose-A	8/8/2022	0825
K2209225-007	GC-OGBT-MW-5-HT-pH-9.5-Dose-B	8/8/2022	0830
K2209225-008	GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-A	8/8/2022	0835
K2209225-009	GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-B	8/8/2022	0840
K2209225-010	GC-GBT-MW-5-FB	8/8/2022	0845
K2209225-011	GC-OGBT-MW-5-CTRL	8/8/2022	0850
K2209225-012	GC-GBT-MW-5-FB-CTRL	8/8/2022	0855

K2209225

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Li	Dissolved As, Li	Comments/Preservation
1	GC-OGBT-MW-5-GHT-Dose-A	8/8/2022	8/8/22 8:00	Water	1	X		HNO3 preserved.
2	GC-OGBT-MW-5-GHT-Dose-A-DUP	8/8/2022	8/8/22 8:05	Water	1	X		HNO3 preserved.
3	GC-OGBT-MW-5-GHT-Dose-B	8/8/2022	8/8/22 8:10	Water	1	X		HNO3 preserved.
4	GC-OGBT-MW-5-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 8:15	Water	1	X		HNO3 preserved. KMnO4 added.
5	GC-OGBT-MW-5-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 8:20	Water	1	X		HNO3 preserved. KMnO4 added.
6	GC-OGBT-MW-5-HT-pH-9.5-Dose-A	8/8/2022	8/8/22 8:25	Water	1	X		HNO3 preserved.
7	GC-OGBT-MW-5-HT-pH-9.5-Dose-B	8/8/2022	8/8/22 8:30	Water	1	X		HNO3 preserved.
8	GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-A	8/8/2022	8/8/22 8:35	Water	1	X		HNO3 preserved. KMnO4 added.
9	GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-B	8/8/2022	8/8/22 8:40	Water	1	X		HNO3 preserved. KMnO4 added.
10	GC-GBT-MW-5-FB	8/8/2022	8/8/22 8:45	Water	1		X	HNO3 preserved.
11	GC-OGBT-MW-5-CTRL	8/8/2022	8/8/22 8:50	Water	1	X		HNO3 preserved.
12	GC-GBT-MW-5-FB-CTRL	8/8/2022	8/8/22 8:55	Water	1		X	HNO3 preserved.
13								
14								
15								

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 8:00 AM 8/10/22

Received by: ALS Courier
Signature/Print Name: KMorrow 8/10/22 1140

Relinquished by: ALS Courier	Company:
Signature/Print Name: KMorrow	Date/Time: 8/10/22 1400

Received by: ALS Courier
Signature/Print Name: KMorrow 8/10/22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 09225

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where?
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:

1/13/22

Page ____ **of** ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2209225
Project: Greene County Treatability/221114-05.01 Task 05

Sample Name: GC-OGBT-MW-5-GHT-Dose-A **Date Collected:** 08/8/22
Lab Code: K2209225-001 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-GHT-Dose-A-DUP **Date Collected:** 08/8/22
Lab Code: K2209225-002 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-GHT-Dose-B **Date Collected:** 08/8/22
Lab Code: K2209225-003 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-MMO-pH-9.5-Dose-A **Date Collected:** 08/8/22
Lab Code: K2209225-004 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-MMO-pH-9.5-Dose-B **Date Collected:** 08/8/22
Lab Code: K2209225-005 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Client: Anchor QEA, LLC **Service Request:** K2209225
Project: Greene County Treatability/221114-05.01 Task 05

Sample Name: GC-OGBT-MW-5-HT-pH-9.5-Dose-A **Date Collected:** 08/8/22
Lab Code: K2209225-006 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-HT-pH-9.5-Dose-B **Date Collected:** 08/8/22
Lab Code: K2209225-007 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose **Date Collected:** 08/8/22
Lab Code: K2209225-008 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose **Date Collected:** 08/8/22
Lab Code: K2209225-009 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-GBT-MW-5-FB **Date Collected:** 08/8/22
Lab Code: K2209225-010 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2209225
Project: Greene County Treatability/221114-05.01 Task 05

Sample Name: GC-OGBT-MW-5-CTRL
Date Collected: 08/8/22
Lab Code: K2209225-011
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-GBT-MW-5-FB-CTRL
Date Collected: 08/8/22
Lab Code: K2209225-012
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209225-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**18.8**	ug/L	0.50	0.50	5	08/17/22 14:50	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-GHT-Dose-A-DUP	**Basis:**	NA
Lab Code:	K2209225-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**18.7**	ug/L	0.50	0.50	5	08/17/22 14:55	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209225-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**14.5**	ug/L	0.50	0.50	5	08/17/22 15:00	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209225-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**88.4**	ug/L	0.50	0.50	5	08/17/22 15:01	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209225-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**81.1**	ug/L	0.50	0.50	5	08/17/22 15:03	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209225-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**59.6**	ug/L	0.50	0.50	5	08/17/22 15:04	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209225-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**54.1**	ug/L	0.50	0.50	5	08/17/22 15:06	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209225-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**6.54**	ug/L	0.50	0.50	5	08/17/22 15:07	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209225-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**1.87**	ug/L	0.50	0.50	5	08/17/22 15:09	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-5-FB	**Basis:**	NA
Lab Code:	K2209225-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**11.4**	ug/L	2.5	0.5	5	08/17/22 15:10	08/15/22	
Lithium	200.8	**27.2**	ug/L	0.50	0.50	5	08/17/22 15:10	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-5-CTRL	**Basis:**	NA
Lab Code:	K2209225-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	**102**	ug/L	0.50	0.50	5	08/17/22 14:23	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 08:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-5-FB-CTRL	**Basis:**	NA
Lab Code:	K2209225-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**150**	ug/L	2.5	0.5	5	08/17/22 14:24	08/15/22	
Lithium	200.8	**102**	ug/L	0.50	0.50	5	08/17/22 14:24	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213477-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 14:26	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 14:26	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213483-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:36	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:36	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-5-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209225-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213477-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	49.7	50.0	99	70-130
Lithium	18.8	71.2	50.0	105	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary

Dissolved Metals

Sample Name:	GC-OGBT-MW-5-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209225-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213477-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	0.5 J	NC	NC	20
Lithium	200.8	0.50	0.50	18.8	17.8	18.3	5	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 8/17/2022 5:11:16 PM

Superset Reference:22-0000636665 rev 00

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213477-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.5	50.0	97	85-115
Lithium	200.8	50.8	50.0	102	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2209225
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213483-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.8	50.0	96	85-115
Lithium	200.8	51.8	50.0	104	85-115

August 17, 2022 Service Request No:K2209226

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209226.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2209226
Date Received: 08/10/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-1-FB **Lab ID: K2209226-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.24		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-FB-DUP **Lab ID: K2209226-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.6	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.67		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-1-FB-CTRL **Lab ID: K2209226-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	8.0		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	295		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FB **Lab ID: K2209226-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.39		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FB-DUP **Lab ID: K2209226-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.37		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-1-FB-CTRL **Lab ID: K2209226-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.4		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	296		0.05	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209226-001	GC-GBT-MW-1-FB	8/8/2022	1200
K2209226-002	GC-GBT-MW-1-FB-DUP	8/8/2022	1205
K2209226-003	GC-GBT-MW-1-FB-CTRL	8/8/2022	1210
K2209226-004	GC-SBT-MW-1-FB	8/8/2022	1215
K2209226-005	GC-SBT-MW-1-FB-DUP	8/8/2022	1220
K2209226-006	GC-SBT-MW-1-FB-CTRL	8/8/2022	1225

K2209224

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved As, Co														
1	GC-GBT-MW-1-FB	8/8/2022	8/8/22 12:00	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-1-FB-DUP	8/8/2022	8/8/22 12:05	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-1-FB-CTRL	8/8/2022	8/8/22 12:10	Water	1	X														HNO3 preserved.
4	GC-SBT-MW-1-FB	8/8/2022	8/8/22 12:15	Water	1	X														HNO3 preserved.
5	GC-SBT-MW-1-FB-DUP	8/8/2022	8/8/22 12:20	Water	1	X														HNO3 preserved.
6	GC-SBT-MW-1-FB-CTRL	8/8/2022	8/8/22 12:25	Water	1	X														HNO3 preserved.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	8/10/22

Received by:
ALS Courier
Signature/Print Name:
KMorrow 8/10/22 1140

Relinquished by:	Company:
ALS Courier	
Signature/Print Name:	Date/Time:
KMorrow	8/10/22 1400

Received by:
ALS SMO
Signature/Print Name:
KMorrow 8/10/22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA

Service Request K22 09226

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where?

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		〃					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:

1/13/22

Page ____ of ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-GBT-MW-1-FB	**Date Collected:**	08/8/22
Lab Code:	K2209226-001	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-GBT-MW-1-FB-DUP	**Date Collected:**	08/8/22
Lab Code:	K2209226-002	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-GBT-MW-1-FB-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209226-003	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-SBT-MW-1-FB	**Date Collected:**	08/8/22
Lab Code:	K2209226-004	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name:	GC-SBT-MW-1-FB-DUP	**Date Collected:**	08/8/22
Lab Code:	K2209226-005	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05		

Sample Name:	GC-SBT-MW-1-FB-CTRL	**Date Collected:**	08/8/22
Lab Code:	K2209226-006	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 12:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-1-FB	**Basis:**	NA
Lab Code:	K2209226-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7 J**	ug/L	2.5	0.5	5	08/17/22 15:48	08/16/22	
Cobalt	200.8	**0.24**	ug/L	0.10	0.05	5	08/17/22 15:48	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 12:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-1-FB-DUP	**Basis:**	NA
Lab Code:	K2209226-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.6 J**	ug/L	2.5	0.5	5	08/17/22 15:49	08/16/22	
Cobalt	200.8	**0.67**	ug/L	0.10	0.05	5	08/17/22 15:49	08/16/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 12:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-1-FB-CTRL	**Basis:**	NA
Lab Code:	K2209226-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.0**	ug/L	2.5	0.5	5	08/17/22 15:51	08/16/22	
Cobalt	200.8	**295**	ug/L	0.10	0.05	5	08/17/22 15:51	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 12:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-1-FB	**Basis:**	NA
Lab Code:	K2209226-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8 J**	ug/L	2.5	0.5	5	08/17/22 15:55	08/16/22	
Cobalt	200.8	**0.39**	ug/L	0.10	0.05	5	08/17/22 15:55	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 12:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-1-FB-DUP	**Basis:**	NA
Lab Code:	K2209226-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8 J**	ug/L	2.5	0.5	5	08/17/22 15:57	08/16/22	
Cobalt	200.8	**0.37**	ug/L	0.10	0.05	5	08/17/22 15:57	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	08/08/22 12:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-1-FB-CTRL	**Basis:**	NA
Lab Code:	K2209226-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.4**	ug/L	2.5	0.5	5	08/17/22 15:59	08/16/22	
Cobalt	200.8	**296**	ug/L	0.10	0.05	5	08/17/22 15:59	08/16/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213482-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 15:12	08/16/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 15:12	08/16/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209226
Project:	Greene County Treatability/221114-05.01 Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213482-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.6	50.0	99	85-115
Cobalt	200.8	25.5	25.0	102	85-115

August 17, 2022 Service Request No:K2209227

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209227.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability	**Date Received:**	08/10/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-14--FB **Lab ID: K2209227-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.9	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.15		0.05	0.10	ug/L	200.8
Lithium, Dissolved	439		0.50	0.50	ug/L	200.8

CLIENT ID: GC-GBT-MW-14--FB-CTRL **Lab ID: K2209227-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.0		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	18.2		0.05	0.10	ug/L	200.8
Lithium, Dissolved	577		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14--CTRL **Lab ID: K2209227-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	19.8		0.05	0.10	ug/L	200.8
Lithium, Dissolved	615		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-GHT-Dose-A **Lab ID: K2209227-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	150		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-GHT-Dose-A-DUP **Lab ID: K2209227-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	154		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-GHT-Dose-B **Lab ID: K2209227-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	111		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-MMO-pH-9.5-Dose-A **Lab ID: K2209227-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	509		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-MMO-pH-9.5-Dose-B **Lab ID: K2209227-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	159		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-HT-pH-9.5-Dose-A **Lab ID: K2209227-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	195		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-HT-pH-9.5-Dose-B **Lab ID: K2209227-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	216		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-A **Lab ID: K2209227-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	86.9		0.50	0.50	ug/L	200.8

CLIENT ID: GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-B **Lab ID: K2209227-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	54.9		0.50	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2209227
Project: Greene County Treatability/221114-05.01 Greene County Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209227-001	GC-OGBT-MW-14-GHT-Dose-A	8/9/2022	0910
K2209227-002	GC-OGBT-MW-14-GHT-Dose-A-DUP	8/9/2022	0915
K2209227-003	GC-OGBT-MW-14-GHT-Dose-B	8/9/2022	0920
K2209227-004	GC-OGBT-MW-14-MMO-pH-9.5-Dose-A	8/9/2022	0925
K2209227-005	GC-OGBT-MW-14-MMO-pH-9.5-Dose-B	8/9/2022	0930
K2209227-006	GC-OGBT-MW-14-HT-pH-9.5-Dose-A	8/9/2022	0935
K2209227-007	GC-OGBT-MW-14-HT-pH-9.5-Dose-B	8/9/2022	0940
K2209227-008	GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-A	8/9/2022	0945
K2209227-009	GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-B	8/9/2022	0950
K2209227-010	GC-OGBT-MW-14--CTRL	8/9/2022	0955
K2209227-011	GC-GBT-MW-14--FB	8/9/2022	0830
K2209227-012	GC-GBT-MW-14--FB-CTRL	8/9/2022	0835

K2209227

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (Co, Li)	Dissolved Metals (As, Co, Li)	Comments/Preservation
1	GC-OGBT-MW-14-GHT-Dose-A	8/9/2022	8/9/22 9:10	Water	1	X		HNO3 preserved.
2	GC-OGBT-MW-14-GHT-Dose-A-DUP	8/9/2022	8/9/22 9:15	Water	1	X		HNO3 preserved.
3	GC-OGBT-MW-14-GHT-Dose-B	8/9/2022	8/9/22 9:20	Water	1	X		HNO3 preserved.
4	GC-OGBT-MW-14-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 9:25	Water	1	X		HNO3 preserved. KMnO4 added.
5	GC-OGBT-MW-14-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 9:30	Water	1	X		HNO3 preserved. KMnO4 added.
6	GC-OGBT-MW-14-HT-pH-9.5-Dose-A	8/9/2022	8/9/22 9:35	Water	1	X		HNO3 preserved.
7	GC-OGBT-MW-14-HT-pH-9.5-Dose-B	8/9/2022	8/9/22 9:40	Water	1	X		HNO3 preserved.
8	GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-A	8/9/2022	8/9/22 9:45	Water	1	X		HNO3 preserved. KMnO4 added.
9	GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-B	8/9/2022	8/9/22 9:50	Water	1	X		HNO3 preserved. KMnO4 added.
10	GC-OGBT-MW-14-CTRL	8/9/2022	8/9/22 9:55	Water	1	X		HNO3 preserved.
11	GC-GBT-MW-14-FB	8/9/2022	8/9/22 8:30	Water	1		X	HNO3 preserved.
12	GC-GBT-MW-14-FB-CTRL	8/9/2022	8/9/22 8:35	Water	1		X	HNO3 preserved.
13								
14								
15								

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: ALS Courier
Signature/Print Name:	Date/Time: 8:00 Am 8/10/22	Signature/Print Name: K Morrow 8/10/22 1140
Relinquished by: ALS Courier	Company:	Received by: ALS SMO
Signature/Print Name: K Morrow	Date/Time: 8/10/22 1400	Signature/Print Name: 8/10/22 1400 K Morrow

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 09227

Received: 8/10/22 Opened: 8/10/22 By: Unloaded: 8/10/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*______ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number / [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:______

1/13/22 *Page* ___ *of*___

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2209227
Project: Greene County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-OGBT-MW-14-GHT-Dose-A **Date Collected:** 08/9/22
Lab Code: K2209227-001 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-GHT-Dose-A-DUP **Date Collected:** 08/9/22
Lab Code: K2209227-002 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-GHT-Dose-B **Date Collected:** 08/9/22
Lab Code: K2209227-003 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-MMO-pH-9.5-Dose-A **Date Collected:** 08/9/22
Lab Code: K2209227-004 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-MMO-pH-9.5-Dose-B **Date Collected:** 08/9/22
Lab Code: K2209227-005 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2209227
Project: Greene County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-OGBT-MW-14-HT-pH-9.5-Dose-A
Date Collected: 08/9/22
Lab Code: K2209227-006
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-HT-pH-9.5-Dose-B
Date Collected: 08/9/22
Lab Code: K2209227-007
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-HT-MMO-pH-9.5-
Date Collected: 08/9/22
Lab Code: K2209227-008
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14-HT-MMO-pH-9.5-
Date Collected: 08/9/22
Lab Code: K2209227-009
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-OGBT-MW-14--CTRL
Date Collected: 08/9/22
Lab Code: K2209227-010
Date Received: 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-GBT-MW-14--FB	**Date Collected:**	08/9/22
Lab Code:	K2209227-011	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Name:	GC-GBT-MW-14--FB-CTRL	**Date Collected:**	08/9/22
Lab Code:	K2209227-012	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-GHT-Dose-A	**Basis:**	NA
Lab Code:	K2209227-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:50	08/15/22	
Lithium	200.8	**150**	ug/L	0.50	0.50	5	08/17/22 12:50	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-GHT-Dose-A-DUP	**Basis:**	NA
Lab Code:	K2209227-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:54	08/15/22	
Lithium	200.8	**154**	ug/L	0.50	0.50	5	08/17/22 12:54	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-GHT-Dose-B	**Basis:**	NA
Lab Code:	K2209227-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:56	08/15/22	
Lithium	200.8	**111**	ug/L	0.50	0.50	5	08/17/22 12:56	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209227-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:57	08/15/22	
Lithium	200.8	**509**	ug/L	0.50	0.50	5	08/17/22 12:57	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209227-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 12:59	08/15/22	
Lithium	200.8	**159**	ug/L	0.50	0.50	5	08/17/22 12:59	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-HT-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209227-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 13:01	08/15/22	
Lithium	200.8	**195**	ug/L	0.50	0.50	5	08/17/22 13:01	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:40
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-HT-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209227-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 13:02	08/15/22	
Lithium	200.8	**216**	ug/L	0.50	0.50	5	08/17/22 13:02	08/15/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:45
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-A	**Basis:**	NA
Lab Code:	K2209227-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 13:04	08/15/22	
Lithium	200.8	**86.9**	ug/L	0.50	0.50	5	08/17/22 13:04	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:50
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14-HT-MMO-pH-9.5-Dose-B	**Basis:**	NA
Lab Code:	K2209227-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	08/17/22 13:08	08/15/22	
Lithium	200.8	**54.9**	ug/L	0.50	0.50	5	08/17/22 13:08	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 09:55
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-OGBT-MW-14--CTRL	**Basis:**	NA
Lab Code:	K2209227-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**19.8**	ug/L	0.10	0.05	5	08/17/22 13:10	08/15/22	
Lithium	200.8	**615**	ug/L	0.50	0.50	5	08/17/22 13:10	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:30
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-14--FB	**Basis:**	NA
Lab Code:	K2209227-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.9 J**	ug/L	2.5	0.5	5	08/17/22 13:18	08/15/22	
Cobalt	200.8	**0.15**	ug/L	0.10	0.05	5	08/17/22 13:18	08/15/22	
Lithium	200.8	**439**	ug/L	0.50	0.50	5	08/17/22 13:18	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:35
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-14--FB-CTRL	**Basis:**	NA
Lab Code:	K2209227-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.0**	ug/L	2.5	0.5	5	08/17/22 13:19	08/15/22	
Cobalt	200.8	**18.2**	ug/L	0.10	0.05	5	08/17/22 13:19	08/15/22	
Lithium	200.8	**577**	ug/L	0.50	0.50	5	08/17/22 13:19	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213474-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 12:22	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 12:22	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213485-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/17/22 13:11	08/15/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 13:11	08/15/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/17/22 13:11	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-14-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209227-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213474-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	ND U	24.8	25.0	99	70-130
Lithium	150	202	50.0	105	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-OGBT-MW-14-GHT-Dose-A	**Units:**	ug/L
Lab Code:	K2209227-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213474-06 Result	Average	RPD	RPD Limit
Cobalt	200.8	0.10	0.05	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	150	157	154	5	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-05.01 Greene County Task 05
Sample Matrix: Water

Service Request: K2209227
Date Analyzed: 08/17/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213474-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	24.5	25.0	98	85-115
Lithium	200.8	50.2	50.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2209227
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213485-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.1	50.0	100	85-115
Cobalt	200.8	25.6	25.0	103	85-115
Lithium	200.8	52.6	50.0	105	85-115

August 17, 2022 Service Request No:K2209228

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **K2209228.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2209228
Project: Greene County Treatability
Date Received: 08/10/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six water samples were received for analysis at ALS Environmental on 08/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/17/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-GBT-MW-44H-FB **Lab ID: K2209228-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.59		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-FB-DUP **Lab ID: K2209228-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.95		0.05	0.10	ug/L	200.8

CLIENT ID: GC-GBT-MW-44H-FB-CTRL **Lab ID: K2209228-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	326		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FB **Lab ID: K2209228-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	1.03		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FB-DUP **Lab ID: K2209228-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.95		0.05	0.10	ug/L	200.8

CLIENT ID: GC-SBT-MW-44H-FB-CTRL **Lab ID: K2209228-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	169		0.05	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2209228-001	GC-GBT-MW-44H-FB	8/9/2022	0800
K2209228-002	GC-GBT-MW-44H-FB-DUP	8/9/2022	0805
K2209228-003	GC-GBT-MW-44H-FB-CTRL	8/9/2022	0810
K2209228-004	GC-SBT-MW-44H-FB	8/9/2022	0815
K2209228-005	GC-SBT-MW-44H-FB-DUP	8/9/2022	0820
K2209228-006	GC-SBT-MW-44H-FB-CTRL	8/9/2022	0825

K2209228

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	8/10/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 530-400-5375)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (Co)														
1	GC-GBT-MW-44H-FB	8/9/2022	8:00 AM	Water	1	X														HNO3 preserved.
2	GC-GBT-MW-44H-FB-DUP	8/9/2022	8:05 AM	Water	1	X														HNO3 preserved.
3	GC-GBT-MW-44H-FB-CTRL	8/9/2022	8:10 AM	Water	1	X														HNO3 preserved.
4	GC-SBT-MW-44H-FB	8/9/2022	8:15 AM	Water	1	X														HNO3 preserved.
5	GC-SBT-MW-44H-FB-DUP	8/9/2022	8:20 AM	Water	1	X														HNO3 preserved.
6	GC-SBT-MW-44H-FB-CTRL	8/9/2022	8:25 AM	Water	1	X														HNO3 preserved.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Some samples may have purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted not to damage ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: ALS Courier	
Signature/Print Name:	Date/Time: 8:00 Am 8/10/22	Signature/Print Name: KMorrow	8/10/22 1140
Relinquished by: ALS Courier	Company:	Received by: ALS SMO	
Signature/Print Name: KMorrow	Date/Time: 8/10/22 1400	Signature/Print Name: KMorrow	8/10/22 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 09228

Received: 8/10/22 Opened: 8/10/22 By: Km Unloaded: 8/10/22 By: Km

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other________ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
5.2		IR01		—	—		
4.7		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA ~~Y~~ Km [✓ N]
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
GC-SBT-MW-44H-FB-0822	125pl			X	HNO3	.05mil	RE1-620	Km	1630

Notes, Discrepancies, Resolutions:________

:________

RUSH

1/13/22 Page ____ of ____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC **Service Request:** K2209228
Project: Greene County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-GBT-MW-44H-FB **Date Collected:** 08/9/22
Lab Code: K2209228-001 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-GBT-MW-44H-FB-DUP **Date Collected:** 08/9/22
Lab Code: K2209228-002 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-GBT-MW-44H-FB-CTRL **Date Collected:** 08/9/22
Lab Code: K2209228-003 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-SBT-MW-44H-FB **Date Collected:** 08/9/22
Lab Code: K2209228-004 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Name: GC-SBT-MW-44H-FB-DUP **Date Collected:** 08/9/22
Lab Code: K2209228-005 **Date Received:** 08/10/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-SBT-MW-44H-FB-CTRL	**Date Collected:**	08/9/22
Lab Code:	K2209228-006	**Date Received:**	08/10/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	KLINN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:00
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-44H-FB	**Basis:**	NA
Lab Code:	K2209228-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.59**	ug/L	0.10	0.05	5	08/17/22 13:21	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:05
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-44H-FB-DUP	**Basis:**	NA
Lab Code:	K2209228-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.95**	ug/L	0.10	0.05	5	08/17/22 13:28	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:10
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-GBT-MW-44H-FB-CTRL	**Basis:**	NA
Lab Code:	K2209228-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**326**	ug/L	0.10	0.05	5	08/17/22 13:30	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:15
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-44H-FB	**Basis:**	NA
Lab Code:	K2209228-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**1.03**	ug/L	0.10	0.05	5	08/17/22 13:32	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:20
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-44H-FB-DUP	**Basis:**	NA
Lab Code:	K2209228-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.95**	ug/L	0.10	0.05	5	08/17/22 13:33	08/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22 08:25
Sample Matrix:	Water	**Date Received:**	08/10/22 14:00
Sample Name:	GC-SBT-MW-44H-FB-CTRL	**Basis:**	NA
Lab Code:	K2209228-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**169**	ug/L	0.10	0.05	5	08/17/22 13:35	08/15/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2213485-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	08/17/22 13:11	08/15/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22
		Date Extracted:	08/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-FB	**Units:**	ug/L
Lab Code:	K2209228-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2213485-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	0.59	25.4	25.0	99	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	08/09/22
Sample Matrix:	Water	**Date Received:**	08/10/22
		Date Analyzed:	08/17/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-GBT-MW-44H-FB	**Units:**	ug/L
Lab Code:	K2209228-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2213485-04 Result	Average	RPD	RPD Limit
Cobalt	200.8	0.10	0.05	0.59	0.61	0.60	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2209228
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Analyzed:**	08/17/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2213485-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	25.6	25.0	103	85-115

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 07, 2022

Analytical Report for Service Request No: K2211015

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 20, 2022
For your reference, these analyses have been assigned our service request number **K2211015.**

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	**Web Site**	**Number**
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211015
Project: Greene County Treatability
Date Received: 09/20/2022
Sample Matrix: Soil

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Two soil samples were received for analysis at ALS Environmental on 09/20/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

Method SM 4500-F- C Modified, 09/28/2022:The matrix spike recoveries of Fluoride for sample HT-MMO-20220916 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. The matrix spike outliers suggested a potential low bias in this matrix. No further corrective action was appropriate.

Approved by ______________________ Date 10/07/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2211015

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/16/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Total B, Ca, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl (EPA 200.8)	Total Hg (EPA 1631)	Fluoride (SM 4500)	Sulfate (300.9/9056A)											
1	HT-MMO-20220916	9/16/2022	16:00	Solid	1	X	X	X	X											hydrotalcite and mixed-metal-oxides slurry. Please homogenize thoroughly to avoid water separation.
2	FB-20220916	9/16/2022	16:01	Solid	1	X	X	X	X											iron sulfide based slurry. Please homogenize thoroughly to avoid water separation.
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary).

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	ALS 9/20 0940	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	8:30 9/19/22		
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mzl

Cooler Receipt and Preservation Form

Client Anchor Service Request ~~K22 10898~~ K2211015

Received: 9/20/22 Opened: 9/20/22 By:
Unloaded: 9/20/22 By:

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other______ NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front
   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.8		IR01		—	—		
5.2		〃					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:______

:______

1/13/22 ***Page*** ***of***

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
HT-MMO-20220916	K2211015-001	**67.4**	-	-	1	09/24/22 14:18	
FB-20220916	K2211015-002	**37.7**	-	-	1	09/24/22 14:18	

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
Analysis Method:	9056A	**Units:**	mg/Kg
Prep Method:	ALS SOP	**Basis:**	Dry

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
HT-MMO-20220916	K2211015-001	ND U	15	7	10	10/06/22 15:50	10/6/22	
FB-20220916	K2211015-002	**107**	26	12	10	10/06/22 16:01	10/6/22	
Method Blank	K2211015-MB	ND U	1.0	0.5	1	10/06/22 15:39	10/6/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/06/22
Sample Matrix:	Soil	**Date Extracted:**	10/06/22

Lab Control Sample Summary
Sulfate

Analysis Method:	9056A	**Units:**	mg/Kg
Prep Method:	ALS SOP	**Basis:**	Dry
		Analysis Lot:	780388

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211015-LCS1	2030	2000	102	80-120
Lab Control Sample	K2211015-LCS2	2030	2000	102	80-120

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 9056A **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	780388	KQ2217393-01	10/06/22 14:55	5.00	5.20	104	90-110
CCV2	780388	KQ2217393-02	10/06/22 16:23	5.00	5.21	104	90-110

Client: Anchor QEA, LLC **Service Request:**K2211015
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 9056A **Units:**mg/Kg

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	780388	KQ2217393-03	10/06/22 15:06	1.0	0.5	ND	U
CCB2	780388	KQ2217393-04	10/06/22 16:34	1.0	0.5	ND	U

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
Analysis Method:	SM 4500-F- C Modified	**Units:**	mg/Kg
Prep Method:	ALS SOP	**Basis:**	Dry

Fluoride

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
HT-MMO-20220916	K2211015-001	ND U	2.9	-	1	09/28/22 13:50	9/28/22	
FB-20220916	K2211015-002	ND U	5.2	-	1	09/28/22 13:50	9/28/22	
Method Blank	K2211015-MB	ND U	2.0	-	1	09/28/22 13:50	9/28/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
		Date Analyzed:	09/28/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	HT-MMO-20220916	**Units:**	mg/Kg
Lab Code:	K2211015-001	**Basis:**	Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K2211015-001DUP Result	Average	RPD	RPD Limit
Fluoride	SM 4500-F- C Modified	3.0	-	ND U	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
		Date Analyzed:	09/28/22
		Date Extracted:	09/28/22

Duplicate Matrix Spike Summary
Fluoride

Sample Name:	HT-MMO-20220916	**Units:**	mg/Kg
Lab Code:	K2211015-001	**Basis:**	Dry
Analysis Method:	SM 4500-F- C Modified		
Prep Method:	ALS SOP		

		Matrix Spike K2211015-001MS			Duplicate Matrix Spike K2211015-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Fluoride	ND U	340	742	46 *	334	731	46 *	75-125	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	09/28/22
Sample Matrix:	Soil	**Date Extracted:**	09/28/22

Lab Control Sample Summary
Fluoride

Analysis Method:	SM 4500-F- C Modified	**Units:**	mg/Kg
Prep Method:	ALS SOP	**Basis:**	Dry
		Analysis Lot:	779242

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211015-LCS1	112	111	101	75-125

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Verification (CCV) Summary

Fluoride

Analysis Method: SM 4500-F- C Modified **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	779242	KQ2216663-03	09/28/22 13:50	5.00	5.24	105	90-110
CCV2	779242	KQ2216663-04	09/28/22 13:50	5.00	5.17	103	90-110
CCV3	779242	KQ2216663-06	09/28/22 13:50	5.00	5.22	104	90-110

Client: Anchor QEA, LLC **Service Request:**K2211015
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Blank (CCB) Summary
Fluoride

Analysis Method: SM 4500-F- C Modified **Units:**mg/Kg

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	779242	KQ2216663-01	09/28/22 13:50	1.0		ND	U
CCB2	779242	KQ2216663-02	09/28/22 13:50	1.0		ND	U
CCB3	779242	KQ2216663-05	09/28/22 13:50	1.0		ND	U

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22

Mercury, Total

Prep Method:	METHOD	Units:	ng/g
Analysis Method:	1631E	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
HT-MMO-20220916	K2211015-001	1.4	0.29	1	09/29/22	09/30/22	0.34	J
FB-20220916	K2211015-002	2.4	0.48	1	09/29/22	09/30/22	ND	
Method Blank 1	K2211015-MB1	1.0	0.20	1	09/29/22	09/30/22	ND	
Method Blank 2	K2211015-MB2	1.0	0.20	1	09/29/22	09/30/22	ND	
Method Blank 3	K2211015-MB3	1.0	0.20	1	09/29/22	09/30/22	ND	

ALS Group USA, Corp.
dba ALS Environmental
QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
		Date Extracted:	09/29/22
		Date Analyzed:	09/30/22

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	HT-MMO-20220916		Units:	ng/g
Lab Code:	K2211015-001MS,	K2211015-001DMS	Basis:	Dry
Test Notes:				

									Percent Recovery				
				Spike Level			Spike Result				ALS	Relative	
Analyte	**Prep Method**	**Analysis Method**	**MRL**	**MS**	**DMS**	**Sample Result**	**MS**	**DMS**	**MS**	**DMS**	**Acceptance Limits**	**Percent Difference**	**Result Notes**
Mercury	METHOD	1631E	13.2	292	331	0.34	308	348	105	105	70-130	12	

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	09/30/22

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/g
Basis: NA

Test Notes:

Analyte	**Prep Method**	**Analysis Method**	**True Value**	**Result**	**Percent Recovery**	**ALS Percent Recovery Acceptance Limits**	**Result Notes**
Mercury	METHOD	1631E	5.00	5.38	108	70-130	

ALS Group USA, Corp.
dba ALS Environmental
QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	09/30/22

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name:	Ongoing Precision and Recovery (Final)	Units:	ng/g
		Basis:	NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	ALS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.38	108	70-130	

ALS Group USA, Corp.
dba ALS Environmental
QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
LCS Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	09/29/22
		Date Analyzed:	09/30/22

Quality Control Sample (QCS) Summary
Total Metals

Sample Name:	Quality Control Sample	Units:	ng/g
		Basis:	Dry

Test Notes:

Source: SRM 2702

Analyte	**Prep Method**	**Analysis Method**	**True Value**	**Result**	**Percent Recovery**	**ALS Percent Recovery Acceptance Limits**	**Result Notes**
Mercury	METHOD	1631E	447	410	92	70-130	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 16:00
Sample Matrix:	Soil	**Date Received:**	09/20/22 09:40
Sample Name:	HT-MMO-20220916	**Basis:**	Dry
Lab Code:	K2211015-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	200.8	ND U	mg/Kg	0.067	0.027	5	09/30/22 09:41	09/29/22	
Arsenic	200.8	ND U	mg/Kg	0.67	0.08	5	09/30/22 09:41	09/29/22	
Barium	200.8	**1.27**	mg/Kg	0.067	0.027	5	09/30/22 09:41	09/29/22	
Beryllium	200.8	ND U	mg/Kg	0.027	0.008	5	09/30/22 09:41	09/29/22	
Boron	200.8	**0.49 J**	mg/Kg	0.67	0.27	5	09/30/22 11:15	09/29/22	
Cadmium	200.8	ND U	mg/Kg	0.027	0.009	5	09/30/22 09:41	09/29/22	
Calcium	200.8	**10 J**	mg/Kg	13	0.3	5	09/30/22 09:41	09/29/22	
Chromium	200.8	**0.41**	mg/Kg	0.27	0.08	5	09/30/22 09:41	09/29/22	
Cobalt	200.8	**0.025 J**	mg/Kg	0.027	0.008	5	09/30/22 09:41	09/29/22	
Lead	200.8	**0.031 J**	mg/Kg	0.067	0.027	5	09/30/22 09:41	09/29/22	
Lithium	200.8	**0.49**	mg/Kg	0.13	0.13	5	09/30/22 09:41	09/29/22	
Molybdenum	200.8	**0.100**	mg/Kg	0.067	0.027	5	09/30/22 09:41	09/29/22	
Selenium	200.8	ND U	mg/Kg	1.3	0.1	5	09/30/22 09:41	09/29/22	
Thallium	200.8	**0.007 J**	mg/Kg	0.027	0.005	5	09/30/22 09:41	09/29/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 16:01
Sample Matrix:	Soil	**Date Received:**	09/20/22 09:40
Sample Name:	FB-20220916	**Basis:**	Dry
Lab Code:	K2211015-002		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	200.8	**0.22**		mg/Kg	0.12	0.05	5	09/30/22 09:50	09/29/22	
Arsenic	200.8	**0.4**	**J**	mg/Kg	1.2	0.1	5	09/30/22 09:50	09/29/22	
Barium	200.8	**0.25**		mg/Kg	0.12	0.05	5	09/30/22 09:50	09/29/22	
Beryllium	200.8	ND	U	mg/Kg	0.048	0.015	5	09/30/22 09:50	09/29/22	
Boron	200.8	**3.0**		mg/Kg	1.2	0.5	5	09/30/22 11:19	09/29/22	
Cadmium	200.8	ND	U	mg/Kg	0.048	0.017	5	09/30/22 09:50	09/29/22	
Calcium	200.8	**112**		mg/Kg	24	0.5	5	09/30/22 09:50	09/29/22	
Chromium	200.8	**58.6**		mg/Kg	0.48	0.15	5	09/30/22 09:50	09/29/22	
Cobalt	200.8	**3.10**		mg/Kg	0.048	0.015	5	09/30/22 09:50	09/29/22	
Lead	200.8	**0.34**		mg/Kg	0.12	0.05	5	09/30/22 09:50	09/29/22	
Lithium	200.8	ND	U	mg/Kg	0.24	0.24	5	09/30/22 09:50	09/29/22	
Molybdenum	200.8	**13.0**		mg/Kg	0.12	0.05	5	09/30/22 09:50	09/29/22	
Selenium	200.8	ND	U	mg/Kg	2.4	0.2	5	09/30/22 09:50	09/29/22	
Thallium	200.8	**0.051**		mg/Kg	0.048	0.010	5	09/30/22 09:50	09/29/22	

Analytical Report

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Soil

Service Request: K2211015
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2216668-03

Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	200.8	ND U	mg/Kg	0.05	0.020	5	09/30/22 09:36	09/29/22	
Arsenic	200.8	ND U	mg/Kg	0.5	0.06	5	09/30/22 09:36	09/29/22	
Barium	200.8	ND U	mg/Kg	0.05	0.020	5	09/30/22 09:36	09/29/22	
Beryllium	200.8	ND U	mg/Kg	0.020	0.006	5	09/30/22 09:36	09/29/22	
Boron	200.8	ND U	mg/Kg	0.5	0.20	5	09/30/22 11:13	09/29/22	
Cadmium	200.8	ND U	mg/Kg	0.020	0.007	5	09/30/22 09:36	09/29/22	
Calcium	200.8	**2 J**	mg/Kg	10	0.2	5	09/30/22 09:36	09/29/22	
Chromium	200.8	**0.07 J**	mg/Kg	0.20	0.06	5	09/30/22 09:36	09/29/22	
Cobalt	200.8	ND U	mg/Kg	0.020	0.006	5	09/30/22 09:36	09/29/22	
Lead	200.8	ND U	mg/Kg	0.05	0.020	5	09/30/22 09:36	09/29/22	
Lithium	200.8	ND U	mg/Kg	0.10	0.10	5	09/30/22 09:36	09/29/22	
Molybdenum	200.8	ND U	mg/Kg	0.05	0.020	5	09/30/22 09:36	09/29/22	
Selenium	200.8	ND U	mg/Kg	1.0	0.09	5	09/30/22 09:36	09/29/22	
Thallium	200.8	ND U	mg/Kg	0.020	0.004	5	09/30/22 09:36	09/29/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
		Date Analyzed:	09/30/22

Replicate Sample Summary
Total Metals

Sample Name:	HT-MMO-20220916	**Units:**	mg/Kg
Lab Code:	K2211015-001	**Basis:**	Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2216668-01 Result	Average	RPD	RPD Limit
Antimony	200.8	0.073	0.029	ND U	ND U	ND	-	30
Arsenic	200.8	0.73	0.09	ND U	ND U	ND	-	30
Barium	200.8	0.073	0.029	1.27	1.26	1.27	1	30
Beryllium	200.8	0.029	0.009	ND U	ND U	ND	-	30
Boron	200.8	0.73	0.29	0.49 J	ND U	NC	NC	30
Cadmium	200.8	0.029	0.010	ND U	ND U	ND	-	30
Calcium	200.8	15	0.3	10 J	8 J	9	18	30
Chromium	200.8	0.29	0.09	0.41	0.44	0.43	7	30
Cobalt	200.8	0.029	0.009	0.025 J	0.022 J	0.024	13	30
Lead	200.8	0.073	0.029	0.031 J	0.031 J	0.031	<1	30
Lithium	200.8	0.15	0.15	0.49	0.47	0.48	4	30
Molybdenum	200.8	0.073	0.029	0.100	0.057 J	0.079	57 #	30
Selenium	200.8	1.5	0.1	ND U	ND U	ND	-	30
Thallium	200.8	0.029	0.006	0.007 J	ND U	NC	NC	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/4/2022 11:33:45 AM Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22
Sample Matrix:	Soil	**Date Received:**	09/20/22
		Date Analyzed:	09/30/22
		Date Extracted:	09/29/22

Matrix Spike Summary
Total Metals

Sample Name:	HT-MMO-20220916	**Units:**	mg/Kg
Lab Code:	K2211015-001	**Basis:**	Dry
Analysis Method:	200.8		
Prep Method:	EPA 3050B		

Matrix Spike
KQ2216668-02

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Antimony	ND U	134	138	97	70-130
Arsenic	ND U	139	138	101	70-130
Barium	1.27	281	276	101	70-130
Beryllium	ND U	13.5	13.8	98	70-130
Boron	0.49 J	64.2	69.1	92	70-130
Cadmium	ND U	13.6	13.8	99	70-130
Calcium	10 J	1410	1380	101	70-130
Chromium	0.41	54.8	55.2	98	70-130
Cobalt	0.025 J	134	138	97	70-130
Lead	0.031 J	146	138	106	70-130
Lithium	0.49	28.7	27.6	102	70-130
Molybdenum	0.100	138	138	100	70-130
Selenium	ND U	136	138	98	70-130
Thallium	0.007 J	28.4	27.6	103	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2211015
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	09/30/22
Sample Matrix:	Soil		

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: Dry

Lab Control Sample
KQ2216668-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony	200.8	93.8	100	94	85-115
Arsenic	200.8	90.9	100	91	85-115
Barium	200.8	194	200	97	85-115
Beryllium	200.8	9.72	10.0	97	85-115
Boron	200.8	48.7	50.0	97	85-115
Cadmium	200.8	9.62	10.0	96	85-115
Calcium	200.8	1000	1000	100	85-115
Chromium	200.8	35.6	40.0	89	85-115
Cobalt	200.8	88.4	100	88	85-115
Lead	200.8	95.1	100	95	85-115
Lithium	200.8	20.8	20.0	104	85-115
Molybdenum	200.8	96.4	100	96	85-115
Selenium	200.8	87.7	100	88	85-115
Thallium	200.8	19.8	20.0	99	85-115

Prep Summary Report

Client: Anchor QEA, LLC
Service Request: K2211015
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Soil

Metals

Prep Method: EPA 3050B
Extraction Lot: 407218
Analytical Method: 200.8
Extraction Date: 09/29/22 11:55

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
HT-MMO-20220916	K2211015-001	9/16/22	9/20/22	1.104 g	100 mL	
FB-20220916	K2211015-002	9/16/22	9/20/22	1.097 g	100 mL	
Duplicate	KQ2216668-01DUP	9/16/22	9/20/22	1.023 g	100 mL	
Matrix Spike	KQ2216668-02MS	9/16/22	9/20/22	1.074 g	100 mL	
Method Blank	KQ2216668-03MB	NA	NA	1 g	100 mL	
Lab Control Sample	KQ2216668-04LCS	NA	NA	1 g	100 mL	

Printed 10/4/2022 11:33:45 AM

Superset Reference:

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
ICV 09/30/22 09:18						
Antimony	200.8	779580	11.6	12.5	92	90-110
Arsenic	200.8	779580	24.8	25.0	99	90-110
Barium	200.8	779580	99.0	100	99	90-110
Beryllium	200.8	779580	2.46	2.50	98	90-110
Cadmium	200.8	779580	12.2	12.5	98	90-110
Calcium	200.8	779580	258	250	103	90-110
Chromium	200.8	779580	10.2	10.0	102	90-110
Cobalt	200.8	779580	25.4	25.0	102	90-110
Lead	200.8	779580	24.7	25.0	99	90-110
Lithium	200.8	779580	26.0	25.0	104	90-110
Molybdenum	200.8	779580	24.2	25.0	97	90-110
Selenium	200.8	779580	26.0	25.0	104	90-110
Thallium	200.8	779580	24.9	25.0	100	90-110
CCV 09/30/22 09:20						
Antimony	200.8	779580	12.4	12.5	100	90-110
Arsenic	200.8	779580	24.7	25.0	99	90-110
Barium	200.8	779580	24.7	25.0	99	90-110
Beryllium	200.8	779580	25.0	25.0	100	90-110
Cadmium	200.8	779580	24.8	25.0	99	90-110
Calcium	200.8	779580	2000	2000	100	90-110
Chromium	200.8	779580	24.9	25.0	99	90-110
Cobalt	200.8	779580	24.8	25.0	99	90-110
Lead	200.8	779580	25.0	25.0	100	90-110
Lithium	200.8	779580	25.6	25.0	103	90-110
Molybdenum	200.8	779580	12.4	12.5	99	90-110
Selenium	200.8	779580	24.5	25.0	98	90-110
Thallium	200.8	779580	25.0	25.0	100	90-110
CCV 09/30/22 09:54						
Antimony	200.8	779580	12.4	12.5	99	90-110
Arsenic	200.8	779580	25.6	25.0	103	90-110
Barium	200.8	779580	24.8	25.0	99	90-110
Beryllium	200.8	779580	24.9	25.0	100	90-110
Cadmium	200.8	779580	24.6	25.0	98	90-110
Calcium	200.8	779580	2000	2000	100	90-110
Chromium	200.8	779580	25.3	25.0	101	90-110
Cobalt	200.8	779580	25.2	25.0	101	90-110

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/30/22 09:54						
Lead	200.8	779580	24.9	25.0	99	90-110
Lithium	200.8	779580	24.7	25.0	99	90-110
Molybdenum	200.8	779580	12.2	12.5	97	90-110
Selenium	200.8	779580	25.6	25.0	102	90-110
Thallium	200.8	779580	25.0	25.0	100	90-110
ICV 09/30/22 11:02						
Boron	200.8	779608	23.2	25.0	93	90-110
CCV 09/30/22 11:04						
Boron	200.8	779608	24.4	25.0	98	90-110
CCV 09/30/22 11:26						
Boron	200.8	779608	24.6	25.0	98	90-110

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 09/30/22 09:23				
Antimony	200.8	779580	0.04	U
Arsenic	200.8	779580	0.1	U
Barium	200.8	779580	0.04	U
Beryllium	200.8	779580	0.012	U
Cadmium	200.8	779580	0.014	U
Calcium	200.8	779580	2	J
Chromium	200.8	779580	0.12	U
Cobalt	200.8	779580	0.012	U
Lead	200.8	779580	0.04	U
Lithium	200.8	779580	0.20	U
Molybdenum	200.8	779580	0.04	U
Selenium	200.8	779580	0.2	U
Thallium	200.8	779580	0.021	J
CCB 09/30/22 09:26				
Antimony	200.8	779580	0.04	U
Arsenic	200.8	779580	0.1	U
Barium	200.8	779580	0.04	U
Beryllium	200.8	779580	0.012	U
Cadmium	200.8	779580	0.014	U
Calcium	200.8	779580	2	J
Chromium	200.8	779580	0.12	U
Cobalt	200.8	779580	0.012	U
Lead	200.8	779580	0.04	U
Lithium	200.8	779580	0.20	U
Molybdenum	200.8	779580	0.04	U
Selenium	200.8	779580	0.2	U
Thallium	200.8	779580	0.008	U
CCB 09/30/22 10:00				
Antimony	200.8	779580	0.04	U
Arsenic	200.8	779580	0.1	U
Barium	200.8	779580	0.04	U
Beryllium	200.8	779580	0.012	U
Cadmium	200.8	779580	0.014	U
Calcium	200.8	779580	1	J
Chromium	200.8	779580	0.12	U
Cobalt	200.8	779580	0.012	U

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 09/30/22 10:00				
Lead	200.8	779580	0.04	U
Lithium	200.8	779580	0.20	U
Molybdenum	200.8	779580	0.04	U
Selenium	200.8	779580	0.2	U
Thallium	200.8	779580	0.013	J
ICB 09/30/22 11:05				
Boron	200.8	779608	0.5	J
CCB 09/30/22 11:06				
Boron	200.8	779608	0.4	U
CCB 09/30/22 11:27				
Boron	200.8	779608	0.4	U

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICVS							
Antimony	200.8	779580	0.11	0.1	114	50-199	09/30/22 09:28
Arsenic	200.8	779580	1.0	1.0	104	50-199	09/30/22 09:28
Barium	200.8	779580	0.11	0.1	106	50-199	09/30/22 09:28
Beryllium	200.8	779580	0.043	0.04	107	50-199	09/30/22 09:28
Cadmium	200.8	779580	0.041	0.04	103	50-199	09/30/22 09:28
Calcium	200.8	779580	24.5	20.0	123	50-199	09/30/22 09:28
Chromium	200.8	779580	0.36	0.4	90	50-199	09/30/22 09:28
Cobalt	200.8	779580	0.043	0.04	107	50-199	09/30/22 09:28
Lead	200.8	779580	0.090	0.1	90	50-199	09/30/22 09:28
Lithium	200.8	779580	0.21	0.2	104	50-199	09/30/22 09:28
Molybdenum	200.8	779580	0.098	0.1	98	50-199	09/30/22 09:28
Selenium	200.8	779580	2.0	2.0	102	50-199	09/30/22 09:28
Thallium	200.8	779580	0.043	0.04	107	50-199	09/30/22 09:28
LLICVS							
Boron	200.8	779608	1.0	1.0	100	50-199	09/30/22 11:08

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-05 **Matrix:** Soil

Analyte	Mass	Units	MRL	MDL	Method
Antimony	121	ug/L	0.1	0.04	200.8
Arsenic	75	ug/L	1	0.12	200.8
Barium	137	ug/L	0.1	0.04	200.8
Beryllium	9	ug/L	0.04	0.012	200.8
Boron	11	ug/L	1	0.4	200.8
Cadmium	111	ug/L	0.04	0.014	200.8
Calcium	43	ug/L	20	0.4	200.8
Chromium	52	ug/L	0.4	0.12	200.8
Cobalt	59	ug/L	0.04	0.012	200.8
Lead	208	ug/L	0.1	0.04	200.8
Lithium	7	ug/L	0.2	0.2	200.8
Molybdenum	95	ug/L	0.1	0.04	200.8
Selenium	78	ug/L	2	0.18	200.8
Thallium	205	ug/L	0.04	0.008	200.8

Client: Anchor QEA, LLC
Service Request: K2211015
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Antimony 121	3150	200.8
Arsenic 75	3150	200.8
Barium 137	3150	200.8
Beryllium 9	3150	200.8
Boron 11	3150	200.8
Cadmium 111	3150	200.8
Calcium 43	450000	200.8
Chromium 52	3150	200.8
Cobalt 59	3150	200.8
Lead 208	3150	200.8
Molybdenum 95	3150	200.8
Selenium 78	3150	200.8
Thallium 205	3150	200.8

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779580**

Sample	Dilution Factor	Date/Time	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Pb	Li	Mo	Se	Tl
ZZZZZZ	1	09/30/22 09:00													
ZZZZZZ	1	09/30/22 09:03													
ZZZZZZ	1	09/30/22 09:05													
ICV	1	09/30/22 09:18	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV	1	09/30/22 09:20	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB	1	09/30/22 09:23	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	1	09/30/22 09:26	X	X	X	X	X	X	X	X	X	X	X	X	X
LLICVS	1	09/30/22 09:28	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/30/22 09:31													
KQ2216668-03.R01MB	5	09/30/22 09:36	X	X	X	X	X	X	X	X	X	X	X	X	X
KQ2216668-04.R01LCS	20	09/30/22 09:39	X	X	X	X	X	X	X	X	X	X	X	X	X
K2211015-001.R01	5	09/30/22 09:41	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/30/22 09:44													
ZZZZZZ	5	09/30/22 09:47													
K2211015-002.R01	5	09/30/22 09:50	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV	1	09/30/22 09:54	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	1	09/30/22 10:00	X	X	X	X	X	X	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2211015

Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779608**

Sample	**Dilution Factor**	**Date/Time**	B
ZZZZZZ	1	09/30/22 10:58	
ZZZZZZ	1	09/30/22 10:59	
ZZZZZZ	1	09/30/22 11:01	
ICV	1	09/30/22 11:02	X
CCV	1	09/30/22 11:04	X
ICB	1	09/30/22 11:05	X
CCB	1	09/30/22 11:06	X
LLICVS	1	09/30/22 11:08	X
ZZZZZZ	1	09/30/22 11:09	
KQ2216668-03MB	5	09/30/22 11:13	X
KQ2216668-04LCS	20	09/30/22 11:14	X
K2211015-001	5	09/30/22 11:15	X
K2211015-001DUP	5	09/30/22 11:17	X
K2211015-001MS	5	09/30/22 11:18	X
K2211015-002	5	09/30/22 11:19	X
CCV	1	09/30/22 11:26	X
CCB	1	09/30/22 11:27	X

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779580**

Sample	**Date/Time**	Sc45NG	Ge72He	Ge72H2	In115He	Lu175He
ZZZZZZ	09/30/22 09:00					
ZZZZZZ	09/30/22 09:03					
ZZZZZZ	09/30/22 09:05					
ICV	09/30/22 09:18	102	99	96	100	99
CCV	09/30/22 09:20	96	98	98	96	96
ICB	09/30/22 09:23	94	97	98	97	96
CCB	09/30/22 09:26	94	97	97	97	96
LLICVS	09/30/22 09:28	96	99	100	99	97
ZZZZZZ	09/30/22 09:31					
KQ2216668-03.R01MB	09/30/22 09:36	98	97	98	98	98
KQ2216668-04.R01LCS	09/30/22 09:39	94	105	108	95	96
K2211015-001.R01	09/30/22 09:41	91	97	98	95	95
K2211015-001DUP	09/30/22 09:44	94	99	98	97	97
K2211015-001MS	09/30/22 09:47	95	96	95	94	93
K2211015-002.R01	09/30/22 09:50	92	94	95	93	94
CCV	09/30/22 09:54	79	81	83	83	86
CCB	09/30/22 10:00	82	84	85	87	89

Client: Anchor QEA, LLC **Service Request:** K2211015
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779608**

Sample	**Date/Time**	Sc45NG
ZZZZZZ	09/30/22 10:58	
ZZZZZZ	09/30/22 10:59	
ZZZZZZ	09/30/22 11:01	
ICV	09/30/22 11:02	99
CCV	09/30/22 11:04	101
ICB	09/30/22 11:05	101
CCB	09/30/22 11:06	103
LLICVS	09/30/22 11:08	102
ZZZZZZ	09/30/22 11:09	
KQ2216668-03MB	09/30/22 11:13	100
KQ2216668-04LCS	09/30/22 11:14	100
K2211015-001	09/30/22 11:15	102
K2211015-001DUP	09/30/22 11:17	107
K2211015-001MS	09/30/22 11:18	110
K2211015-002	09/30/22 11:19	111
CCV	09/30/22 11:26	108
CCB	09/30/22 11:27	111

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #:	**K2209964, KQ2216359, K2210826, K2210726, K2210889, K2210860, K2211015, K2210890**	**Run #:**	**778610**
Test:	**TS**	**Balance ID:**	**K-BALANCE-47**
Method:	**160.3 Modified**		

Matrix	Lab Code	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
Sediment	K2209964-006	1.291	10.493	7.495	6.20	59.1	
Sediment	K2209964-006DUP	1.289	10.418	7.488	6.20	59.5	<1
Sediment	K2209964-005	1.265	10.506	7.125	5.86	55.8	
Soil	K2210826-001	1.275	10.158	11.071	9.80	96.4	
Soil	K2210826-002	1.274	10.053	11.174	9.90	98.5	
Soil	K2210826-004	1.267	10.085	10.925	9.66	95.8	
Soil	K2210826-005	1.278	10.405	11.482	10.2	98.1	
Soil	K2210826-007	1.270	10.839	11.719	10.4	96.4	
Soil	K2210826-008	1.261	10.923	11.927	10.7	97.6	
Soil	K2210726-001	1.269	10.065	6.748	5.48	54.4	
Soil	K2210726-002	1.277	10.359	7.550	6.27	60.6	
Soil	K2210726-003	1.265	10.477	8.425	7.16	68.3	
Soil	K2210726-003DUP	1.283	10.149	8.210	6.93	68.3	<1
Sediment	K2210889-001	1.266	10.175	6.906	5.64	55.4	
Sediment	K2210860-001	1.267	10.646	10.560	9.29	87.3	
Soil	K2211015-001	1.270	12.433	9.651	8.38	67.4	
Soil	K2211015-002	1.283	12.768	6.102	4.82	37.7	
Soil	K2210890-001	1.274	10.634	3.709	2.44	22.9	
Soil	K2210890-007	1.267	10.418	1.936	0.669	6.42	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	**K-Oven-07**	**105**	**105**	**09/24/22**	**14:18**	**09/26/22**	**08:36**	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	**K-BALANCE-47**	**1.000, 100.000**	**1.000, 100.000**	**09/24/22**	**12:22**	**09/24/22**	**14:17**
Calibration2	**K-BALANCE-47**	**1.001, 100.001**	**1.001, 100.001**	**09/26/22**	**11:59**	**09/26/22**	**12:04**

Comments: NRP 11011 ; 10826-001, 10826-002, 10826-004, 10826-005, 10826-007, and 10826-008 are a bit rocky.

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Sequence IC08100622

Ion Chromatography Data Quality Report

780388

Inorganics

	Yes	No	N/A
1. Holding times met for all samples analyzed?	☑	☐	☐
2. Are dilutions within upper limits of the curve?	☑	☐	☐
3. Were peaks manually integrated?	☑	☐	☐
a.)Does DOD QUAPP apply?	☐	☑	☐
4. Are detection limits reported correctly?	☑	☐	☐
5. Are all quality control criteria met?	☑	☐	☐
a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency?	☑	☐	☐
b. Are CCV's and CCB's all within acceptance limits?	☑	☐	☐
c. Are results for Method Blanks all ND?	☑	☐	☐
d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.)	☑	☐	☐
e. Are all exceptions explained? Limited Sample. Ran dup LCS instead. Elevated MRL due to Very Cl Concentration in both Samples.	☑	☐	☐
6. Are all samples labelled correctly?	☑	☐	☐

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS	ALS ID# 22-GEN-01-	88A	Expires: 10/6/2022	
Fluoride	True Value=5.0ppm		10K ALS ID#22GEN-01-84C	2/22/2023
Chloride	True Value=5.0ppm		10K ALS ID#22GEN-01-84D	3/21/2023
Nitrite	True Value=2.5ppm		10K ALS ID#22GEN-01-43H	10/26/2022
Bromide	True Value=2.5ppm		10K ALS ID#22GEN-01-84A	3/21/2023
Nitrate	True Value=2.5ppm		10K ALS ID#22GEN-01-84B	3/21/2023
Sulfate	True Value=5.0ppm		10K ALS ID#22GEN-01-84E	3/21/2023
CCV	ALS ID# 22-GEN-01-	88E	Expires: 10/6/2022	
Fluoride	True Value=5.0ppm		10K ALS ID#22GEN-01-82L	3/16/2023
Chloride	True Value=5.0ppm		10K ALS ID#22GEN-01-82M	3/16/2023
Nitrite	True Value=2.5ppm		10K ALS ID#22GEN-01-77I	2/27/2023
Bromide	True Value=2.5ppm		10K ALS ID#22GEN-01-82J	3/16/2023
Nitrate	True Value=2.5ppm		10K ALS ID#22GEN-01-82K	3/16/2023
Sulfate	True Value=5.0ppm		10K ALS ID#22GEN-01-82N	3/16/2023
Spike 100/50 ppm	ALS ID# 22-GEN-01-	88F	Expires: 10/6/2022	
Fluoride	10K ALS ID#22GEN-01-82L			3/16/2023
Chloride	10K ALS ID#22GEN-01-82M			3/16/2023
Nitrite	10K ALS ID#22GEN-01-77I			2/27/2023
Bromide	10K ALS ID#22GEN-01-82J			3/16/2023
Nitrate	10K ALS ID#22GEN-01-82K			3/16/2023
Sulfate	10K ALS ID#22GEN-01-82N			3/16/2023

Pipetes#:								
037544E	Mr Burns	IC Not yours	208613Z	18100839	18094324	39487243	41883884	18112947
	People Eater	Purple Papa	IC Mama	J17591H				

Analyst: NF Date: 10/6/2022

First Review: NF Date: 10/7/2022

Final Review: RRM Date: 10/7/22

t:\wet\ic\icdqs.xls

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780388 **Method/Testcode:** 9056A/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2211015-001	Sulfate	N/A		Soil	0.00 mg/L	2.5388 g	15 mg/Kg U	10	7	15			10/6/22 15:50:00	N	IV
K2211015-002	Sulfate	N/A		Soil	4.11 mg/L	2.5477 g	107 mg/Kg	10	12	26			10/6/22 16:01:00	N	IV
KQ2217310-01	Sulfate	LCS		Soil	203.41 mg/L	2.5 g	2030 mg/Kg	100	50	100	102		10/6/22 15:17:00	N	IV
KQ2217310-02	Sulfate	LCS		Soil	203.03 mg/L	2.5 g	2030 mg/Kg	100	50	100	102		10/6/22 15:28:00	N	IV
KQ2217310-03	Sulfate	MB		Soil	0.00 mg/L	2.5 g	1.0 mg/Kg U	1	0.5	1.0			10/6/22 15:39:00	N	IV
KQ2217393-01	Sulfate	CCV		Soil	5.20 mg/L	2.5 g	5.20 mg/L	1					10/6/22 14:55:00	N	IV
KQ2217393-02	Sulfate	CCV		Soil	5.21 mg/L	2.5 g	5.21 mg/L	1					10/6/22 16:23:00	N	IV
KQ2217393-03	Sulfate	CCB		Soil	0.00 mg/L	2.5 g	1.0 mg/Kg U	1	0.5	1.0			10/6/22 15:06:00	N	IV
KQ2217393-04	Sulfate	CCB		Soil	0.00 mg/L	2.5 g	1.0 mg/Kg U	1	0.5	1.0			10/6/22 16:34:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

ALS ENVIRONMENTAL, INC.

Ion Chromatography Calibration Data

Sequence: IC08072922 CAL **Date:** 07/29/22

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope	Residuals
F	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.9677	0.1438	
Cl	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.9389	0.083	
NO2	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9669	0.1886	
Br	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9967	0.0333	
NO3	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9535	0.2072	
SO4	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.998	0.0616	
								99.9703	0.1196	

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

No.	Peak Name	Cal.Type	#Points	Rel.Std.Dev. %	Corr.Coeff. %	Offset	Slope		Curve
1	Fluoride	Lin	6	2.3723	99.9677	0	0.1438	0	0
2	Chloride	Lin	6	3.2972	99.9389	0	0.083	0	0
3	Nitrite	Lin	6	2.4214	99.9669	0	0.1886	0.0000	0
4	Bromide	Lin	6	0.7498	99.9967	0	0.0333	0	0
5	Nitrate	Lin	6	2.8736	99.9535	0	0.2072	0	0
6	Sulfate	Lin	6	0.5841	99.998	0	0.0616	0	0
Average:			6	2.0497	99.9703	0	0.1196	0	0

	0.5mL	22-GEN-01-71E	1.0mL	22-GEN-01-71E	to 100 mL flask
	50ppm	NO2, BR, NO3	100ppm	F, CL, SO4	

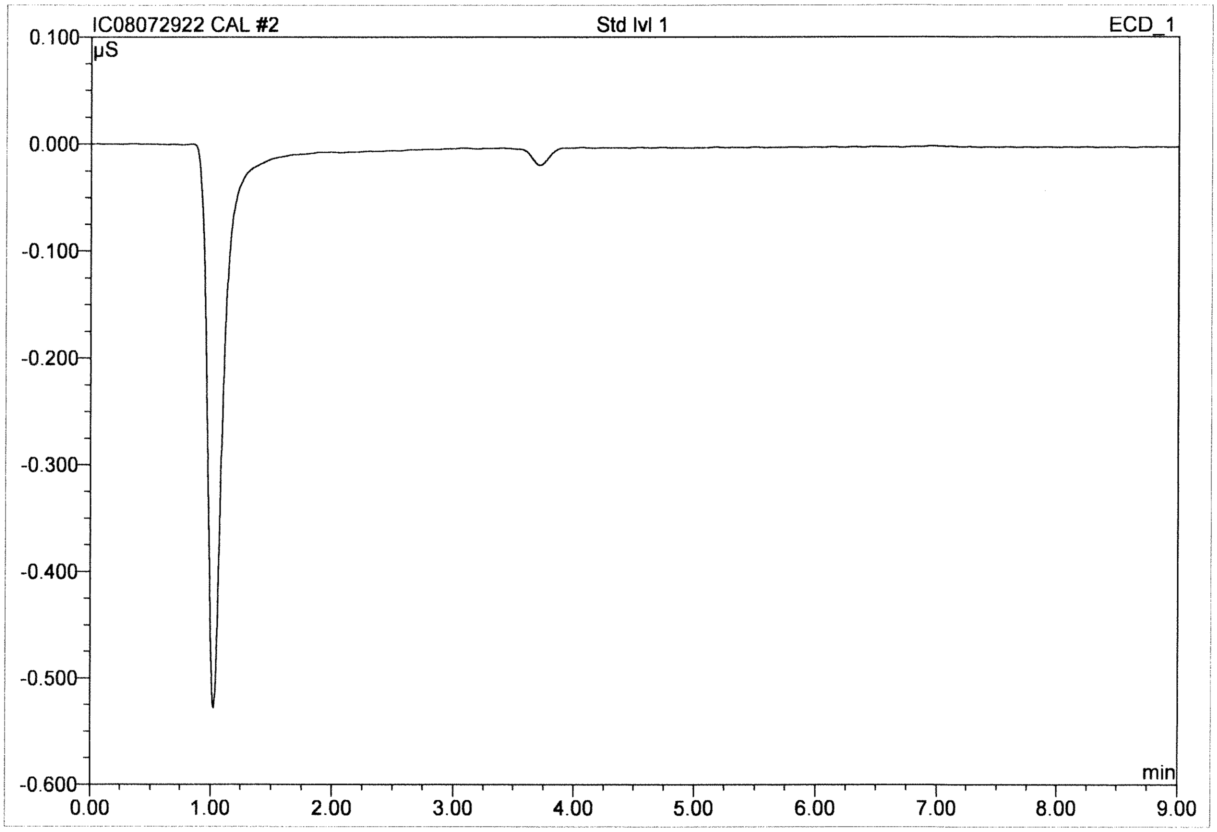
mL added (100mL)

	22-GEN-01-71-K	22-GEN-01-71-J	22-GEN-01-71-I	22-GEN-01-71-H	22-GEN-01-71-G	22-GEN-01-71-F	DIW
	STD2	STD3	STD4	STD5	STD6	STD7	STD1
F	0.100	0.200	0.500	1.000	5.00	7.50	0
CL	0.100	0.200	0.500	1.000	5.00	7.50	0
SO4	0.100	0.200	0.500	1.000	5.00	3.75	0
NO2	0.050	0.100	0.250	0.500	2.50	3.75	0
NO3	0.050	0.100	0.250	0.500	2.50	3.75	0
BR	0.050	0.100	0.250	0.500	2.50	7.50	0

Eluent: 22-GEN-01-71A
ICV: 22-GEN-01-71B

2 Std lvl 1

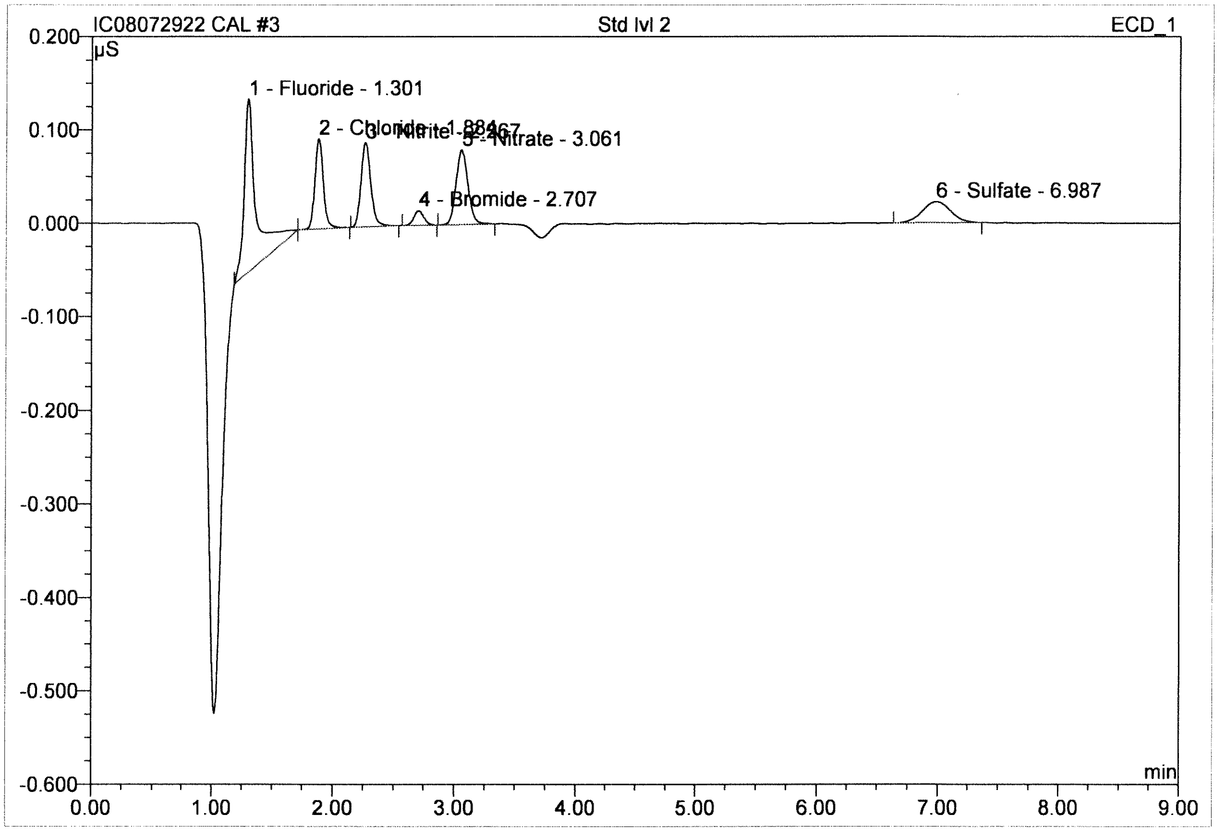
Sample Name:	**Std lvl 1**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

3 Std lvl 2

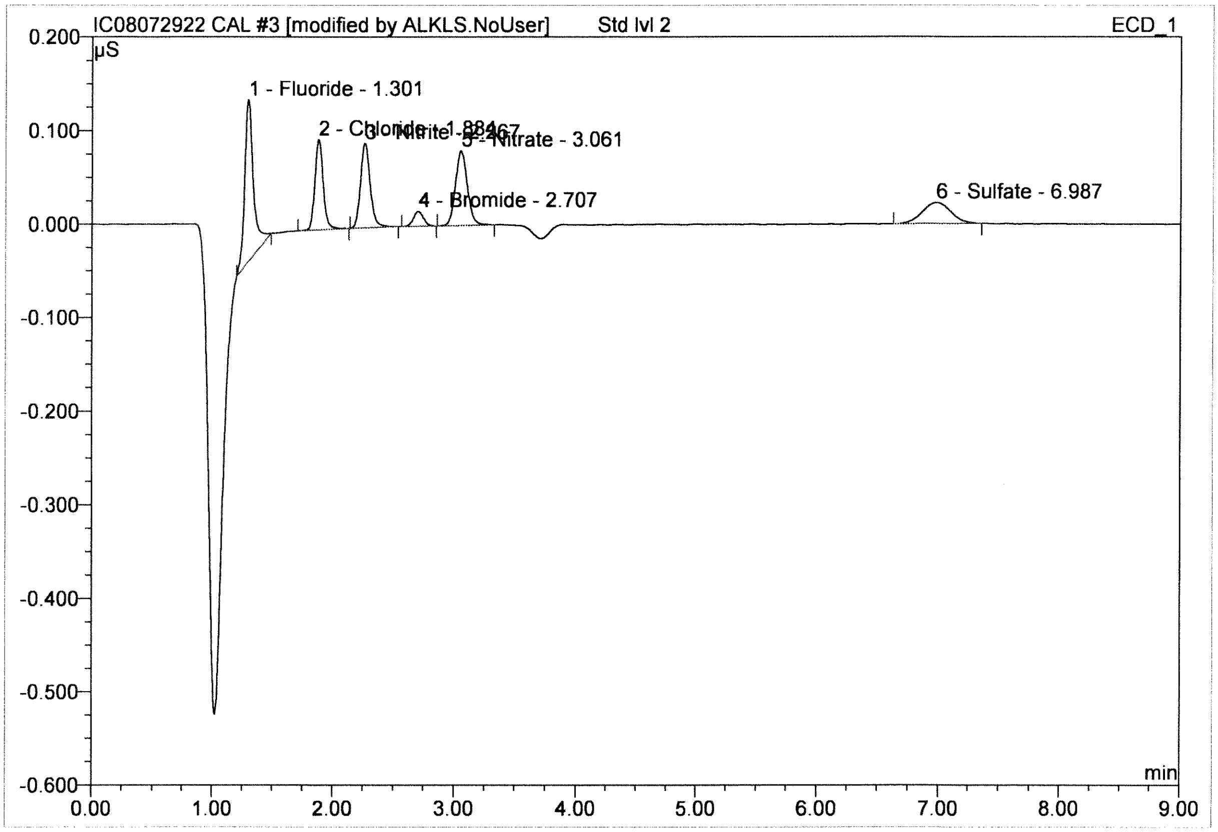
Sample Name:	**Std lvl 2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.185	0.021	39.12	0.149	BMB
2	1.88	Chloride	0.096	0.008	14.26	0.094	bMB
3	2.27	Nitrite	0.090	0.008	15.56	0.045	BMB
4	2.71	Bromide	0.016	0.002	2.87	0.047	BMB
5	3.06	Nitrate	0.080	0.009	16.95	0.045	BMB
6	6.99	Sulfate	0.023	0.006	11.24	0.100	BMB
Total:			0.490	0.055	100.00	0.479	

3 Std lvl 2

Sample Name:	**Std lvl 2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.173	0.015	30.59	0.102	BMB*
2	1.88	Chloride	0.096	0.008	16.26	0.094	BMB*
3	2.27	Nitrite	0.090	0.008	17.74	0.045	BMB
4	2.71	Bromide	0.016	0.002	3.27	0.047	BMB
5	3.06	Nitrate	0.080	0.009	19.32	0.045	BMB
6	6.99	Sulfate	0.023	0.006	12.82	0.100	BMB
Total:			0.477	0.048	100.00	0.432	

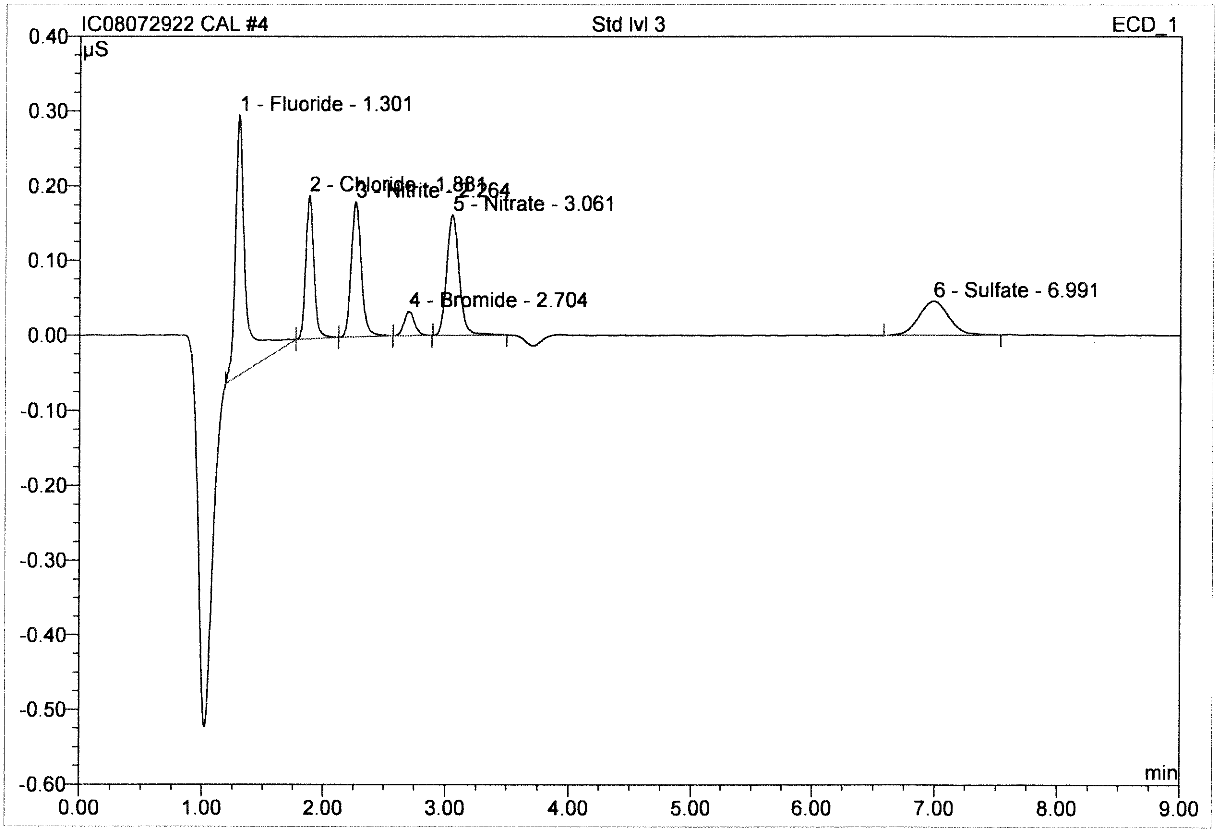
After
Initials NP

AUG 18

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

4 Std lvl 3

Sample Name:	**Std lvl 3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



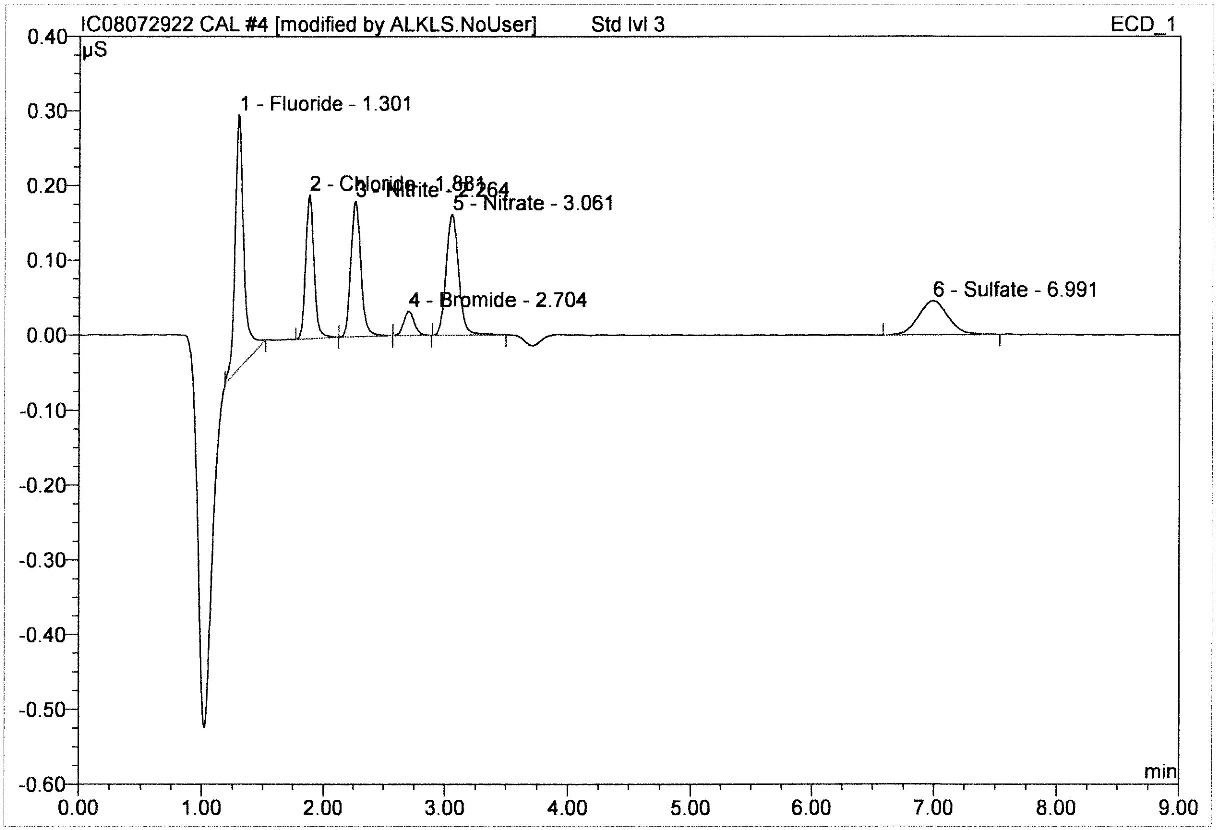
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.348	0.036	34.33	0.247	BMB
2	1.88	Chloride	0.192	0.015	14.87	0.185	bMB
3	2.26	Nitrite	0.181	0.017	16.73	0.092	BMB
4	2.70	Bromide	0.032	0.003	3.19	0.099	BMB
5	3.06	Nitrate	0.162	0.019	18.48	0.092	BMB
6	6.99	Sulfate	0.046	0.013	12.40	0.208	BMB
Total:			0.960	0.103	100.00	0.924	

Before

AUG 1 8

4 Std lvl 3

Sample Name:	**Std lvl 3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.339	0.028	29.54	0.198	BMB*
2	1.88	Chloride	0.192	0.015	15.96	0.185	BMB*
3	2.26	Nitrite	0.181	0.017	17.94	0.092	BMB
4	2.70	Bromide	0.032	0.003	3.42	0.099	BMB
5	3.06	Nitrate	0.162	0.019	19.83	0.092	BMB
6	6.99	Sulfate	0.046	0.013	13.30	0.208	BMB
Total:			0.952	0.096	100.00	0.875	

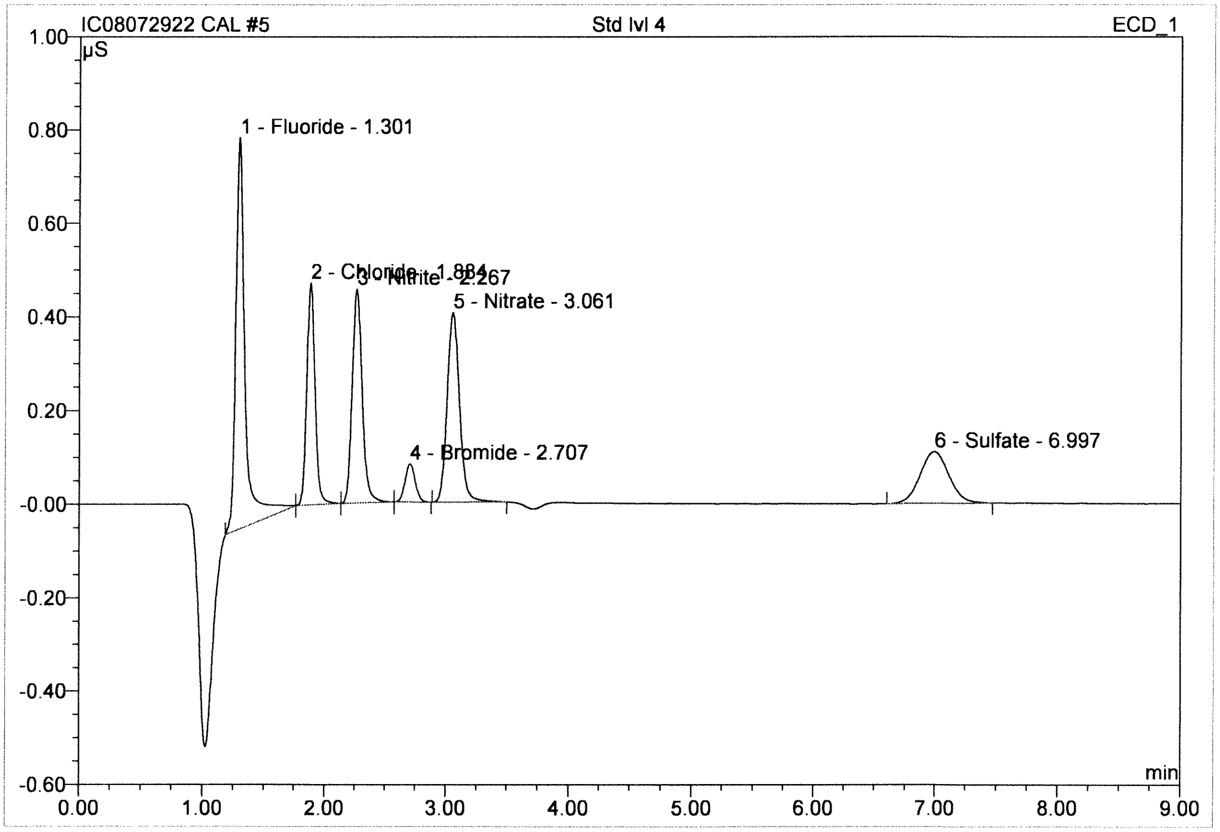
After
Initials NF

AUG 18

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

5 Std lvl 4

Sample Name:	**Std lvl 4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



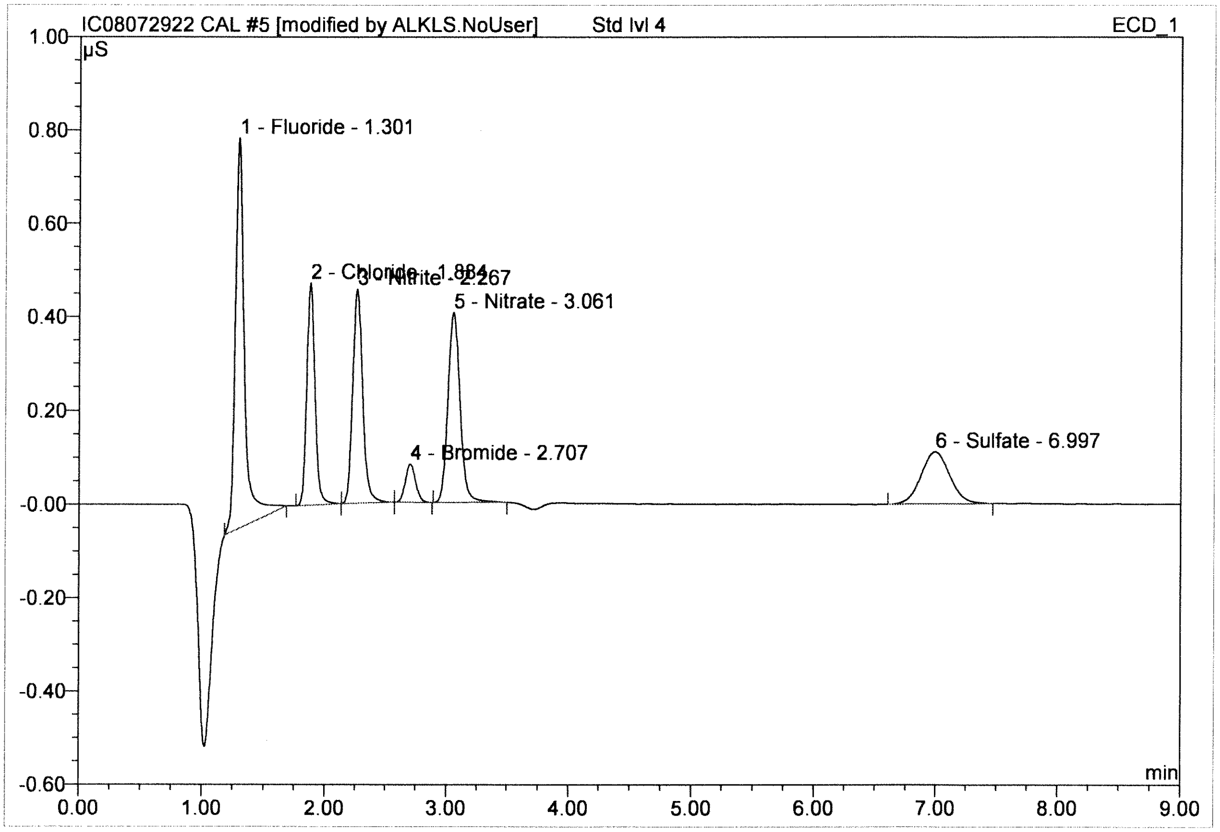
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.836	0.073	30.45	0.508	BMB
2	1.88	Chloride	0.474	0.038	15.72	0.454	bMB
3	2.27	Nitrite	0.457	0.043	18.11	0.230	BMB
4	2.71	Bromide	0.081	0.008	3.38	0.244	bMB
5	3.06	Nitrate	0.405	0.047	19.76	0.229	BMB
6	7.00	Sulfate	0.110	0.030	12.58	0.490	BMB
Total:			2.364	0.240	100.00	2.154	

Before

AUG 1 8

5 Std lvl 4

Sample Name:	**Std lvl 4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.834	0.071	29.76	0.491	BMB*
2	1.88	Chloride	0.474	0.038	15.88	0.454	BMB*
3	2.27	Nitrite	0.457	0.043	18.29	0.230	BMb*
4	2.71	Bromide	0.081	0.008	3.41	0.244	bMB
5	3.06	Nitrate	0.405	0.047	19.95	0.229	BMB
6	7.00	Sulfate	0.110	0.030	12.70	0.490	BMB
Total:			2.362	0.237	100.00	2.138	

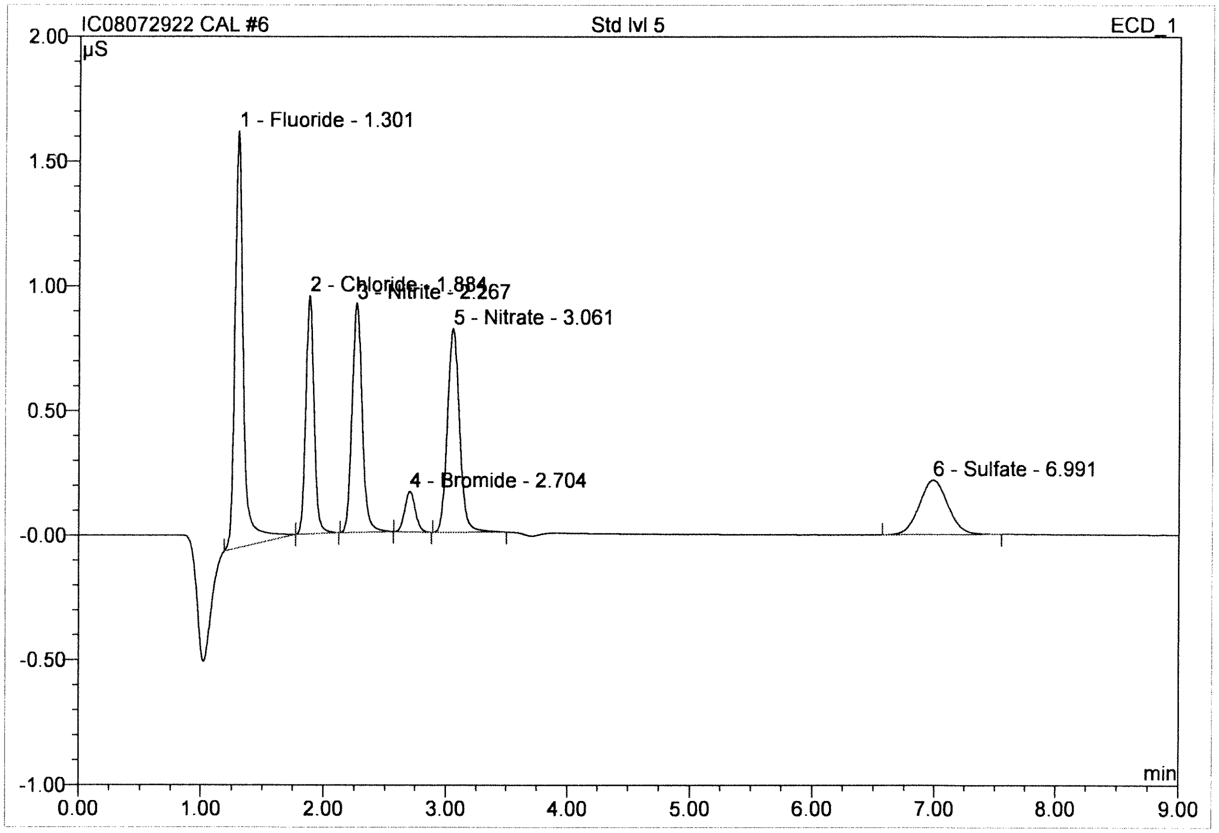
After
Initials NF

AUG 1 8

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

6 Std lvl 5

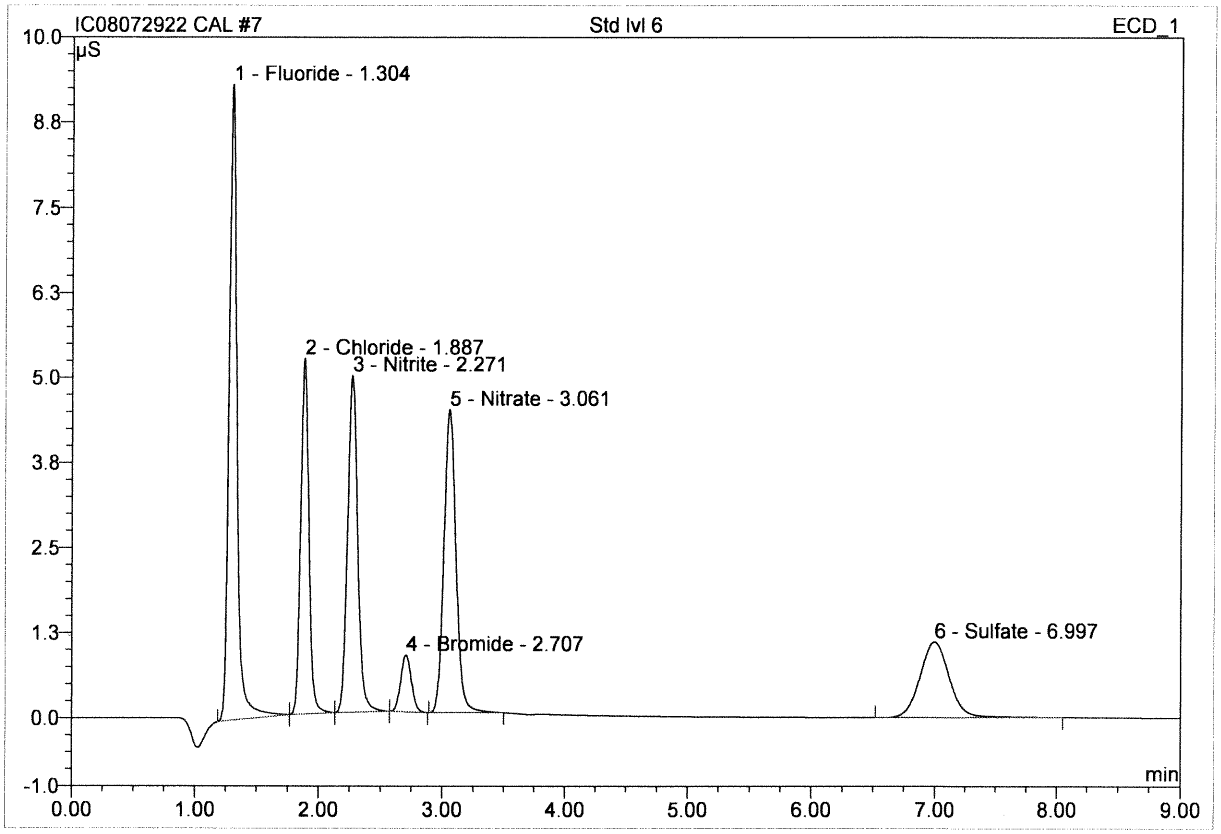
Sample Name:	**Std lvl 5**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	1.670	0.137	29.00	0.951	BMB
2	1.88	Chloride	0.956	0.076	16.07	0.912	bMB
3	2.27	Nitrite	0.920	0.087	18.51	0.463	BMB
4	2.70	Bromide	0.162	0.016	3.46	0.489	BMB
5	3.06	Nitrate	0.818	0.096	20.26	0.461	BMB
6	6.99	Sulfate	0.219	0.060	12.71	0.973	BMB
Total:			4.745	0.471	100.00	4.249	

7 Std lvl 6

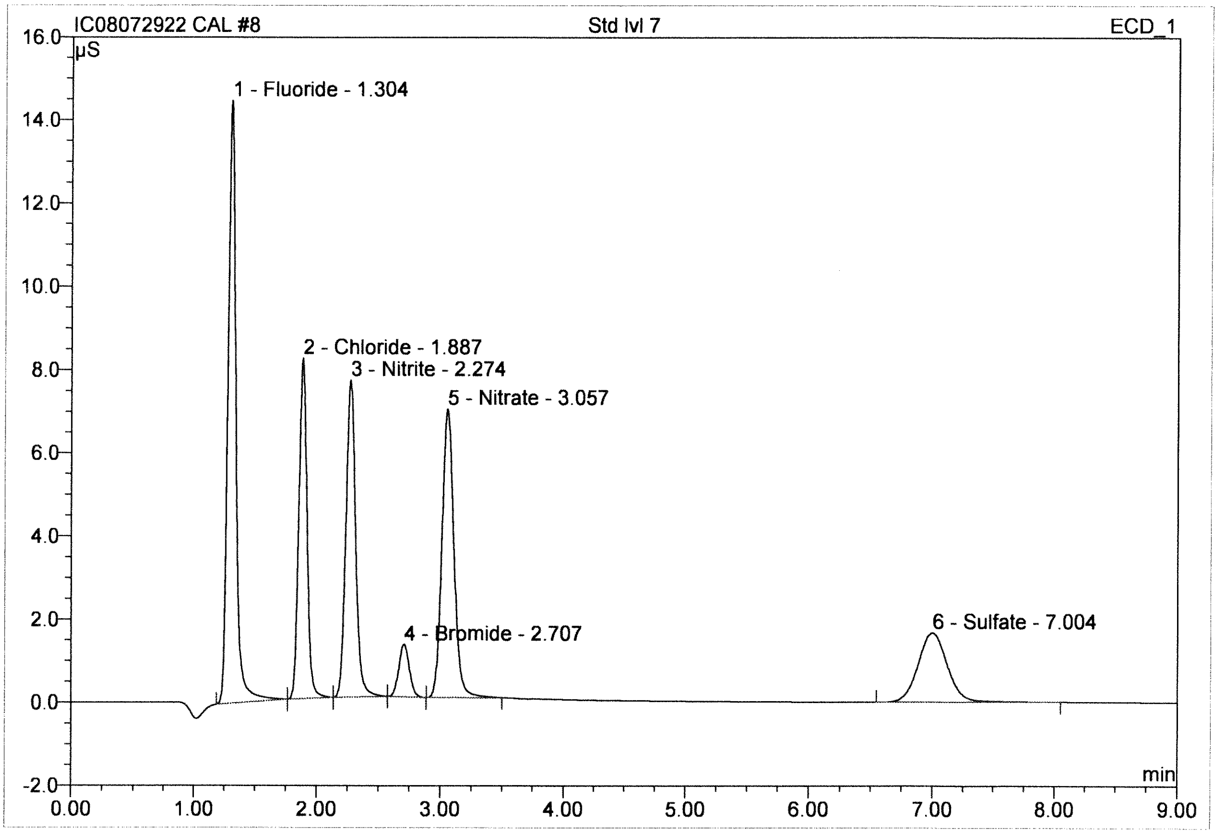
Sample Name:	**Std lvl 6**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.332	0.706	28.51	4.907	BMB
2	1.89	Chloride	5.224	0.406	16.40	4.890	bMb
3	2.27	Nitrite	4.949	0.465	18.78	2.464	bMB
4	2.71	Bromide	0.833	0.083	3.35	2.488	BMB
5	3.06	Nitrate	4.452	0.508	20.54	2.453	BMB
6	7.00	Sulfate	1.106	0.308	12.43	4.996	BMB
Total:			25.896	2.475	100.00	22.198	

8 Std lvl 7

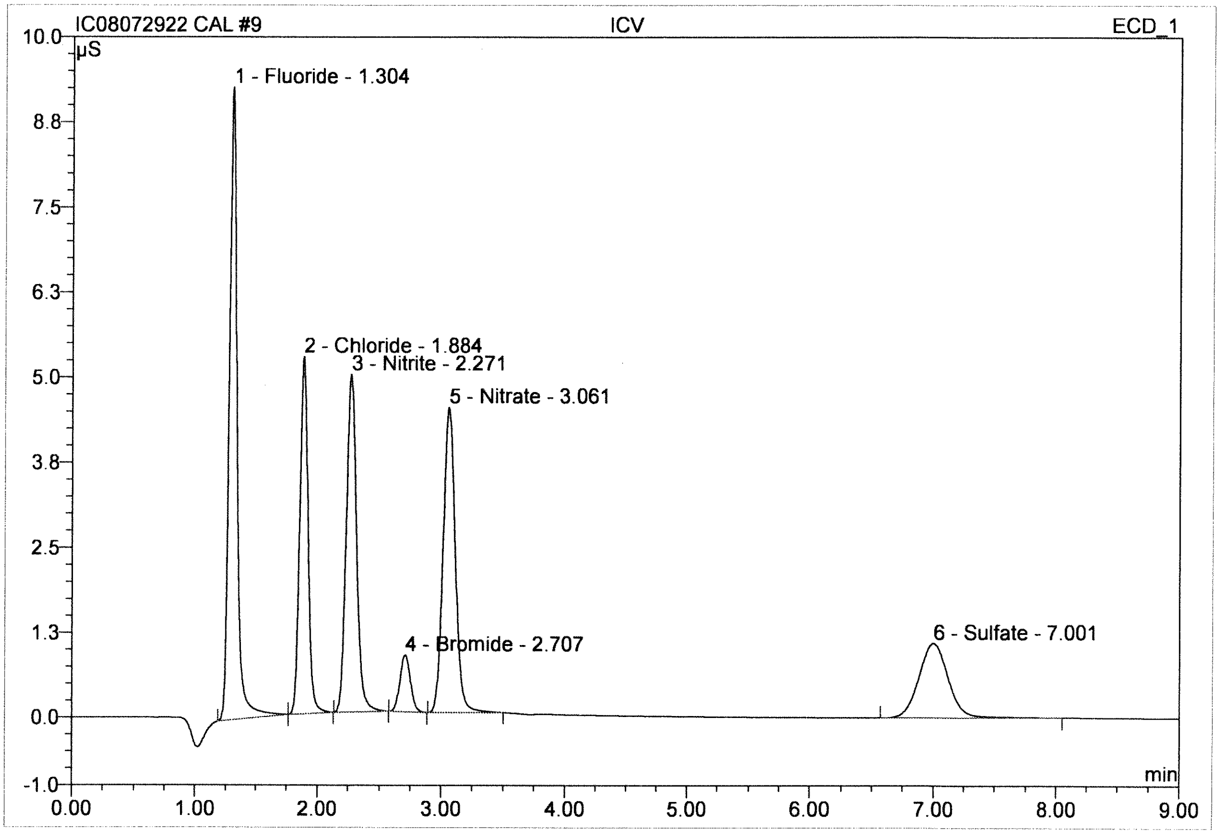
Sample Name:	**Std lvl 7**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	14.491	1.088	28.61	7.569	BMB
2	1.89	Chloride	8.191	0.630	16.56	7.589	bMB
3	2.27	Nitrite	7.627	0.713	18.75	3.780	bMb
4	2.71	Bromide	1.261	0.125	3.29	3.760	bMB
5	3.06	Nitrate	6.948	0.785	20.64	3.788	BMB
6	7.00	Sulfate	1.669	0.462	12.15	7.507	BMB
Total:			40.188	3.804	100.00	33.993	

9 ICV

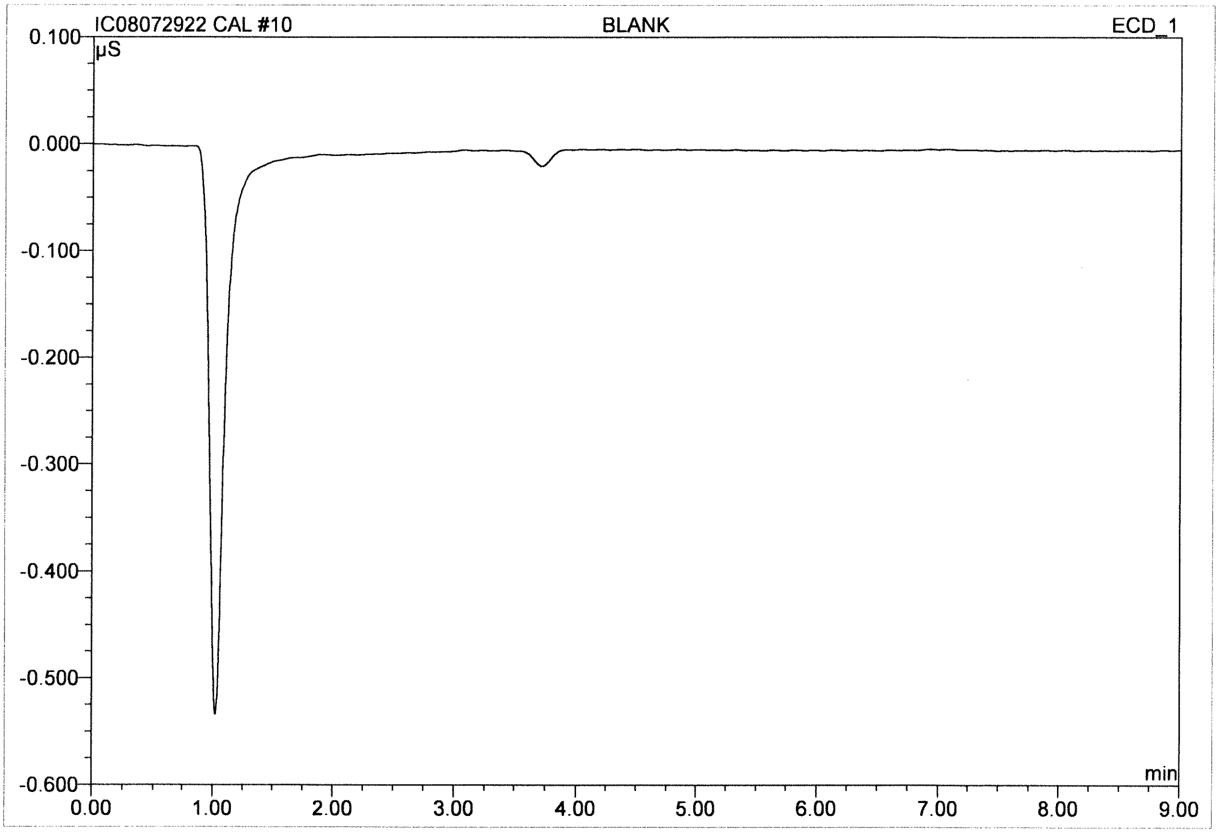
Sample Name:	**ICV**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.294	0.699	28.32	4.864	BMB
2	1.88	Chloride	5.247	0.407	16.48	4.902	bMB
3	2.27	Nitrite	4.962	0.465	18.84	2.466	BMB
4	2.71	Bromide	0.838	0.083	3.37	2.503	BMB
5	3.06	Nitrate	4.485	0.511	20.69	2.466	BMB
6	7.00	Sulfate	1.096	0.304	12.30	4.936	BMB
Total:			25.922	2.470	100.00	22.137	

10 BLANK

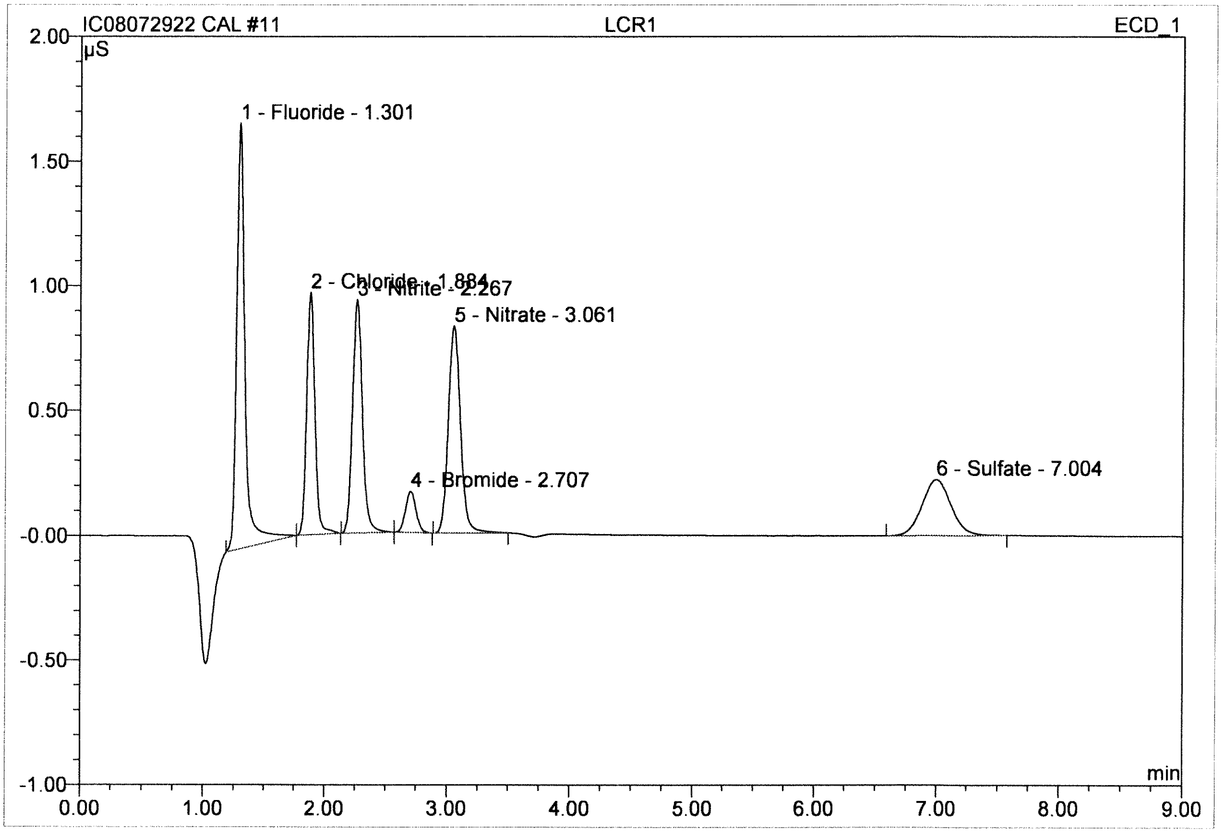
Sample Name:	**BLANK**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

11 LCR1

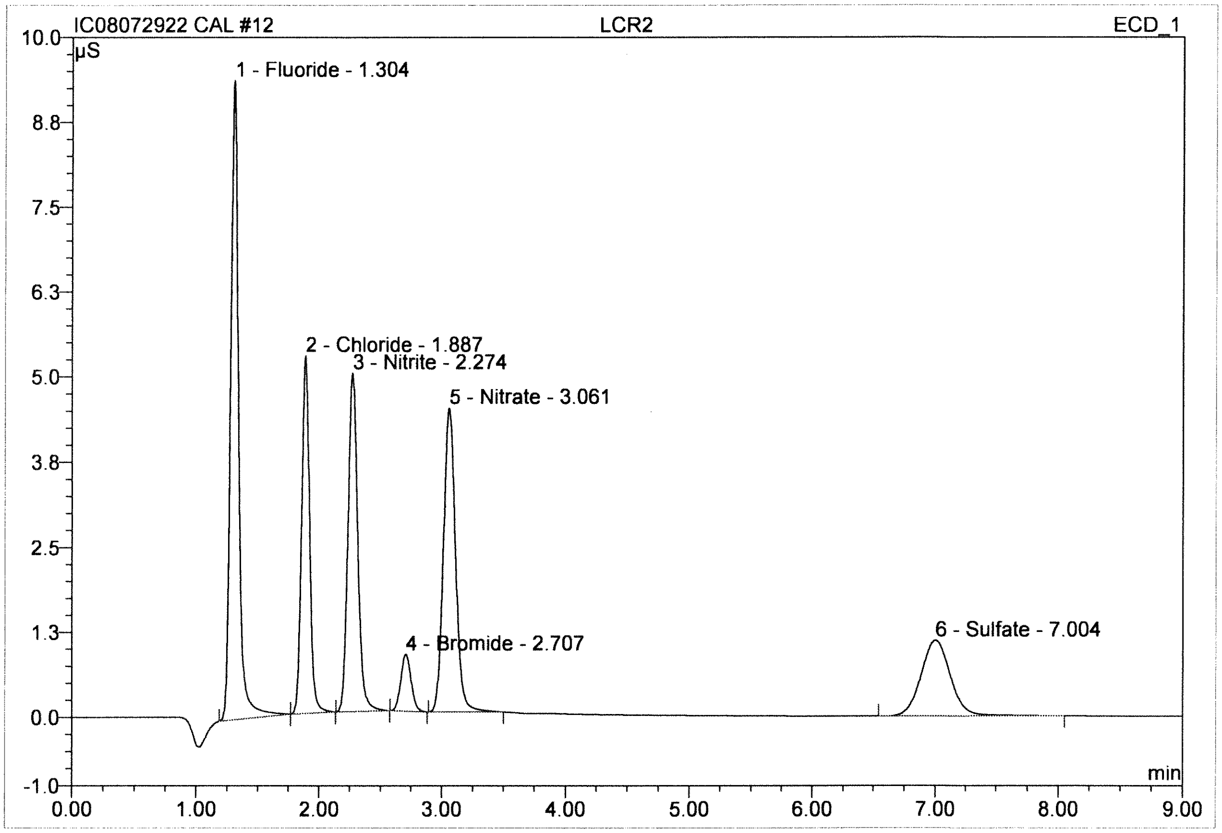
Sample Name:	**LCR1**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	1.705	0.139	29.06	0.966	BMB
2	1.88	Chloride	0.968	0.077	16.11	0.928	bMB
3	2.27	Nitrite	0.933	0.088	18.41	0.467	BMb
4	2.71	Bromide	0.164	0.016	3.44	0.494	bMB
5	3.06	Nitrate	0.828	0.096	20.16	0.465	BMB
6	7.00	Sulfate	0.223	0.061	12.82	0.996	BMB
Total:			4.820	0.478	100.00	4.315	

12 LCR2

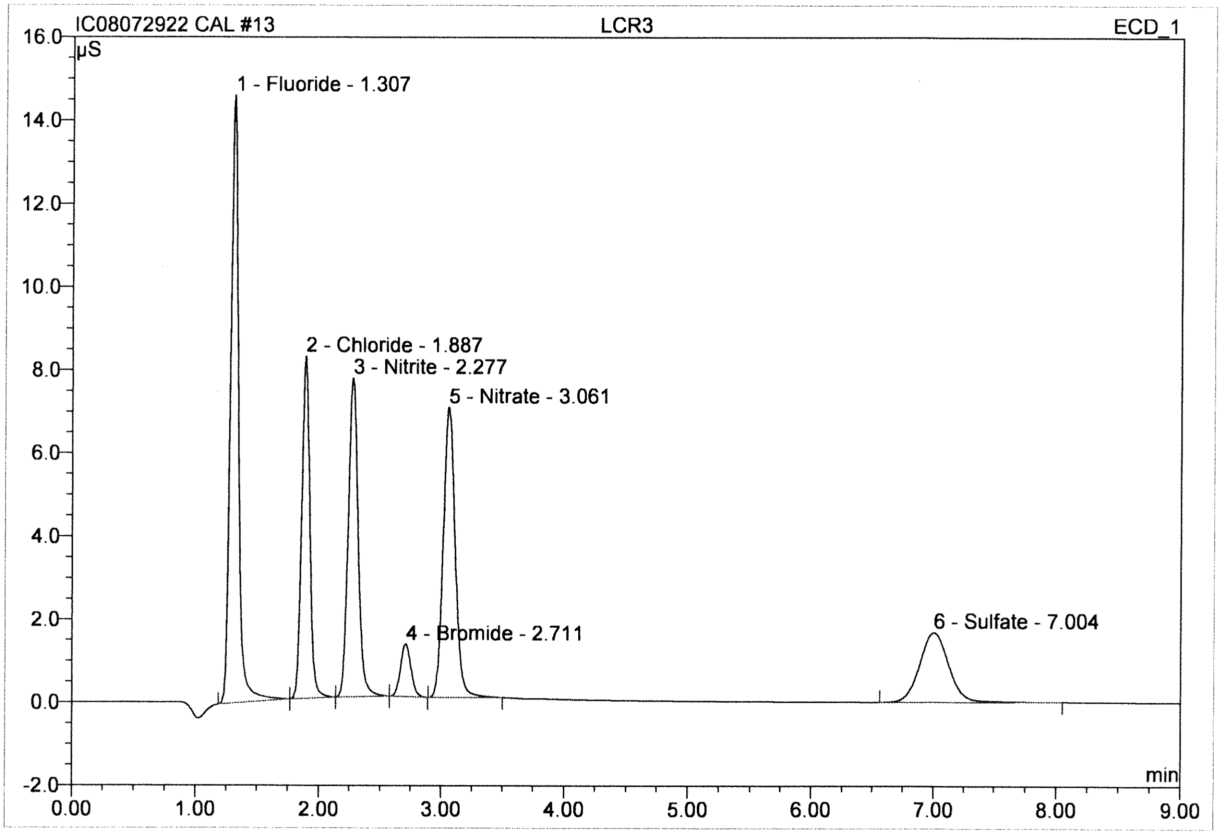
Sample Name:	**LCR2**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.395	0.708	28.56	4.925	BMB
2	1.89	Chloride	5.247	0.407	16.39	4.896	bMB
3	2.27	Nitrite	4.968	0.465	18.76	2.467	BMB
4	2.71	Bromide	0.835	0.083	3.34	2.488	BMB
5	3.06	Nitrate	4.462	0.508	20.50	2.453	BMB
6	7.00	Sulfate	1.110	0.309	12.45	5.015	BMB
Total:			26.017	2.480	100.00	22.245	

13 LCR3

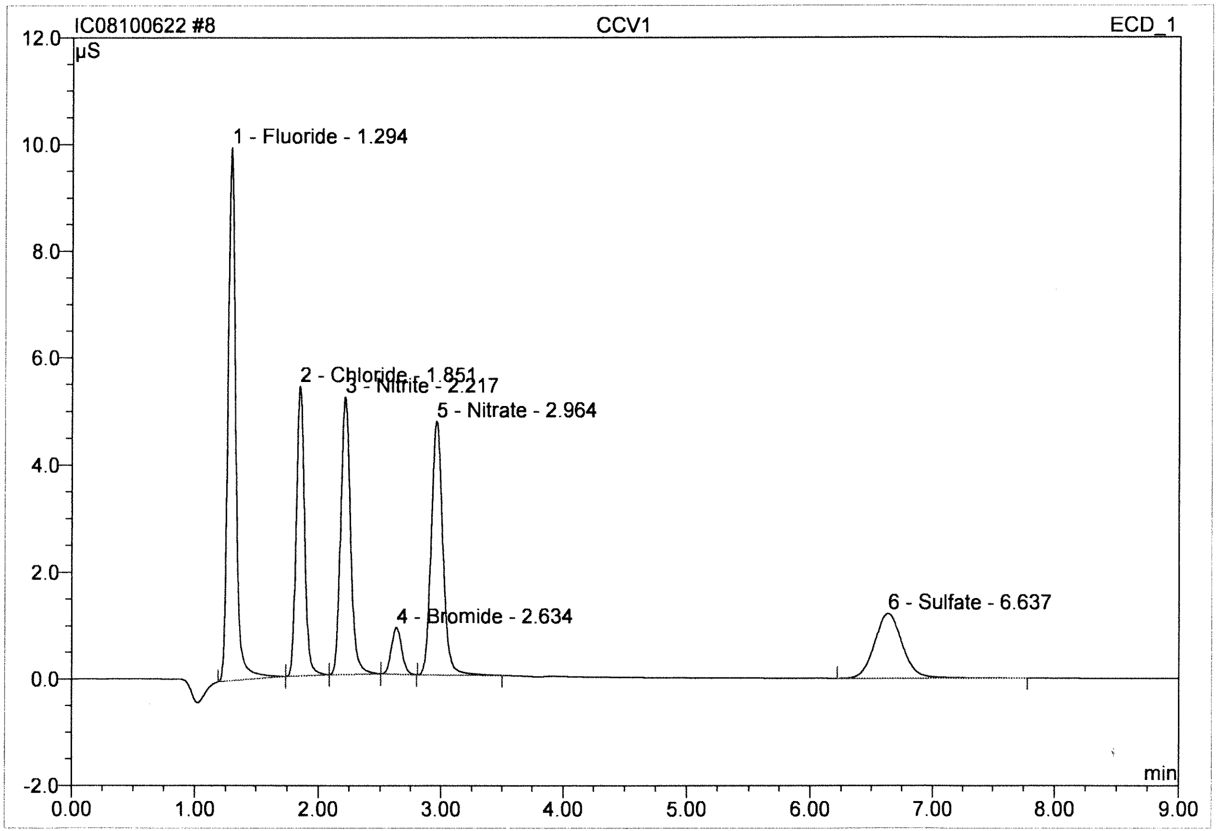
Sample Name:	**LCR3**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	14.626	1.097	28.65	7.633	BMB
2	1.89	Chloride	8.240	0.635	16.56	7.643	bMB
3	2.28	Nitrite	7.677	0.718	18.75	3.808	bMb
4	2.71	Bromide	1.269	0.126	3.29	3.782	bMB
5	3.06	Nitrate	6.992	0.790	20.62	3.812	BMB
6	7.00	Sulfate	1.683	0.465	12.14	7.557	BMB
Total:			40.486	3.831	100.00	34.234	

8 CCV1

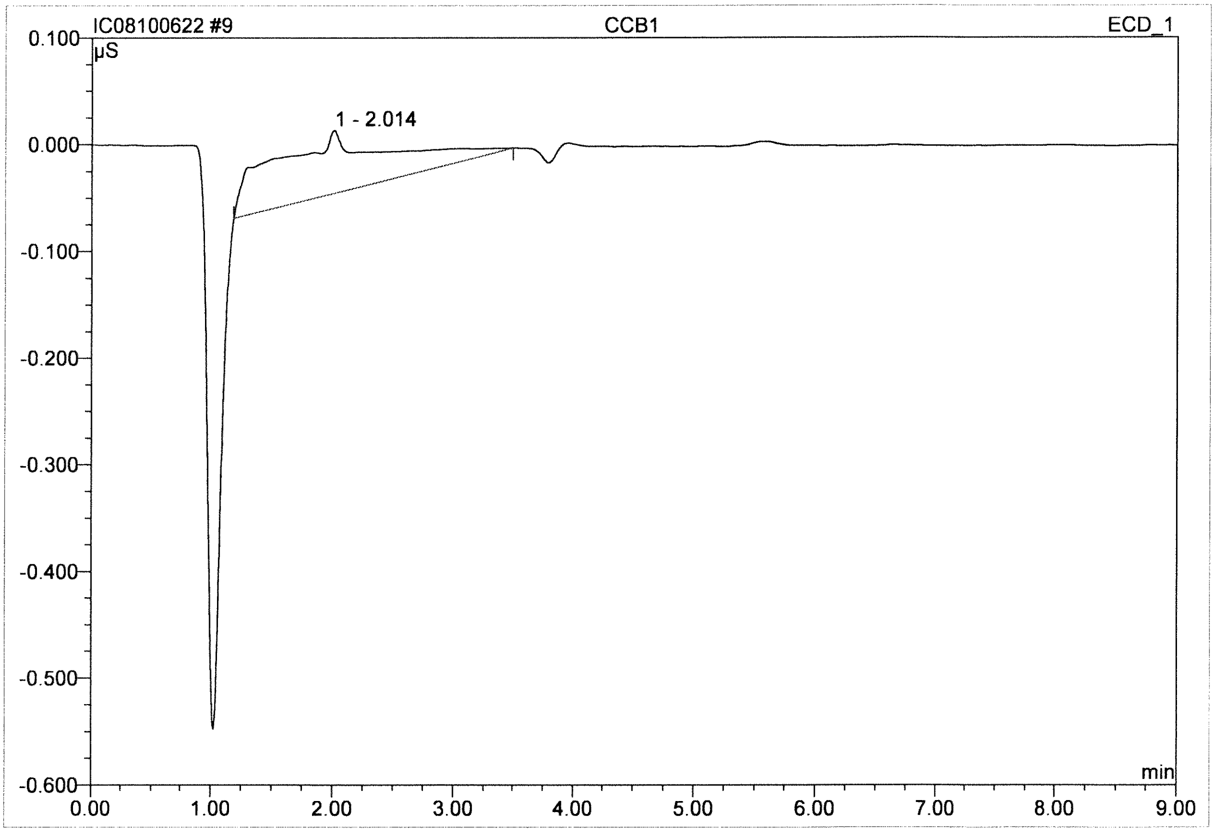
Sample Name:	**CCV1**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 14:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.973	0.740	28.87	5.148	BMB
2	1.85	Chloride	5.405	0.416	16.23	5.013	bMb
3	2.22	Nitrite	5.179	0.477	18.59	2.526	bMB
4	2.63	Bromide	0.878	0.085	3.32	2.560	BMB
5	2.96	Nitrate	4.736	0.525	20.49	2.536	BMB
6	6.64	Sulfate	1.213	0.320	12.50	5.205	BMB
Total:			27.383	2.564	100.00	22.988	

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 15:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



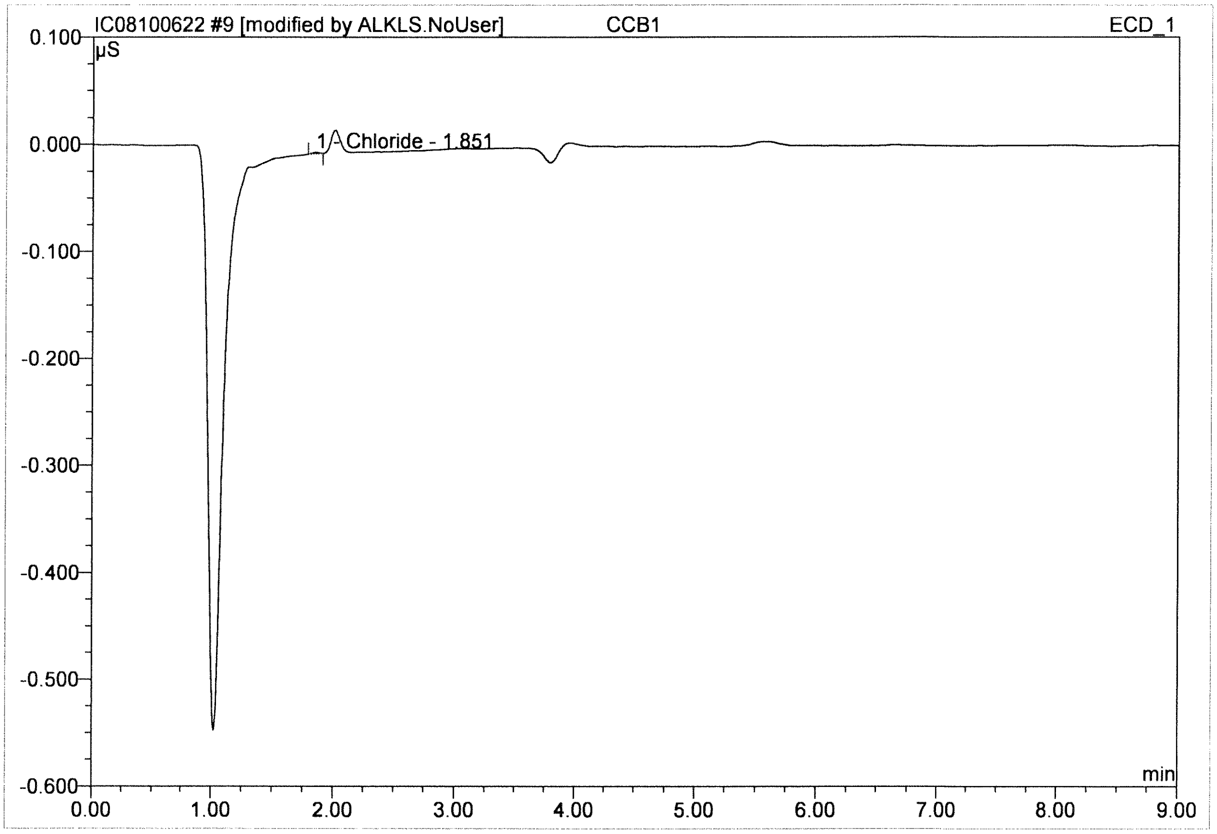
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.01	n.a.	0.058	0.064	100.00	n.a.	BMB
Total:			0.058	0.064	100.00	0.000	

Before

OCT 07

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 15:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.001	0.000	100.00	0.001	BMB*
Total:			0.001	0.000	100.00	0.001	

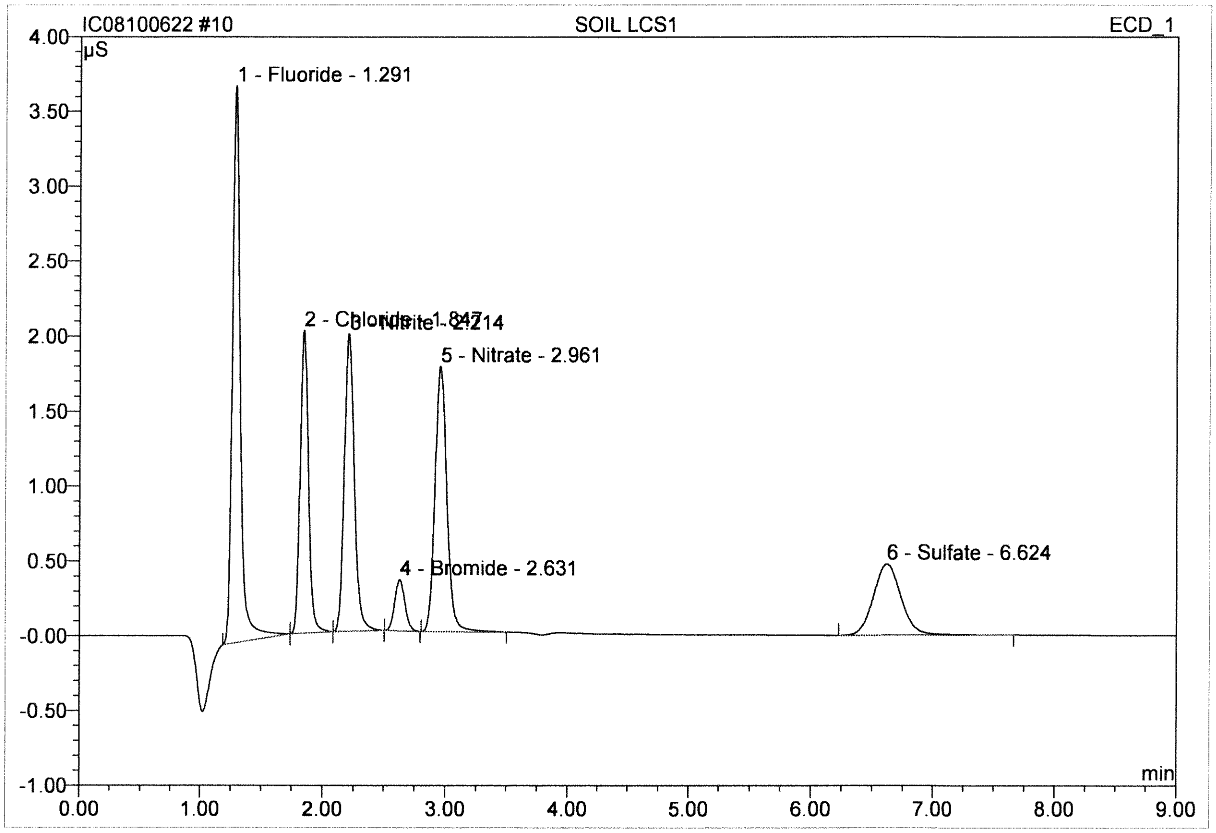
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

10 SOIL LCS1

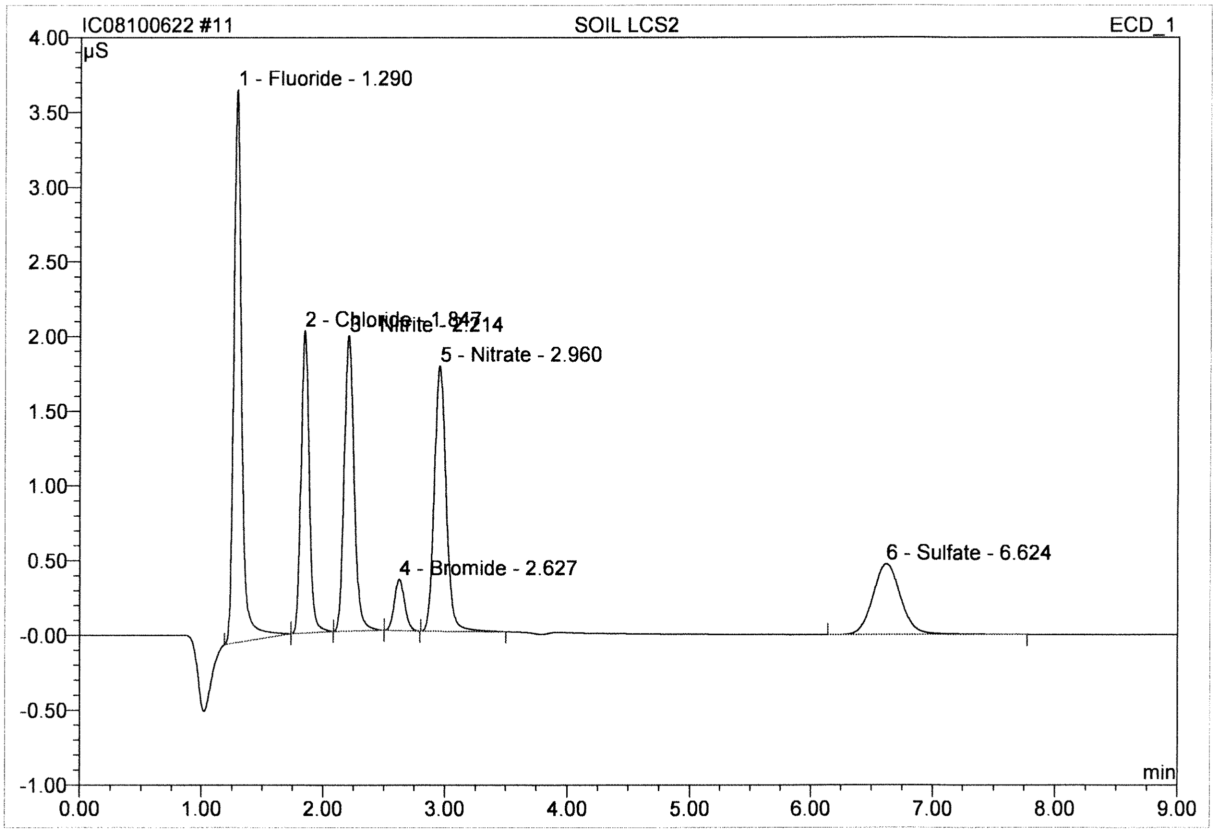
Sample Name:	**SOIL LCS1**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/6/2022 15:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.718	0.284	28.86	197.277	BMB
2	1.85	Chloride	2.018	0.158	16.03	189.767	bMB
3	2.21	Nitrite	1.983	0.184	18.67	97.284	BMB
4	2.63	Bromide	0.342	0.033	3.39	100.084	BMB
5	2.96	Nitrate	1.770	0.200	20.32	96.406	BMB
6	6.62	Sulfate	0.474	0.125	12.74	203.414	BMB
Total:			10.306	0.983	100.00	884.233	

11 SOIL LCS2

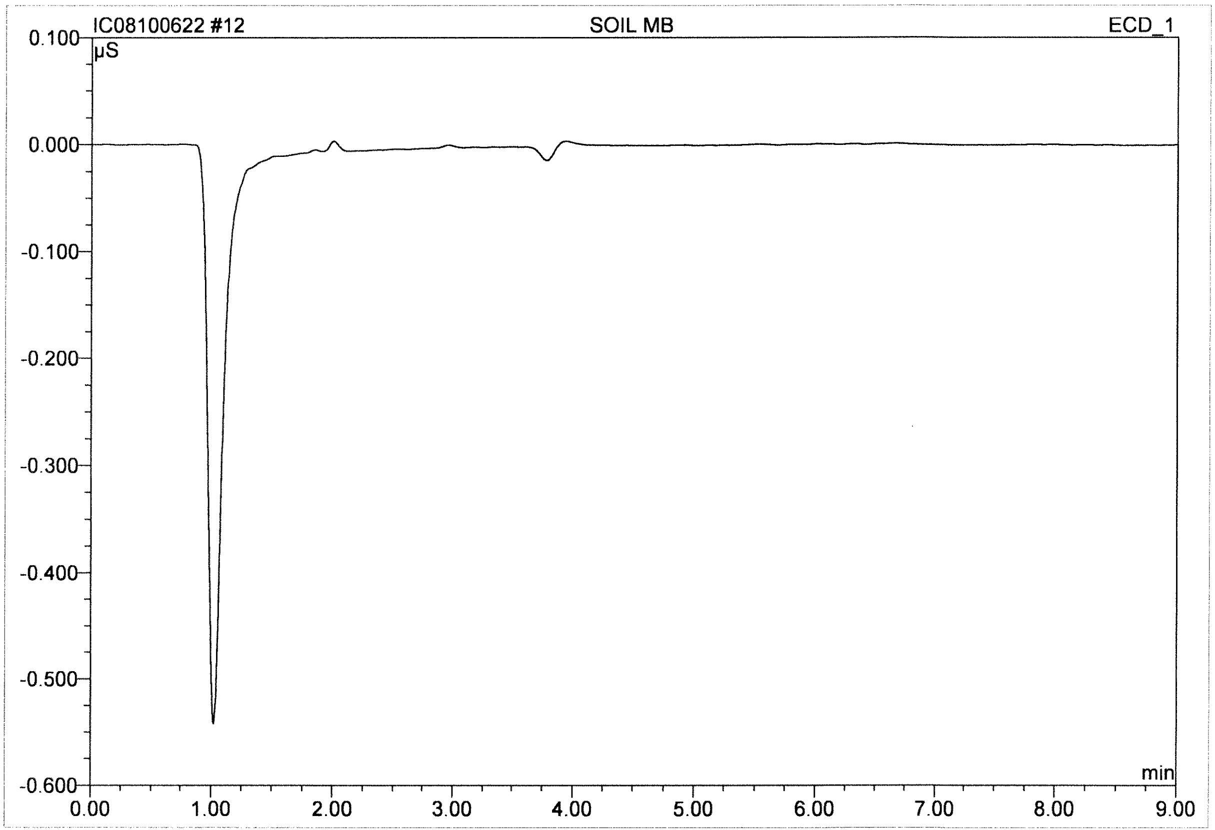
Sample Name:	**SOIL LCS2**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/6/2022 15:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.698	0.282	28.76	196.337	BMB
2	1.85	Chloride	2.021	0.158	16.07	189.986	bMB
3	2.21	Nitrite	1.975	0.183	18.64	96.975	BMB
4	2.63	Bromide	0.342	0.033	3.39	100.050	BMB
5	2.96	Nitrate	1.774	0.200	20.40	96.623	BMB
6	6.62	Sulfate	0.472	0.125	12.73	203.034	BMB
Total:			10.283	0.981	100.00	883.005	

12 SOIL MB

Sample Name:	**SOIL MB**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 15:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



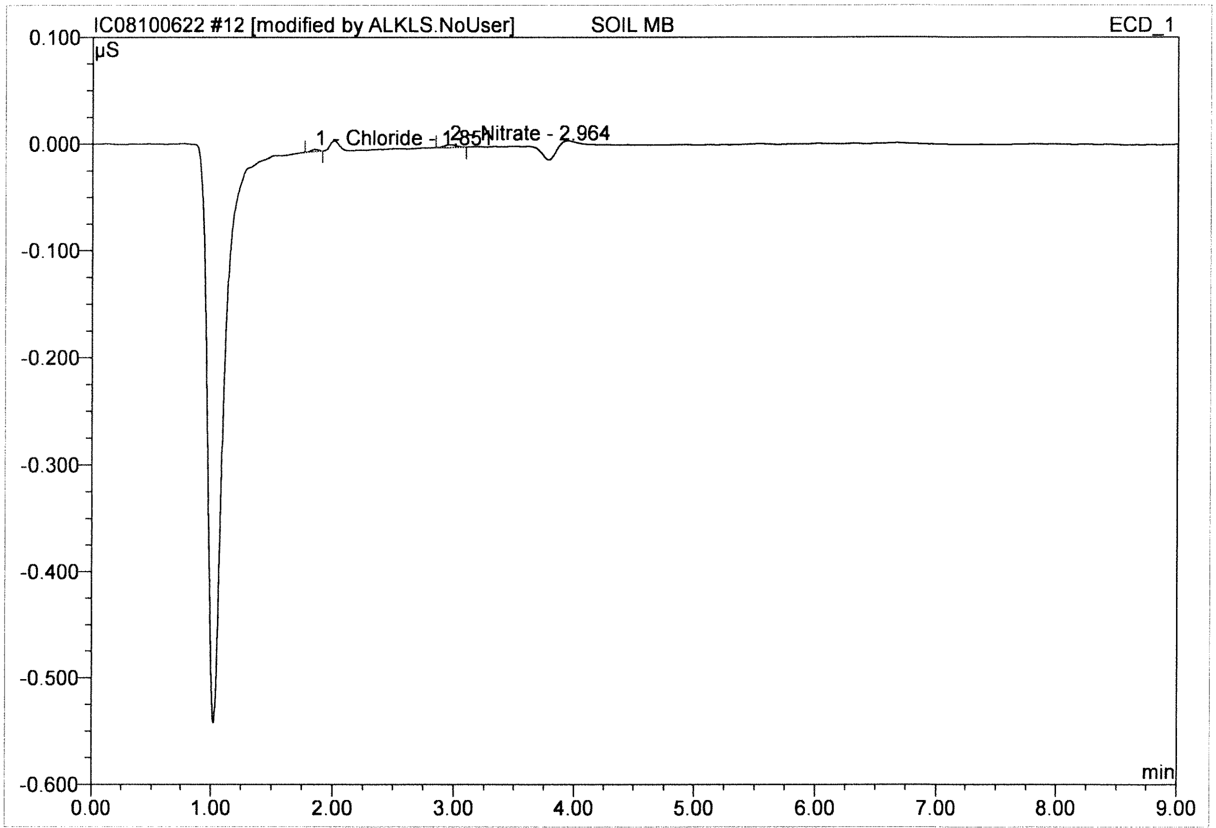
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Before

OCT 07

12 SOIL MB

Sample Name:	**SOIL MB**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 15:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.002	0.000	34.55	0.002	BMB*
2	2.96	Nitrate	0.003	0.000	65.45	0.001	BMB*
Total:			0.005	0.000	100.00	0.003	

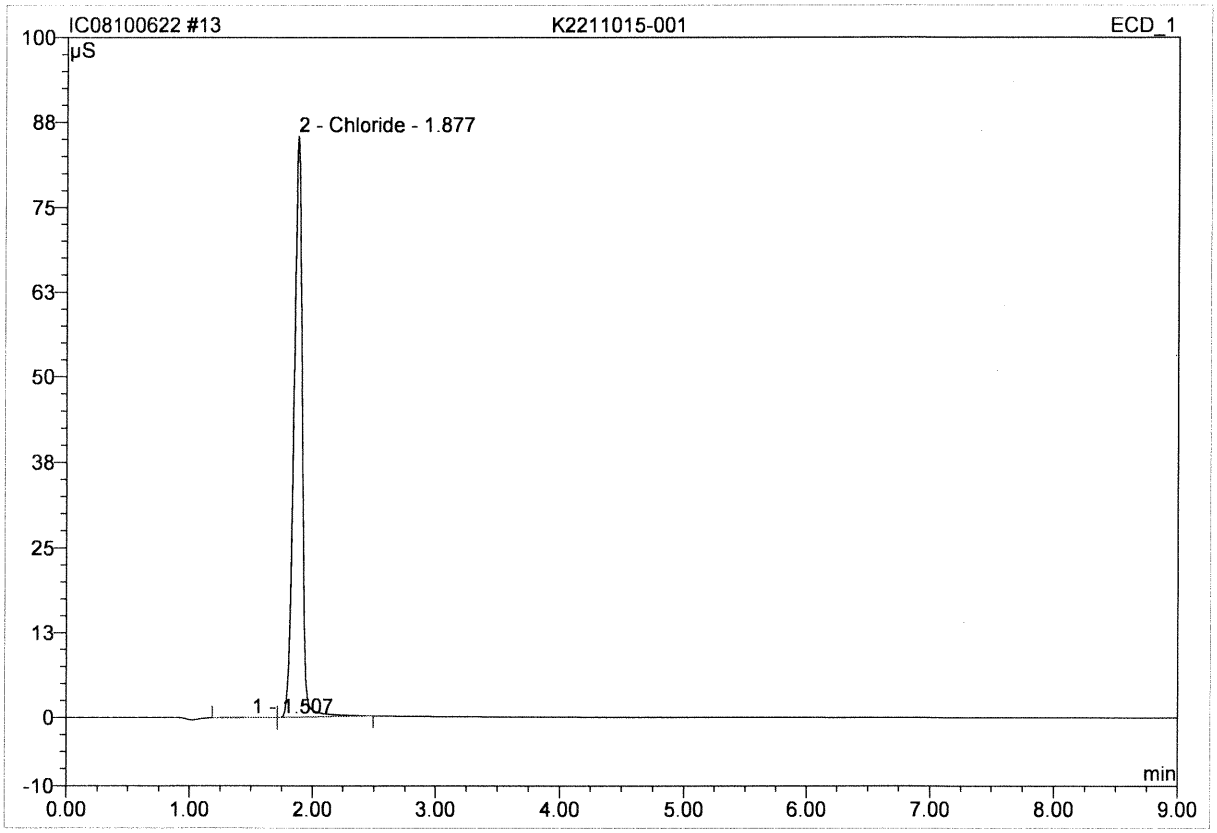
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

13 K2211015-001

Sample Name:	**K2211015-001**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 15:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

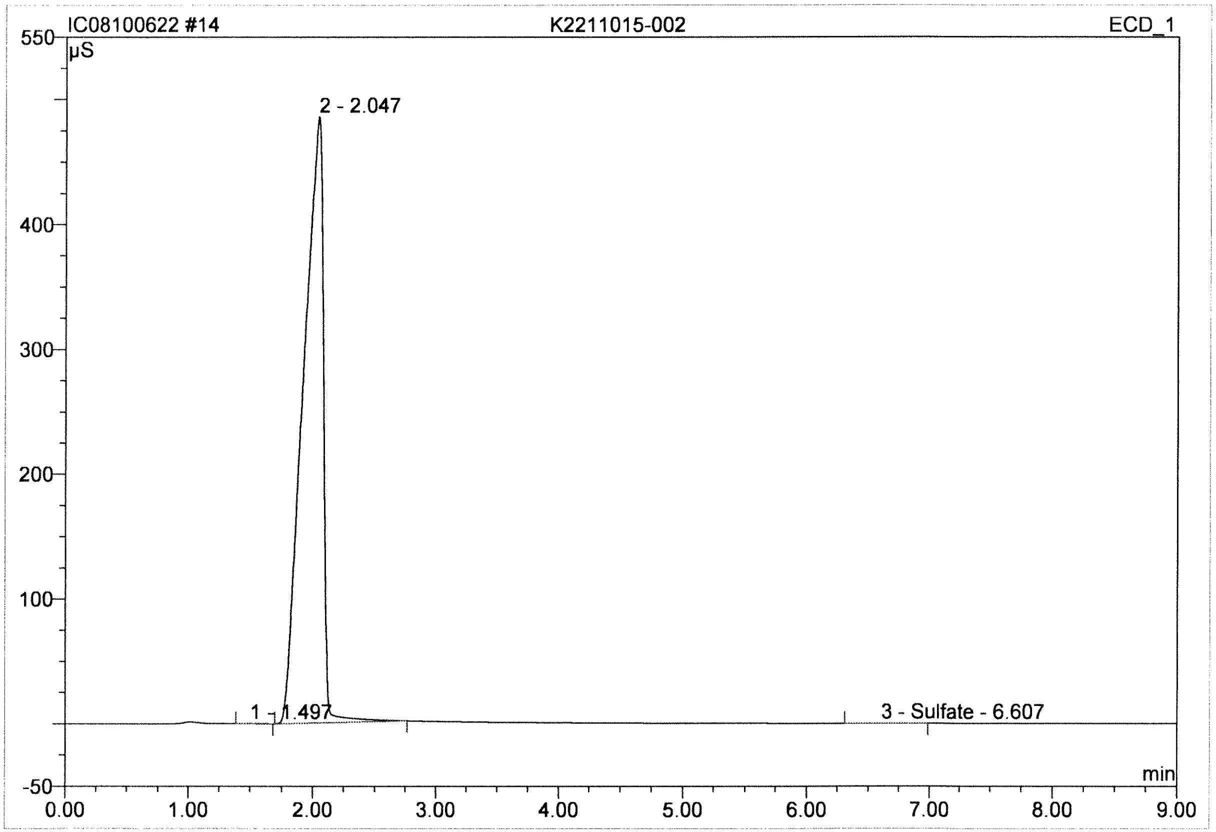


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.51	n.a.	0.017	0.007	0.10	n.a.	BMB
2	1.88	Chloride	85.408	6.771	99.90	815.501	bMB
Total:			85.425	6.777	100.00	815.501	

14 K2211015-002

F

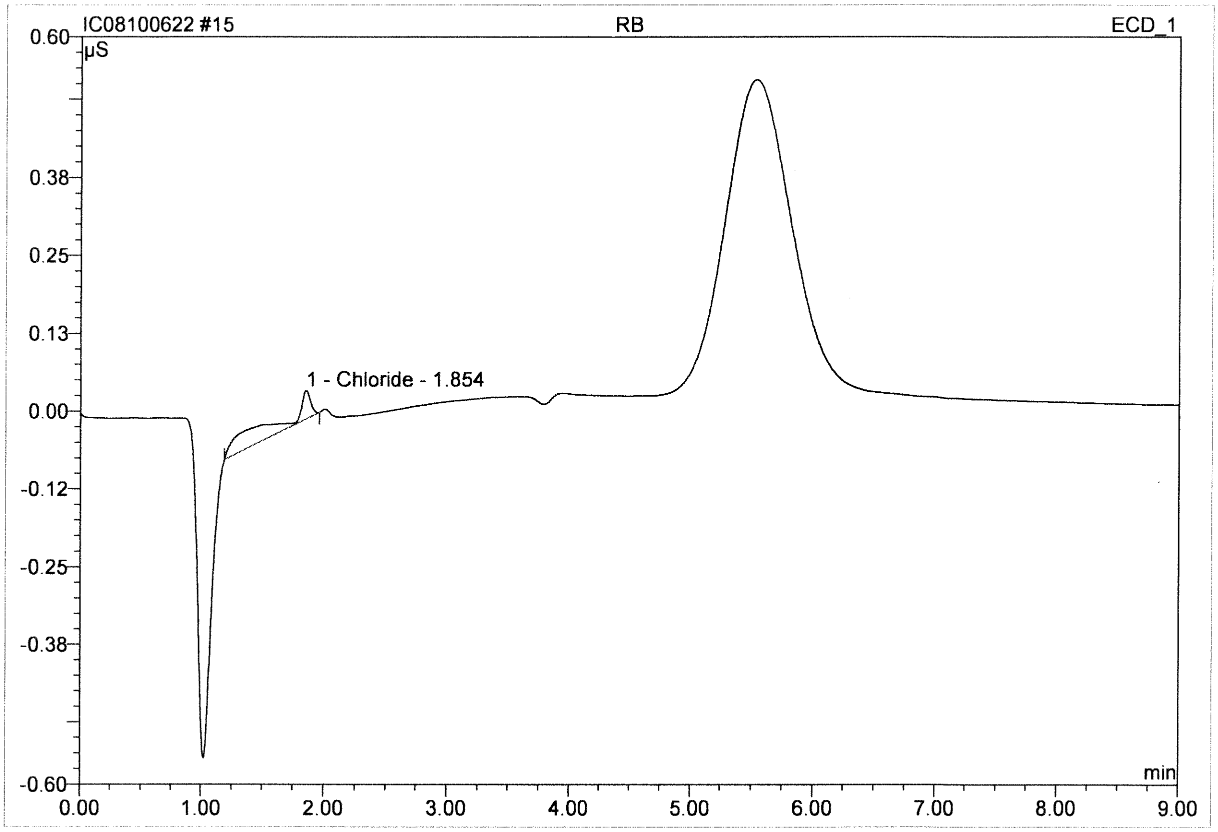
Sample Name:	**K2211015-002**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 16:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.50	n.a.	0.270	0.031	0.03	n.a.	BMB
2	2.05	n.a.	485.215	91.973	99.94	n.a.	BMB
3	6.61	Sulfate	0.102	0.025	0.03	4.109	BMB
Total:			485.587	92.029	100.00	4.109	

15 RB

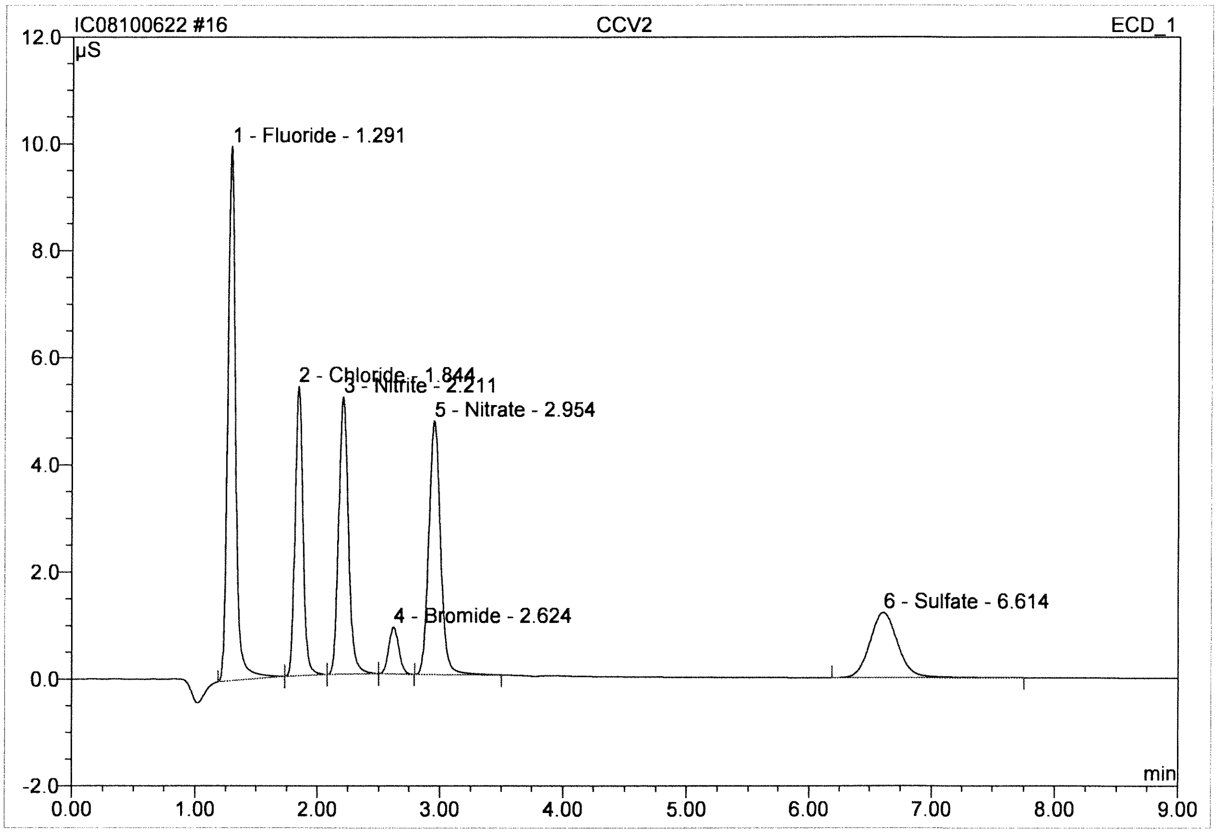
Sample Name:	**RB**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 16:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.045	0.015	100.00	0.184	BMB
Total:			0.045	0.015	100.00	0.184	

16 CCV2

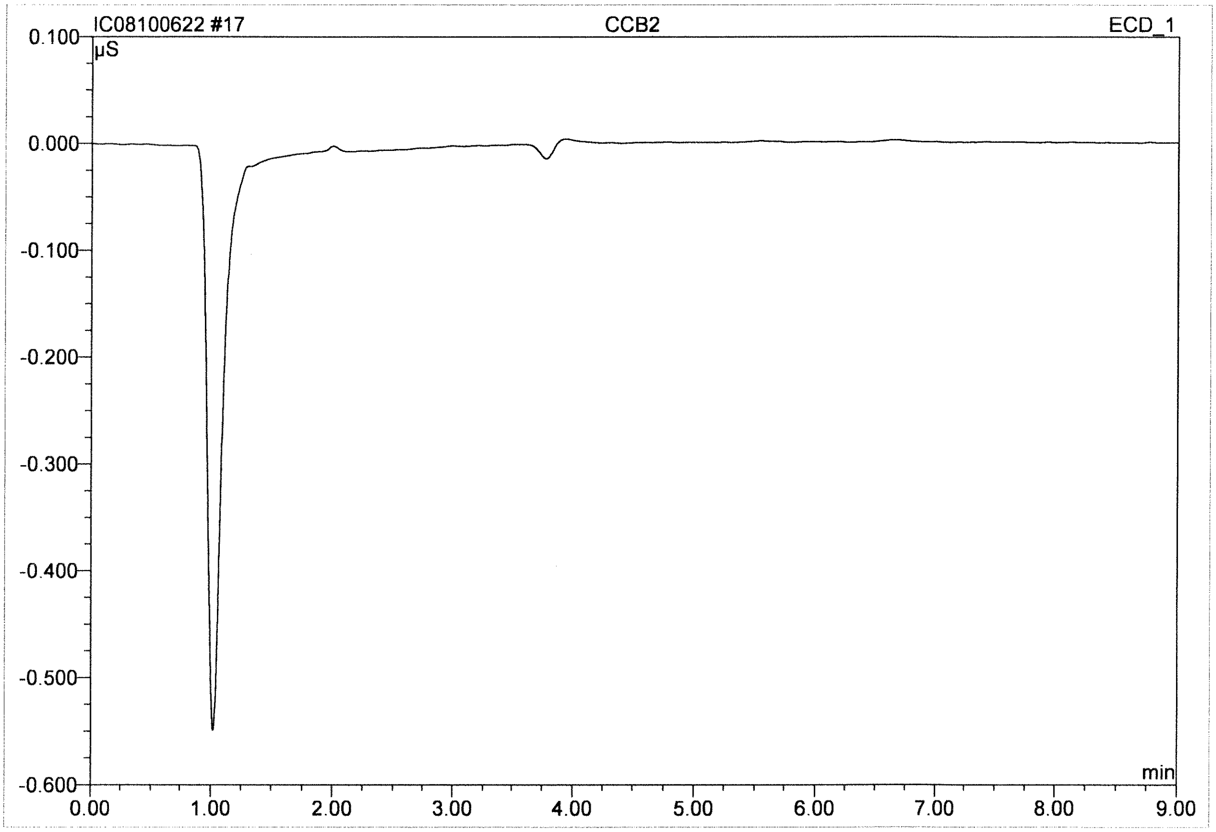
Sample Name:	**CCV2**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 16:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.980	0.738	28.85	5.135	BMB
2	1.84	Chloride	5.405	0.415	16.22	4.998	bMB
3	2.21	Nitrite	5.184	0.475	18.56	2.518	bMb
4	2.62	Bromide	0.879	0.085	3.32	2.555	bMB
5	2.95	Nitrate	4.740	0.525	20.52	2.534	BMB
6	6.61	Sulfate	1.218	0.321	12.53	5.210	BMB
Total:			27.407	2.559	100.00	22.951	

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 16:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Work Request # K10540 K10969 K11015

Date Analyzed: 9-28-22

Analyst: A Chertkof

Run # 779242
779255

Analysis: Fluoride SM 4500-F-C Mod.

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1. Is the method name and number correct and appropriate? [✓ yes]/no/NA
2. Holding times met for all analyses and for all samples? [✓ yes]/no/NA
3. Are calculations correct? [✓ yes]/no/NA
4. Is the reporting basis correct? (Dry Weight) [✓ yes]/no/NA
5. All quality control criteria met? [✓ yes]/no
6. Is the calibration curve correlation coefficient ≥ 0.995? yes/no/[✓ NA]
7. MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency? [✓ yes]/no/NA
8. Are ICVs, CCVs, and CCBs all within acceptance limits? [✓ yes]/no/NA
9. Are results for methods blanks all ND? [✓ yes]/no/NA
10. Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.) yes/[✓ no]/NA
11. Are all exceptions explained? [✓ yes]/no/NA
12. Have all applicable service requests been reviewed? [✓ yes]/no/NA
13. Are all samples labeled correctly? [✓ yes]/no/NA
14. Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V) [✓ yes]/no/NA
15. Are detection limits and units reported correctly? [✓ yes]/no/NA
16. Is the unused space on the benchsheet crossed out? [✓ yes]/no/NA
17. Was analysis turned in by the data due date? (If not record SR#) [✓ yes]/no/NA

COMMENTS:

10) 11015-1MS/1MSD failed. Suspect matrix interference.

Secondary Approved by: Date: 09/28/22

DQREPORT

Analytical Results Summary

Instrument Name: K-ISE-01 **Analyst:** ACHEATLEY **Analysis Lot:** 779255 **Method/Testcode:** SM 4500-F- C Modified/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2210540-003	Fluoride	N/A		Water	1.40 mg/L	20 mL	1.40 mg/L	1	0.007	0.20			9/28/22 13:50:00	N	IV
K2210969-001	Fluoride	N/A		Drinking Water	0.76 mg/L	20 mL	0.76 mg/L	1	0.007	0.20			9/28/22 13:50:00	N	I
KQ2216669-01	Fluoride	DUP	K2210540-003	Water	1.41 mg/L	20 mL	1.41 mg/L	1	0.007	0.20		<1	9/28/22 13:50:00	N	IV
KQ2216669-02	Fluoride	MS	K2210540-003	Water	28.10 mg/L	20 mL	28.1 mg/L	1	0.007	0.20	107		9/28/22 13:50:00	N	IV
KQ2216669-03	Fluoride	DMS	K2210540-003	Water	27.10 mg/L	20 mL	27.1 mg/L	1	0.007	0.20	103	4	9/28/22 13:50:00	N	IV
KQ2216669-04	Fluoride	LCS		Water	11.50 mg/L	20 mL	11.5 mg/L	1	0.007	0.20	104		9/28/22 13:50:00	N	IV
KQ2216669-05	Fluoride	MB		Water	0.02 mg/L	20 mL	0.02 mg/L J	1	0.007	0.20			9/28/22 13:50:00	N	IV
KQ2216669-06	Fluoride	CCB		Water	0.01 mg/L	20 mL	0.01 mg/L J	1	0.007	0.20			9/28/22 13:50:00	N	IV
KQ2216669-07	Fluoride	CCB		Water	0.01 mg/L	20 mL	0.01 mg/L J	1	0.007	0.20			9/28/22 13:50:00	N	IV
KQ2216669-08	Fluoride	CCV		Water	5.24 mg/L	20 mL	5.24 mg/L	1					9/28/22 13:50:00	N	IV
KQ2216669-09	Fluoride	CCV		Water	5.17 mg/L	20 mL	5.17 mg/L	1					9/28/22 13:50:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-ISE-01 **Analyst:** ACHEATLEY **Analysis Lot:** 779242 **Method/Testcode:** SM 4500-F- C Modified/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2211015-001	Fluoride	N/A		Soil	0.00 mg/L	2.0193 g	2.9 mg/Kg U	1		2.9			9/28/22 13:50:00	N	IV
K2211015-002	Fluoride	N/A		Soil	0.00 mg/L	2.0274 g	5.2 mg/Kg U	1		5.2			9/28/22 13:50:00	N	IV
KQ2216632-01	Fluoride	DUP	K2211015-001	Soil	0.00 mg/L	2.0024 g	3.0 mg/Kg U	1		3.0		NC	9/28/22 13:50:00	N	IV
KQ2216632-02	Fluoride	MS	K2211015-001	Soil	22.90 mg/L	2.0000 g	340 mg/Kg	1		3.0	46*		9/28/22 13:50:00	N	IV
KQ2216632-03	Fluoride	DMS	K2211015-001	Soil	22.80 mg/L	2.0286 g	334 mg/Kg	1		2.9	46*	2	9/28/22 13:50:00	N	IV
KQ2216632-04	Fluoride	LCS		Soil	11.20 mg/L	2.0000 g	112 mg/Kg	1		2.0	101		9/28/22 13:50:00	N	IV
KQ2216632-05	Fluoride	MB		Soil	0.02 mg/L	2.0000 g	2.0 mg/Kg U	1		2.0			9/28/22 13:50:00	N	IV
KQ2216663-01	Fluoride	CCB		Soil	0.01 mg/L	10 g	1.0 mg/Kg U	1		1.0			9/28/22 13:50:00	N	IV
KQ2216663-02	Fluoride	CCB		Soil	0.01 mg/L	10 g	1.0 mg/Kg U	1		1.0			9/28/22 13:50:00	N	IV
KQ2216663-03	Fluoride	CCV		Soil	5.24 mg/L	10 g	5.24 mg/L	1					9/28/22 13:50:00	N	IV
KQ2216663-04	Fluoride	CCV		Soil	5.17 mg/L	10 g	5.17 mg/L	1					9/28/22 13:50:00	N	IV
KQ2216663-05	Fluoride	CCB		Soil	0.03 mg/L	10 g	1.0 mg/Kg U	1		1.0			9/28/22 13:50:00	N	IV
KQ2216663-06	Fluoride	CCV		Soil	5.22 mg/L	10 g	5.22 mg/L	1					9/28/22 13:50:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Work Order #.: Fluoride

Analysis Method 340.2/SM 4500-F C Prep. Method : ALS SOP

Sample Number	Sample Aliquot, mL	Final Vol. mL	Reading mg/L	Dilution	mg/L Sample Reported	%REC
0.2 STD	20	20	0.19	1.00	0.19	95
CCV1	20	20	5.24	1.00	5.24	105
CCB1	20	20	0.01	1.00	0.01	
MB	20	20	0.02	1.00	0.02	
LCS	20	20	11.5	1.00	11.5	
K2210540-003	20	20	1.40	1.00	1.40	
K2210540-003d	20	20	1.41	1.00	1.41	
K2210540-003ms	20	20	28.1	1.00	28.1	
K2210540-003msd	20	20	27.1	1.00	27.1	
K2210969-001	20	20	0.76	1.00	0.76	
MB	20	20	0.02	1.00	0.02	
LCS	20	20	11.2	1.00	11.2	
K2211015-001	20	20	0.00	1.00	0.00	
CCV2	20	20	5.17	1.00	5.17	103
CCB2	20	20	0.01	1.00	0.01	
K2211015-001d	20	20	0.00	1.00	0.00	
K2211015-001ms	20	20	22.9	1.00	22.9	
K2211015-001msd	20	20	22.8	1.00	22.8	
K2211015-002	20	20	0.00	1.00	0.00	
0.2 STD	20	20	0.20	1.00	0.20	
CCV3	20	20	5.22	1.00	5.22	104
CCB3	20	20	0.03	1.00	0.03	E.O.D.

Calibration info. 1STD 1.0 mg/L 2 STD 10.0 mg/L 3 STD 100 mg/L

1-100ppm Slope: -59.6 Mv

1ppm 19-GEN-07-59-A 10ppm 19-GEN-07-58-N 100ppm 19-GEN-07- 58-M 1000ppm 19-GEN-07-58-L

CCV = 5ppm 19-GEN-07-59-B LCS TV= 11.1mg/L 19-GEN-07-55-K

ICV stock 1000ppm 19-gen-07-64-I 10540-3ms/3msd=0.5x1000ppm/20ml=25

Instrument ID K-ISE-02 Probe ID 19-GEN-07-73-A

		DATE	TIME
Analyzed By:	AC	9/28/2022	1:50:00 PM
Reviewed By:		09/28/22	

Revision 1-R:/WET/ANALYSES/FLUOR/FIN SOLUTION_LIMS

9-28-22

Preparation Information Benchsheet

Prep Run#: 407203
Team: GenChem/ACHEATLEY
Number of Copies to make: 1

Prep WorkFlow: GenExt28Day
Prep Method:

Status: Prepped
Prep Date/Time: 9/28/22 09:45

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K2211015-001	HT-MMO-20220916	.01	SM 4500-F- C Modified/F		Soil	2.0193g	20.00mL	
2	KQ2216632-05	MB		SM 4500-F- C Modified/F		Solid	2.0000g	20.00mL	
3	KQ2216632-04	LCS		SM 4500-F- C Modified/F		Solid	2.0000g	20.00mL	
4	KQ2216632-02	K2211015-001 MS	.01	SM 4500-F- C Modified/F		Solid	2.0000g	20.00mL	
5	KQ2216632-03	K2211015-001 DMS	.01	SM 4500-F- C Modified/F		Solid	2.0286g	20.00mL	
6	KQ2216632-01	K2211015-001 DUP	.01	SM 4500-F- C Modified/F		Solid	2.0024g	20.00mL	
7	K2211015-002	FB-20220916	.01	SM 4500-F- C Modified/F		Soil	2.0274g	20.00mL	

Spiking Solutions TISAB 19-GEN-07-64-E

Name: Fluoride 1000 ppm F   Inventory ID 209693   Logbook Ref: 19-Gen-07-~~6-D~~ 58-L   Expires On: ~~03/16/2021~~ 12-14-22

KQ2216632-02 1.00mL   KQ2216632-03 1.00mL

Name: Fluoride ERA LCS   Inventory ID 219744   Logbook Ref: 19-GEN-13-65-A   Expires On: 10/30/2023

KQ2216632-04 2.00g

Preparation Steps

Step: Extraction
Started: 9/28/22 09:45
Finished: 9/28/22 10:30
By: ACHEATLEY
Comments

Comments: Limited Sample.

Reviewed By: ______ Date: 09/28/22

Chain of Custody

Relinquished By: ______ Date: ______
Received By: ______ Date: ______

Extracts Examined
Yes No

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 407218
Team: Metals/MSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 9/29/22 11:55

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216668-03	MB		200.8/Metals T		Solid	1g	100.00mL	10%HNO3, 10%HCl
2	KQ2216668-04	LCS		200.8/Metals T		Solid	1g	100.00mL	10%HNO3, 10%HCl
3	K2211015-001	HT-MMO-20220916	.01	200.8/Metals T		Soil	1.104g	100.00mL	LAGUILAR k-Balance-55 / 10%HNO3, 10%HCl
4	KQ2216668-01	K2211015-001 DUP	.01	200.8/Metals T		Solid	1.023g	100.00mL	LAGUILAR k-Balance-55 / 10%HNO3, 10%HCl
5	KQ2216668-02	K2211015-001 MS	.01	200.8/Metals T		Solid	1.074g	100.00mL	LAGUILAR k-Balance-55 / 10%HNO3, 10%HCl
6	K2211015-002	FB-20220916	.01	200.8/Metals T		Soil	1.097g	100.00mL	LAGUILAR k-Balance-55 / 10%HNO3, 10%HCl

Spiking Solutions

Name: K-MET SS4 Inventory ID 224212 Logbook Ref: MET4-30-G Expires On: 05/31/2023

KQ2216668-02 1.00mL KQ2216668-04 1.00mL

Name: K-MET SS3 Inventory ID 224297 Logbook Ref: MET4-30-K Expires On: 11/01/2022

KQ2216668-02 1.00mL KQ2216668-04 1.00mL

Name: K-MET SS5 Inventory ID 224298 Logbook Ref: MET4-31-A Expires On: 10/31/2022

KQ2216668-02 1.00mL KQ2216668-04 1.00mL

Name: K-MET SS1 Inventory ID 224440 Logbook Ref: MET4-32-D Expires On: 03/16/2023

KQ2216668-02 2.00mL KQ2216668-04 2.00mL

Name: K-MET 10ppm Li Inventory ID 225210 Logbook Ref: MS29-16-N Expires On: 10/18/2022

KQ2216668-02 2.00mL KQ2216668-04 2.00mL

Preparation Materials

K-MET 100ml Centrifuge Tube	2106023 (220673)	K-MET HCL	21L2962003 (224372)	K-MET H2O2	61098127 (221606)
K-MET HNO3	22E1062003 (224008)	K-METPTFE Boiling chips	29036769 (223731)		

Preparation Steps

Step:	Weigh	Step:	Digestion
Started:	9/29/22 11:55	Started:	9/29/22 11:55
Finished:	9/29/22 15:03	Finished:	9/29/22 15:03
By:	MSOLADEY	By:	MSOLADEY
Comments		Comments	

Preparation Information Benchsheet

Prep Run#: 407218
Team: Metals/MSOLADEY

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 9/29/22 11:55

Preparation Equipment

K-BlockDigester-07	Digestion	IR Thermometer ID: IR03		K-BlockDigester-07	Digestion	Temperature	94.3 deg C
K-BlockDigester-07	Digestion	Temperature Check Location	11	K-41585306	Digestion		
K-DGV 100-1000B	Digestion						

Comments: R1:15 min, R2:120 min, R3:15 min

Reviewed By: Date: 9-30-22

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
*** Add after HNO3 and before ALS-89 when making the solution	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50.0	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6.00	500ml	12	
K-MET SS4	HNO3	25.0	500ml	-	
	B	25.0	500ml	50	
	Mo	50.0	500ml	100	
	U	10.0	500ml	20	
K-MET SS5	HNO3	25.0	500ml	-	
	K**	50.0	500ml	1000	
	Na**	50.0	500ml	1000	
	Mg**	50.0	500ml	1000	
	Ca**	50.0	500ml	1000	

K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Preparation Information Benchsheet

Prep Run#: 407218
Team: Metals/LAGUILAR
Number of Copies to make: 1

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Draft
Prep Date/Time: 9/28/22 14:40 PM

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	**KQ2216668-03**	MB			200.8 / Metals T	Solid						
2	**KQ2216668-04**	LCS			200.8 / Metals T	Solid						
3	**K2211015-001**	HT-MMO-20220916	.01		200.8 / Metals T	Soil						
4	**KQ2216668-01**	K2211015-001 DUP	.01		200.8 / Metals T	Solid						
5	**KQ2216668-02**	K2211015-001 MS	.01		200.8 / Metals T	Solid						
6	**K2211015-002**	FB-20220916	.01		200.8 / Metals T	Soil						

R1 - 11:55 - 12:10
R2 - 12:13 - 12:58
H_2O_2 - 1:24 - 2:44
R3 - 2:48 - 3:03

Comments: BD-7 T: 94.3 TL: 11 2mL - 10ppm Li - MS25-16-N

Surrogate ID: Spike ID:

Witnessed By:

Analyst: Assisted By:

Printed 9/29/22 10:25

Pre-Prep Information Benchsheet

Prep Run #: 407218

Container Lot No: 2204135

Prep Due Date: Sep-23-2022

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2211015-001	.01	Metals T : 200.8/	1.104g		LAGUILAR k-Balance-55
2	K2211015-001 DUP KQ2216668-01	.01	Metals T : 200.8/	1.023g		LAGUILAR k-Balance-55
3	K2211015-001 MS KQ2216668-02	.01	Metals T : 200.8/	1.074g		LAGUILAR k-Balance-55
4	K2211015-002	.01	Metals T : 200.8/	1.097g		LAGUILAR k-Balance-55

Relinquished By:		Date/Time:	9/28/22 2:40	Received By:		Date/Time:	9/29/22 11:00

Service Request #: K2211015,K2210865,T2201667

MS/MSD with #: K2211015
StarLims Run # : 779576
VER (100ppt) Standard ID: AF2-94-B Expiration Date: 10/6/2022
OPR (40ppb) Standard ID: AF2-93-L Expiration Date: 10/6/2022
QCS Standard ID: AF2-93-J Expiration Date: 9/29/2022
Parent OPR/VER ID: AF2-92-B Expiration Date: 1/31/2024
Parent QCS ID: AF2-86-G Expiration Date: 11/1/2022
NH2OH: AF2-91-G Expiration Date: 6/14/2023
SnCl: AF2-89-H Expiration Date: 3/22/2023
Pipettors ID: LL 20-200,42781656,LL1000-5000 Calibration Due: 10/5/22

1631 Soil Data Review Form

	Yes	No	NA
1. 20 samples (or less) in batch	X		
2. MS/MSD every 10 samples	X		
3. Current Calibration factor used	X		
4. Calibration data included	X		
5. Method blank below MRL	X		
6. 3 Bubbler Blanks Ran Avg < 25 pg	X		
7. Bubbler Blanks < 50 pg	X		
8. Verification Standards Passed (75-123%)	X		
9. OPR, QCS in control (70-130%)	X		
10. MS/MSD recovery 70-130%	X		
11. Spike RPD within 30%	X		
12. All samples within the linear range	X		
13. All corresponding charts included	X		
14. Dilution factors calculated	X		
15. Bench sheet signed	X		
16. Reagent Blank below 20 pg	X		

Comments: ~~T2201667 needs solids~~ 10.3.22

Primary Reviewed by AB Date 9/30/22

Secondary Reviewed by Date 9.30.22

R:\ICP\MISC\Document Control\1631 Review Forms

Service Request #: K2210684

MS/MSD with #: K2210684
StarLims Run # : 779576
VER (100ppt) Standard ID: AF2-94-B Expiration Date: 10/6/2022
OPR (40ppb) Standard ID: AF2-93-L Expiration Date: 10/6/2022
QCS Standard ID: AF2-93-J Expiration Date: 9/29/2022
Parent OPR/VER ID: AF2-92-B Expiration Date: 1/31/2024
Parent QCS ID: AF2-86-G Expiration Date: 11/1/2022
NH2OH: AF2-91-G Expiration Date: 6/14/2023
SnCl: AF2-89-H Expiration Date: 3/22/2023
Pipettors ID: LL 20-200,42781656,LL1000-5000 Calibration Due: 10/5/22

1631 Tissue Data Review Form

	Yes	No	NA
1. 20 samples (or less) in batch	X		
2. MS/MSD every 10 samples	X		
3. Current Calibration factor used	X		
4. Calibration data included	X		
5. Method blank below MRL	X		
6. 3 Bubbler Blanks Ran Avg < 25 pg	X		
7. Bubbler Blanks < 50 pg	X		
8. Verification Standards Passed (75-123%)	X		
9. OPR, QCS in control (70-130%)	X		
10. MS/MSD recovery 70-130%	X		
11. Spike RPD within 30%	X		
12. All samples within the linear range	X		
13. All corresponding charts included	X		
14. Dilution factors calculated	X		
15. Bench sheet signed	X		
16. Reagent Blank below 20 pg	X		

Comments

Primary Reviewed by AB Date 9/30/22

Secondary Reviewed by Date 9.30.22

R:\ICP\MISC\Document Control\1631 Review Forms

Batch Information Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Run Duration:	2.5	Method Blank Type:	Concentration
Heating Duration:	2.5	Integration Mode:	Auto Total Hg
Retention Start Time:	0.4	Integration Type:	Peak Area
Retention Stop Time:	1.3	Result Units:	µg/Kg
Purge Duration:	6.0		
Drying Duration:	6.0		
Calibration File:	This File		

Analyst Comments:

PMT: 540
OFFSET: 3,166
NOISE: 59
VOA Vial Lot # 092021-3DWZ

Run Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Run	Trap	Type	Name/ID	Method Blank	Peak	Peak Area	Analyzed Result (pg)	Final Result (µg/Kg)	QA Results	Criteria	Notes	
1	X	CCB	RINSE		1	37,808	0.716		0.716	< 50	accept	
2	Y	CCB	RINSE		1	24,592	-0.567		-0.567	< 50	accept	
3	X	CB	CB-1		1	30,214	2.93		2.93	< 50	accept	
4	~~Y~~	~~CB~~	~~CB-2~~		~~1~~	~~143,795~~	~~14.0~~		~~14.0~~	~~< 50~~	~~reject~~	ML 10.3.22
5	X	CB	CB-3		1	19,832	1.92		1.92	< 50	accept	
6	Y	CB	CB-4		1	19,265	1.87		1.87	< 50	accept	
7	X	CB	CB-2		1	52,418	5.09		5.09	< 50	accept	
8	Y	STD	12.5 pg		1	155,564	12.1		97.1	75-125	accept	
9	X	STD	25 pg		1	288,957	25.1		100.	75-125	accept	
10	Y	STD	100 pg		1	1,095,140	103		103	75-125	accept	
11	X	STD	500 pg		1	5,261,930	508		102	75-125	accept	
12	Y	STD	2500 pg		1	25,965,416	2,520		101	75-125	accept	
13	X	STD	10000 pg		1	100,352,520	9,730		97.3	75-125	accept	
14	Y	OPR	VER-1		1	1,270,125	120.	4.81	96.2	77-123	accept	
15	X	OPR	OPR-1		1	2,800,468	269	5.38	108	77-123	accept	
16	Y	MBA	MB-1		1	60,136	2.88	0.0576	0.0576	< 0.5	accept	
17	X	MBA	MB-2		1	36,750	0.613	0.0123	0.0123	< 0.5	accept	
18	Y	QCS	QCS-1		1	2,701,141	259	5.18	104	77-123	accept	
19	X	QCS	SRM 2702		1	21,989,079	2,130	410.	91.7	77-123	accept	
20	~~Y~~	~~S~~	~~K2211015-001~~		~~1~~	~~37,524~~	~~0.688~~	~~0.198~~		~~< HS~~	~~reject~~	*
21	X	MS	K2211015-001		1	13,619,284	1,320	308	106	71-125	accept	
22	Y	MSD	K2211015-001		1	13,580,082	1,310	348	105	71-125	accept	
23	~~X~~	~~S~~	~~K2211015-002~~		~~1~~	~~30,816~~	~~0.0372~~	~~0.0179~~		~~< HS~~	~~reject~~	*
24	Y	S	K2210865-001		1	11,998,793	1,160	407		< HS	accept	
25	X	S	T2201667-001		1	3,476,660	334	31.4		< HS	accept	
26	Y	S	T2201667-002		1	857,948	80.3	6.97		< HS	accept	
27	X	S	K2211015-001		1	151,621	11.8	0.338		< HS	accept	
28	Y	S	K2211015-002		1	97,814	6.54	0.315		< HS	accept	
29	X	MBA	MB-3		1	29,944	-0.0474	-0.000947	-0.000947	< 0.5	accept	
30	Y	OPR	OPR-2		1	2,801,746	269	5.38	108	77-123	accept	
31	X	OPR	VER-2		1	1,263,532	120.	4.79	95.7	77-123	accept	
32	Y	OPR	OPR-1		1	2,809,617	270.	5.39	108	77-123	accept	
33	X	MBA	MB-1		1	32,837	0.233	0.00467	0.00467	< 0.5	accept	

* No dilution needed.
ML 10.3.22

Run Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Run	Trap	Type	Name/ID	Method Blank	Peak	Peak Area	Analyzed Result (pg)	Final Result (µg/Kg)	QA Results	Criteria	Notes
34	Y	MBA	MB-2		1	31,598	0.113	0.00226	0.00226	< 0.5	accept
35	X	QCS	TORT-3		1	29,484,004	2,860	273	93.7	77-123	accept
36	Y	S	K2210684-001		1	1,699,113	162	31.7		< HS	accept
37	X	MS	K2210684-001		1	15,471,308	1,500	297	107	71-125	accept
38	Y	MSD	K2210684-001		1	15,148,615	1,470	291	105	71-125	accept
39	X	S	K2210684-002		1	1,597,221	152	29.8		< HS	accept
40	Y	S	K2210684-003		1	1,062,524	100.	19.6		< HS	accept
41	X	S	K2210684-004		1	1,793,784	171	33.6		< HS	accept
42	Y	S	K2210684-005		1	1,699,433	162	31.7		< HS	accept
43	X	S	K2210684-006		1	1,737,572	166	32.1		< HS	accept
44	Y	S	K2210684-007		1	850,165	79.5	15.7		< HS	accept
45	X	MBA	MB-3		1	32,939	0.243	0.00486	0.00486	< 0.5	accept
46	Y	OPR	OPR-2		1	2,825,450	271	5.42	108	77-123	accept
47	X	OPR	VER/OPR-3		1	1,273,498	121	4.82	96.5	77-123	accept

Analyst Comments:

PMT: 540
OFFSET: 3,166
NOISE: 59
VOA Vial Lot # 092021-3DWZ

QA Summary Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Bias and Precision

Type	Name/ID	Final Result	Units	Spike Level	Source Result	% REC	% REC Limit	RPD	RPD Limit	Notes
MS	K2211015-001	308	µg/Kg	292	0.338	106	71-125			accept
	K2210684-001	297	µg/Kg	248	31.7	107	71-125			accept
MSD	K2211015-001	348	µg/Kg	331	0.338	105	71-125	12.1	< 24	accept
	K2210684-001	291	µg/Kg	248	31.7	105	71-125	2.11	< 24	accept
OPR	VER-1	4.81	µg/Kg	5.0		96.2	77-123			accept
	OPR-1	5.38	µg/Kg	5.0		108	77-123			accept
	OPR-2	5.38	µg/Kg	5.0		108	77-123			accept
	VER-2	4.79	µg/Kg	5.0		95.7	77-123			accept
	OPR-1	5.39	µg/Kg	5.0		108	77-123			accept
	OPR-2	5.42	µg/Kg	5.0		108	77-123			accept
	VER/OPR-3	4.82	µg/Kg	5.0		96.5	77-123			accept
QCS	QCS-1	5.18	µg/Kg	5.0		104	77-123			accept
	SRM 2702	410.	µg/Kg	447		91.7	77-123			accept
	TORT-3	273	µg/Kg	292		93.7	77-123			accept

QA Summary Report

Batch Number:

Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Calibration									
QA Sample Type	**Name/ID**	**Analyzed Result**	**Units**	**Spike Level**	**% REC**	**% REC Limit**	**RSD**	**RSD Limit**	**Notes**
Calibration	12.5 pg	12.1	pg	12.5	97.1	75-125			accept
	25 pg	25.1	pg	25	100.	75-125			accept
	100 pg	103	pg	100	103	75-125			accept
	500 pg	508	pg	500	102	75-125			accept
	2500 pg	2,520	pg	2500	101	75-125			accept
	10000 pg	9,730	pg	10000	97.3	75-125			accept
Calibration Factor		0.0000970	pg/PA				2.42	< 15	accept
Calibration Date		9/30/22							

1631 Extended Calibration Point Verification

Instruemt: ASF-04
Date: 09/30/22
Run Number: 779576

	Raw Peak Area	Blank Corrected Peak Area			
CB-1	30,214				
CB-2	52,418				
CB-3	19,832				
CB-4	19,265				
STD 12.5	155,564	125,132	0.0000999		
STD 25	288,957	258,525	0.0000967		
STD 100	1,095,140	1,064,708	0.0000939		
STD 500	5,261,930	5,231,498	0.0000956		
STD 2500	25,965,416	25,934,984	0.0000964	0.0000965	0.5 - 100 ng/L Ave. Cal. Factor
STD 10000	100,352,520	100,322,088	0.0000997	-3.3	% Difference (Limit ± 15%)
			Result:	**PASS**	

Cal. Factor 0.0000970

QA Summary Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Blank Summary

QA Sample Type	Name/ID	Analyzed Result	Units	Criteria	StDev	StDev Limit	Notes
CB	CB-1	2.93	pg	< 50			accept
	~~CB-2~~	~~14.0~~	~~pg~~	~~< 50~~			~~reject~~ KW 10.3.22
	CB-3	1.92	pg	< 50			accept
	CB-4	1.87	pg	< 50			accept
	CB-2	5.09	pg	< 50			accept
Average		2.95	pg	< 25	1.50	< 10	accept
MBA	MB-1	0.0576	µg/Kg	< 0.5			accept
	MB-2	0.0123	µg/Kg	< 0.5			accept
	MB-3	-0.000947	µg/Kg	< 0.5			accept
	MB-1	0.00467	µg/Kg	< 0.5			accept
	MB-2	0.00226	µg/Kg	< 0.5			accept
	MB-3	0.00486	µg/Kg	< 0.5			accept
Average		0.0135	µg/Kg		0.0221		

QA Comments:

Sample Results Summary Report

Batch Number:

Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Run	Name/ID	Final Result (µg/Kg)	Notes
36	K2210684-001	31.7	accept
39	K2210684-002	29.8	accept
40	K2210684-003	19.6	accept
41	K2210684-004	33.6	accept
42	K2210684-005	31.7	accept
43	K2210684-006	32.1	accept
44	K2210684-007	15.7	accept
24	K2210865-001	407	accept
27	K2211015-001	0.338	accept
20	~~K2211015-001~~	~~0.198~~	~~reject~~ *
28	K2211015-002	0.315	accept
23	~~K2211015-002~~	~~0.0179~~	~~reject~~ *
25	T2201667-001	31.4	accept
26	T2201667-002	6.97	accept

* 10.3.22

Run Information Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Run	Trap	Type	Name/ID	Method Blank	Sample Vol/Wt	Dilution Vol (ml)	Analyzed Vol (ml)	Expected Value	Notes
1	X	CCB	RINSE						
2	Y	CCB	RINSE						
3	X	CB	CB-1						
4	~~Y~~	~~CB~~	~~CB-2~~						
5	X	CB	CB-3						
6	Y	CB	CB-4						
7	X	CB	CB-2						
8	Y	STD	12.5 pg					12.5	0.125mL AF2-94-
9	X	STD	25 pg					25	0.25mL AF2-94-B
10	Y	STD	100 pg					100	1.0mL AF2-94-B
11	X	STD	500 pg					500	0.05mL AF2-94-A
12	Y	STD	2500 pg					2500	0.25mL AF2-94-A
13	X	STD	10000 pg					10000	1.0mL AF2-94-A
14	Y	OPR	VER-1		25	25	25	5.0	
15	X	OPR	OPR-1		400	40	5.0	5.0	
16	Y	MBA	MB-1		400	40	5.0		
17	X	MBA	MB-2		400	40	5.0		
18	Y	QCS	QCS-1		400	40	5.0	5.0	
19	X	QCS	SRM 2702		208	40	1.0	447	
20	~~Y~~	~~S~~	~~K2211015-001~~		~~278~~	~~40~~	~~0.5~~		
21	X	MS	K2211015-001		342	40	0.5	292	
22	Y	MSD	K2211015-001		302	40	0.5	331	
23	~~X~~	~~S~~	~~K2211015-002~~		~~166~~	~~40~~	~~0.5~~		
24	Y	S	K2210865-001		114	40	1.0		
25	X	S	T2201667-001		426	40	1.0		
26	Y	S	T2201667-002		461	40	1.0		
27	X	S	K2211015-001		278	40	5.0		
28	Y	S	K2211015-002		166	40	5.0		
29	X	MBA	MB-3		400	40	5.0		
30	Y	OPR	OPR-2		400	40	5.0	5.0	
31	X	OPR	VER-2		25	25	25	5.0	
32	Y	OPR	OPR-1		400	40	5.0	5.0	
33	X	MBA	MB-1		400	40	5.0		

10.3.22

Run Information Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

Run	Trap	Type	Name/ID	Method Blank	Sample Vol/Wt	Dilution Vol (ml)	Analyzed Vol (ml)	Expected Value	Notes
34	Y	MBA	MB-2		400	40	5.0		
35	X	QCS	TORT-3		418	40	1.0	292	
36	Y	S	K2210684-001		408	40	0.5		
37	X	MS	K2210684-001		403	40	0.5	248	
38	Y	MSD	K2210684-001		403	40	0.5	248	
39	X	S	K2210684-002		408	40	0.5		
40	Y	S	K2210684-003		409	40	0.5		
41	X	S	K2210684-004		407	40	0.5		
42	Y	S	K2210684-005		409	40	0.5		
43	X	S	K2210684-006		413	40	0.5		
44	Y	S	K2210684-007		404	40	0.5		
45	X	MBA	MB-3		400	40	5.0		
46	Y	OPR	OPR-2		400	40	5.0	5.0	
47	X	OPR	VER/OPR-3		25	25	25	5.0	

Metals Digestion Sheet

StarLims Number: **407217**

Method : **1631EApp.**

Analysis for : **CVAFS**

Sample	Matrices	Dry	Wet	Initial Weight (g)	Final Volume (ml)	Matrix
VER-1	Water		x	25ml	25ml	0.5% BrCl
Method Blank		x		0.400	40	0.02N BrCl
Method Blank		x		0.400	40	0.02N BrCl
Method Blank		x		0.400	40	0.02N BrCl
OPR-1		x		0.400	40	0.02N BrCl
QCS-1		x		0.400	40	0.02N BrCl
SRM 2702		x		0.208	40	0.02N BrCl
K2211015-001			x	0.412	40	0.02N BrCl
K2211015-001S			x	0.507	40	0.02N BrCl
K2211015-001SD			x	0.448	40	0.02N BrCl
K2211015-002			x	0.441	40	0.02N BrCl
K2210865-001			x	0.823	40	0.02N BrCl
T2201667-001		x		0.426	40	0.02N BrCl
T2201667-002		x		0.456	40	0.02N BrCl
OPR-2		x		0.400	40	0.02N BrCl
VER-2	Water		x	25ml	25ml	0.5% BrCl

VOA Vial Lot # 1-027-008/092021-3002

BrCl = AF2-93-G

AF2-93-L *(40ppb)* **OPR:** 0.05mL

Digestion Acid Mixture: AF2-93-I

AF2-93-J (2.5ppb) **QCS:** 0.8mL

1st **MS / DMS:** 0.1mL 1ppm QCS Parent (AF2-86-G) **Balance ID:** 37/55

Comments:

HotBlock: K-BlockDigester: 19 IR Thermometer ID: IR03 Temp: 103°C Temp Check Location: 34

Time Digestion Started: 9:10am **Dilution Completed:** 2:53pm

Analyst Anna Boyer **Date** 9/29/22

1631Dig.XLS
6/17/2004

Conversion from wet weight to dry weight:

Standard MRL = 1.0
Standard MDL = 0.2
Standard Dilution = 1
Standard Sample Mass = 0.40

					Weight & Dilution Adjusted	
Sample I.D.	Wet Weight	Percent Solids	Dry Weight	Dilution	MRL	MDL
K2211015-001	0.4120	67.4	0.2777	1	1.4	0.29
K2211015-001S	0.5070	67.4	0.3417	10	11.7	2.34
K2211015-001SD	0.4480	67.4	0.3020	10	13.2	2.65
K2211015-002	0.4410	37.7	0.1663	1	2.4	0.48
K2210865-001	0.8230	13.9	0.1144	5	17.5	3.50
T2201667-001	0.4260	100.0	0.4260	5	4.7	0.94
T2201667-002	0.456	101.0	0.4606	5	4.3	0.87
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
			0.0000	1	#DIV/0!	#DIV/0!
Method Blank	0.400	100.0	0.4000	1	1.0	0.20

Pre-Prep Information Benchsheet

Prep Run #: 407217 **Container Lot No:** 1-027-008 **Prep Due Date:** Sep-23-2022

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2211015-001	.01	Hg LL T : 1631app/	0.412g		LAGUILAR k-Balance-55
2	K2211015-001 MS KQ2216666-01	.01	Hg LL T : 1631app/	0.507g		LAGUILAR k-Balance-55
3	K2211015-001 DMS KQ2216666-02	.01	Hg LL T : 1631app/	0.448g		LAGUILAR k-Balance-55
4	K2211015-002	.01	Hg LL T : 1631app/	0.441g		LAGUILAR k-Balance-55

Relinquished By: Mg	Date/Time: 9/28/22 2:40	Received By: AP	Date/Time: 8:34am 9/29/22

Metals Digestion Sheet

StarLims Number:	406940
Method : **1631EApp.**	Analysis for : **CVAFS**

Sample	Matrices	Dry	Wet	Initial Weight (g)	Final Volume (ml)	Matrix
VER-1	Water		x	25ml	25ml	0.5% BrCl
Method Blank		x		0.400	40	0.02N BrCl
Method Blank		x		0.400	40	0.02N BrCl
Method Blank		x		0.400	40	0.02N BrCl
OPR-1		x		0.400	40	0.02N BrCl
TORT-3		x		0.429	40	0.02N BrCl
K2210684-001		x		0.408	40	0.02N BrCl
K2210684-002		x		0.408	40	0.02N BrCl
K2210684-003		x		0.409	40	0.02N BrCl
K2210684-004		x		0.407	40	0.02N BrCl
K2210684-005		x		0.409	40	0.02N BrCl
K2210684-006		x		0.413	40	0.02N BrCl
K2210684-007		x		0.404	40	0.02N BrCl
K2210684-001	S	x		0.403	40	0.02N BrCl
K2210684-001	SD	x		0.403	40	0.02N BrCl
OPR-2		x		0.400	40	0.02N BrCl
VER-2	Water		x	25ml	25ml	0.5% BrCl

VOA Vial Lot # 092021-3DWZ **BrCl =** AF2-93-G

AF2-93-L *(40ppb)* **OPR:** 0.05mL **Digestion Acid Mixture:** AF2-93-I

1st **MS / DMS:** 0.1mL 1ppm QCS Parent (AF2-86-G) **Balance ID:** 37

Comments: TORT-3 Solids: 97.4%

HotBlock: K-BlockDigester: 19 IR Thermometer ID: IR03 Temp: 103 °C Temp Check Location: 34

Time Digestion Started: 9:10am **Dilution Completed:** 2:58pm

Analyst Anna Boeger **Date** 9/29/22

1631Dig.XLS
6/17/2004

Tissue Dry Wt. MRL and MDL Calculations:

Standard MRL = 1.0
Standard MDL = 0.2
Standard Dilution = 1
Standard Sample Mass = 0.40

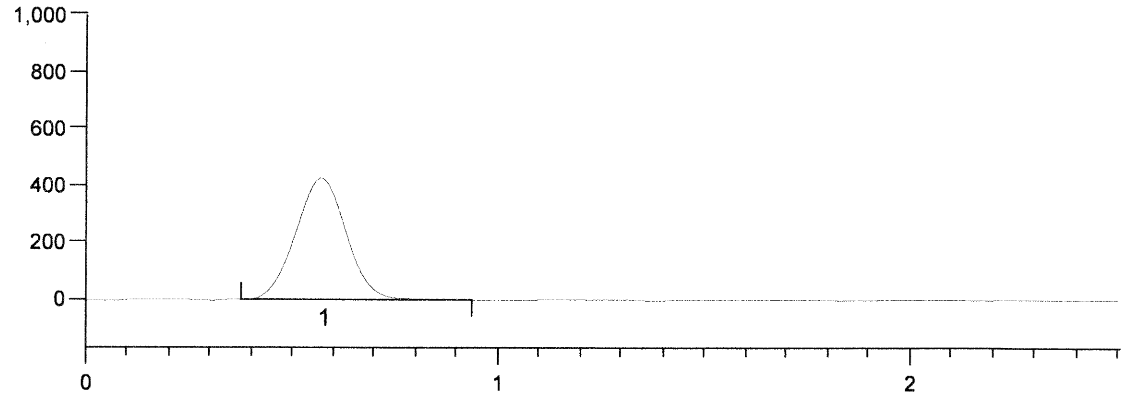
			Weight & Dilution Adjuste	
Sample I.D.	**Dry Weight**	**Dilution**	**MRL**	**MDL**
K2210684-001	0.4080	10	**9.8**	**1.96**
K2210684-001S	0.4030	10	**9.9**	**1.99**
K2210684-001SD	0.4030	10	**9.9**	**1.99**
K2210684-002	0.4080	10	**9.8**	**1.96**
K2210684-003	0.4090	10	**9.8**	**1.96**
K2210684-004	0.4070	10	**9.8**	**1.97**
K2210684-005	0.4090	10	**9.8**	**1.96**
K2210684-006	0.4130	10	**9.7**	**1.94**
K2210684-007	0.4040	10	**9.9**	**1.98**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
			#DIV/0!	**#DIV/0!**
Method Blank	**0.4000**	1	**1.0**	**0.20**

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

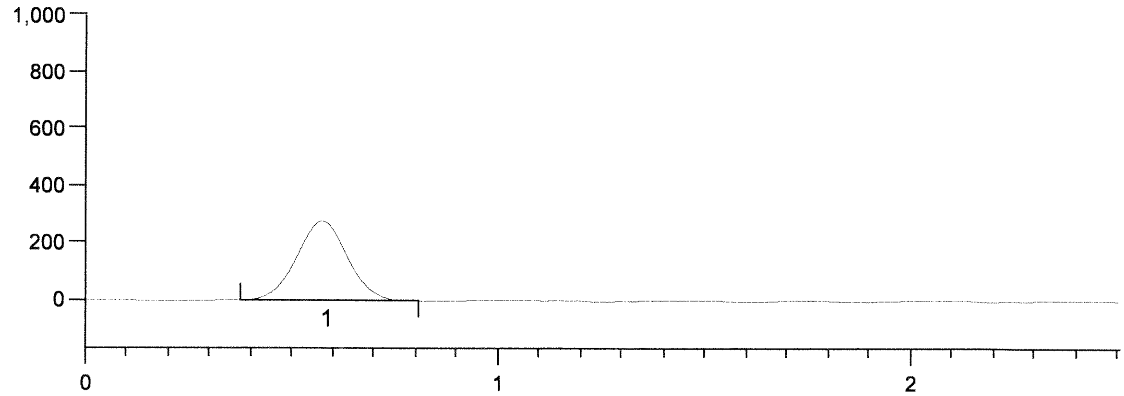


Date: 9/30/22
Time: 7:44 AM

Peak	rt	Area
1	0.56	37,808

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
1	X	CCB	RINSE		1	37,808	0.716		0.716	< 50	accept

Notes

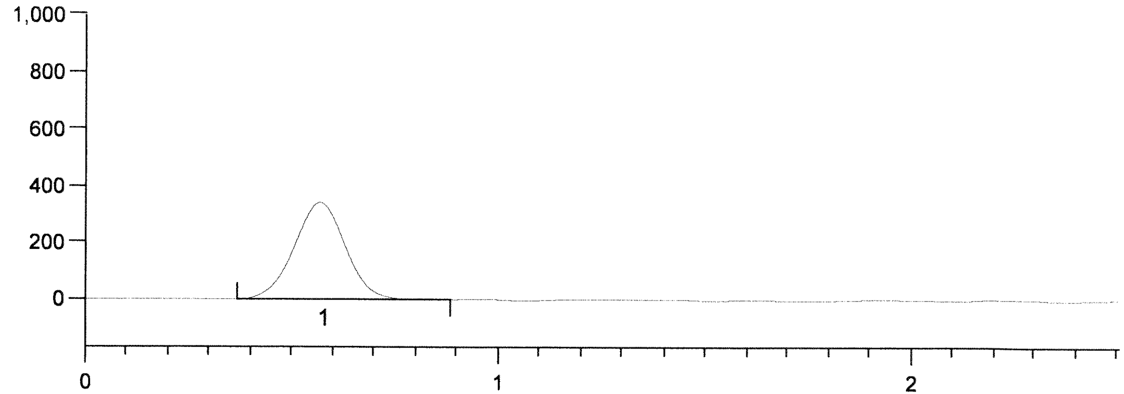


Date: 9/30/22
Time: 7:49 AM

Peak	rt	Area
1	0.57	24,592

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
2	Y	CCB	RINSE		1	24,592	-0.567		-0.567	< 50	accept

Notes



Date: 9/30/22
Time: 7:54 AM

Peak	rt	Area
1	0.56	30,214

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
3	X	CB	CB-1		1	30,214	2.93		2.93	< 50	accept

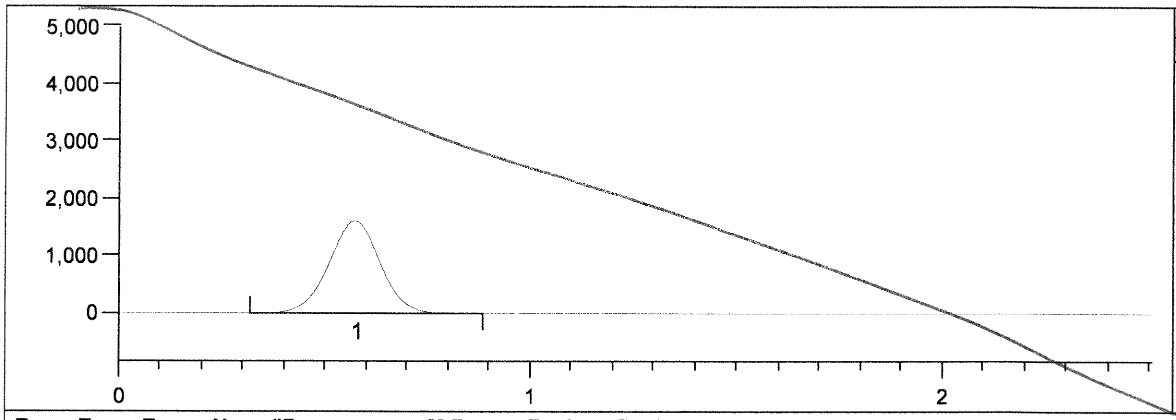
Notes

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

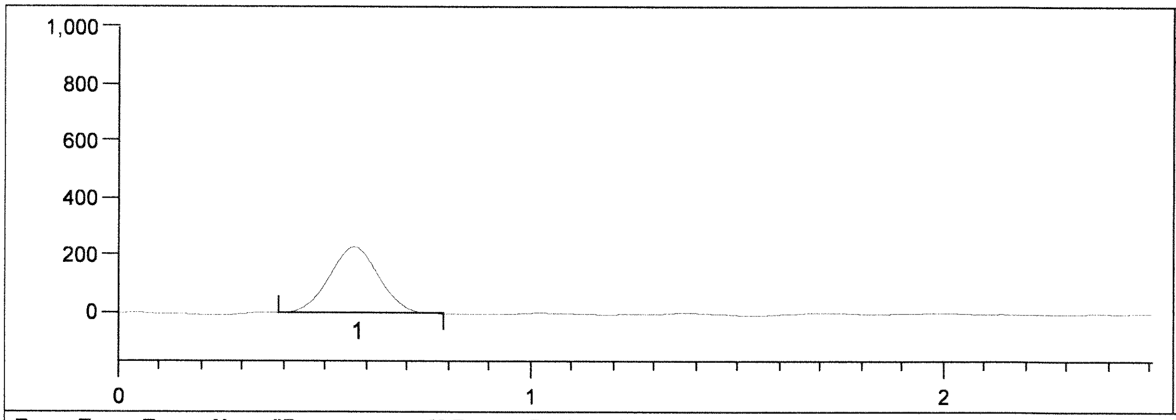


Date: 9/30/22
Time: 7:59 AM

Peak	rt	Area
1	0.57	143,795

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
4	Y	CB	CB-2		1	143,795	14.0		14.0	< 50	reject
Notes											

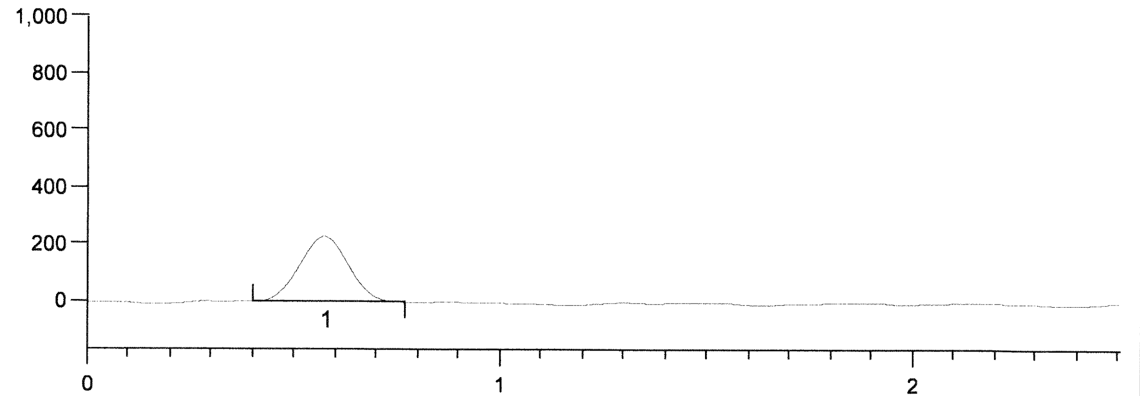
10.3.22



Date: 9/30/22
Time: 8:04 AM

Peak	rt	Area
1	0.56	19,832

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
5	X	CB	CB-3		1	19,832	1.92		1.92	< 50	accept
Notes											



Date: 9/30/22
Time: 8:09 AM

Peak	rt	Area
1	0.57	19,265

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
6	Y	CB	CB-4		1	19,265	1.87		1.87	< 50	accept
Notes											

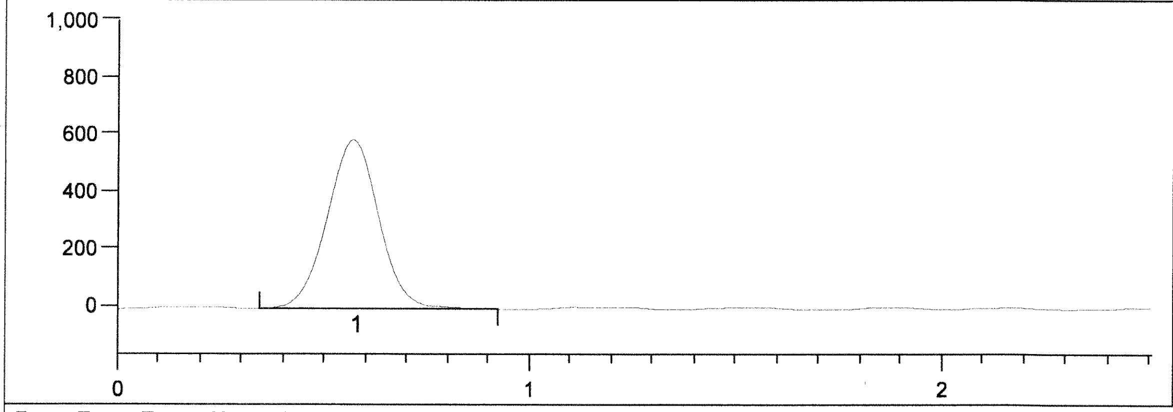
Peak Report

Batch Number:

Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

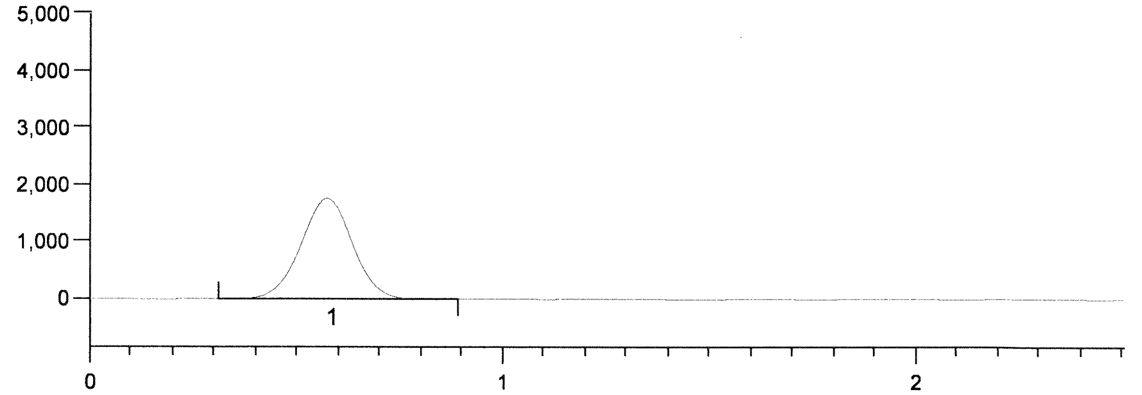


Date: 9/30/22
Time: 8:25 AM

Peak	rt	Area
1	0.56	52,418

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
7	X	CB	CB-2		1	52,418	5.09		5.09	< 50	accept

Notes

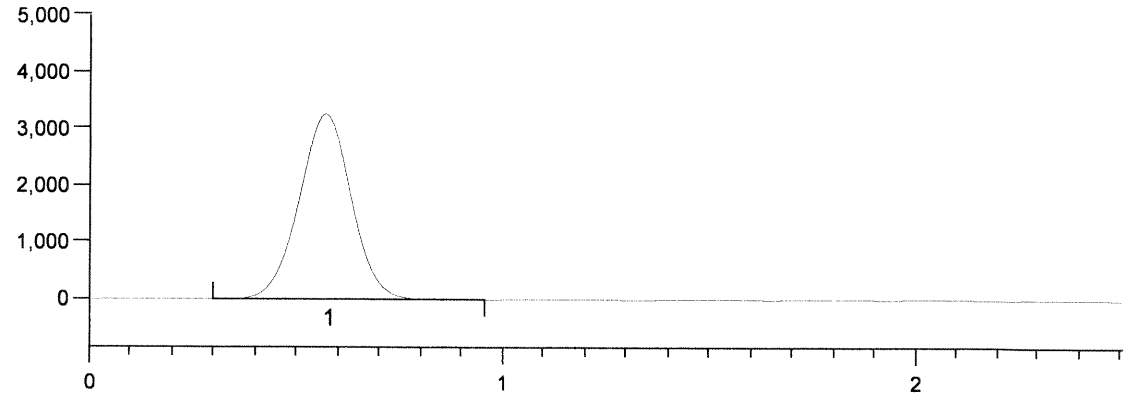


Date: 9/30/22
Time: 8:30 AM

Peak	rt	Area
1	0.57	155,564

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
8	Y	STD	12.5 pg		1	155,564	12.1		97.1	75-125	accept

Notes0.125mL AF2-94-B



Date: 9/30/22
Time: 8:35 AM

Peak	rt	Area
1	0.56	288,957

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
9	X	STD	25 pg		1	288,957	25.1		100.	75-125	accept

Notes0.25mL AF2-94-B

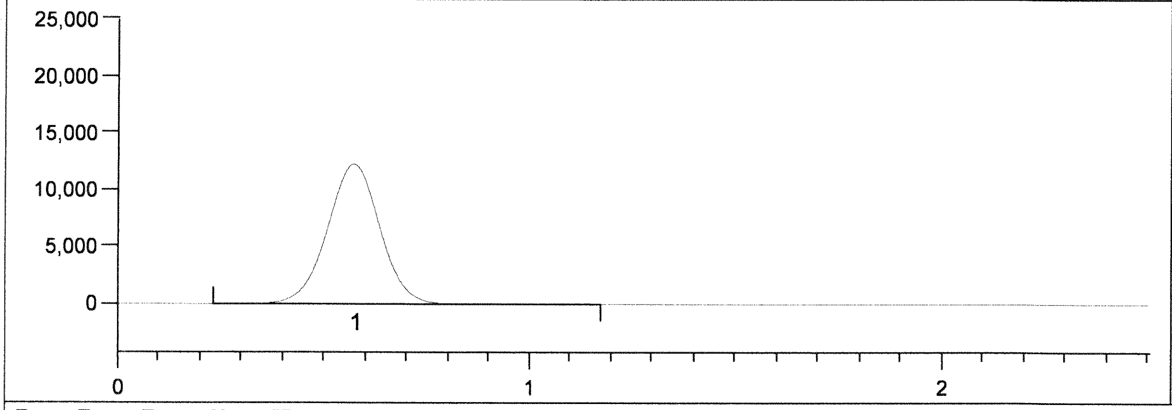
Peak Report

Batch Number:

Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

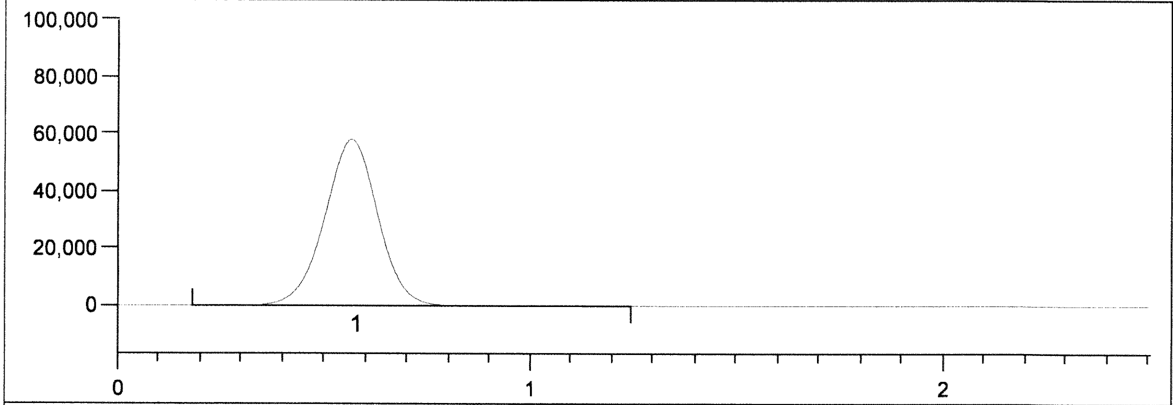


Date: 9/30/22
Time: 8:40 AM

Peak	rt	Area
1	0.57	1,095,140

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
10	Y	STD	100 pg		1	1,095,140	103		103	75-125	accept

Notes1.0mL AF2-94-B

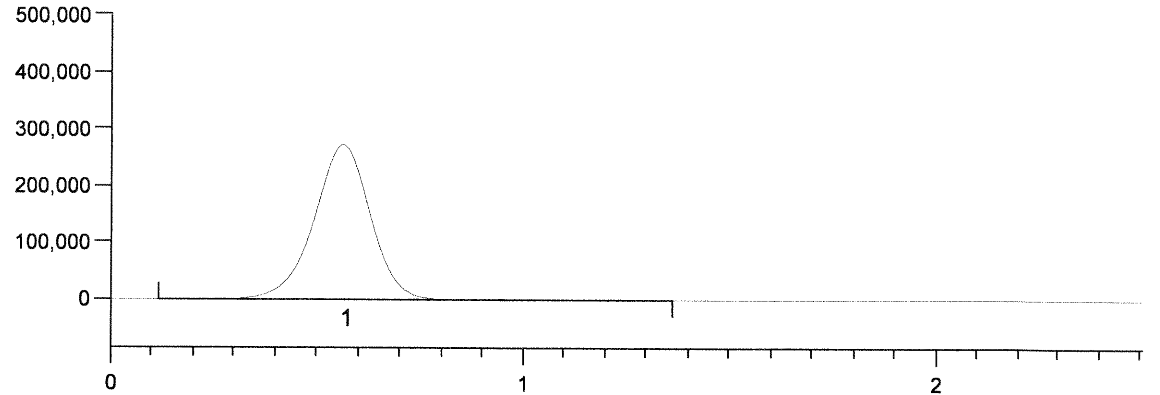


Date: 9/30/22
Time: 8:45 AM

Peak	rt	Area
1	0.56	5,261,930

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
11	X	STD	500 pg		1	5,261,930	508		102	75-125	accept

Notes0.05mL AF2-94-A



Date: 9/30/22
Time: 8:50 AM

Peak	rt	Area
1	0.56	25,965,416

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
12	Y	STD	2500 pg		1	25,965,416	2,520		101	75-125	accept

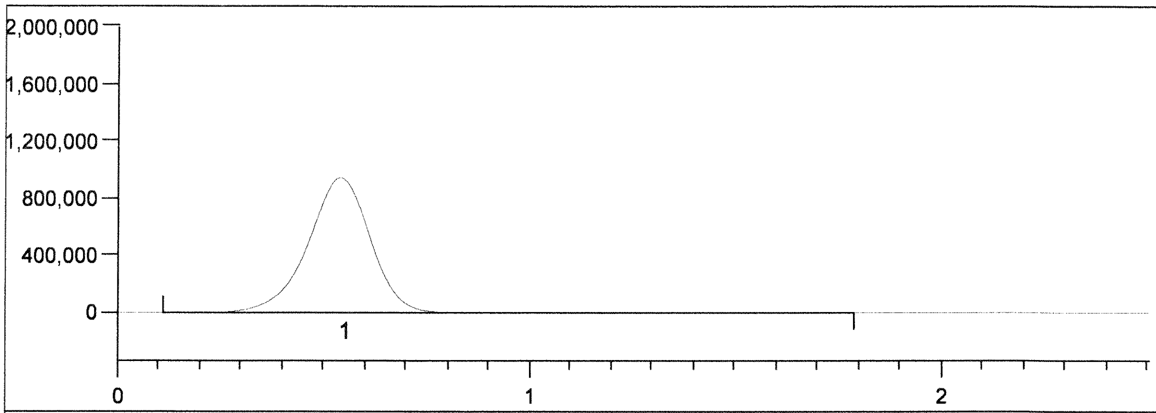
Notes0.25mL AF2-94-A

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

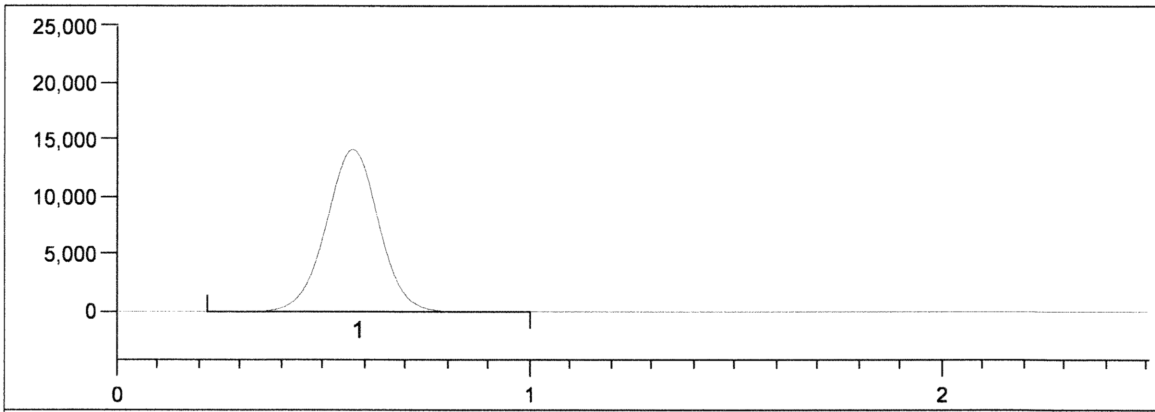


Date: 9/30/22
Time: 8:55 AM

Peak	rt	Area
1	0.54	100,352,520

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
13	X	STD	10000 pg		1	100,352,520	9,730		97.3	75-125	accept

Notes1.0mL AF2-94-A

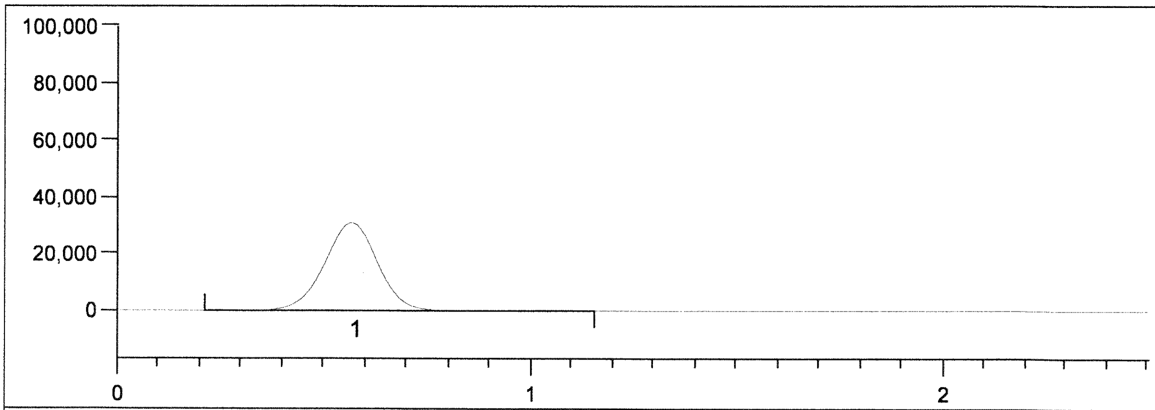


Date: 9/30/22
Time: 9:00 AM

Peak	rt	Area
1	0.57	1,270,125

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
14	Y	OPR	VER-1		1	1,270,125	120.	4.81	96.2	77-123	accept

Notes



Date: 9/30/22
Time: 9:05 AM

Peak	rt	Area
1	0.56	2,800,468

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
15	X	OPR	OPR-1		1	2,800,468	269	5.38	108	77-123	accept

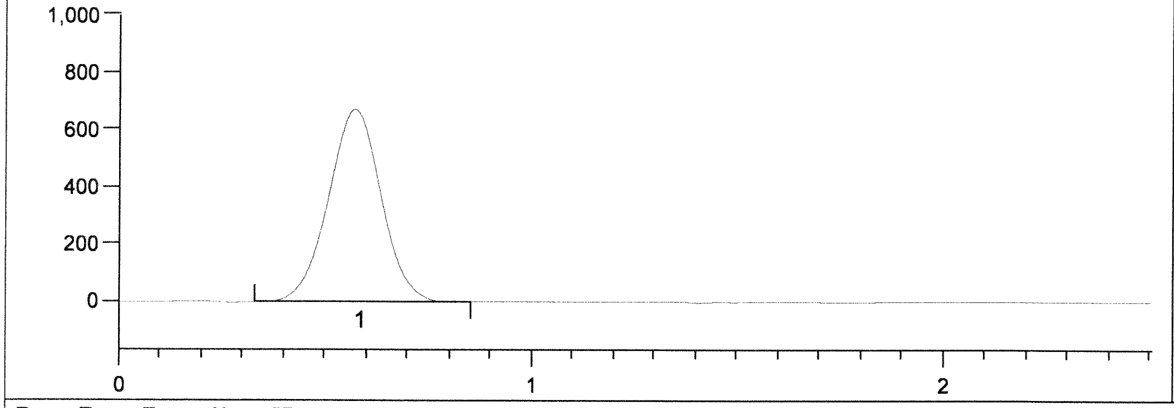
Notes

Peak Report

Batch Number:
Method Number: EPA 1631E

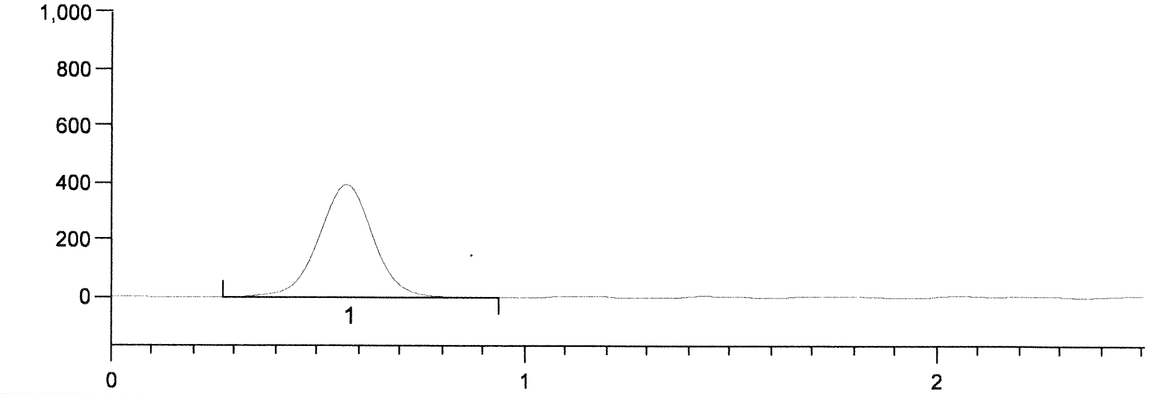
Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



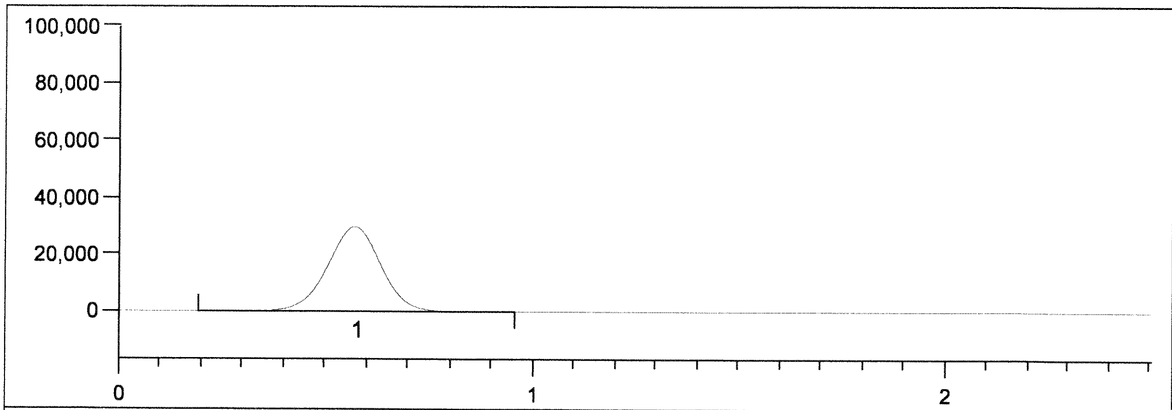
Date:	9/30/22	
Time:	9:10 AM	
Peak	**rt**	**Area**
1	0.57	60,136

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
16	Y	MBA	MB-1		1	60,136	2.88	0.0576	0.0576	< 0.5	accept
Notes											



Date:	9/30/22	
Time:	9:15 AM	
Peak	**rt**	**Area**
1	0.56	36,750

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
17	X	MBA	MB-2		1	36,750	0.613	0.0123	0.0123	< 0.5	accept
Notes											



Date:	9/30/22	
Time:	9:20 AM	
Peak	**rt**	**Area**
1	0.57	2,701,141

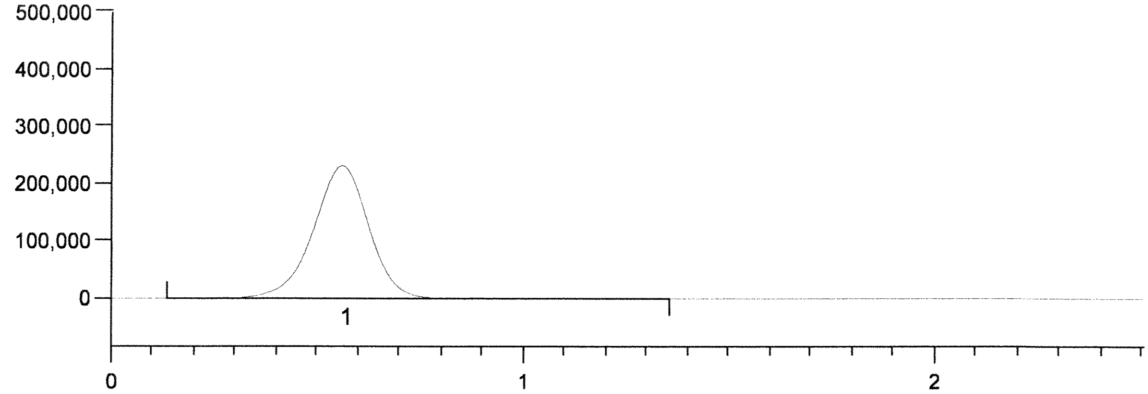
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
18	Y	QCS	QCS-1		1	2,701,141	259	5.18	104	77-123	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

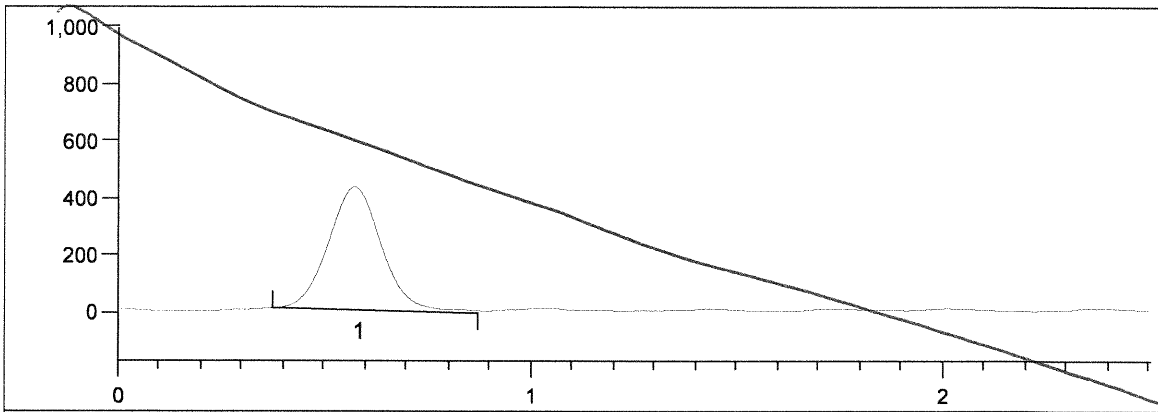
Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date:	9/30/22	
Time:	9:25 AM	
Peak	**rt**	**Area**
1	0.56	21,989,079

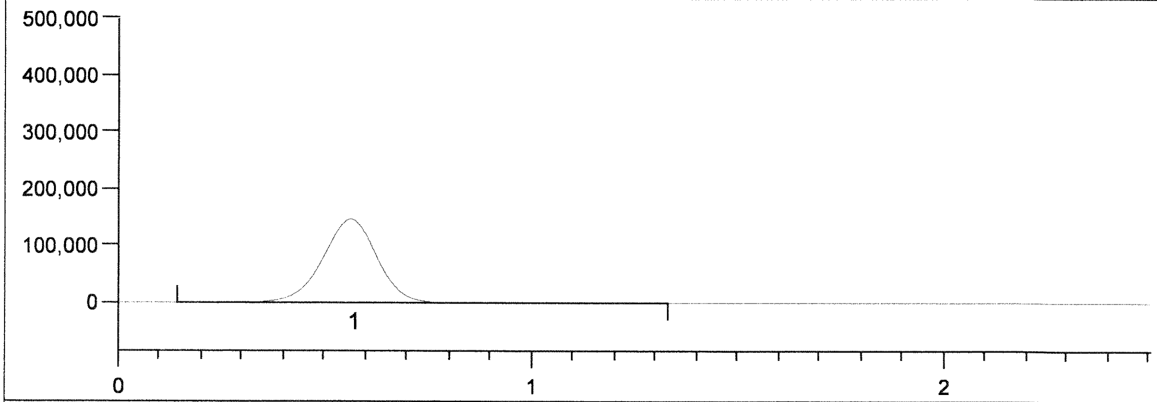
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
19	X	QCS	SRM 2702		1	21,989,079	2,130	410.	91.7	77-123	accept
Notes											



Date:	9/30/22	
Time:	9:30 AM	
Peak	**rt**	**Area**
1	0.57	37,524

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
20	Y	S	K2211015-001		1	37,524	0.688	0.198		< HS	reject
Notes											

ML
10.3.22



Date:	9/30/22	
Time:	9:35 AM	
Peak	**rt**	**Area**
1	0.56	13,619,284

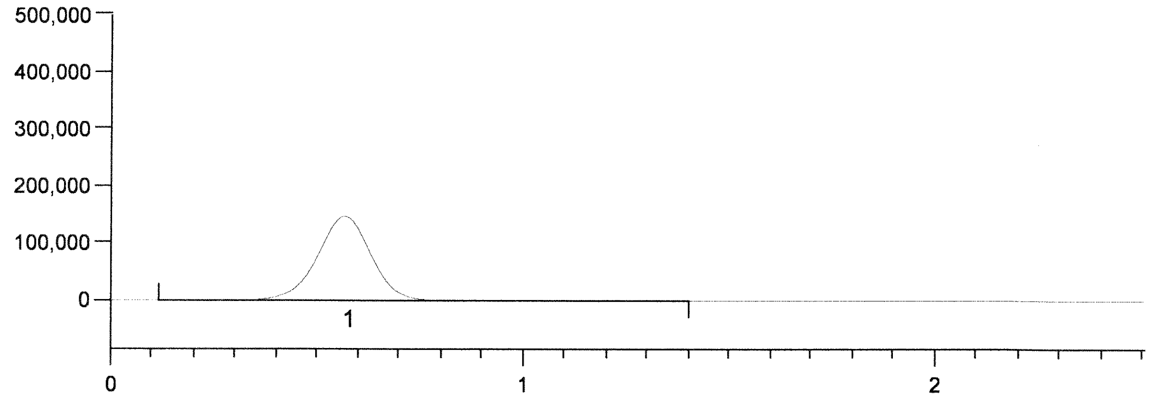
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
21	X	MS	K2211015-001		1	13,619,284	1,320	308	106	71-125	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

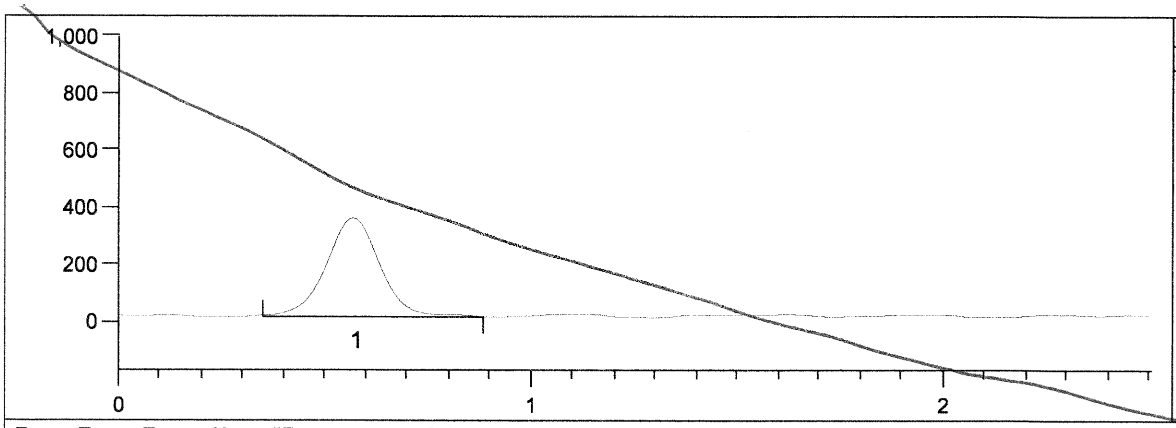
Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date: 9/30/22
Time: 9:40 AM

Peak	rt	Area
1	0.56	13,580,082

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
22	Y	MSD	K2211015-001		1	13,580,082	1,310	348	105	71-125	accept
Notes											

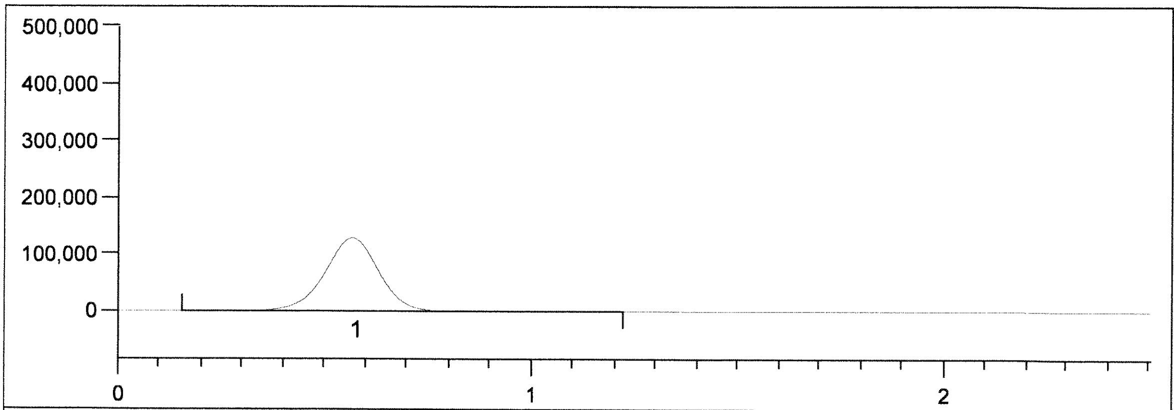


Date: 9/30/22
Time: 9:45 AM

Peak	rt	Area
1	0.56	30,816

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
23	X	S	K2211015-002		1	30,816	0.0372	0.0179		< HS	reject
Notes											

10.3.22



Date: 9/30/22
Time: 9:50 AM

Peak	rt	Area
1	0.56	11,998,793

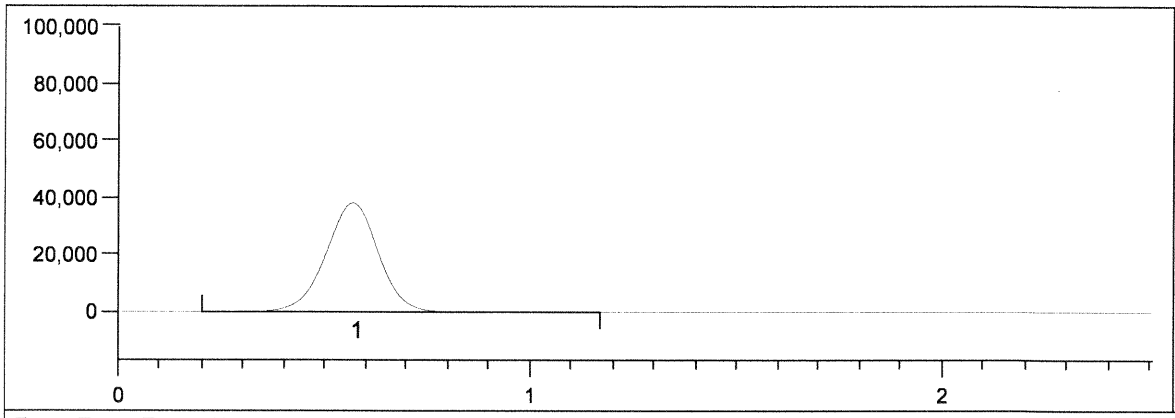
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
24	Y	S	K2210865-001		1	11,998,793	1,160	407		< HS	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

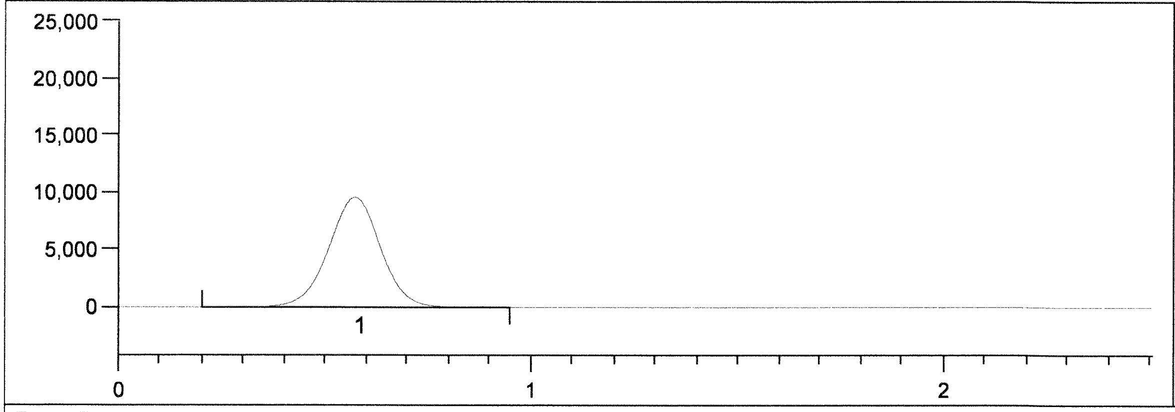
Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date: 9/30/22
Time: 9:55 AM

Peak	rt	Area
1	0.56	3,476,660

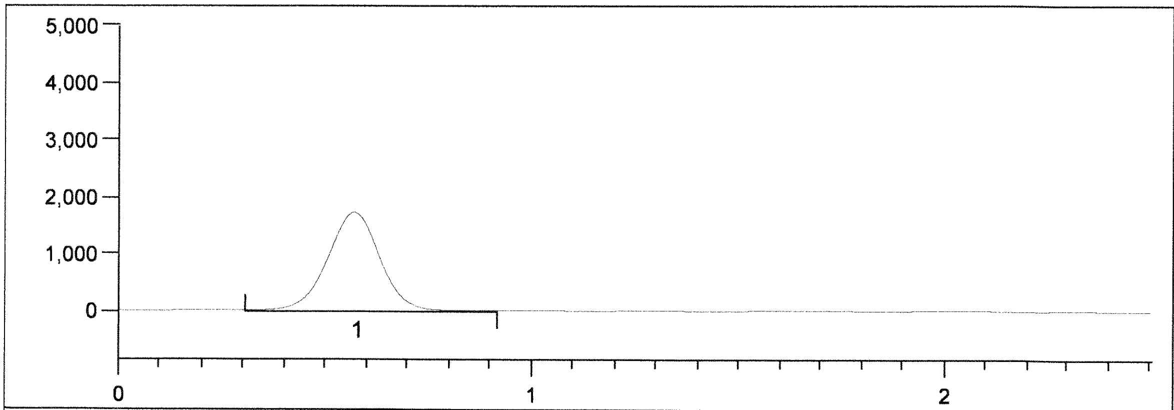
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
25	X	S	T2201667-001		1	3,476,660	334	31.4		< HS	accept
Notes											



Date: 9/30/22
Time: 10:00 AM

Peak	rt	Area
1	0.57	857,948

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
26	Y	S	T2201667-002		1	857,948	80.3	6.97		< HS	accept
Notes											



Date: 9/30/22
Time: 10:05 AM

Peak	rt	Area
1	0.56	151,621

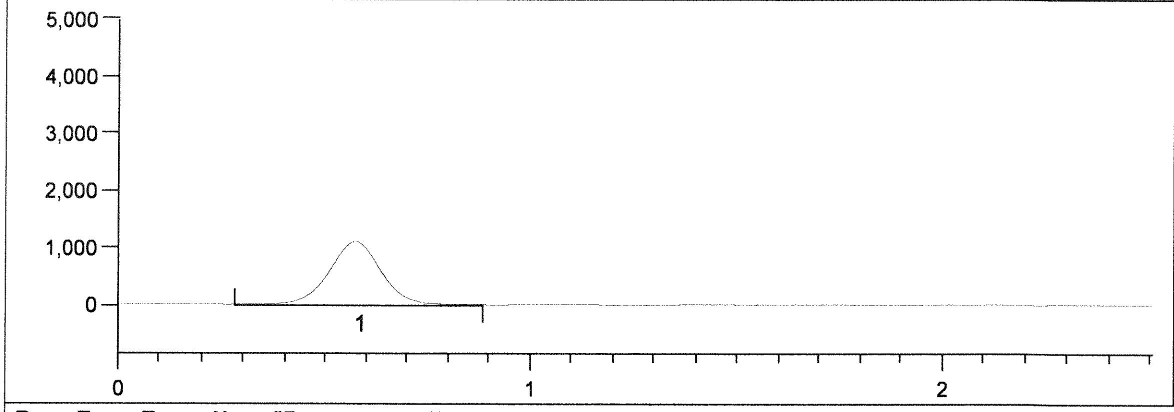
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
27	X	S	K2211015-001		1	151,621	11.8	0.338		< HS	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

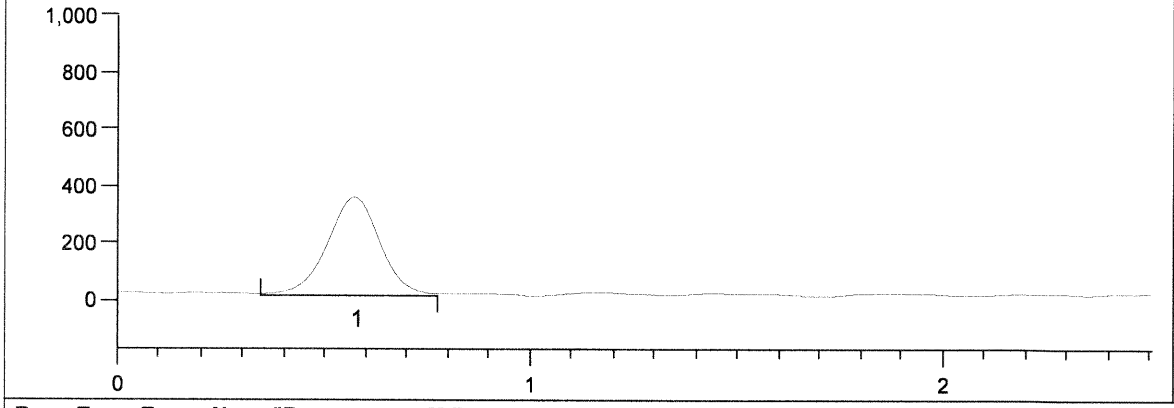
Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date: 9/30/22
Time: 10:10 AM

Peak	rt	Area
1	0.57	97,814

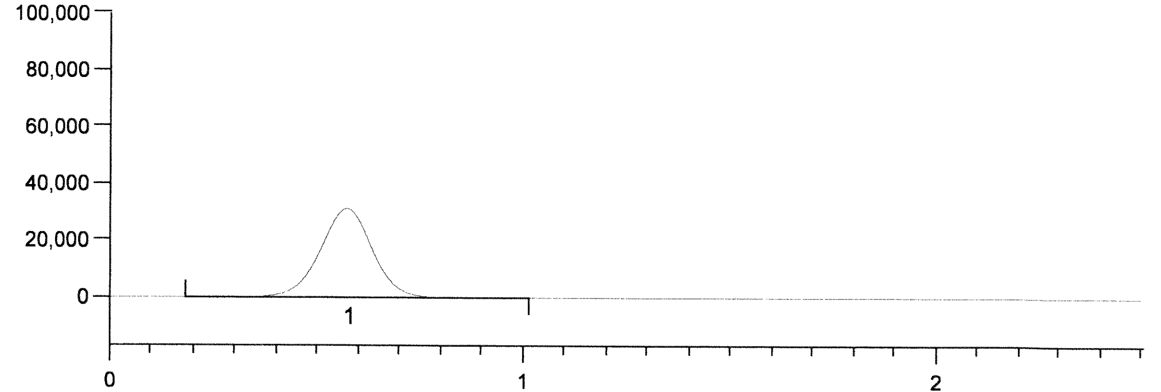
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
28	Y	S	K2211015-002		1	97,814	6.54	0.315		< HS	accept
Notes											



Date: 9/30/22
Time: 10:15 AM

Peak	rt	Area
1	0.57	29,944

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
29	X	MBA	MB-3		1	29,944	-0.0474	-0.000947	-0.000947	< 0.5	accept
Notes											



Date: 9/30/22
Time: 10:20 AM

Peak	rt	Area
1	0.57	2,801,746

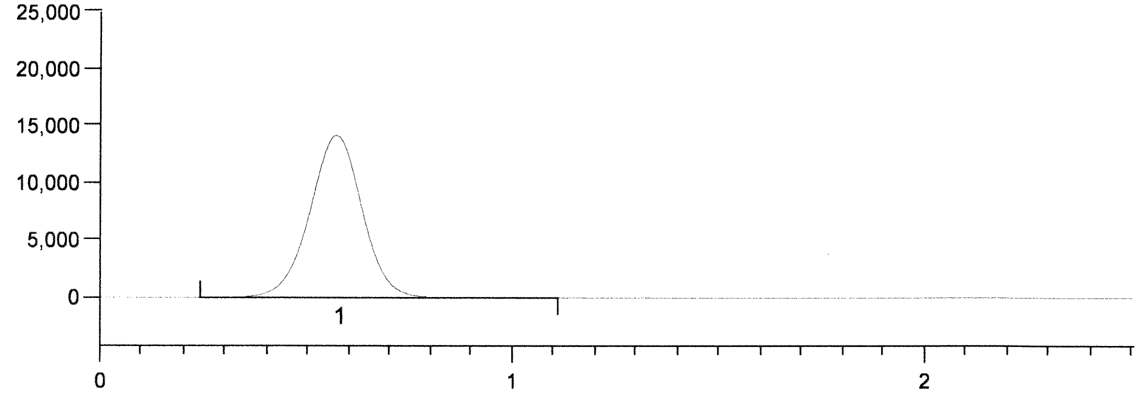
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
30	Y	OPR	OPR-2		1	2,801,746	269	5.38	108	77-123	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

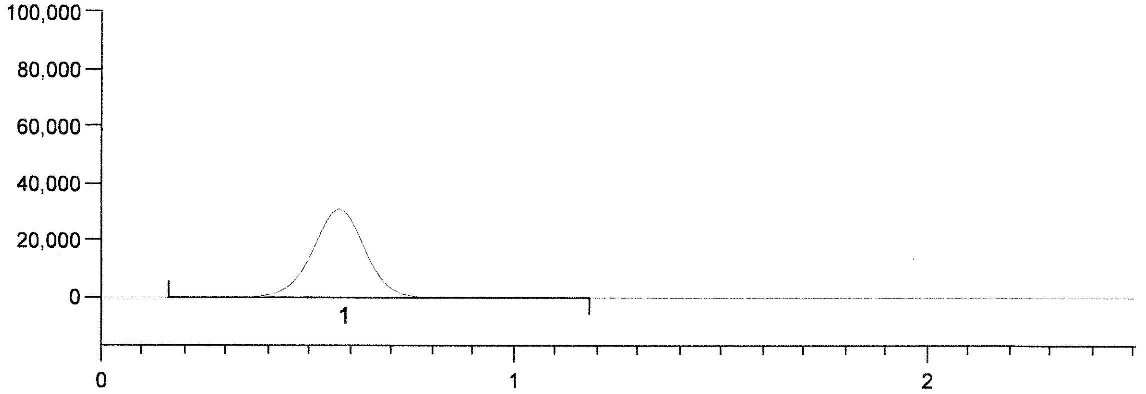
Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date: 9/30/22
Time: 10:25 AM

Peak	rt	Area
1	0.56	1,263,532

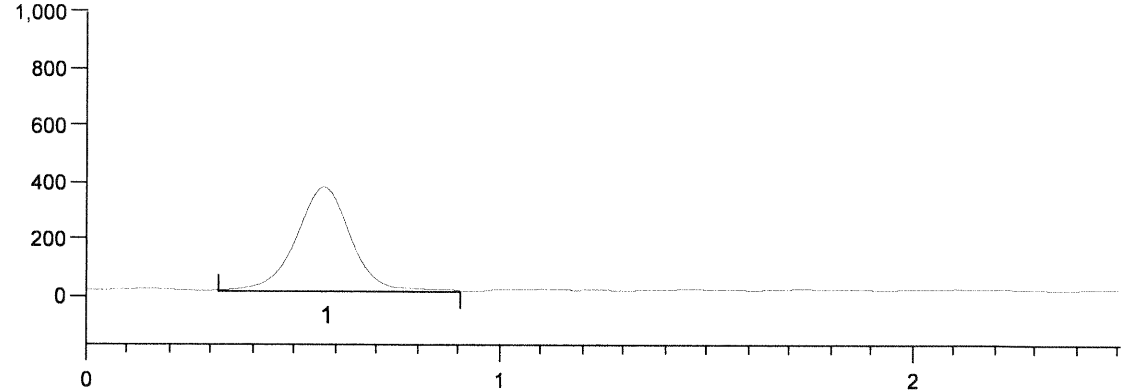
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
31	X	OPR	VER-2		1	1,263,532	120.	4.79	95.7	77-123	accept
Notes											



Date: 9/30/22
Time: 10:30 AM

Peak	rt	Area
1	0.57	2,809,617

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
32	Y	OPR	OPR-1		1	2,809,617	270.	5.39	108	77-123	accept
Notes											



Date: 9/30/22
Time: 10:35 AM

Peak	rt	Area
1	0.57	32,837

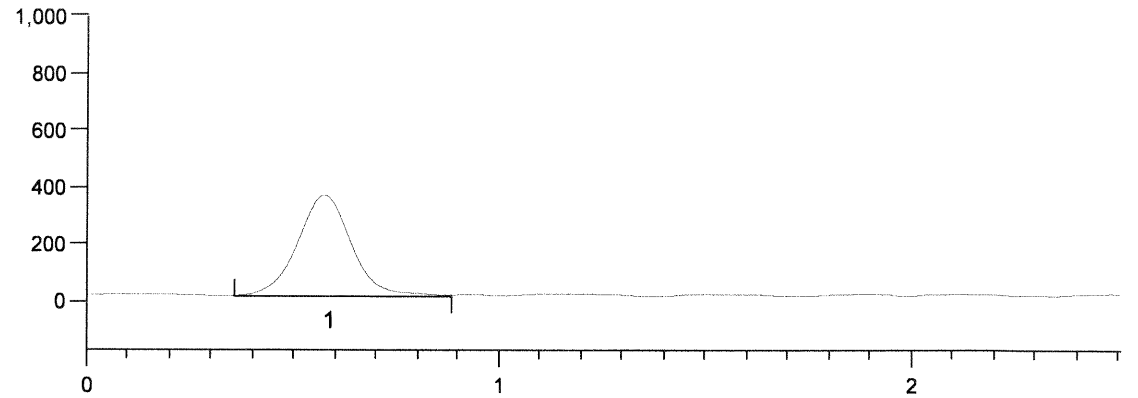
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
33	X	MBA	MB-1		1	32,837	0.233	0.00467	0.00467	< 0.5	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

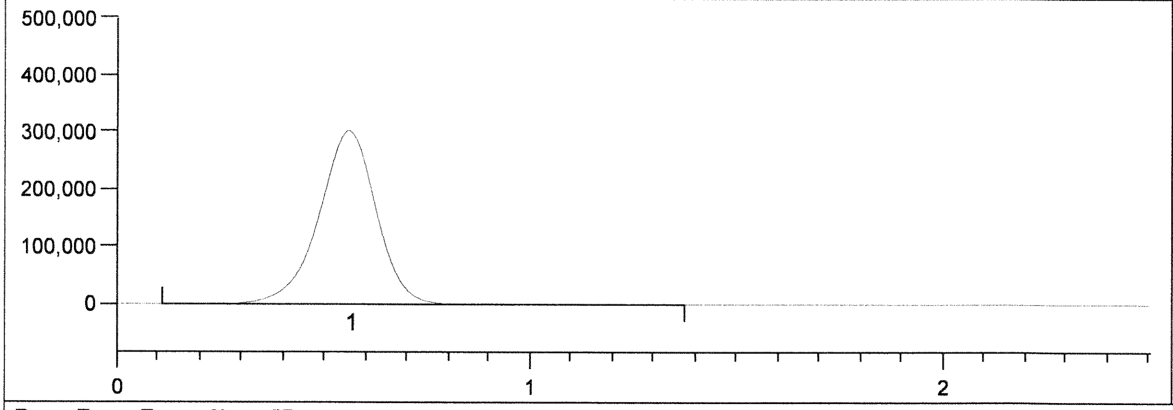
Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



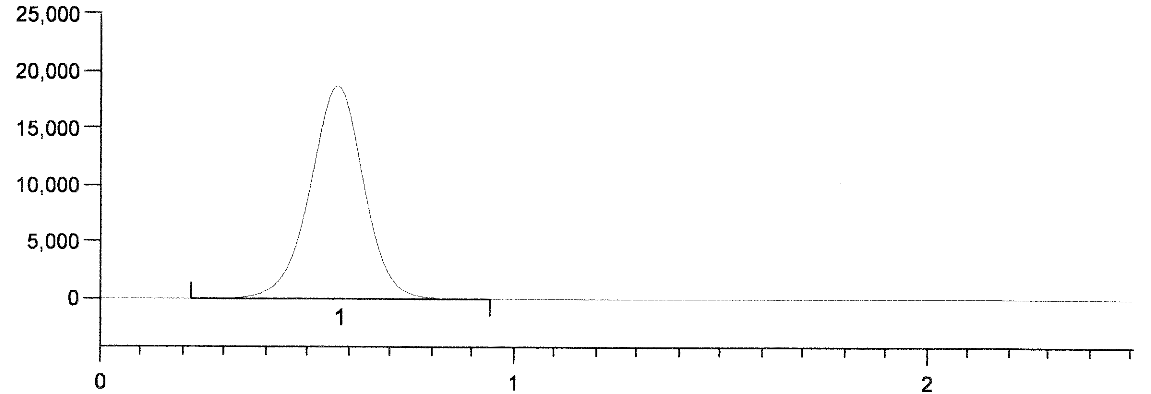
Date:	9/30/22	
Time:	10:40 AM	
Peak	**rt**	**Area**
1	0.57	31,598

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
34	Y	MBA	MB-2		1	31,598	0.113	0.00226	0.00226	< 0.5	accept
Notes											



Date:	9/30/22	
Time:	10:45 AM	
Peak	**rt**	**Area**
1	0.55	29,484,004

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
35	X	QCS	TORT-3		1	29,484,004	2,860	273	93.7	77-123	accept
Notes											



Date:	9/30/22	
Time:	10:50 AM	
Peak	**rt**	**Area**
1	0.57	1,699,113

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
36	Y	S	K2210684-001		1	1,699,113	162	31.7		< HS	accept
Notes											

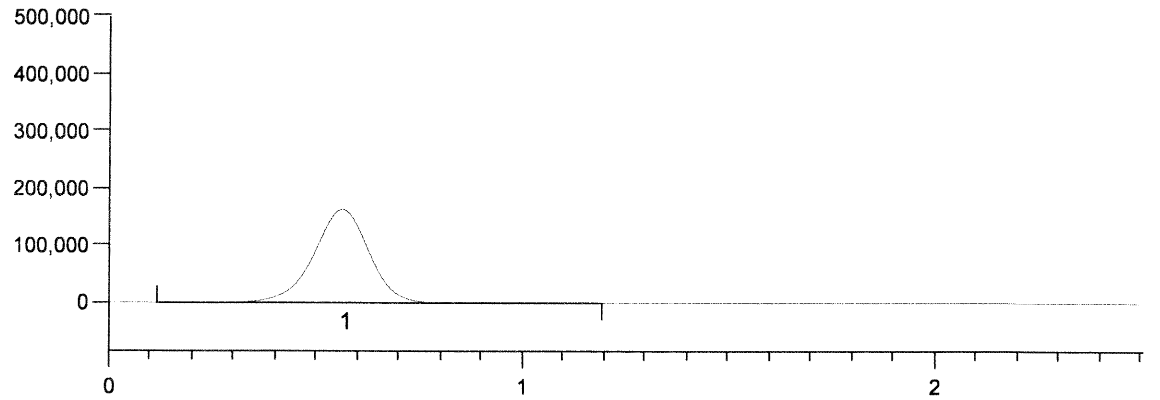
Peak Report

Batch Number:

Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

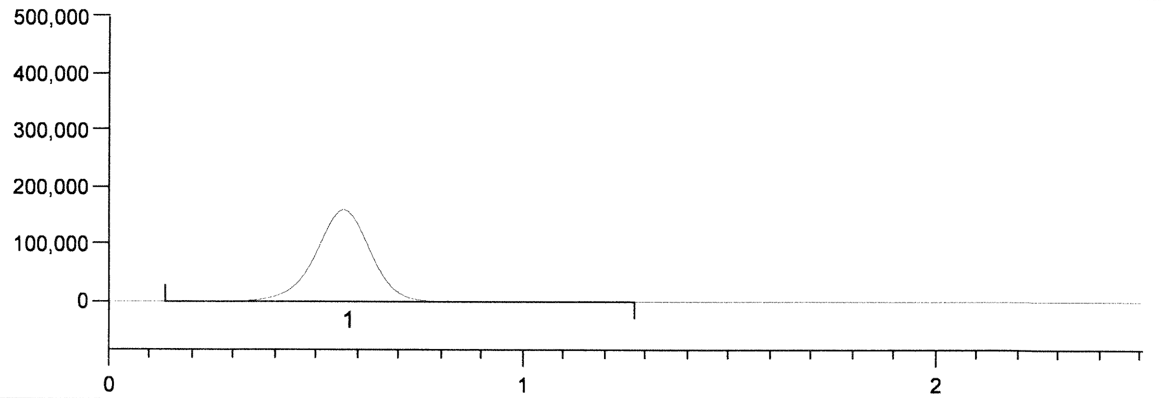
Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date: 9/30/22
Time: 10:55 AM

Peak	rt	Area
1	0.56	15,471,308

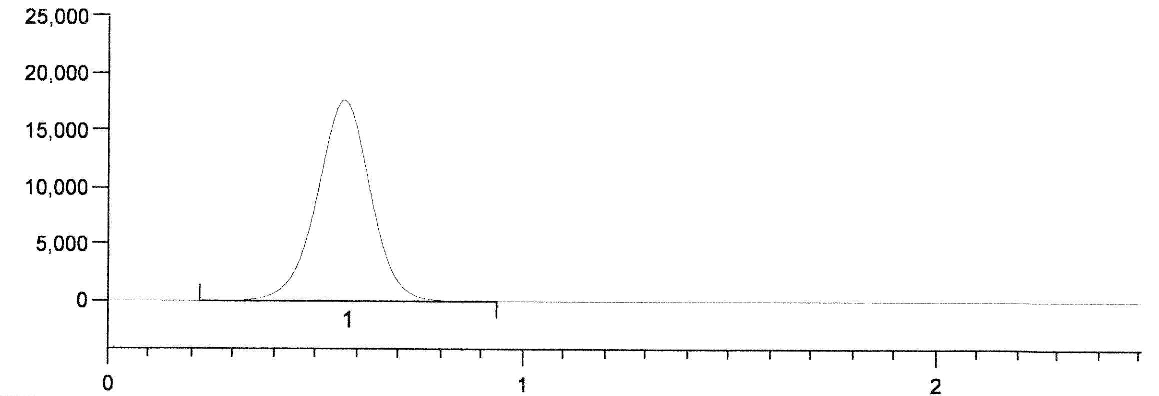
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
37	X	MS	K2210684-001		1	15,471,308	1,500	297	107	71-125	accept
Notes											



Date: 9/30/22
Time: 11:00 AM

Peak	rt	Area
1	0.56	15,148,615

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
38	Y	MSD	K2210684-001		1	15,148,615	1,470	291	105	71-125	accept
Notes											



Date: 9/30/22
Time: 11:05 AM

Peak	rt	Area
1	0.56	1,597,221

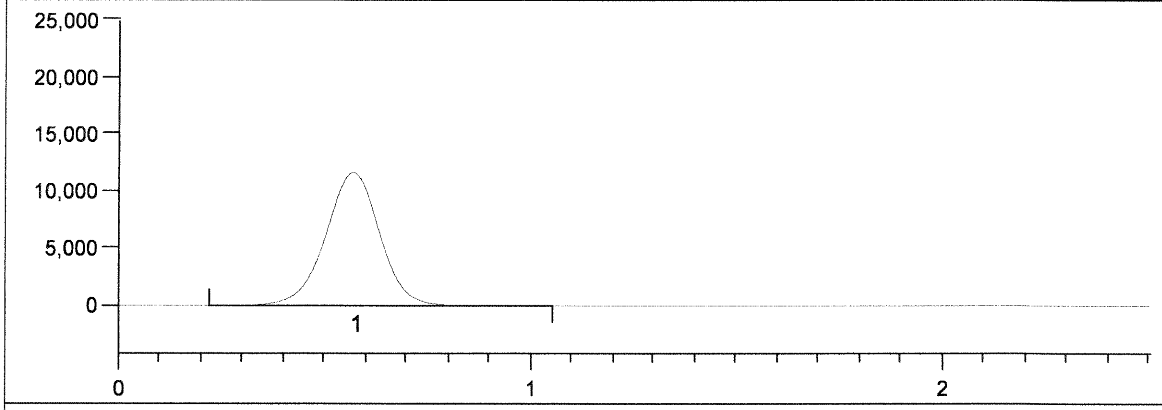
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
39	X	S	K2210684-002		1	1,597,221	152	29.8		< HS	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer

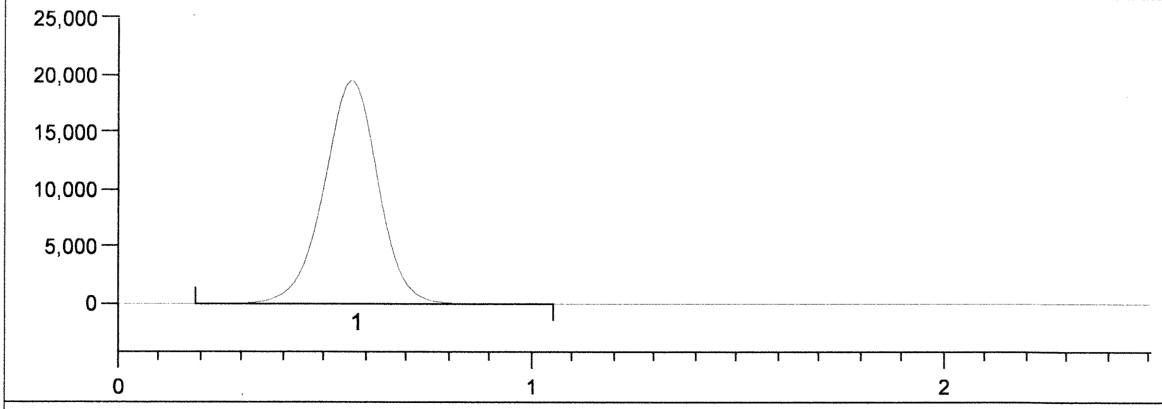


Date: 9/30/22
Time: 11:10 AM

Peak	rt	Area
1	0.56	1,062,524

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
40	Y	S	K2210684-003		1	1,062,524	100.	19.6		< HS	accept

Notes

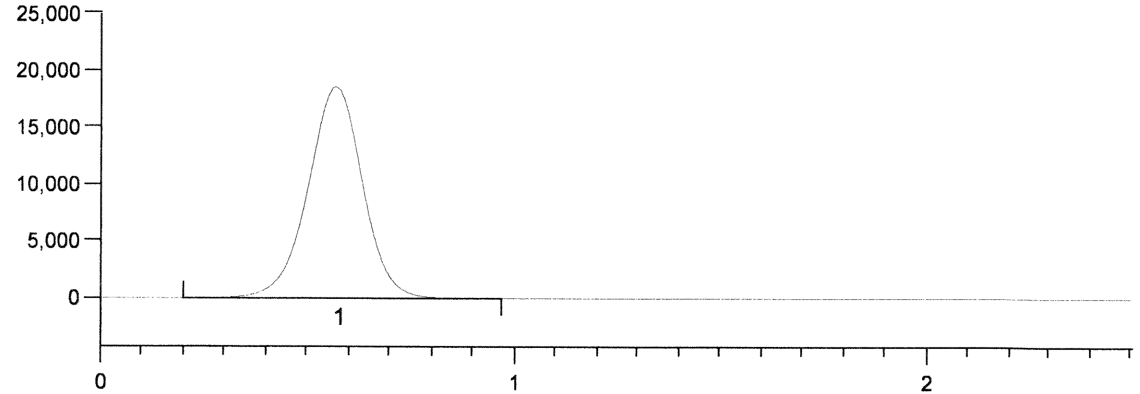


Date: 9/30/22
Time: 11:15 AM

Peak	rt	Area
1	0.56	1,793,784

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
41	X	S	K2210684-004		1	1,793,784	171	33.6		< HS	accept

Notes



Date: 9/30/22
Time: 11:20 AM

Peak	rt	Area
1	0.56	1,699,433

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
42	Y	S	K2210684-005		1	1,699,433	162	31.7		< HS	accept

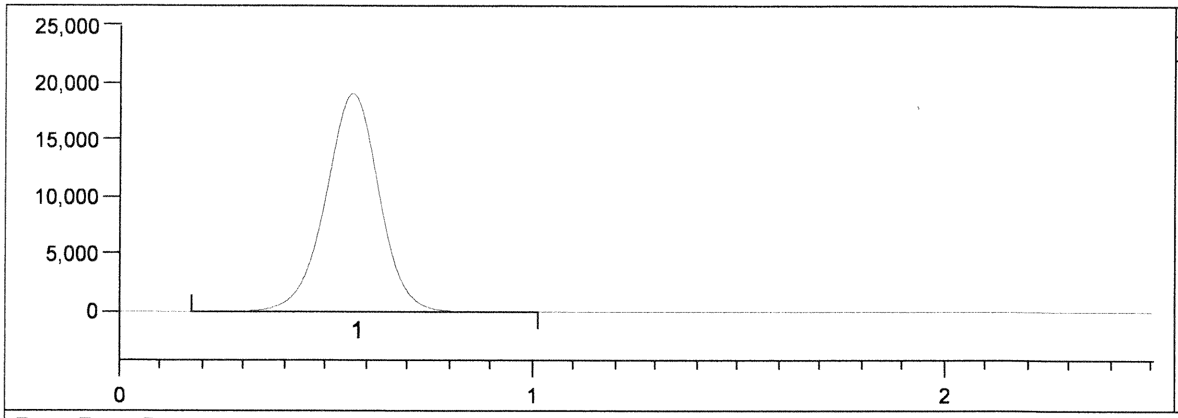
Notes

Peak Report

Batch Number:
Method Number: EPA 1631E

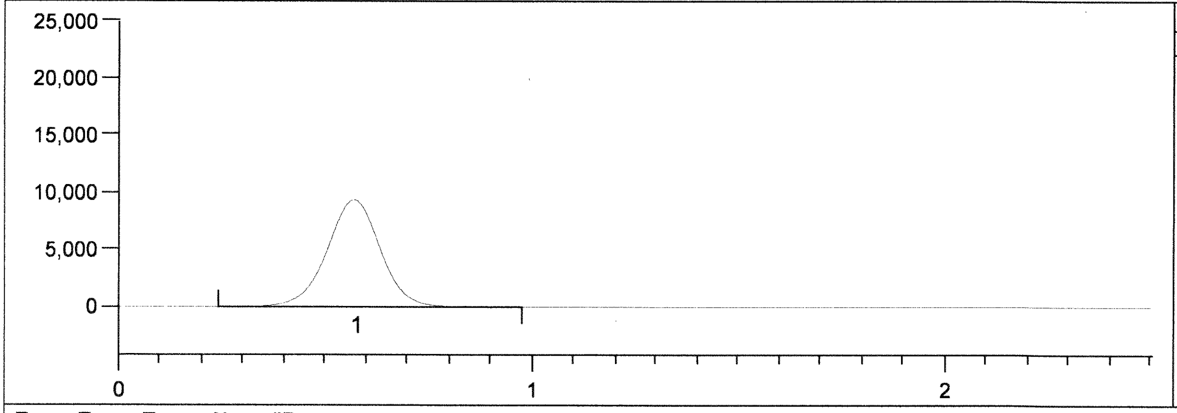
Project Number(s):
Instrument ID: K-AFS-04

Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



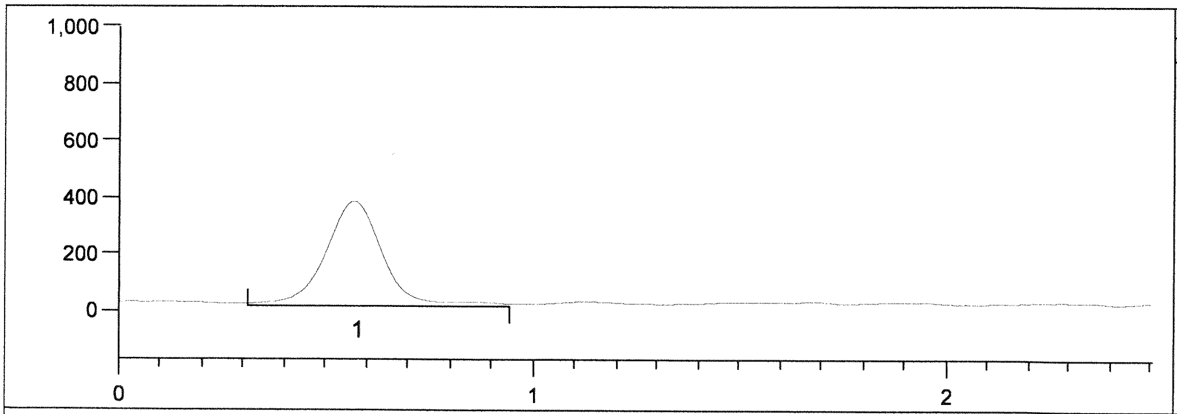
Date:	9/30/22	
Time:	11:25 AM	
Peak	**rt**	**Area**
1	0.56	1,737,572

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
43	X	S	K2210684-006		1	1,737,572	166	32.1		< HS	accept
Notes											



Date:	9/30/22	
Time:	11:30 AM	
Peak	**rt**	**Area**
1	0.57	850,165

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
44	Y	S	K2210684-007		1	850,165	79.5	15.7		< HS	accept
Notes											



Date:	9/30/22	
Time:	11:35 AM	
Peak	**rt**	**Area**
1	0.56	32,939

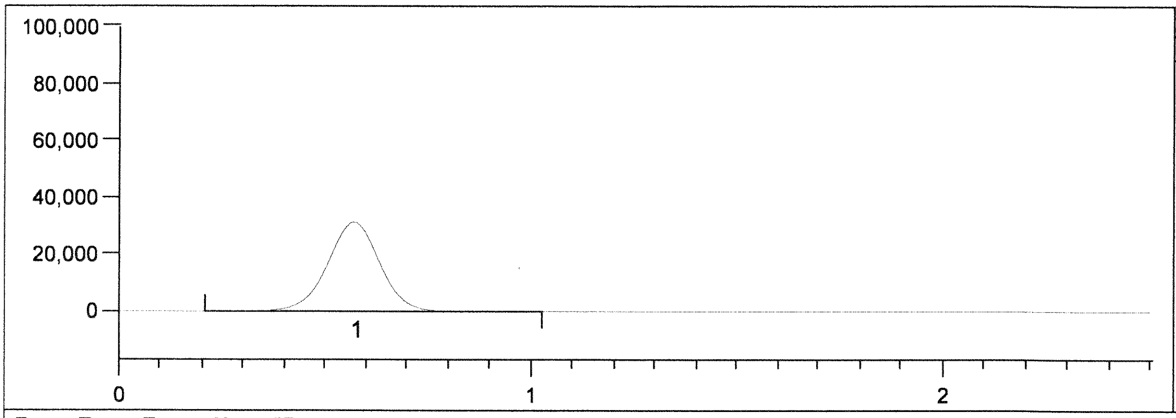
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
45	X	MBA	MB-3		1	32,939	0.243	0.00486	0.00486	< 0.5	accept
Notes											

Peak Report

Batch Number:
Method Number: EPA 1631E

Project Number(s):
Instrument ID: K-AFS-04

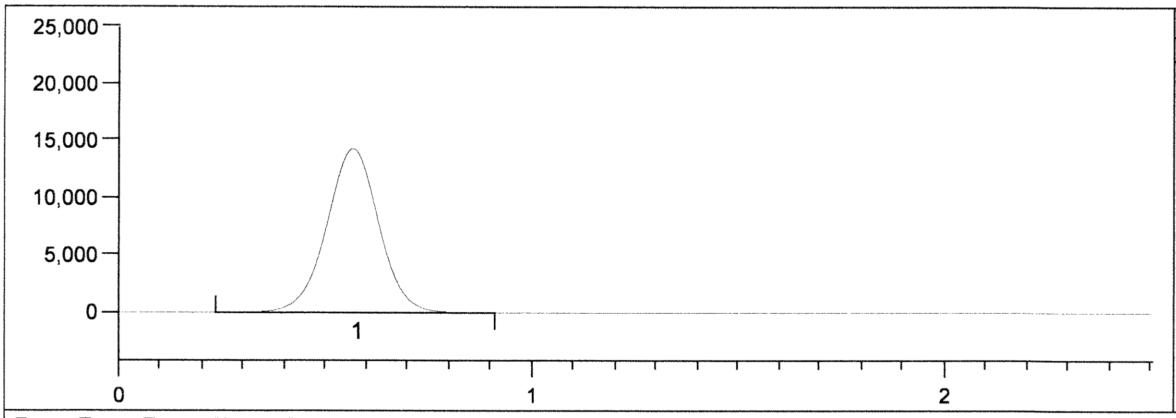
Date Analyzed: 9/30/22
Analyst Name: Anna Boyer



Date:	9/30/22
Time:	11:40 AM

Peak	rt	Area
1	0.57	2,825,450

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
46	Y	OPR	OPR-2		1	2,825,450	271	5.42	108	77-123	accept
Notes											



Date:	9/30/22
Time:	11:45 AM

Peak	rt	Area
1	0.56	1,273,498

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
47	X	OPR	VER/OPR-3		1	1,273,498	121	4.82	96.5	77-123	accept
Notes											

Service Request # K2211015
Instrument ID # K-ICP-MS-05
Calibration 093022AICPMS05
ALS LIMS Run # 779580
Cal Std: MS30-41-F
ICV Std: MS30-41-G
LLICV Std: MS30-41-H
I.S. Solution: MS29-79-M
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICSA Std: MS30-40-M
ICSAB Std: MS30-40-N

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control			X
6. ICS standards within 20% of true value	X		
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments: needs Recalibration for Boron.

Prep Batch: 407218

Primary Review by JL Date 9/30/22

Secondary Review by Date 9/30/22

R:\ICP\MISC\Document Control\K-ICPMS-05 Review Sheet.doc

Data Review Form

Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\093022A.csv**
RUNNO: **779580**

K2211015

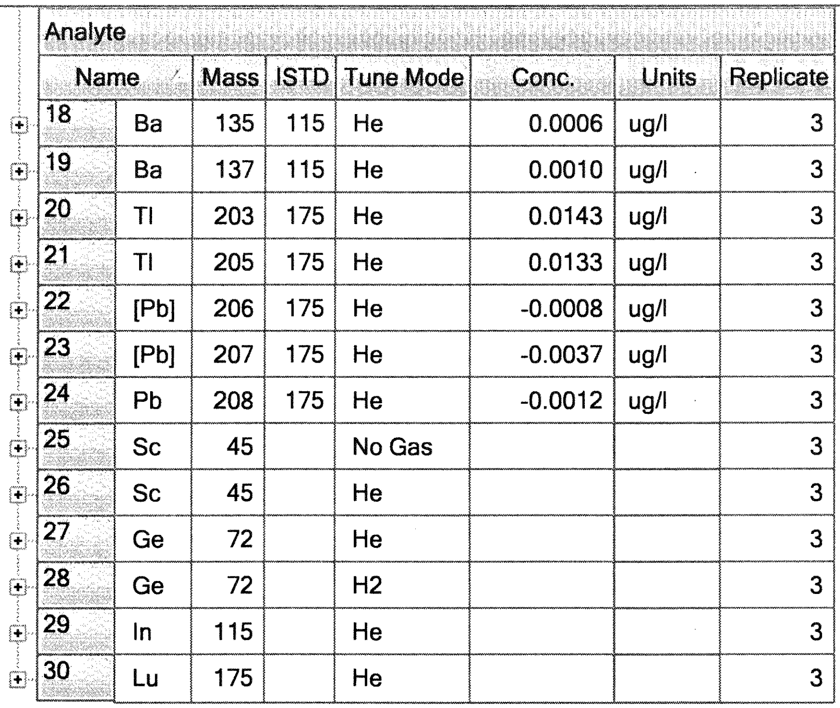
No exceptions to report.

Primary Approver: JC 9/30/22
Secondary Approver: 9/30/22

	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	001CALB.	2022-09-30 08:52:50	CalBlk		Prime		2
2		☐	002CALB.	2022-09-30 08:55:24	CalBlk		Rinse		3
3		☐	003CALB.	2022-09-30 08:57:59	CalBlk		Rinse		3
4		☐	004CALB.	2022-09-30 09:00:32	CalBlk	1	Blank		3
5		☐	005CALS.	2022-09-30 09:03:06	CalStd	2	25ppb		2
~~6~~	⚑	☐	~~006_ICV.d~~	~~2022-09-30 09:05:43~~	~~ICV~~		~~ICV~~		~~1103~~
7	⚑	☐	007_ICV.d	2022-09-30 09:18:00	ICV		ICV		1103
8		☐	008_CCV.	2022-09-30 09:20:51	CCV		CCV		2
9		☐	009_ICB.d	2022-09-30 09:23:25	ICB		ICB		3
10		☐	010_CCB.	2022-09-30 09:26:00	CCB		CCB		3
11		☐	011LICV.d	2022-09-30 09:28:33	LLICV		LLICVS		1104
12		☐	012SMPL.	2022-09-30 09:31:07	Sample		MoSTD		1107
13	⚑	☐	013_PB.d	2022-09-30 09:36:32	PB		KQ2216668-03	5X	2101
14		☐	014_LCS.d	2022-09-30 09:39:06	LCS		KQ2216668-04	20X	2102
15		☐	015_ARF.d	2022-09-30 09:41:40	AllRef		K2211015-001	5X	2103
16	⚑	☐	016_Dup.d	2022-09-30 09:44:13	Dup		KQ2216668-01	5X	2104
17		☐	017_Spk.d	2022-09-30 09:47:52	Spike		KQ2216668-02	5X	2105
18		☐	018SMPL.	2022-09-30 09:50:25	Sample		K2211015-002	5X	2106
19		☐	019_CCV.	2022-09-30 09:54:16	CCV		CCV		2
20		☐	020_CCB.	2022-09-30 10:00:54	CCB		CCB		3

JC
9/30/22

	Analyte						
	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Li	7	45	No Gas	-0.0009	ug/l	3
2	Be	9	45	No Gas	0.0017	ug/l	3
3	B	10	45	No Gas	0.2883	ug/l	3
4	B	11	45	No Gas	0.3749	ug/l	3
5	Ca	43	45	No Gas	1.2611	ug/l	3
6	Cr	52	72	He	0.0030	ug/l	3
7	Cr	53	72	He	-0.6150	ug/l	3
8	Co	59	72	He	0.0011	ug/l	3
9	As	75	72	He	-0.0135	ug/l	3
10	Se	77	72	H2	-0.3730	ug/l	3
11	Se	78	72	H2	0.0048	ug/l	3
12	Mo	95	115	He	0.0254	ug/l	3
13	Mo	98	115	He	0.0247	ug/l	3
14	Cd	111	115	He	0.0012	ug/l	3
15	Cd	114	115	He	0.0022	ug/l	3
16	Sb	121	115	He	0.0150	ug/l	3
17	Sb	123	115	He	-0.0058	ug/l	3



Analyte							
Name		Mass	ISTD	Tune Mode	Conc.	Units	Replicate
18	Ba	135	115	He	0.0006	ug/l	3
19	Ba	137	115	He	0.0010	ug/l	3
20	Tl	203	175	He	0.0143	ug/l	3
21	Tl	205	175	He	0.0133	ug/l	3
22	[Pb]	206	175	He	-0.0008	ug/l	3
23	[Pb]	207	175	He	-0.0037	ug/l	3
24	Pb	208	175	He	-0.0012	ug/l	3
25	Sc	45		No Gas			3
26	Sc	45		He			3
27	Ge	72		He			3
28	Ge	72		H2			3
29	In	115		He			3
30	Lu	175		He			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\093022.b
Acq. Date-Time	2022-09-30 07:23:30
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

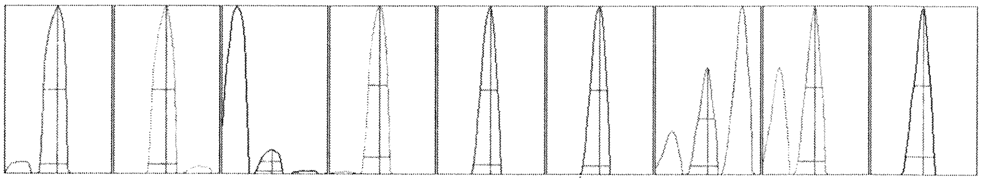
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	81628.00	0.843	5.000	
9	24235.24	1.035	5.000	
24	63966.93	1.689	5.000	
59	84633.80	0.977	5.000	
115	155158.18	1.401	5.000	
140	164508.63	1.127	5.000	
208	129050.43	1.238	5.000	
209	201229.72	1.297	5.000	
238	298210.41	0.633	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	8042	8213	8188	8178	8193
9	2387	2454	2414	2435	2427
24	6226	6382	6483	6396	6495
59	8323	8469	8540	8494	8491
115	15135	15541	15652	15640	15612
140	16138	16467	16495	16630	16524
208	12651	12880	12913	13031	13050
209	19678	20109	20305	20222	20301
238	29518	29771	29937	29998	29882

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	13488.59	7.00	6.90 - 7.10		0.782		0.900
9	4184.86	9.00	8.90 - 9.10		0.782		0.900
24	11274.31	23.95	23.90 - 24.10		0.755		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	15696.20	58.95	58.90 - 59.10		0.746		0.900
115	32165.14	115.00	114.90 - 115.10		0.761		0.900
140	34392.41	140.00	139.90 - 140.10		0.759		0.900
208	26945.74	208.00	207.90 - 208.10		0.778		0.900
209	42180.79	209.00	208.90 - 209.10		0.779		0.900
238	60305.48	238.00	237.90 - 238.10		0.818		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.1 V	Deflect	12.0 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	160 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0009	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.6 mV	Analog HV	1787 V	Pulse HV	1428 V

Calibration Blank Report

Sample Name Blank

File Name 004CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022A.b

Acq Time 2022-09-30 09:00:32

Sample Type CalBlk

Comment —

ISTD Ref FileName 004CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	1480.10	10.2
Be	9	45	No Gas	13.00	23.1
B	10	45	No Gas	1650.09	2.6
B	11	45	No Gas	7215.93	1.8
Ca	43	45	No Gas	50.00	72.1
Cr	52	72	He	223.34	17.2
Cr	53	72	He	308.89	21.0
Co	59	72	He	12.22	41.7
As	75	72	He	17.33	14.5
Mo	95	115	He	11.11	45.8
Mo	98	115	He	23.33	37.8
Cd	111	115	He	2.17	13.3
Cd	114	115	He	21.00	6.3
Sb	121	115	He	397.23	7.2
Sb	123	115	He	336.67	5.7
Ba	135	115	He	2.22	173.2
Ba	137	115	He	6.11	41.7
Tl	203	175	He	87.78	19.1
Tl	205	175	He	211.12	25.6
[Pb]	206	175	He	107.78	9.9
[Pb]	207	175	He	98.89	15.2
Pb	208	175	He	435.56	7.1
Se	77	72	H2	659.68	3.5
Se	78	72	H2	12.33	9.4

JL
9/30/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	2710873.30	1.5
Sc	45	He	136357.18	1.4
Ge	72	He	119183.21	1.3
In	115	He	1211107.58	0.3
Lu	175	He	4350546.08	1.1
Ge	72	H2	938467.39	0.1

Calibration Standard Report

Sample Name	25ppb
File Name	005CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:03:06
Sample Type	CalStd
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	293763.14	1.0
Be	9	45	No Gas	94948.30	0.3
B	10	45	No Gas	18899.98	1.8
B	11	45	No Gas	91189.07	1.0
Ca	43	45	No Gas	40855.03	1.6
Cr	52	72	He	83637.96	0.3
Cr	53	72	He	10325.36	0.9
Co	59	72	He	143664.43	1.5
As	75	72	He	9106.76	1.0
Mo	95	115	He	29077.49	2.0
Mo	98	115	He	50626.32	1.2
Cd	111	115	He	30444.58	0.4
Cd	114	115	He	78097.30	1.0
Sb	121	115	He	38193.55	0.8
Sb	123	115	He	30819.89	2.2
Ba	135	115	He	12806.22	0.8
Ba	137	115	He	23086.36	1.7
Tl	203	175	He	262794.36	1.5
Tl	205	175	He	644922.37	0.7
[Pb]	206	175	He	212953.68	0.2
[Pb]	207	175	He	182960.46	1.2
Pb	208	175	He	850928.24	0.3
Se	77	72	H2	4742.33	2.4
Se	78	72	H2	13102.71	0.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2599712.12	1.3	2710873.3	95.9	
Sc	45	He	135551.55	1.8	136357.18	99.41	
Ge	72	He	119038.62	0.5	119183.21	99.88	
In	115	He	1181173.10	1.3	1211107.58	97.53	
Lu	175	He	4212221.64	1.8	4350546.08	96.82	
Ge	72	H2	929767.04	0.6	938467.39	99.07	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	006_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:05:43
Sample Type	ICV
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	26.4439	ug/l	0.8	310294.46	105.78	
Be	9	45	No Gas	2.5316	ug/l	2.6	9612.57	101.26	
B	10	45	No Gas	20.1885	ug/l	2.8	15554.59	80.75	ICV Failed
B	11	45	No Gas	19.5250	ug/l	1.9	72650.60	78.1	ICV Failed
Ca	43	45	No Gas	280.1293	ug/l	3.2	5757.72	112.05	ICV Failed
Cr	52	72	He	10.4841	ug/l	1.2	34370.71	104.84	
Cr	53	72	He	10.0906	ug/l	3.1	4249.44	100.91	
Co	59	72	He	25.9513	ug/l	0.7	145610.84	103.81	
As	75	72	He	25.5702	ug/l	0.5	9094.09	102.28	
Mo	95	115	He	24.6413	ug/l	0.3	58707.82	98.57	
Mo	98	115	He	24.4200	ug/l	0.6	101291.06	97.68	
Cd	111	115	He	12.3144	ug/l	0.8	15362.75	98.52	
Cd	114	115	He	12.4932	ug/l	1.0	39987.11	99.95	
Sb	121	115	He	11.5488	ug/l	1.2	36175.67	92.39	
Sb	123	115	He	11.7983	ug/l	0.0	29824.19	94.39	
Ba	135	115	He	98.6625	ug/l	0.9	51764.27	98.66	
Ba	137	115	He	99.7015	ug/l	1.0	94285.49	99.7	
Tl	203	175	He	25.0193	ug/l	2.7	268515.93	100.08	
Tl	205	175	He	24.7353	ug/l	3.2	651469.90	98.94	
[Pb]	206	175	He	24.5495	ug/l	3.2	213491.83	98.2	
[Pb]	207	175	He	24.7093	ug/l	3.1	184613.38	98.84	
Pb	208	175	He	24.7747	ug/l	2.8	860969.60	99.1	
Se	77	72	H2	25.9650	ug/l	1.4	4809.35	103.86	
Se	78	72	H2	25.7998	ug/l	1.4	13269.50	103.2	

31
9/30/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2596925.94	2.6	2710873.3	95.8	
Sc	45	He	137479.17	1.2	136357.18	100.82	
Ge	72	He	116227.71	1.2	119183.21	97.52	
In	115	He	1209862.27	0.3	1211107.58	99.9	
Lu	175	He	4302436.64	3.3	4350546.08	98.89	
Ge	72	H2	912541.11	1.4	938467.39	97.24	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	007_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:18:00
Sample Type	ICV
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.9845	ug/l	0.8	323499.87	103.94	
Be	9	45	No Gas	2.4589	ug/l	0.8	9908.39	98.36	
B	10	45	No Gas	18.9916	ug/l	2.4	15616.89	75.97	ICV Failed
B	11	45	No Gas	18.5290	ug/l	0.8	73523.00	74.12	ICV Failed
Ca	43	45	No Gas	258.2240	ug/l	7.3	5634.37	103.29	
Cr	52	72	He	10.2082	ug/l	2.2	33899.73	102.08	
Cr	53	72	He	10.0833	ug/l	10.3	4300.56	100.83	
Co	59	72	He	25.4310	ug/l	1.7	144510.04	101.72	
As	75	72	He	24.7972	ug/l	2.8	8931.68	99.19	
Mo	95	115	He	24.2411	ug/l	1.8	58011.12	96.96	
Mo	98	115	He	24.4795	ug/l	1.0	101993.95	97.92	
Cd	111	115	He	12.2460	ug/l	0.4	15346.06	97.97	
Cd	114	115	He	12.4679	ug/l	0.6	40085.52	99.74	
Sb	121	115	He	11.5591	ug/l	1.4	36371.69	92.47	
Sb	123	115	He	11.7370	ug/l	0.3	29804.19	93.9	
Ba	135	115	He	98.2054	ug/l	1.1	51756.40	98.21	
Ba	137	115	He	99.0084	ug/l	0.7	94051.52	99.01	
Tl	203	175	He	25.0566	ug/l	0.7	270627.44	100.23	
Tl	205	175	He	24.9067	ug/l	1.4	660243.53	99.63	
[Pb]	206	175	He	24.5578	ug/l	1.4	214945.77	98.23	
[Pb]	207	175	He	24.6185	ug/l	1.8	185114.12	98.47	
Pb	208	175	He	24.7260	ug/l	1.0	864784.37	98.9	
Se	77	72	H2	26.0842	ug/l	1.8	4767.01	104.34	
Se	78	72	H2	25.9956	ug/l	0.7	13200.45	103.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2754778.85	0.5	2710873.3	101.62	
Sc	45	He	136346.13	1.0	136357.18	99.99	
Ge	72	He	117708.65	0.4	119183.21	98.76	
In	115	He	1215286.19	0.3	1211107.58	100.35	
Lu	175	He	4327579.27	1.0	4350546.08	99.47	
Ge	72	H2	900861.04	1.0	938467.39	95.99	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	008_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:20:51
Sample Type	CCV
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.6460	ug/l	1.4	301872.07	102.58	
Be	9	45	No Gas	24.9915	ug/l	1.2	95094.94	99.97	
B	10	45	No Gas	26.4839	ug/l	1.4	19964.51	105.94	
B	11	45	No Gas	24.7691	ug/l	0.9	90581.44	99.08	
Ca	43	45	No Gas	1995.8945	ug/l	2.7	40848.26	99.79	
Cr	52	72	He	24.8592	ug/l	2.2	81564.93	99.44	
Cr	53	72	He	25.2054	ug/l	1.5	10208.62	100.82	
Co	59	72	He	24.7924	ug/l	1.8	139731.15	99.17	
As	75	72	He	24.6774	ug/l	3.5	8814.29	98.71	
Mo	95	115	He	12.4178	ug/l	2.0	28489.81	99.34	
Mo	98	115	He	12.3448	ug/l	0.4	49311.38	98.76	
Cd	111	115	He	24.8218	ug/l	1.4	29811.28	99.29	
Cd	114	115	He	24.9473	ug/l	0.5	76858.56	99.79	
Sb	121	115	He	12.4389	ug/l	0.6	37485.84	99.51	
Sb	123	115	He	12.7745	ug/l	1.7	31062.05	102.2	
Ba	135	115	He	24.4560	ug/l	1.0	12355.85	97.82	
Ba	137	115	He	24.7362	ug/l	0.3	22527.25	98.94	
Tl	203	175	He	24.9112	ug/l	1.7	260013.07	99.64	
Tl	205	175	He	25.0102	ug/l	0.9	640721.78	100.04	
[Pb]	206	175	He	25.0334	ug/l	0.5	211757.22	100.13	
[Pb]	207	175	He	24.9530	ug/l	1.4	181335.50	99.81	
Pb	208	175	He	24.9843	ug/l	1.2	844455.11	99.94	
Se	77	72	H2	25.2035	ug/l	0.9	4719.66	100.81	
Se	78	72	H2	24.4794	ug/l	2.2	12678.72	97.92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2604451.15	0.6	2710873.3	96.07	
Sc	45	He	133226.10	0.6	136357.18	97.7	
Ge	72	He	116766.82	1.9	119183.21	97.97	
In	115	He	1164867.43	0.6	1211107.58	96.18	
Lu	175	He	4182157.61	0.8	4350546.08	96.13	
Ge	72	H2	918809.79	0.4	938467.39	97.91	

Initial Calibration Blank (ICB) Report

Sample Name ICB

File Name 009_ICB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022A.b

Acq Time 2022-09-30 09:23:25

Sample Type ICB

Comment —

ISTD Ref FileName 004CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0096	ug/l	284.6	1493.43	
Be	9	45	No Gas	0.0040	ug/l	16.5	27.00	
B	10	45	No Gas	0.6194	ug/l	21.5	1961.24	
B	11	45	No Gas	0.8010	ug/l	8.8	9383.62	
Ca	43	45	No Gas	2.1962	ug/l	106.0	90.00	
Cr	52	72	He	0.0065	ug/l	222.8	237.78	
Cr	53	72	He	-0.1843	ug/l	N/A	228.89	
Co	59	72	He	-0.0009	ug/l	N/A	6.67	
As	75	72	He	0.0022	ug/l	1188.1	17.67	
Mo	95	115	He	0.0194	ug/l	22.2	55.56	
Mo	98	115	He	0.0192	ug/l	34.3	100.00	
Cd	111	115	He	0.0031	ug/l	82.0	5.83	
Cd	114	115	He	0.0234	ug/l	151.8	92.69	
Sb	121	115	He	0.0015	ug/l	242.5	389.45	
Sb	123	115	He	-0.0060	ug/l	N/A	311.67	
Ba	135	115	He	-0.0042	ug/l	0.0	0.00	
Ba	137	115	He	-0.0016	ug/l	N/A	4.44	
Tl	203	175	He	0.0214	ug/l	20.6	306.67	
Tl	205	175	He	0.0209	ug/l	13.6	736.69	
[Pb]	206	175	He	-0.0037	ug/l	N/A	72.22	
[Pb]	207	175	He	-0.0025	ug/l	N/A	76.67	
Pb	208	175	He	-0.0022	ug/l	N/A	344.45	
Se	77	72	H2	-0.0175	ug/l	N/A	640.68	
Se	78	72	H2	0.0000	ug/l	N/A	12.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2535208.93	1.3	2710873.3	93.52	
Sc	45	He	136078.69	1.1	136357.18	99.8	
Ge	72	He	115944.65	0.6	119183.21	97.28	
In	115	He	1173425.36	0.5	1211107.58	96.89	
Lu	175	He	4175514.28	0.7	4350546.08	95.98	
Ge	72	H2	915439.69	1.4	938467.39	97.55	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	010_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:26:00
Sample Type	CCB
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	-0.0097	ug/l	N/A	1280.07	
Be	9	45	No Gas	-0.0005	ug/l	N/A	10.33	
B	10	45	No Gas	0.2399	ug/l	18.9	1712.32	
B	11	45	No Gas	0.3322	ug/l	30.2	7871.78	
Ca	43	45	No Gas	2.3597	ug/l	113.3	93.33	
Cr	52	72	He	-0.0002	ug/l	N/A	216.67	
Cr	53	72	He	-0.2958	ug/l	N/A	185.56	
Co	59	72	He	0.0019	ug/l	244.3	22.22	
As	75	72	He	-0.0080	ug/l	N/A	14.00	
Mo	95	115	He	0.0045	ug/l	74.3	21.11	
Mo	98	115	He	0.0091	ug/l	25.8	58.89	
Cd	111	115	He	0.0019	ug/l	84.7	4.33	
Cd	114	115	He	0.0002	ug/l	397.3	21.00	
Sb	121	115	He	-0.0008	ug/l	N/A	381.67	
Sb	123	115	He	-0.0074	ug/l	N/A	307.78	
Ba	135	115	He	-0.0021	ug/l	N/A	1.11	
Ba	137	115	He	-0.0046	ug/l	N/A	1.67	
Tl	203	175	He	0.0028	ug/l	18.9	113.33	
Tl	205	175	He	0.0036	ug/l	37.5	295.56	
[Pb]	206	175	He	-0.0029	ug/l	N/A	78.89	
[Pb]	207	175	He	-0.0036	ug/l	N/A	68.89	
Pb	208	175	He	-0.0029	ug/l	N/A	321.11	
Se	77	72	H2	-0.1382	ug/l	N/A	619.34	
Se	78	72	H2	-0.0149	ug/l	N/A	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2545713.99	1.9	2710873.3	93.91	
Sc	45	He	133740.55	0.9	136357.18	98.08	
Ge	72	He	116045.29	1.1	119183.21	97.37	
In	115	He	1170620.79	0.4	1211107.58	96.66	
Lu	175	He	4183902.89	2.1	4350546.08	96.17	
Ge	72	H2	912617.39	0.3	938467.39	97.25	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVS
File Name	011LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:28:33
Sample Type	LLICV
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.2074	ug/l	12.3	3857.17	103.7	
Be	9	45	No Gas	0.0427	ug/l	7.3	175.00	106.75	
B	10	45	No Gas	0.8723	ug/l	20.3	2193.48	87.23	
B	11	45	No Gas	1.0659	ug/l	4.7	10547.58	106.59	
Ca	43	45	No Gas	24.5246	ug/l	38.8	550.02	122.62	
Cr	52	72	He	0.3585	ug/l	7.2	1408.96	89.62	
Cr	53	72	He	0.1755	ug/l	27.0	376.67	43.88	
Co	59	72	He	0.0427	ug/l	7.6	255.56	106.75	
As	75	72	He	1.0406	ug/l	5.9	393.01	104.06	
Mo	95	115	He	0.0976	ug/l	15.7	241.12	97.6	
Mo	98	115	He	0.1024	ug/l	16.7	443.34	102.4	
Cd	111	115	He	0.0412	ug/l	10.8	53.00	103	
Cd	114	115	He	0.0407	ug/l	6.5	149.67	101.75	
Sb	121	115	He	0.1141	ug/l	2.0	742.80	114.1	
Sb	123	115	He	0.0978	ug/l	11.3	575.01	97.8	
Ba	135	115	He	0.0963	ug/l	27.7	52.22	96.3	
Ba	137	115	He	0.1057	ug/l	5.9	105.00	105.7	
Tl	203	175	He	0.0403	ug/l	3.8	508.90	100.75	
Tl	205	175	He	0.0426	ug/l	5.0	1305.62	106.5	
[Pb]	206	175	He	0.0918	ug/l	17.8	887.81	91.8	
[Pb]	207	175	He	0.0926	ug/l	12.0	774.47	92.6	
Pb	208	175	He	0.0904	ug/l	1.4	3503.52	90.4	
Se	77	72	H2	1.9603	ug/l	6.0	979.36	-196.03	
Se	78	72	H2	2.0381	ug/l	4.4	1085.04	101.9	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2607683.51	0.6	2710873.3	96.19	
Sc	45	He	139690.25	1.5	136357.18	102.44	
Ge	72	He	118234.52	0.8	119183.21	99.2	
In	115	He	1197687.95	0.2	1211107.58	98.89	
Lu	175	He	4219179.00	0.3	4350546.08	96.98	
Ge	72	H2	934561.04	1.5	938467.39	99.58	

Sample Report

Sample Name MoSTD

File Name 012SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022A.b

Acq Time 2022-09-30 09:31:07

Sample Type Sample

Comment —

ISTD Ref FileName 004CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	-0.0978	ug/l	N/A	233.34	
Be	9	45	No Gas	0.0009	ug/l	126.7	13.33	
B	10	45	No Gas	0.0032	ug/l	8816.2	1327.84	
B	11	45	No Gas	0.2317	ug/l	12.6	6465.64	
Ca	43	45	No Gas	6.0466	ug/l	22.7	143.34	
Cr	52	72	He	-0.0099	ug/l	N/A	176.67	
Cr	53	72	He	-0.6129	ug/l	N/A	58.89	
Co	59	72	He	0.0006	ug/l	61.9	14.44	
As	75	72	He	-0.0228	ug/l	N/A	8.33	
Mo	95	115	He	49.2158	ug/l	1.2	117547.39	
Mo	98	115	He	48.9390	ug/l	0.9	203524.28	
Cd	111	115	He	0.0101	ug/l	24.9	14.83	
Cd	114	115	He	0.0125	ug/l	6.2	61.17	
Sb	121	115	He	0.2342	ug/l	7.7	1125.04	
Sb	123	115	He	0.2321	ug/l	4.3	919.47	
Ba	135	115	He	0.0084	ug/l	200.8	6.67	
Ba	137	115	He	0.0018	ug/l	60.7	7.78	
Tl	203	175	He	0.0265	ug/l	31.4	367.79	
Tl	205	175	He	0.0291	ug/l	3.9	964.48	
[Pb]	206	175	He	-0.0046	ug/l	N/A	65.56	
[Pb]	207	175	He	-0.0060	ug/l	N/A	52.22	
Pb	208	175	He	-0.0053	ug/l	N/A	244.45	
Se	77	72	H2	-0.1955	ug/l	N/A	577.68	
Se	78	72	H2	-0.0131	ug/l	N/A	5.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2182415.75	2.6	2710873.3	80.51	
Sc	45	He	139827.91	4.8	136357.18	102.55	
Ge	72	He	110659.84	2.5	119183.21	92.85	
In	115	He	1213220.27	3.2	1211107.58	100.17	
Lu	175	He	4249743.16	2.2	4350546.08	97.68	
Ge	72	H2	863999.18	0.5	938467.39	92.06	

Prep Blank (PB) Report

Sample Name	KQ2216668-03
File Name	013_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:36:32
Sample Type	PB
Comment	5X
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	-0.0321	ug/l	N/A	1070.05	
Be	9	45	No Gas	-0.0016	ug/l	N/A	6.67	
B	10	45	No Gas	-0.1134	ug/l	N/A	1538.97	
B	11	45	No Gas	0.1464	ug/l	50.3	7588.32	
Ca	43	45	No Gas	3.7143	ug/l	16.4	126.67	
Cr	52	72	He	0.1329	ug/l	14.5	647.80	
Cr	53	72	He	-0.0864	ug/l	N/A	266.67	
Co	59	72	He	0.0011	ug/l	179.7	17.78	
As	75	72	He	0.0062	ug/l	164.7	19.00	
Mo	95	115	He	0.0257	ug/l	38.1	71.11	
Mo	98	115	He	0.0314	ug/l	33.9	151.11	
Cd	111	115	He	0.0008	ug/l	201.1	3.17	
Cd	114	115	He	0.1276	ug/l	8.9	422.01	Flag
Sb	121	115	He	-0.0265	ug/l	N/A	309.45	
Sb	123	115	He	-0.0314	ug/l	N/A	253.33	
Ba	135	115	He	-0.0021	ug/l	N/A	1.11	
Ba	137	115	He	0.0020	ug/l	352.1	7.78	
Tl	203	175	He	-0.0007	ug/l	N/A	78.89	
Tl	205	175	He	0.0005	ug/l	98.7	220.00	
[Pb]	206	175	He	0.0050	ug/l	55.8	148.89	
[Pb]	207	175	He	0.0028	ug/l	160.0	117.78	
Pb	208	175	He	0.0033	ug/l	11.9	540.01	
Se	77	72	H2	-0.1184	ug/l	N/A	627.35	
Se	78	72	H2	-0.0072	ug/l	N/A	8.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2661782.53	3.0	2710873.3	98.19	
Sc	45	He	137562.35	0.3	136357.18	100.88	
Ge	72	He	115713.56	0.4	119183.21	97.09	
In	115	He	1189353.33	1.2	1211107.58	98.2	
Lu	175	He	4264182.05	0.5	4350546.08	98.01	
Ge	72	H2	919677.40	0.1	938467.39	98	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216668-04
File Name	014_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:39:06
Sample Type	LCS
Comment	20X
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	10.4188	ug/l	1.7	121059.02	10	104.19	
Be	9	45	No Gas	4.8598	ug/l	0.6	18138.45	5	97.2	
B	10	45	No Gas	21.1561	ug/l	2.8	15947.14	25	84.62	
B	11	45	No Gas	20.3856	ug/l	0.6	74287.25	25	81.54	
Ca	43	45	No Gas	502.1425	ug/l	2.0	10109.80	500	100.43	
Cr	52	72	He	17.8127	ug/l	0.1	62867.67	20	89.06	
Cr	53	72	He	18.7960	ug/l	5.1	8259.81	20	93.98	
Co	59	72	He	44.1944	ug/l	1.1	267626.12	50	88.39	
As	75	72	He	45.4378	ug/l	0.6	17427.21	50	90.88	
Mo	95	115	He	48.2223	ug/l	0.8	108870.39	50	96.44	
Mo	98	115	He	48.3565	ug/l	0.8	190067.79	50	96.71	
Cd	111	115	He	4.8106	ug/l	0.6	5689.31	5	96.21	
Cd	114	115	He	4.7769	ug/l	0.0	14502.66	5	95.54	
Sb	121	115	He	46.9065	ug/l	0.5	138099.83	50	93.81	
Sb	123	115	He	47.3053	ug/l	1.1	112366.07	50	94.61	
Ba	135	115	He	95.2435	ug/l	1.7	47355.30	100	95.24	
Ba	137	115	He	97.0150	ug/l	1.1	86947.47	100	97.02	
Tl	203	175	He	9.8241	ug/l	1.8	102079.50	10	98.24	
Tl	205	175	He	9.8865	ug/l	1.4	252160.28	10	98.86	
[Pb]	206	175	He	47.3884	ug/l	2.7	398698.51	50	94.78	
[Pb]	207	175	He	47.3692	ug/l	2.9	342367.88	50	94.74	
Pb	208	175	He	47.5711	ug/l	2.4	1599311.01	50	95.14	
Se	77	72	H2	44.2973	ug/l	1.2	8573.16	50	88.59	
Se	78	72	H2	43.8564	ug/l	0.4	24936.21	50	87.71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2553197.12	0.2	2710873.3	94.18	
Sc	45	He	132786.81	1.6	136357.18	97.38	
Ge	72	He	125443.01	0.7	119183.21	105.25	
In	115	He	1146625.10	0.8	1211107.58	94.68	
Lu	175	He	4162227.47	2.5	4350546.08	95.67	
Ge	72	H2	1009079.13	0.9	938467.39	107.52	

Reference Sample Report

Sample Name	K2211015-001
File Name	015_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:41:40
Sample Type	AllRef
Comment	5X
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.7346	ug/l	6.7	9449.37	
Be	9	45	No Gas	0.0023	ug/l	34.7	20.00	
B	10	45	No Gas	0.5713	ug/l	22.8	1867.89	
B	11	45	No Gas	0.7894	ug/l	8.9	9045.66	
Ca	43	45	No Gas	14.2682	ug/l	44.5	320.01	
Cr	52	72	He	0.6150	ug/l	1.8	2197.94	
Cr	53	72	He	0.1818	ug/l	45.8	368.90	
Co	59	72	He	0.0367	ug/l	13.1	215.56	
As	75	72	He	0.0093	ug/l	78.7	20.00	
Mo	95	115	He	0.1491	ug/l	22.1	347.79	
Mo	98	115	He	0.1047	ug/l	1.4	434.45	
Cd	111	115	He	0.0014	ug/l	65.7	3.67	
Cd	114	115	He	0.1628	ug/l	1.2	514.34	
Sb	121	115	He	-0.0005	ug/l	N/A	375.01	
Sb	123	115	He	-0.0051	ug/l	N/A	307.22	
Ba	135	115	He	1.8314	ug/l	7.1	914.48	
Ba	137	115	He	1.8970	ug/l	5.0	1708.98	
Tl	203	175	He	0.0107	ug/l	59.8	194.45	
Tl	205	175	He	0.0105	ug/l	21.9	467.79	
[Pb]	206	175	He	0.0515	ug/l	11.6	534.46	
[Pb]	207	175	He	0.0440	ug/l	11.3	412.23	
Pb	208	175	He	0.0456	ug/l	7.3	1945.62	
Se	77	72	H2	-0.3524	ug/l	N/A	589.34	
Se	78	72	H2	0.0371	ug/l	15.6	31.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2453988.72	1.2	2710873.3	90.52	
Sc	45	He	134895.96	1.1	136357.18	98.93	
Ge	72	He	115026.39	0.5	119183.21	96.51	
In	115	He	1148600.60	0.9	1211107.58	94.84	
Lu	175	He	4153897.06	2.2	4350546.08	95.48	
Ge	72	H2	919528.33	0.7	938467.39	97.98	

Duplicate Sample Report

Sample Name	KQ2216668-01
File Name	016_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:44:13
Sample Type	Dup
Total Dilution	1.0000
Comment	5X
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	015_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune Mode	CPS	Conc.	Units	Conc. RSD	RPD	Flag
Li	7	No Gas	8939.06	0.6543	ug/l	3.2		< 5X MRL
Be	9	No Gas	16.33	0.0011	ug/l	101.0		< 5X MRL
B	10	No Gas	1661.20	0.1496	ug/l	146.5		< 5X MRL
B	11	No Gas	7637.22	0.2458	ug/l	14.3		< 5X MRL
Ca	43	No Gas	270.01	11.0721	ug/l	28.5		< 5X MRL
Cr	52	He	2229.05	0.6074	ug/l	8.0		< 5X MRL
Cr	53	He	344.45	0.0958	ug/l	41.5		< 5X MRL
Co	59	He	183.34	0.0300	ug/l	19.0		< 5X MRL
As	75	He	21.33	0.0117	ug/l	144.7		< 5X MRL
Mo	95	He	193.34	0.0785	ug/l	21.2		< 5X MRL
Mo	98	He	341.12	0.0787	ug/l	13.4		< 5X MRL
Cd	111	He	3.67	0.0013	ug/l	81.4		< 5X MRL
Cd	114	He	536.01	0.1651	ug/l	3.1		< 5X MRL
Sb	121	He	322.22	-0.0215	ug/l	N/A		< 5X MRL
Sb	123	He	243.34	-0.0347	ug/l	N/A		< 5X MRL
Ba	135	He	1018.93	1.9861	ug/l	2.8	8.1	
Ba	137	He	1606.75	1.7347	ug/l	3.5	8.94	
Tl	203	He	73.33	-0.0011	ug/l	N/A		< 5X MRL
Tl	205	He	202.22	-0.0001	ug/l	N/A		< 5X MRL
[Pb]	206	He	515.57	0.0479	ug/l	18.1		< 5X MRL
[Pb]	207	He	422.23	0.0443	ug/l	9.0		< 5X MRL
Pb	208	He	1894.50	0.0430	ug/l	4.4		< 5X MRL
Se	77	H2	626.35	-0.1382	ug/l	N/A		< 5X MRL
Se	78	H2	24.67	0.0241	ug/l	35.9		< 5X MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	2561395.73	0.9	2710873.3	94.49	59.55	125.44	
Sc	45	He	139957.84	0.4	136357.18	102.64	59.55	125.44	
Ge	72	He	118022.90	1.3	119183.21	99.03	59.55	125.44	
In	115	He	1180784.29	1.0	1211107.58	97.5	59.55	125.44	
Lu	175	He	4234478.58	1.7	4350546.08	97.33	59.55	125.44	
Ge	72	H2	923021.14	0.3	938467.39	98.35	59.55	125.44	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216668-02
File Name	017_Spk.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:47:52
Sample Type	Spike
Comment	5X
ISTD Ref FileName	004CALB.d
QC Ref File Name	015_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	41.5613	ug/l	0.2	482632.94	40	102.07	
Be	9	No Gas	19.5290	ug/l	1.0	73444.24	20	97.63	
B	10	No Gas	83.0184	ug/l	2.0	58505.93	100	82.45	
B	11	No Gas	79.9452	ug/l	1.9	273668.04	100	79.16	
Ca	43	No Gas	2041.1537	ug/l	1.6	41285.99	2000	101.34	
Cr	52	He	79.3020	ug/l	0.5	254052.66	80	98.36	
Cr	53	He	80.1955	ug/l	1.7	31117.90	80	100.02	
Co	59	He	193.9737	ug/l	0.6	1069305.41	200	96.97	
As	75	He	201.0642	ug/l	0.4	70148.14	200	100.53	
Mo	95	He	199.9117	ug/l	1.3	446545.99	200	99.88	
Mo	98	He	199.9249	ug/l	0.5	777458.25	200	99.91	
Cd	111	He	19.7046	ug/l	0.7	23050.24	20	98.52	
Cd	114	He	19.5275	ug/l	0.1	58598.37	20	96.82	
Sb	121	He	194.1932	ug/l	0.9	564528.22	200	97.1	
Sb	123	He	195.5297	ug/l	0.8	458565.87	200	97.77	
Ba	135	He	398.0051	ug/l	1.2	195806.28	400	99.04	
Ba	137	He	407.1927	ug/l	0.3	361076.87	400	101.32	
Tl	203	He	41.3248	ug/l	2.0	419024.31	40	103.29	
Tl	205	He	41.0712	ug/l	1.8	1022155.58	40	102.65	
[Pb]	206	He	203.4452	ug/l	6.4	1670502.61	200	101.7	
[Pb]	207	He	196.2777	ug/l	2.2	1385141.75	200	98.12	
Pb	208	He	211.4770	ug/l	3.1	6940602.95	200	105.72	
Se	77	H2	201.3227	ug/l	1.3	32192.27	200	100.84	
Se	78	H2	196.3082	ug/l	1.4	98549.93	200	98.14	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2573988.30	0.3	2710873.3	94.95	
Sc	45	He	131191.03	1.9	136357.18	96.21	
Ge	72	He	114197.38	1.0	119183.21	95.82	
In	115	He	1134503.10	0.1	1211107.58	93.67	
Lu	175	He	4064286.92	2.3	4350546.08	93.42	
Ge	72	H2	891382.74	1.2	938467.39	94.98	

Sample Report

Sample Name K2211015-002

File Name 018SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022A.b

Acq Time 2022-09-30 09:50:25

Sample Type Sample

Comment 5X

ISTD Ref FileName 004CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0711	ug/l	22.8	2156.85	
Be	9	45	No Gas	0.0048	ug/l	19.6	29.33	
B	10	45	No Gas	3.0237	ug/l	10.7	3527.04	
B	11	45	No Gas	2.9039	ug/l	3.3	16021.63	
Ca	43	45	No Gas	92.6181	ug/l	3.4	1856.81	
Cr	52	72	He	48.4748	ug/l	0.3	152921.13	
Cr	53	72	He	48.6265	ug/l	1.8	18686.83	
Co	59	72	He	2.5674	ug/l	1.5	13940.15	
As	75	72	He	0.3399	ug/l	10.6	133.00	
Mo	95	115	He	10.7783	ug/l	0.7	24002.81	
Mo	98	115	He	10.7662	ug/l	1.7	41744.18	
Cd	111	115	He	0.0104	ug/l	28.1	14.17	
Cd	114	115	He	0.2500	ug/l	2.3	767.02	
Sb	121	115	He	0.1849	ug/l	5.5	906.14	
Sb	123	115	He	0.1984	ug/l	5.0	777.80	
Ba	135	115	He	0.1657	ug/l	20.5	83.33	
Ba	137	115	He	0.2048	ug/l	14.1	186.67	
Tl	203	175	He	0.0473	ug/l	14.9	566.68	
Tl	205	175	He	0.0425	ug/l	23.3	1265.62	
[Pb]	206	175	He	0.2825	ug/l	6.7	2443.55	
[Pb]	207	175	He	0.2772	ug/l	4.0	2067.94	
Pb	208	175	He	0.2838	ug/l	2.5	9812.44	
Se	77	72	H2	-0.0668	ug/l	N/A	614.34	
Se	78	72	H2	0.0525	ug/l	21.7	38.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2491917.96	1.5	2710873.3	91.92	
Sc	45	He	133639.67	1.3	136357.18	98.01	
Ge	72	He	112388.97	0.4	119183.21	94.3	
In	115	He	1130598.90	0.2	1211107.58	93.35	
Lu	175	He	4101669.01	0.9	4350546.08	94.28	
Ge	72	H2	888939.93	0.8	938467.39	94.72	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	019_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022A.b
Acq Time	2022-09-30 09:54:16
Sample Type	CCV
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.7098	ug/l	2.3	238359.39	98.84	
Be	9	45	No Gas	24.9041	ug/l	1.9	77648.10	99.62	
B	10	45	No Gas	26.2579	ug/l	2.3	16231.83	105.03	
B	11	45	No Gas	24.7506	ug/l	1.4	74176.88	99	
Ca	43	45	No Gas	1999.0850	ug/l	2.0	33526.10	99.95	
Cr	52	72	He	25.2843	ug/l	1.4	68611.63	101.14	
Cr	53	72	He	25.1517	ug/l	1.7	8424.34	100.61	
Co	59	72	He	25.2103	ug/l	0.5	117516.84	100.84	
As	75	72	He	25.6454	ug/l	1.8	7577.02	102.58	
Mo	95	115	He	12.1555	ug/l	1.0	24048.41	97.24	
Mo	98	115	He	12.3442	ug/l	0.5	42520.57	98.75	
Cd	111	115	He	24.5690	ug/l	1.1	25446.07	98.28	
Cd	114	115	He	24.8176	ug/l	0.4	65933.04	99.27	
Sb	121	115	He	12.4372	ug/l	0.6	32320.52	99.5	
Sb	123	115	He	12.7235	ug/l	1.8	26681.05	101.79	
Ba	135	115	He	24.4314	ug/l	1.6	10643.54	97.73	
Ba	137	115	He	24.8299	ug/l	0.7	19499.45	99.32	
Tl	203	175	He	25.0152	ug/l	0.3	232447.02	100.06	
Tl	205	175	He	25.0233	ug/l	0.4	570686.44	100.09	
[Pb]	206	175	He	25.0477	ug/l	0.8	188617.51	100.19	
[Pb]	207	175	He	24.7512	ug/l	0.6	160126.47	99	
Pb	208	175	He	24.8518	ug/l	0.9	747778.54	99.41	
Se	77	72	H2	25.4640	ug/l	2.8	4050.49	101.86	
Se	78	72	H2	25.5806	ug/l	0.1	11270.40	102.32	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2134452.97	1.6	2710873.3	78.74	
Sc	45	He	110721.05	2.6	136357.18	81.2	
Ge	72	He	96556.46	0.5	119183.21	81.02	
In	115	He	1004483.58	0.2	1211107.58	82.94	
Lu	175	He	3723019.30	0.8	4350546.08	85.58	
Ge	72	H2	781602.00	0.8	938467.39	83.28	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 020_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022A.b

Acq Time 2022-09-30 10:00:54

Sample Type CCB

Comment —

ISTD Ref FileName 004CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	-0.0009	ug/l	N/A	1210.07	
Be	9	45	No Gas	0.0017	ug/l	69.1	16.33	
B	10	45	No Gas	0.2883	ug/l	25.5	1533.41	
B	11	45	No Gas	0.3749	ug/l	39.0	7038.09	
Ca	43	45	No Gas	1.2611	ug/l	201.2	63.33	
Cr	52	72	He	0.0030	ug/l	472.0	194.45	
Cr	53	72	He	-0.6150	ug/l	N/A	52.22	
Co	59	72	He	0.0011	ug/l	219.4	15.56	
As	75	72	He	-0.0135	ug/l	N/A	10.33	
Mo	95	115	He	0.0254	ug/l	24.8	62.22	
Mo	98	115	He	0.0247	ug/l	37.0	108.89	
Cd	111	115	He	0.0012	ug/l	157.3	3.17	
Cd	114	115	He	0.0022	ug/l	39.6	24.33	
Sb	121	115	He	0.0150	ug/l	24.1	385.01	
Sb	123	115	He	-0.0058	ug/l	N/A	279.45	
Ba	135	115	He	0.0006	ug/l	1377.2	2.22	
Ba	137	115	He	0.0010	ug/l	425.7	6.11	
Tl	203	175	He	0.0143	ug/l	11.5	216.67	
Tl	205	175	He	0.0133	ug/l	18.1	504.46	
[Pb]	206	175	He	-0.0008	ug/l	N/A	90.00	
[Pb]	207	175	He	-0.0037	ug/l	N/A	63.33	
Pb	208	175	He	-0.0012	ug/l	N/A	352.22	
Se	77	72	H2	-0.3730	ug/l	N/A	510.34	
Se	78	72	H2	0.0048	ug/l	118.2	12.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2236051.93	1.2	2710873.3	82.48	
Sc	45	He	115404.39	0.9	136357.18	84.63	
Ge	72	He	99621.48	1.0	119183.21	83.59	
In	115	He	1050622.67	0.7	1211107.58	86.75	
Lu	175	He	3881145.96	2.2	4350546.08	89.21	
Ge	72	H2	800716.91	0.4	938467.39	85.32	

Service Request # K2211015
Instrument ID # K-ICP-MS-05
Calibration 093022BICPMS05
ALS LIMS Run # 779608
Cal Std: MS30-41-F
ICV Std: MS30-41-G
LLICV Std: MS30-41-H
I.S. Solution: MS29-79-M
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICSA Std: MS30-40-M
ICSAB Std: MS30-40-N

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control			X
6. ICS standards within 20% of true value	X		
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments: Boron

Prep Batch: 407218

Primary Review by JC Date 9/30/22

Secondary Review by GW Date 9/30/22

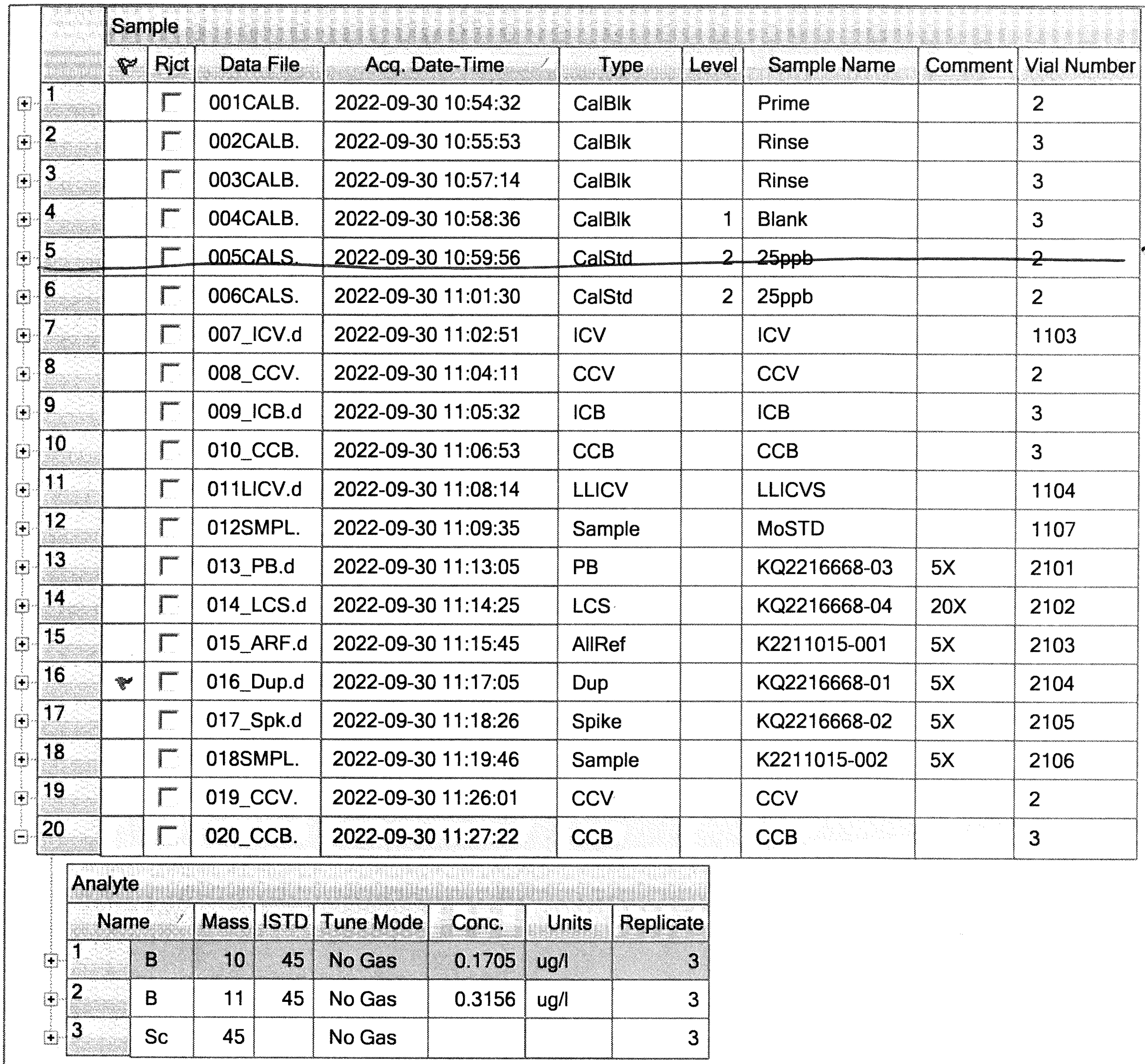
Data Review Form

Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\093022B.csv**
RUNNO: **779608**

K2211015

No exceptions to report.

Primary Approver: 9/30/22
Secondary Approver: 9/30/22



Sample

		Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	001CALB.	2022-09-30 10:54:32	CalBlk		Prime		2
2		☐	002CALB.	2022-09-30 10:55:53	CalBlk		Rinse		3
3		☐	003CALB.	2022-09-30 10:57:14	CalBlk		Rinse		3
4		☐	004CALB.	2022-09-30 10:58:36	CalBlk	1	Blank		3
~~5~~		☐	~~005CALS.~~	~~2022-09-30 10:59:56~~	~~CalStd~~	~~2~~	~~25ppb~~		~~2~~
6		☐	006CALS.	2022-09-30 11:01:30	CalStd	2	25ppb		2
7		☐	007_ICV.d	2022-09-30 11:02:51	ICV		ICV		1103
8		☐	008_CCV.	2022-09-30 11:04:11	CCV		CCV		2
9		☐	009_ICB.d	2022-09-30 11:05:32	ICB		ICB		3
10		☐	010_CCB.	2022-09-30 11:06:53	CCB		CCB		3
11		☐	011LICV.d	2022-09-30 11:08:14	LLICV		LLICVS		1104
12		☐	012SMPL.	2022-09-30 11:09:35	Sample		MoSTD		1107
13		☐	013_PB.d	2022-09-30 11:13:05	PB		KQ2216668-03	5X	2101
14		☐	014_LCS.d	2022-09-30 11:14:25	LCS		KQ2216668-04	20X	2102
15		☐	015_ARF.d	2022-09-30 11:15:45	AllRef		K2211015-001	5X	2103
16		☐	016_Dup.d	2022-09-30 11:17:05	Dup		KQ2216668-01	5X	2104
17		☐	017_Spk.d	2022-09-30 11:18:26	Spike		KQ2216668-02	5X	2105
18		☐	018SMPL.	2022-09-30 11:19:46	Sample		K2211015-002	5X	2106
19		☐	019_CCV.	2022-09-30 11:26:01	CCV		CCV		2
20		☐	020_CCB.	2022-09-30 11:27:22	CCB		CCB		3

JI
9/30/22

Analyte

	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	B	10	45	No Gas	0.1705	ug/l	3
2	B	11	45	No Gas	0.3156	ug/l	3
3	Sc	45		No Gas			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\093022.b
Acq. Date-Time	2022-09-30 07:23:30
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

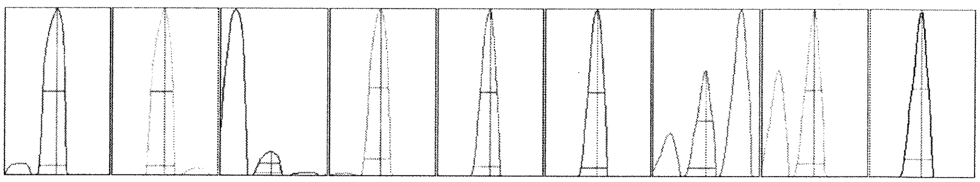
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	81628.00	0.843	5.000	
9	24235.24	1.035	5.000	
24	63966.93	1.689	5.000	
59	84633.80	0.977	5.000	
115	155158.18	1.401	5.000	
140	164508.63	1.127	5.000	
208	129050.43	1.238	5.000	
209	201229.72	1.297	5.000	
238	298210.41	0.633	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	8042	8213	8188	8178	8193
9	2387	2454	2414	2435	2427
24	6226	6382	6483	6396	6495
59	8323	8469	8540	8494	8491
115	15135	15541	15652	15640	15612
140	16138	16467	16495	16630	16524
208	12651	12880	12913	13031	13050
209	19678	20109	20305	20222	20301
238	29518	29771	29937	29998	29882

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	13488.59	7.00	6.90 - 7.10		0.782		0.900
9	4184.86	9.00	8.90 - 9.10		0.782		0.900
24	11274.31	23.95	23.90 - 24.10		0.755		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	15696.20	58.95	58.90 - 59.10		0.746		0.900
115	32165.14	115.00	114.90 - 115.10		0.761		0.900
140	34392.41	140.00	139.90 - 140.10		0.759		0.900
208	26945.74	208.00	207.90 - 208.10		0.778		0.900
209	42180.79	209.00	208.90 - 209.10		0.779		0.900
238	60305.48	238.00	237.90 - 238.10		0.818		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.1 V	Deflect	12.0 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	160 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0009	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.6 mV	Analog HV	1787 V	Pulse HV	1428 V

Calibration Blank Report

Sample Name Blank

File Name 004CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022B.b

Acq Time 2022-09-30 10:58:36

Sample Type CalBlk

Comment —

ISTD Ref FileName 004CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
B	10	45	No Gas	1338.95	7.0
B	11	45	No Gas	5736.50	3.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	2510453.23	2.1

3L
9/30/22

Calibration Standard Report

Sample Name	25ppb
File Name	005CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 10:59:56
Sample Type	CalStd
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
B	10	45	No Gas	11405.90	0.1
B	11	45	No Gas	53227.51	1.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1884575.55	2.2	2510453.23	75.07	

31
9/30/22

Calibration Standard Report

Sample Name	25ppb
File Name	006CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:01:30
Sample Type	CalStd
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
B	10	45	No Gas	15222.10	1.1
B	11	45	No Gas	69780.51	1.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2447364.28	1.0	2510453.23	97.49	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	007_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:02:51
Sample Type	ICV
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
B	10	45	No Gas	22.9976	ug/l	3.5	14296.86	91.99	
B	11	45	No Gas	23.1630	ug/l	1.2	65941.56	92.65	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2480529.07	1.7	2510453.23	98.81	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	008_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:04:11
Sample Type	CCV
Comment	---
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
B	10	45	No Gas	24.3173	ug/l	2.4	15306.58	97.27	
B	11	45	No Gas	24.4228	ug/l	2.5	70434.11	97.69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2524426.22	1.7	2510453.23	100.56	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:05:32
Sample Type	ICB
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	0.2809	ug/l	32.5	1518.96	
B	11	45	No Gas	0.5184	ug/l	8.8	7193.71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2541581.01	0.5	2510453.23	101.24	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	010_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:06:53
Sample Type	CCB
Comment	---
ISTD Ref FileName	004CALB.d
Operator	ALKLS NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	-0.1187	ug/l	N/A	1304.50	
B	11	45	No Gas	0.1789	ug/l	63.5	6372.29	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2577186.91	2.3	2510453.23	102.66	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVS
File Name	011LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:08:14
Sample Type	LLICV
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
B	10	45	No Gas	0.8919	ug/l	5.1	1882.34	89.19	
B	11	45	No Gas	0.9968	ug/l	9.9	8515.42	99.68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2556025.38	1.7	2510453.23	101.82	

Sample Report

Sample Name MoSTD

File Name 012SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022B.b

Acq Time 2022-09-30 11:09:35

Sample Type Sample

Comment —

ISTD Ref FileName 004CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	-0.1998	ug/l	N/A	1251.16	
B	11	45	No Gas	-0.0279	ug/l	N/A	5787.64	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2564055.66	1.4	2510453.23	102.14	

Prep Blank (PB) Report

Sample Name KQ2216668-03

File Name 013_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022B.b

Acq Time 2022-09-30 11:13:05

Sample Type PB

Comment 5X

ISTD Ref FileName 004CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	0.0826	ug/l	171.4	1390.07	
B	11	45	No Gas	0.3387	ug/l	5.9	6644.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2514788.16	1.3	2510453.23	100.17	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216668-04
File Name	014_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:14:25
Sample Type	LCS
Comment	20X
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
B	10	45	No Gas	23.7013	ug/l	2.3	14935.19	25	94.81	
B	11	45	No Gas	24.3406	ug/l	2.8	70131.81	25	97.36	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2521774.69	2.4	2510453.23	100.45	

Reference Sample Report

Sample Name	K2211015-001
File Name	015_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:15:45
Sample Type	AllRef
Comment	5X
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	0.5675	ug/l	9.4	1696.76	
B	11	45	No Gas	0.7250	ug/l	3.5	7802.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2560503.51	1.2	2510453.23	101.99	

Duplicate Sample Report

Sample Name KQ2216668-01

File Name 016_Dup.d

Data Path Name D:\Agilent\ICPMH\1\DATA\093022B.b

Acq Time 2022-09-30 11:17:05

Sample Type Dup

Total Dilution 1.0000

Comment 5X

ISTD Ref FileName 004CALB.d

Sample QC Pass/Fial Pass

ISTD Ref FileName Pass

QC Ref File Name 015_
ARF_
1

Default Text **ALKLS**
NoUser

QC Analyte Table

Name	Mass	Tune Mode	CPS	Conc.	Units	Conc. RSD	RPD	Flag
B	10	No Gas	1656.75	0.3654	ug/l	67.1		< 5X MRL
B	11	No Gas	7277.08	0.3997	ug/l	22.8		< 5X MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	2689880.10	2.6	2510453.23	107.15	59.55	125.44	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216668-02
File Name	017_Spk.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:18:26
Sample Type	Spike
Comment	5X
ISTD Ref FileName	004CALB.d
QC Ref File Name	015_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
B	10	No Gas	92.7188	ug/l	2.4	59426.68	100	92.15	
B	11	No Gas	92.9265	ug/l	2.6	274234.29	100	92.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2749231.70	2.2	2510453.23	109.51	

Sample Report

Sample Name	K2211015-002
File Name	018SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:19:46
Sample Type	Sample
Comment	5X
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	2.3094	ug/l	12.0	2940.26	
B	11	45	No Gas	2.4781	ug/l	1.2	13571.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2777564.96	1.2	2510453.23	110.64	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	019_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:26:01
Sample Type	CCV
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
B	10	45	No Gas	24.2627	ug/l	3.1	16446.50	97.05	
B	11	45	No Gas	24.6164	ug/l	2.5	76399.39	98.47	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2719290.73	3.7	2510453.23	108.32	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	020_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\093022B.b
Acq Time	2022-09-30 11:27:22
Sample Type	CCB
Comment	—
ISTD Ref FileName	004CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
B	10	45	No Gas	0.1705	ug/l	87.8	1591.19	
B	11	45	No Gas	0.3156	ug/l	31.4	7272.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2778878.08	1.2	2510453.23	110.69	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 27, 2022

Analytical Report for Service Request No: K2210854

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 20, 2022
For your reference, these analyses have been assigned our service request number **K2210854.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2210854
Date Received: 09/20/2022 - 09/21/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Eighteen water samples were received for analysis at ALS Environmental on 09/20/2022 - 09/21/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 09/27/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

PM________

Cooler Receipt and Preservation Form

Client Anchor ____________________ Service Request **K22**____________

Received: 9/20/22 Opened: 9/20/22 By: ________ Unloaded: 9/20/22 By: ________

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.8		IR01		—	—		
5.2		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was Cl2/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________________________________

____

1/13/22 ***Page of***

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/12/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Dissolved Sodium							Comments/Preservation
		Date	Time																	
1	MW-1-HT-MMO-20220912	9/12/2022	11:32	Water	1	X		X	X	X	X	X	X							HNO3 preserved.
2	MW-1-FB-20220912	9/12/2022	11:33	Water	1	X		X	X											HNO3 preserved.
3	MW-5-HT-MMO-20220912	9/12/2022	11:34	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
4	MW-5-FB-20220912	9/12/2022	11:35	Water	1	X	X		X											HNO3 preserved.
5	MW-10-HT-MMO-20220912	9/12/2022	11:36	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
6	MW-10-FB-20220912	9/12/2022	11:37	Water	1	X	X		X											HNO3 preserved.
7	MW-14-HT-MMO-20220912	9/12/2022	11:38	Water	1	X	X	X	X	X	X	X	X							HNO3 preserved.
8	MW-14-FB-20220912	9/12/2022	11:39	Water	1	X	X	X	X											HNO3 preserved.
9	MW-17-HT-MMO-20220912	9/12/2022	11:40	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
10	MW-17-FB-20220912	9/12/2022	11:41	Water	1	X	X		X											HNO3 preserved.
11	MW-44H-HT-MMO-20220912	9/12/2022	11:42	Water	1			X	X	X	X	X	X							HNO3 preserved.
12	MW-44H-FB-20220912	9/12/2022	11:43	Water	1			X	X											HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 8:30 9/19/22
Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by: ALS 9/20/22 0940
Signature/Print Name:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/12/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Dissolved Sodium							Comments/Preservation
1	MW-1-INF-20220912	9/12/2022	11:44	Water	1	X		X	X	X	X	X	X							HNO3 preserved.
2	MW-5-INF-20220912	9/12/2022	11:45	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
3	MW-10-INF-20220912	9/12/2022	11:46	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
4	MW-14-INF-20220912	9/12/2022	11:47	Water	1	X	X	X	X	X	X	X	X							HNO3 preserved.
5	MW-17-INF-20220912	9/12/2022	11:48	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
6	MW-44H-INF-20220912	9/12/2022	11:49	Water	1			X	X	X	X	X	X							HNO3 preserved.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 9/19/22 8:30

Received by: ALS 9/20/22 0940
Signature/Print Name:

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:32
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-HT-MMO-20220912	**Basis:**	NA
Lab Code:	K2210854-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**37.0**	ug/L	4.0	0.5	1	09/27/22 09:45	09/22/22	
Arsenic	200.8	**0.11 J**	ug/L	0.50	0.09	1	09/27/22 09:45	09/22/22	
Cobalt	200.8	**0.013 J**	ug/L	0.020	0.009	1	09/27/22 09:45	09/22/22	
Iron	200.8	**8.1**	ug/L	2.0	0.3	1	09/27/22 09:45	09/22/22	
Magnesium	200.8	**55000**	ug/L	10	2	1	09/27/22 09:45	09/22/22	
Manganese	200.8	**9.54**	ug/L	0.20	0.04	1	09/27/22 09:45	09/22/22	
Sodium	200.8	**33900**	ug/L	50	20	1	09/27/22 09:45	09/22/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:33
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-FB-20220912	**Basis:**	NA
Lab Code:	K2210854-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10 J**	ug/L	0.50	0.09	1	09/27/22 09:48	09/22/22	
Cobalt	200.8	**34.2**	ug/L	0.020	0.009	1	09/27/22 09:48	09/22/22	
Iron	200.8	**49400**	ug/L	10	2	5	09/27/22 11:10	09/22/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:34
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MNW-5-HT-MMO-20220912	**Basis:**	NA
Lab Code:	K2210854-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**28.2**	ug/L	4.0	0.5	1	09/27/22 09:50	09/22/22	
Arsenic	200.8	**0.15 J**	ug/L	0.50	0.09	1	09/27/22 09:50	09/22/22	
Iron	200.8	**2.7**	ug/L	2.0	0.3	1	09/27/22 09:50	09/22/22	
Lithium	200.8	**0.30**	ug/L	0.10	0.10	1	09/27/22 09:50	09/22/22	
Magnesium	200.8	**32200**	ug/L	10	2	1	09/27/22 09:50	09/22/22	
Manganese	200.8	**0.31**	ug/L	0.20	0.04	1	09/27/22 09:50	09/22/22	
Sodium	200.8	**20600**	ug/L	50	20	1	09/27/22 09:50	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:35
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-FB-20220912	**Basis:**	NA
Lab Code:	K2210854-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.30**	ug/L	0.50	0.09	1	09/27/22 09:52	09/22/22	
Iron	200.8	**5.9**	ug/L	2.0	0.3	1	09/27/22 09:52	09/22/22	
Lithium	200.8	**5.74**	ug/L	0.10	0.10	1	09/27/22 09:52	09/22/22	

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2210854
Date Collected: 09/12/22 11:36
Date Received: 09/20/22 09:40

Sample Name: MW-10-HT-MMO-20220912
Lab Code: K2210854-005

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**84**		ug/L	20	3	5	09/27/22 11:12	09/22/22	
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	09/27/22 11:12	09/22/22	
Iron	200.8	**8**	**J**	ug/L	10	2	5	09/27/22 11:12	09/22/22	
Lithium	200.8	ND	U	ug/L	0.50	0.50	5	09/27/22 11:12	09/22/22	
Magnesium	200.8	**48600**		ug/L	50	10	5	09/27/22 11:12	09/22/22	
Manganese	200.8	**11.0**		ug/L	1.0	0.2	5	09/27/22 11:12	09/22/22	
Sodium	200.8	**42700**		ug/L	250	100	5	09/27/22 11:12	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:37
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-FB-20220912	**Basis:**	NA
Lab Code:	K2210854-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/27/22 13:46	09/22/22	
Iron	200.8	**16.7**		ug/L	2.0	0.3	1	09/27/22 13:46	09/22/22	
Lithium	200.8	**0.66**		ug/L	0.10	0.10	1	09/27/22 13:46	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:38
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-HT-MMO-20220912	**Basis:**	NA
Lab Code:	K2210854-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**30.4**		ug/L	4.0	0.5	1	09/27/22 13:48	09/22/22	
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	09/27/22 13:48	09/22/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	09/27/22 13:48	09/22/22	
Iron	200.8	**2.7**		ug/L	2.0	0.3	1	09/27/22 13:48	09/22/22	
Lithium	200.8	**0.93**		ug/L	0.10	0.10	1	09/27/22 13:48	09/22/22	
Magnesium	200.8	**44500**		ug/L	10	2	1	09/27/22 13:48	09/22/22	
Manganese	200.8	**0.23**		ug/L	0.20	0.04	1	09/27/22 13:48	09/22/22	
Sodium	200.8	**26800**		ug/L	50	20	1	09/27/22 13:48	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:39
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-FB-20220912	**Basis:**	NA
Lab Code:	K2210854-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.25 J**	ug/L	0.50	0.09	1	09/27/22 13:50	09/22/22	
Cobalt	200.8	**0.021**	ug/L	0.020	0.009	1	09/27/22 13:50	09/22/22	
Iron	200.8	**5.8**	ug/L	2.0	0.3	1	09/27/22 13:50	09/22/22	
Lithium	200.8	**9.59**	ug/L	0.10	0.10	1	09/27/22 13:50	09/22/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:40
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-HT-MMO-20220912	**Basis:**	NA
Lab Code:	K2210854-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**26.9**	ug/L	4.0	0.5	1	09/27/22 13:51	09/22/22	
Arsenic	200.8	**0.17 J**	ug/L	0.50	0.09	1	09/27/22 13:51	09/22/22	
Iron	200.8	**1.9 J**	ug/L	2.0	0.3	1	09/27/22 13:51	09/22/22	
Lithium	200.8	**24.0**	ug/L	0.10	0.10	1	09/27/22 13:51	09/22/22	
Magnesium	200.8	**38600**	ug/L	10	2	1	09/27/22 13:51	09/22/22	
Manganese	200.8	**0.37**	ug/L	0.20	0.04	1	09/27/22 13:51	09/22/22	
Sodium	200.8	**30800**	ug/L	50	20	1	09/27/22 13:51	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:41
Sample Matrix:	Water	**Date Received:**	09/21/22 09:40
Sample Name:	MW-17-FB-20220912	**Basis:**	NA
Lab Code:	K2210854-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	09/27/22 10:50	09/22/22	
Iron	200.8	**1350**	ug/L	10	2	5	09/27/22 10:50	09/22/22	
Lithium	200.8	**3.35**	ug/L	0.50	0.50	5	09/27/22 10:50	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:42
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-HT-MMO-20220912	**Basis:**	NA
Lab Code:	K2210854-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**36.7**		ug/L	4.0	0.5	1	09/27/22 13:53	09/22/22	
Cobalt	200.8	**0.013**	**J**	ug/L	0.020	0.009	1	09/27/22 13:53	09/22/22	
Iron	200.8	**1.3**	**J**	ug/L	2.0	0.3	1	09/27/22 13:53	09/22/22	
Magnesium	200.8	**38100**		ug/L	10	2	1	09/27/22 13:53	09/22/22	
Manganese	200.8	**0.23**		ug/L	0.20	0.04	1	09/27/22 13:53	09/22/22	
Sodium	200.8	**37500**		ug/L	50	20	1	09/27/22 13:53	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:43
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-FB-20220912	**Basis:**	NA
Lab Code:	K2210854-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.196**	ug/L	0.020	0.009	1	09/27/22 13:55	09/22/22	
Iron	200.8	**1.9 J**	ug/L	2.0	0.3	1	09/27/22 13:55	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:44
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-INF-20220912	**Basis:**	NA
Lab Code:	K2210854-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**5.1**	ug/L	4.0	0.5	1	09/27/22 13:56	09/22/22	
Arsenic	200.8	**7.42**	ug/L	0.50	0.09	1	09/27/22 13:56	09/22/22	
Cobalt	200.8	**262**	ug/L	0.020	0.009	1	09/27/22 13:56	09/22/22	
Iron	200.8	**191000**	ug/L	10	2	5	09/27/22 10:55	09/22/22	
Magnesium	200.8	**29900**	ug/L	10	2	1	09/27/22 13:56	09/22/22	
Manganese	200.8	**15500**	ug/L	1.0	0.2	5	09/27/22 10:55	09/22/22	
Sodium	200.8	**46500**	ug/L	50	20	1	09/27/22 13:56	09/22/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:45
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-INF-20220912	**Basis:**	NA
Lab Code:	K2210854-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**5.5**	ug/L	4.0	0.5	1	09/27/22 14:01	09/22/22	
Arsenic	200.8	**41.3**	ug/L	0.50	0.09	1	09/27/22 14:01	09/22/22	
Iron	200.8	**9320**	ug/L	2.0	0.3	1	09/27/22 14:01	09/22/22	
Lithium	200.8	**85.7**	ug/L	0.10	0.10	1	09/27/22 14:01	09/22/22	
Magnesium	200.8	**16800**	ug/L	10	2	1	09/27/22 14:01	09/22/22	
Manganese	200.8	**1610**	ug/L	0.20	0.04	1	09/27/22 14:01	09/22/22	
Sodium	200.8	**19700**	ug/L	50	20	1	09/27/22 14:01	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:46
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-INF-20220912	**Basis:**	NA
Lab Code:	K2210854-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.4**	ug/L	4.0	0.5	1	09/27/22 14:03	09/22/22	
Arsenic	200.8	**46.0**	ug/L	0.50	0.09	1	09/27/22 14:03	09/22/22	
Iron	200.8	**7040**	ug/L	2.0	0.3	1	09/27/22 14:03	09/22/22	
Lithium	200.8	**253**	ug/L	0.10	0.10	1	09/27/22 14:03	09/22/22	
Magnesium	200.8	**15100**	ug/L	10	2	1	09/27/22 14:03	09/22/22	
Manganese	200.8	**3480**	ug/L	1.0	0.2	5	09/27/22 10:58	09/22/22	
Sodium	200.8	**26700**	ug/L	50	20	1	09/27/22 14:03	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:47
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-INF-20220912	**Basis:**	NA
Lab Code:	K2210854-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.9**	ug/L	4.0	0.5	1	09/27/22 14:05	09/22/22	
Arsenic	200.8	**23.7**	ug/L	0.50	0.09	1	09/27/22 14:05	09/22/22	
Cobalt	200.8	**34.9**	ug/L	0.020	0.009	1	09/27/22 14:05	09/22/22	
Iron	200.8	**40400**	ug/L	2.0	0.3	1	09/27/22 14:05	09/22/22	
Lithium	200.8	**539**	ug/L	0.10	0.10	1	09/27/22 14:05	09/22/22	
Magnesium	200.8	**25700**	ug/L	10	2	1	09/27/22 14:05	09/22/22	
Manganese	200.8	**5590**	ug/L	1.0	0.2	5	09/27/22 11:00	09/22/22	
Sodium	200.8	**29600**	ug/L	50	20	1	09/27/22 14:05	09/22/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:48
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-INF-20220912	**Basis:**	NA
Lab Code:	K2210854-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.5**	ug/L	4.0	0.5	1	09/27/22 14:06	09/22/22	
Arsenic	200.8	**401**	ug/L	0.50	0.09	1	09/27/22 14:06	09/22/22	
Iron	200.8	**16700**	ug/L	2.0	0.3	1	09/27/22 14:06	09/22/22	
Lithium	200.8	**570**	ug/L	0.10	0.10	1	09/27/22 14:06	09/22/22	
Magnesium	200.8	**23800**	ug/L	10	2	1	09/27/22 14:06	09/22/22	
Manganese	200.8	**1820**	ug/L	0.20	0.04	1	09/27/22 14:06	09/22/22	
Sodium	200.8	**43700**	ug/L	50	20	1	09/27/22 14:06	09/22/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/12/22 11:49
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-INF-20220912	**Basis:**	NA
Lab Code:	K2210854-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.6**	ug/L	4.0	0.5	1	09/27/22 14:08	09/22/22	
Cobalt	200.8	**304**	ug/L	0.020	0.009	1	09/27/22 14:08	09/22/22	
Iron	200.8	**4.2**	ug/L	2.0	0.3	1	09/27/22 14:08	09/22/22	
Magnesium	200.8	**15800**	ug/L	10	2	1	09/27/22 14:08	09/22/22	
Manganese	200.8	**9350**	ug/L	1.0	0.2	5	09/27/22 11:08	09/22/22	
Sodium	200.8	**24300**	ug/L	50	20	1	09/27/22 14:08	09/22/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216188-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**3.0**	**J**	ug/L	4.0	0.5	1	09/27/22 09:40	09/22/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/27/22 09:40	09/22/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	09/27/22 09:40	09/22/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	09/27/22 09:40	09/22/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	09/27/22 09:40	09/22/22	
Magnesium	200.8	**5**	**J**	ug/L	10	2	1	09/27/22 09:40	09/22/22	
Manganese	200.8	ND	U	ug/L	0.20	0.04	1	09/27/22 09:40	09/22/22	
Sodium	200.8	ND	U	ug/L	50	20	1	09/27/22 09:40	09/22/22	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	09/27/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216188-03			Duplicate Lab Control Sample KQ2216188-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	106	100	106	105	100	105	85-115	<1	20
Arsenic	200.8	49.1	50.0	98	49.5	50.0	99	85-115	<1	20
Cobalt	200.8	25.7	25.0	103	25.9	25.0	104	85-115	<1	20
Iron	200.8	50.3	50.0	101	50.7	50.0	101	85-115	<1	20
Lithium	200.8	50.3	50.0	101	51.2	50.0	102	85-115	2	20
Magnesium	200.8	244	250	98	248	250	99	85-115	2	20
Manganese	200.8	25.4	25.0	102	25.7	25.0	103	85-115	1	20
Sodium	200.8	237	250	95	240	250	96	85-115	1	20

Printed 9/27/2022 4:40:25 PM

Superset Reference:

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05		
Sample Matrix:	Water		

Metals

Prep Method:	EPA CLP ILM04.0	**Extraction Lot:**	406844
Analytical Method:	200.8	**Extraction Date:**	09/22/22 11:30

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-HT-MMO-20220912	K2210854-001	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-1-FB-20220912	K2210854-002	9/12/22	9/20/22	10.0000 mL	10 mL	
MNW-5-HT-MMO-20220912	K2210854-003	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-5-FB-20220912	K2210854-004	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220912	K2210854-005	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-10-FB-20220912	K2210854-006	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220912	K2210854-007	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-14-FB-20220912	K2210854-008	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220912	K2210854-009	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-17-FB-20220912	K2210854-010	9/12/22	9/21/22	10.0000 mL	10 mL	
MW-44H-HT-MMO-20220912	K2210854-011	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-44H-FB-20220912	K2210854-012	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-1-INF-20220912	K2210854-013	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-5-INF-20220912	K2210854-014	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-10-INF-20220912	K2210854-015	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-14-INF-20220912	K2210854-016	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-17-INF-20220912	K2210854-017	9/12/22	9/20/22	10.0000 mL	10 mL	
MW-44H-INF-20220912	K2210854-018	9/12/22	9/20/22	10.0000 mL	10 mL	
Method Blank	KQ2216188-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216188-03LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate Lab Control Sample	KQ2216188-04DLCS	NA	NA	10.0000 mL	10.4 mL	

Printed 9/27/2022 4:40:25 PM

Superset Reference:

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
ICV 09/27/22 09:31						
Aluminum	200.8	779009	103	100	103	90-110
Arsenic	200.8	779009	24.8	25.0	99	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Iron	200.8	779009	49.5	50.0	99	90-110
Magnesium	200.8	779009	240	250	96	90-110
Manganese	200.8	779009	24.6	25.0	98	90-110
Sodium	200.8	779009	233	250	93	90-110
Lithium	200.8	779009	26.5	25.0	106	90-110
CCV 09/27/22 09:33						
Aluminum	200.8	779009	252	250	101	90-110
Arsenic	200.8	779009	24.6	25.0	98	90-110
Cobalt	200.8	779009	24.9	25.0	100	90-110
Iron	200.8	779009	249	250	99	90-110
Magnesium	200.8	779009	1950	2000	98	90-110
Manganese	200.8	779009	24.5	25.0	98	90-110
Sodium	200.8	779009	1960	2000	98	90-110
Lithium	200.8	779009	25.8	25.0	103	90-110
CCV 09/27/22 10:43						
Aluminum	200.8	779009	251	250	101	90-110
Arsenic	200.8	779009	24.7	25.0	99	90-110
Cobalt	200.8	779009	25.5	25.0	102	90-110
Iron	200.8	779009	252	250	101	90-110
Magnesium	200.8	779009	2000	2000	100	90-110
Manganese	200.8	779009	25.4	25.0	102	90-110
Sodium	200.8	779009	1980	2000	99	90-110
Lithium	200.8	779009	25.9	25.0	104	90-110
CCV 09/27/22 11:03						
Aluminum	200.8	779009	244	250	98	90-110
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Iron	200.8	779009	252	250	101	90-110
Magnesium	200.8	779009	1970	2000	99	90-110
Manganese	200.8	779009	25.1	25.0	100	90-110
Sodium	200.8	779009	2020	2000	101	90-110
Lithium	200.8	779009	25.3	25.0	101	90-110

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
CCV 09/27/22 11:16						
Aluminum	200.8	779009	251	250	100	90-110
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1980	2000	99	90-110
Manganese	200.8	779009	24.7	25.0	99	90-110
Sodium	200.8	779009	1970	2000	99	90-110
Lithium	200.8	779009	25.6	25.0	102	90-110
CCV 09/27/22 11:50						
Aluminum	200.8	779009	252	250	101	90-110
Arsenic	200.8	779009	24.9	25.0	99	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1910	2000	95	90-110
Manganese	200.8	779009	24.9	25.0	100	90-110
Sodium	200.8	779009	1940	2000	97	90-110
Lithium	200.8	779009	25.2	25.0	101	90-110
CCV 09/27/22 12:10						
Aluminum	200.8	779009	251	250	100	90-110
Arsenic	200.8	779009	24.6	25.0	98	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1950	2000	97	90-110
Manganese	200.8	779009	25.2	25.0	101	90-110
Sodium	200.8	779009	1970	2000	98	90-110
Lithium	200.8	779009	25.4	25.0	102	90-110
CCV 09/27/22 12:33						
Aluminum	200.8	779009	254	250	101	90-110
Arsenic	200.8	779009	24.7	25.0	99	90-110
Cobalt	200.8	779009	24.9	25.0	99	90-110
Iron	200.8	779009	249	250	100	90-110
Magnesium	200.8	779009	1960	2000	98	90-110
Manganese	200.8	779009	24.5	25.0	98	90-110
Sodium	200.8	779009	1960	2000	98	90-110
Lithium	200.8	779009	25.8	25.0	103	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/27/22 13:06						
Aluminum	200.8	779009	254	250	102	90-110
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1960	2000	98	90-110
Manganese	200.8	779009	24.7	25.0	99	90-110
Sodium	200.8	779009	1960	2000	98	90-110
Lithium	200.8	779009	25.3	25.0	101	90-110
CCV 09/27/22 13:26						
Aluminum	200.8	779009	245	250	98	90-110
Arsenic	200.8	779009	24.9	25.0	100	90-110
Cobalt	200.8	779009	24.9	25.0	100	90-110
Iron	200.8	779009	250	250	100	90-110
Magnesium	200.8	779009	1930	2000	96	90-110
Manganese	200.8	779009	25.2	25.0	101	90-110
Sodium	200.8	779009	1890	2000	95	90-110
Lithium	200.8	779009	24.7	25.0	99	90-110
CCV 09/27/22 13:58						
Aluminum	200.8	779009	244	250	97	90-110
Arsenic	200.8	779009	24.5	25.0	98	90-110
Cobalt	200.8	779009	24.5	25.0	98	90-110
Iron	200.8	779009	246	250	98	90-110
Magnesium	200.8	779009	1950	2000	97	90-110
Manganese	200.8	779009	24.3	25.0	97	90-110
Sodium	200.8	779009	1930	2000	96	90-110
Lithium	200.8	779009	24.3	25.0	97	90-110
CCV 09/27/22 14:22						
Aluminum	200.8	779009	242	250	97	90-110
Arsenic	200.8	779009	24.8	25.0	99	90-110
Cobalt	200.8	779009	25.2	25.0	101	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1940	2000	97	90-110
Manganese	200.8	779009	23.8	25.0	95	90-110
Sodium	200.8	779009	1940	2000	97	90-110
Lithium	200.8	779009	24.3	25.0	97	90-110

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 09/27/22 09:35				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 09:36				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 10:45				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 11:05				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U

Client:	Anchor QEA, LLC	**Service Request:**	K2210854
Project:	Greene County Treatability/221114-01.05 Task 05		

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
CCB 09/27/22 11:18				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 11:51				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 12:12				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 12:34				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 09/27/22 13:08				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 13:35				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 14:00				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 14:30				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Aluminum	200.8	779009	4.0	4.0	101	50-199	09/27/22 09:38
Arsenic	200.8	779009	0.51	0.5	102	50-199	09/27/22 09:38
Cobalt	200.8	779009	0.017	0.02	87	50-199	09/27/22 09:38
Iron	200.8	779009	2.1	2.0	107	50-199	09/27/22 09:38
Magnesium	200.8	779009	9.8	10.0	98	50-199	09/27/22 09:38
Manganese	200.8	779009	0.19	0.2	96	50-199	09/27/22 09:38
Sodium	200.8	779009	40.9	50.0	82	50-199	09/27/22 09:38
Lithium	200.8	779009	0.11	0.1	113	50-199	09/27/22 09:38

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-05 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.1	0.1	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.2	0.04	200.8
Sodium	23	ug/L	50	20	200.8

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	3150	200.8
Cobalt 59	3150	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	3150	200.8
Sodium 23	450000	200.8

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Service Request: K2210854
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05**
Analytical BatchID: **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 09:28								
ZZZZZZ	1	09/27/22 09:30								
ICV	1	09/27/22 09:31	X	X	X	X	X	X	X	X
CCV	1	09/27/22 09:33	X	X	X	X	X	X	X	X
ICB	1	09/27/22 09:35	X	X	X	X	X	X	X	X
CCB	1	09/27/22 09:36	X	X	X	X	X	X	X	X
LLICVW	1	09/27/22 09:38	X	X	X	X	X	X	X	X
KQ2216188-01MB	1	09/27/22 09:40	X	X	X	X	X	X	X	X
KQ2216188-03LCS	1	09/27/22 09:42	X	X	X	X	X	X	X	X
KQ2216188-04DLCS	1	09/27/22 09:43	X	X	X	X	X	X	X	X
K2210854-001	1	09/27/22 09:45	X	X	X	X		X	X	X
K2210854-002	1	09/27/22 09:48		X	X					
K2210854-003	1	09/27/22 09:50	X	X		X	X	X	X	X
K2210854-004	1	09/27/22 09:52		X		X	X			
ZZZZZZ	1	09/27/22 09:54								
ZZZZZZ	5	09/27/22 10:40								
ZZZZZZ	5	09/27/22 10:41								
CCV	1	09/27/22 10:43	X	X	X	X	X	X	X	X
CCB	1	09/27/22 10:45	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 10:46								
ZZZZZZ	5	09/27/22 10:48								
K2210854-010	5	09/27/22 10:50		X		X	X			
ZZZZZZ	5	09/27/22 10:51								
ZZZZZZ	5	09/27/22 10:53								
K2210854-013	5	09/27/22 10:55				X			X	
ZZZZZZ	5	09/27/22 10:56								
K2210854-015	5	09/27/22 10:58							X	
K2210854-016	5	09/27/22 11:00							X	
ZZZZZZ	5	09/27/22 11:01								
CCV	1	09/27/22 11:03	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:05	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 11:06								
K2210854-018	5	09/27/22 11:08							X	
K2210854-002	5	09/27/22 11:10				X				
K2210854-005	5	09/27/22 11:12	X	X		X	X	X	X	X
CCV	1	09/27/22 11:16	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:18	X	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 11:33								
ZZZZZZ	1	09/27/22 11:35								
ZZZZZZ	1	09/27/22 11:36								
ZZZZZZ	5	09/27/22 11:38								
ZZZZZZ	5	09/27/22 11:40								
ZZZZZZ	5	09/27/22 11:41								
ZZZZZZ	5	09/27/22 11:43								
ZZZZZZ	5	09/27/22 11:45								
ZZZZZZ	5	09/27/22 11:46								
ZZZZZZ	5	09/27/22 11:48								
CCV	1	09/27/22 11:50	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:51	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 11:53								
ZZZZZZ	5	09/27/22 11:55								
ZZZZZZ	5	09/27/22 11:56								
ZZZZZZ	5	09/27/22 11:58								
ZZZZZZ	5	09/27/22 12:00								
ZZZZZZ	5	09/27/22 12:02								
ZZZZZZ	5	09/27/22 12:03								
ZZZZZZ	5	09/27/22 12:05								
ZZZZZZ	5	09/27/22 12:07								
ZZZZZZ	5	09/27/22 12:08								
CCV	1	09/27/22 12:10	X	X	X	X	X	X	X	X
CCB	1	09/27/22 12:12	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 12:23								
ZZZZZZ	5	09/27/22 12:25								
ZZZZZZ	50	09/27/22 12:30								
CCV	1	09/27/22 12:33	X	X	X	X	X	X	X	X
CCB	1	09/27/22 12:34	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 12:46								
ZZZZZZ	1	09/27/22 12:48								
ZZZZZZ	1	09/27/22 12:49								
ZZZZZZ	1	09/27/22 12:51								
ZZZZZZ	1	09/27/22 12:53								
ZZZZZZ	1	09/27/22 12:58								
ZZZZZZ	1	09/27/22 12:59								
ZZZZZZ	1	09/27/22 13:01								

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 13:03								
ZZZZZZ	1	09/27/22 13:04								
CCV	1	09/27/22 13:06	X	X	X	X	X	X	X	X
CCB	1	09/27/22 13:08	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:09								
ZZZZZZ	1	09/27/22 13:11								
ZZZZZZ	1	09/27/22 13:13								
ZZZZZZ	1	09/27/22 13:14								
ZZZZZZ	1	09/27/22 13:16								
ZZZZZZ	1	09/27/22 13:18								
ZZZZZZ	1	09/27/22 13:19								
ZZZZZZ	1	09/27/22 13:21								
ZZZZZZ	1	09/27/22 13:23								
ZZZZZZ	1	09/27/22 13:24								
CCV	1	09/27/22 13:26	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:28								
CCB	1	09/27/22 13:35	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:37								
ZZZZZZ	100	09/27/22 13:41								
ZZZZZZ	100	09/27/22 13:43								
K2210854-006	1	09/27/22 13:46		X		X	X			
K2210854-007	1	09/27/22 13:48	X	X	X	X	X	X	X	X
K2210854-008	1	09/27/22 13:50		X	X	X	X			
K2210854-009	1	09/27/22 13:51	X	X		X	X	X	X	X
K2210854-011	1	09/27/22 13:53	X		X	X		X	X	X
K2210854-012	1	09/27/22 13:55			X	X				
K2210854-013	1	09/27/22 13:56	X	X	X			X		X
CCV	1	09/27/22 13:58	X	X	X	X	X	X	X	X
CCB	1	09/27/22 14:00	X	X	X	X	X	X	X	X
K2210854-014	1	09/27/22 14:01	X	X		X	X	X	X	X
K2210854-015	1	09/27/22 14:03	X	X		X	X	X		X
K2210854-016	1	09/27/22 14:05	X	X	X	X	X	X		X
K2210854-017	1	09/27/22 14:06	X	X		X	X	X	X	X
K2210854-018	1	09/27/22 14:08	X		X	X		X		X
ZZZZZZ	1	09/27/22 14:13								
ZZZZZZ	1	09/27/22 14:15								
ZZZZZZ	1	09/27/22 14:17								

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 14:18								
ZZZZZZ	1	09/27/22 14:20								
CCV	1	09/27/22 14:22	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 14:23								
CCB	1	09/27/22 14:30	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 14:31								
ZZZZZZ	1	09/27/22 14:33								
ZZZZZZ	1	09/27/22 14:35								
ZZZZZZ	1	09/27/22 14:36								
ZZZZZZ	1	09/27/22 14:38								
ZZZZZZ	1	09/27/22 14:40								
ZZZZZZ	1	09/27/22 14:41								
ZZZZZZ	1	09/27/22 14:43								
ZZZZZZ	1	09/27/22 14:45								
ZZZZZZ	1	09/27/22 14:46								
ZZZZZZ	1	09/27/22 14:48								
ZZZZZZ	1	09/27/22 14:50								
ZZZZZZ	1	09/27/22 14:52								
ZZZZZZ	1	09/27/22 14:53								
ZZZZZZ	1	09/27/22 14:55								
ZZZZZZ	1	09/27/22 15:28								
ZZZZZZ	1	09/27/22 15:30								

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 09:28			
ZZZZZZ	09/27/22 09:30			
ICV	09/27/22 09:31	99	101	103
CCV	09/27/22 09:33	99	100	103
ICB	09/27/22 09:35	100	99	101
CCB	09/27/22 09:36	100	100	102
LLICVW	09/27/22 09:38	99	99	103
KQ2216188-01MB	09/27/22 09:40	100	99	102
KQ2216188-03LCS	09/27/22 09:42	100	100	102
KQ2216188-04DLCS	09/27/22 09:43	100	100	102
K2210854-001	09/27/22 09:45	105	114	116
K2210854-002	09/27/22 09:48	82	80	80
K2210854-003	09/27/22 09:50	78	97	99
K2210854-004	09/27/22 09:52	86	93	89
ZZZZZZ	09/27/22 09:54			
ZZZZZZ	09/27/22 10:40			
ZZZZZZ	09/27/22 10:41			
CCV	09/27/22 10:43	93	90	93
CCB	09/27/22 10:45	92	90	92
ZZZZZZ	09/27/22 10:46			
ZZZZZZ	09/27/22 10:48			
K2210854-010	09/27/22 10:50	94	94	94
ZZZZZZ	09/27/22 10:51			
ZZZZZZ	09/27/22 10:53			
K2210854-013	09/27/22 10:55	85	82	87
ZZZZZZ	09/27/22 10:56			
K2210854-015	09/27/22 10:58	87	86	90
K2210854-016	09/27/22 11:00	86	85	89
ZZZZZZ	09/27/22 11:01			
CCV	09/27/22 11:03	90	88	91
CCB	09/27/22 11:05	91	89	91
ZZZZZZ	09/27/22 11:06			
K2210854-018	09/27/22 11:08	87	86	90
K2210854-002	09/27/22 11:10	88	84	88
K2210854-005	09/27/22 11:12	91	96	99
CCV	09/27/22 11:16	92	92	96
CCB	09/27/22 11:18	91	92	95

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Service Request: K2210854
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05**
Analytical BatchID: **779009**

Sample	Date/Time	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 11:33			
ZZZZZZ	09/27/22 11:35			
ZZZZZZ	09/27/22 11:36			
ZZZZZZ	09/27/22 11:38			
ZZZZZZ	09/27/22 11:40			
ZZZZZZ	09/27/22 11:41			
ZZZZZZ	09/27/22 11:43			
ZZZZZZ	09/27/22 11:45			
ZZZZZZ	09/27/22 11:46			
ZZZZZZ	09/27/22 11:48			
CCV	09/27/22 11:50	93	93	95
CCB	09/27/22 11:51	92	91	95
ZZZZZZ	09/27/22 11:53			
ZZZZZZ	09/27/22 11:55			
ZZZZZZ	09/27/22 11:56			
ZZZZZZ	09/27/22 11:58			
ZZZZZZ	09/27/22 12:00			
ZZZZZZ	09/27/22 12:02			
ZZZZZZ	09/27/22 12:03			
ZZZZZZ	09/27/22 12:05			
ZZZZZZ	09/27/22 12:07			
ZZZZZZ	09/27/22 12:08			
CCV	09/27/22 12:10	98	97	101
CCB	09/27/22 12:12	96	94	97
ZZZZZZ	09/27/22 12:23			
ZZZZZZ	09/27/22 12:25			
ZZZZZZ	09/27/22 12:30			
CCV	09/27/22 12:33	91	90	93
CCB	09/27/22 12:34	90	87	92
ZZZZZZ	09/27/22 12:46			
ZZZZZZ	09/27/22 12:48			
ZZZZZZ	09/27/22 12:49			
ZZZZZZ	09/27/22 12:51			
ZZZZZZ	09/27/22 12:53			
ZZZZZZ	09/27/22 12:58			
ZZZZZZ	09/27/22 12:59			
ZZZZZZ	09/27/22 13:01			

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 13:03			
ZZZZZZ	09/27/22 13:04			
CCV	09/27/22 13:06	95	93	97
CCB	09/27/22 13:08	92	92	95
ZZZZZZ	09/27/22 13:09			
ZZZZZZ	09/27/22 13:11			
ZZZZZZ	09/27/22 13:13			
ZZZZZZ	09/27/22 13:14			
ZZZZZZ	09/27/22 13:16			
ZZZZZZ	09/27/22 13:18			
ZZZZZZ	09/27/22 13:19			
ZZZZZZ	09/27/22 13:21			
ZZZZZZ	09/27/22 13:23			
ZZZZZZ	09/27/22 13:24			
CCV	09/27/22 13:26	89	89	93
ZZZZZZ	09/27/22 13:28			
CCB	09/27/22 13:35	89	88	92
ZZZZZZ	09/27/22 13:37			
ZZZZZZ	09/27/22 13:41			
ZZZZZZ	09/27/22 13:43			
K2210854-006	09/27/22 13:46	90	85	88
K2210854-007	09/27/22 13:48	97	105	107
K2210854-008	09/27/22 13:50	104	99	102
K2210854-009	09/27/22 13:51	104	107	110
K2210854-011	09/27/22 13:53	111	114	116
K2210854-012	09/27/22 13:55	104	105	106
K2210854-013	09/27/22 13:56	74	73	76
CCV	09/27/22 13:58	80	80	85
CCB	09/27/22 14:00	81	80	83
K2210854-014	09/27/22 14:01	78	77	86
K2210854-015	09/27/22 14:03	82	81	85
K2210854-016	09/27/22 14:05	81	78	83
K2210854-017	09/27/22 14:06	87	86	93
K2210854-018	09/27/22 14:08	78	78	82
ZZZZZZ	09/27/22 14:13			
ZZZZZZ	09/27/22 14:15			
ZZZZZZ	09/27/22 14:17			

Client: Anchor QEA, LLC **Service Request:** K2210854
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 14:18			
ZZZZZZ	09/27/22 14:20			
CCV	09/27/22 14:22	90	88	93
ZZZZZZ	09/27/22 14:23			
CCB	09/27/22 14:30	89	86	90
ZZZZZZ	09/27/22 14:31			
ZZZZZZ	09/27/22 14:33			
ZZZZZZ	09/27/22 14:35			
ZZZZZZ	09/27/22 14:36			
ZZZZZZ	09/27/22 14:38			
ZZZZZZ	09/27/22 14:40			
ZZZZZZ	09/27/22 14:41			
ZZZZZZ	09/27/22 14:43			
ZZZZZZ	09/27/22 14:45			
ZZZZZZ	09/27/22 14:46			
ZZZZZZ	09/27/22 14:48			
ZZZZZZ	09/27/22 14:50			
ZZZZZZ	09/27/22 14:52			
ZZZZZZ	09/27/22 14:53			
ZZZZZZ	09/27/22 14:55			
ZZZZZZ	09/27/22 15:28			
ZZZZZZ	09/27/22 15:30			

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 406844
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/22/22 11:30

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216188-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
2	KQ2216188-03	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3, 0.2% HCl
3	KQ2216188-04	DLCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3, 0.2% HCl
4	K2210854-001	MW-1-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
5	K2210854-002	MW-1-FB-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
6	K2210854-003	MNW-5-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
7	K2210854-004	MW-5-FB-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
8	K2210854-005	MW-10-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
9	K2210854-006	MW-10-FB-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
10	K2210854-007	MW-14-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
11	K2210854-008	MW-14-FB-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
12	K2210854-009	MW-17-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
13	K2210854-010	MW-17-FB-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
14	K2210854-011	MW-44H-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
15	K2210854-012	MW-44H-FB-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
16	K2210854-013	MW-1-INF-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
17	K2210854-014	MW-5-INF-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
18	K2210854-015	MW-10-INF-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
19	K2210854-016	MW-14-INF-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
20	K2210854-017	MW-17-INF-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl
21	K2210854-018	MW-44H-INF-20220912	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3, 0.2% HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3	Inventory ID 221910	Logbook Ref: MET4-24-I	Expires On: 03/02/2023

KQ2216188-03 0.10mL KQ2216188-04 0.10mL

Name: k-met 1/100 QCP CICV-1	Inventory ID 221911	Logbook Ref: MET4-25-A	Expires On: 12/02/2022

KQ2216188-03 0.10mL KQ2216188-04 0.10mL

Name: K-MET 10ppm Li	Inventory ID 223041	Logbook Ref: MET4-29-F	Expires On: 10/31/2023

KQ2216188-03 0.05mL KQ2216188-04 0.05mL

Preparation Information Benchsheet

Prep Run#: 406844
Team: Metals/SSOLADEY
Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0
Status: Prepped
Prep Date/Time: 9/22/22 11:30

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023

KQ2216188-03 0.05mL KQ2216188-04 0.05mL

Name: k-met Sb 1ug/mL Sb	Inventory ID 225112	Logbook Ref: MET4-32-E	Expires On: 06/08/2023

KQ2216188-03 0.10mL KQ2216188-04 0.10mL

Preparation Materials

K-MET 16 mL Tube	P498723 (223738)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 9/22/22 11:30
Finished: 9/23/22 11:14
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-20	Digestion	IR Thermometer ID: IR03		K-BlockDigester-20	Digestion	Temperature	93 deg C
K-BlockDigester-20	Digestion	Temperature Check Location	11	K-CR 20-200B	Digestion		
K-CR100-1000A	Digestion						

Comments: ______________________

Reviewed By: ML Date: 9.26.22

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

9/23/22 9:14-11:14

Preparation Information Benchsheet * Li 223041

9/127

Prep Run#: 406844 B20/R11/T93
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 11:30

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216188-01	MB		200.8/Metals D		Liquid	10.0000mL		1% HNO3, 0.2% HCl
2	KQ2216188-02	LCS / DLCS		200.8/Metals D		Liquid	10.0000mL		1% HNO3, 0.2% HCl
3	K2210854-001	MW-1-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
4	KQ2216188-04	K2210854-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3, 0.2% HCl
5	~~KQ2216188-03~~	~~K2210854-001 MS~~	~~.01~~	~~200.8/Metals D~~		~~Liquid~~	~~10.0000mL~~		~~1% HNO3, 0.2% HCl~~
6	K2210854-002	MW-1-FB-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
7	KQ2216188-06	K2210854-002 DUP	~~.01~~	~~200.8/Metals D~~		Liquid	~~10.0000mL~~		~~1% HNO3, 0.2% HCl~~
8	KQ2216188-05	K2210854-002 MS	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3, 0.2% HCl
9	K2210854-003	MNW-5-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
10	K2210854-004	MW-5-FB-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
11	K2210854-005	MW-10-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
12	K2210854-006	MW-10-FB-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
13	K2210854-007	MW-14-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
14	K2210854-008	MW-14-FB-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
15	K2210854-009	MW-17-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
16	K2210854-010	MW-17-FB-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
17	K2210854-011	MW-44H-HT-MMO-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
18	K2210854-012	MW-44H-FB-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
19	K2210854-013	MW-1-INF-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
20	K2210854-014	MW-5-INF-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
21	K2210854-015	MW-10-INF-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
22	K2210854-016	MW-14-INF-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
23	K2210854-017	MW-17-INF-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl
24	K2210854-018	MW-44H-INF-20220912	.01	200.8/Metals D		Water	10.0000mL		1% HNO3, 0.2% HCl

Spiking Solutions

Name:	Inventory ID	Logbook Ref:	Expires On:
k-met 1/100 QCP-CICV-3	221910	MET4-24-I	03/02/2023

KQ2216188-02 0.10mL KQ2216188-03 0.10mL KQ2216188-05 0.10mL

Name:	Inventory ID	Logbook Ref:	Expires On:
k-met 1/100 QCP CICV-1	221911	MET4-25-A	12/02/2022

KQ2216188-02 0.10mL KQ2216188-03 0.10mL KQ2216188-05 0.10mL

Preparation Information Benchsheet

Prep Run#: 406844
Team: Metals/SSOLADEY
Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0
Status: Draft
Prep Date/Time: 9/22/22 11:30

Name: k-met Sb 1ug/mL Sb	Inventory ID 222918	Logbook Ref: MET4-29-E	Expires On: 07/12/2023
KQ2216188-02 0.10mL	KQ2216188-03 0.10mL	KQ2216188-05 0.10mL	

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216188-02 0.05mL	KQ2216188-03 0.05mL	KQ2216188-05 0.05mL	

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ______________________________

Reviewed By: ____________________ Date: ______________

Service Request # K2210854, K2210884, K2210887
Instrument ID # K-ICP-MS-05
Calibration 092722AICPMS05
ALS LIMS Run # 779009
Cal Std: MS30-38-G
ICV Std: MS30-39-I
LLICV Std: MS30-38-H
I.S. Solution: MS30-9-K
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICSA Std: NA
ICSAB Std: NA

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments:

Prep Batch: 406844, 406846, 406857

Primary Review by JC Date 9/27/22

Secondary Review by Date 9/27/22

Data Review Form

Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\092722A.csv**
RUNNO: **779009**

K2210854

No exceptions to report.

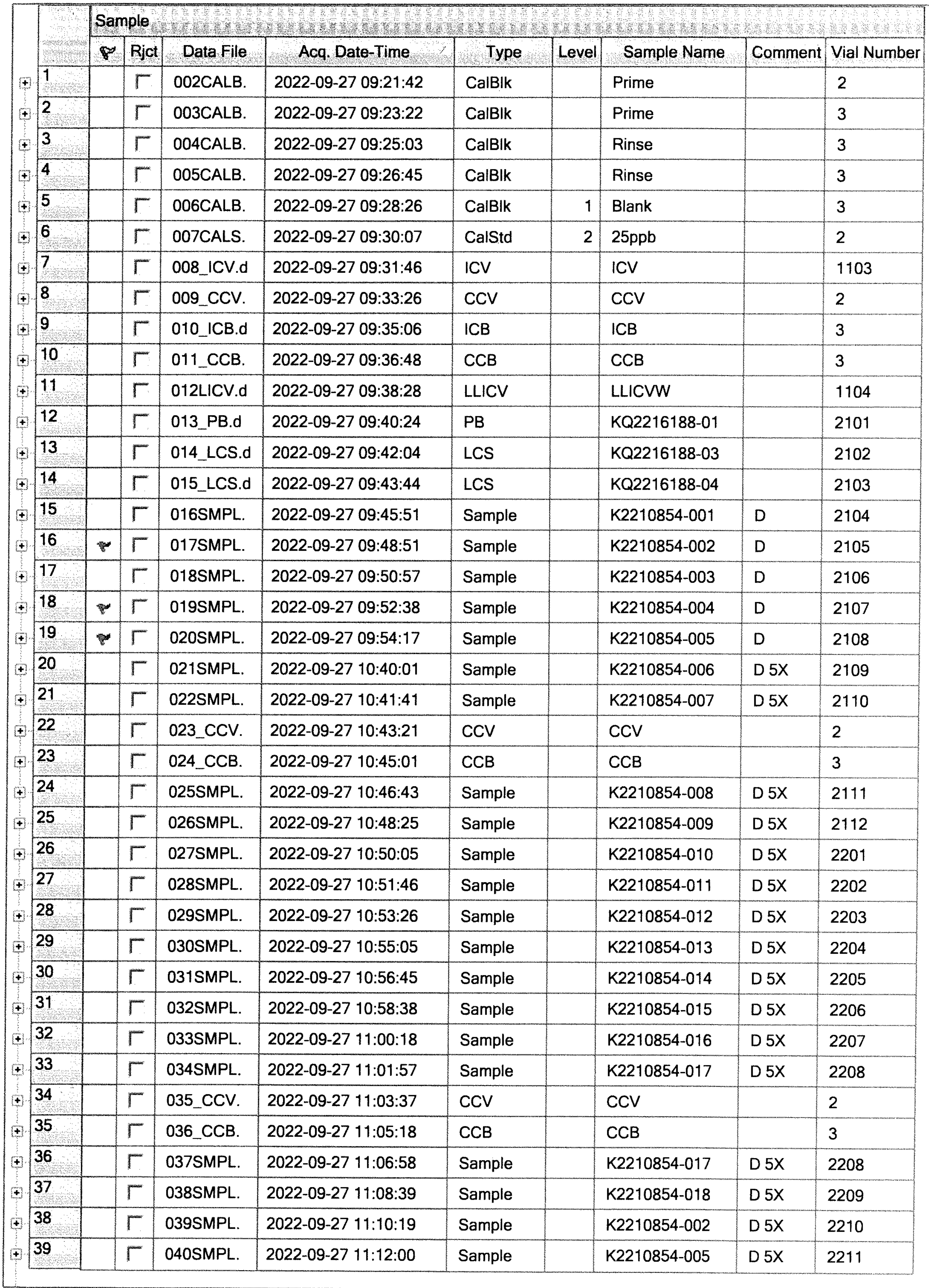
K2210884

No exceptions to report.

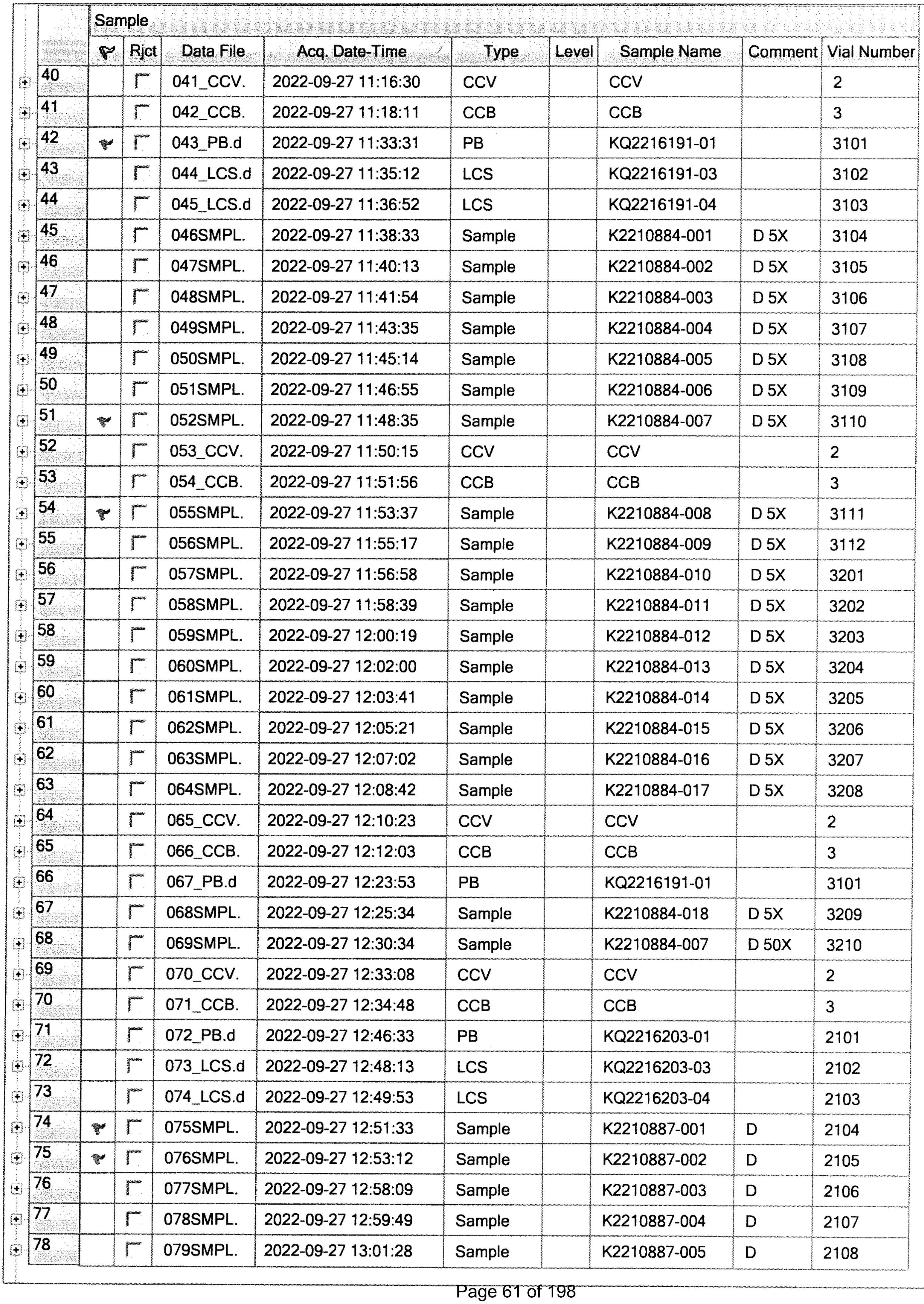
K2210887

No exceptions to report.

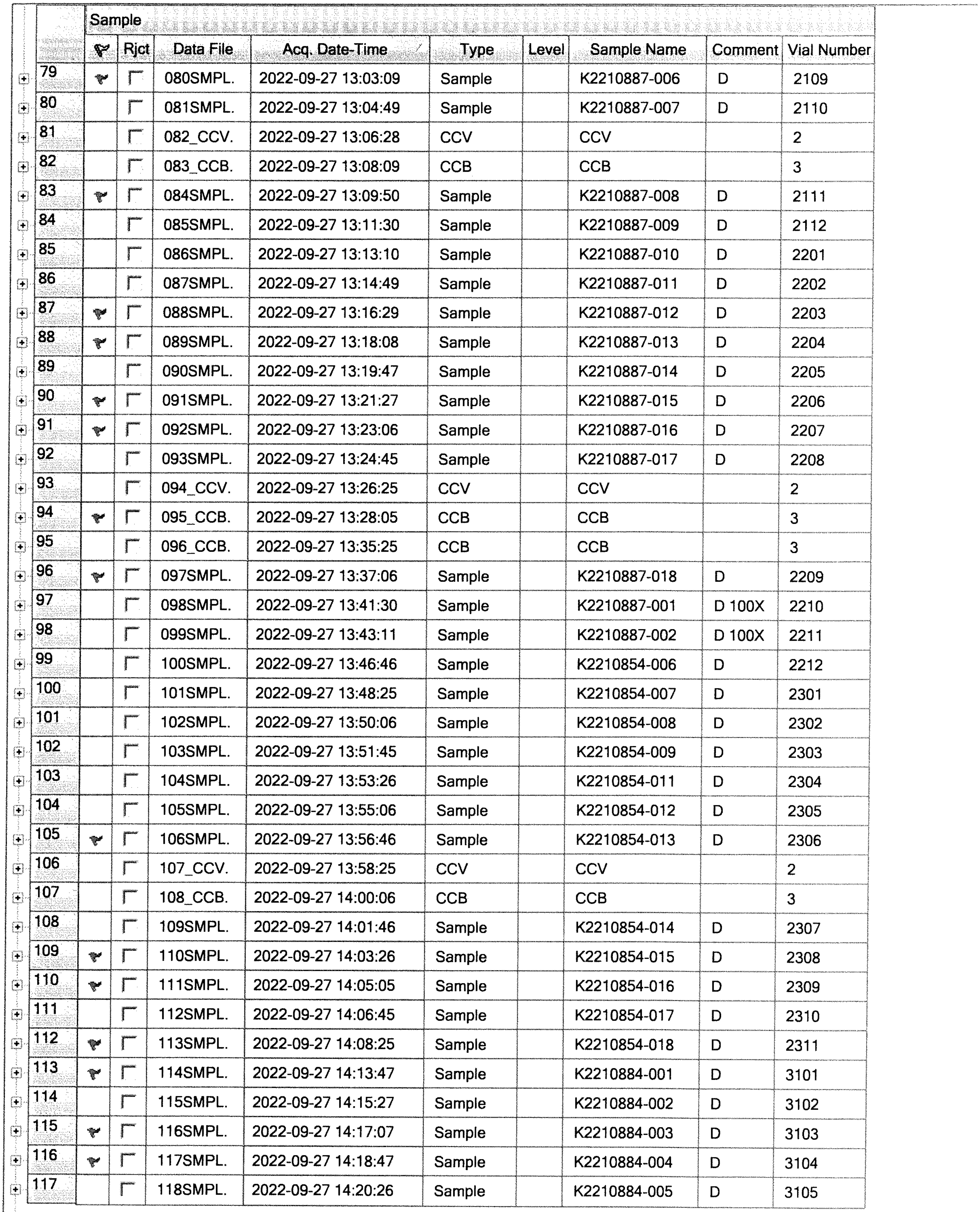
Primary Approver: JC 9/27/22
Secondary Approver: 9/27/22



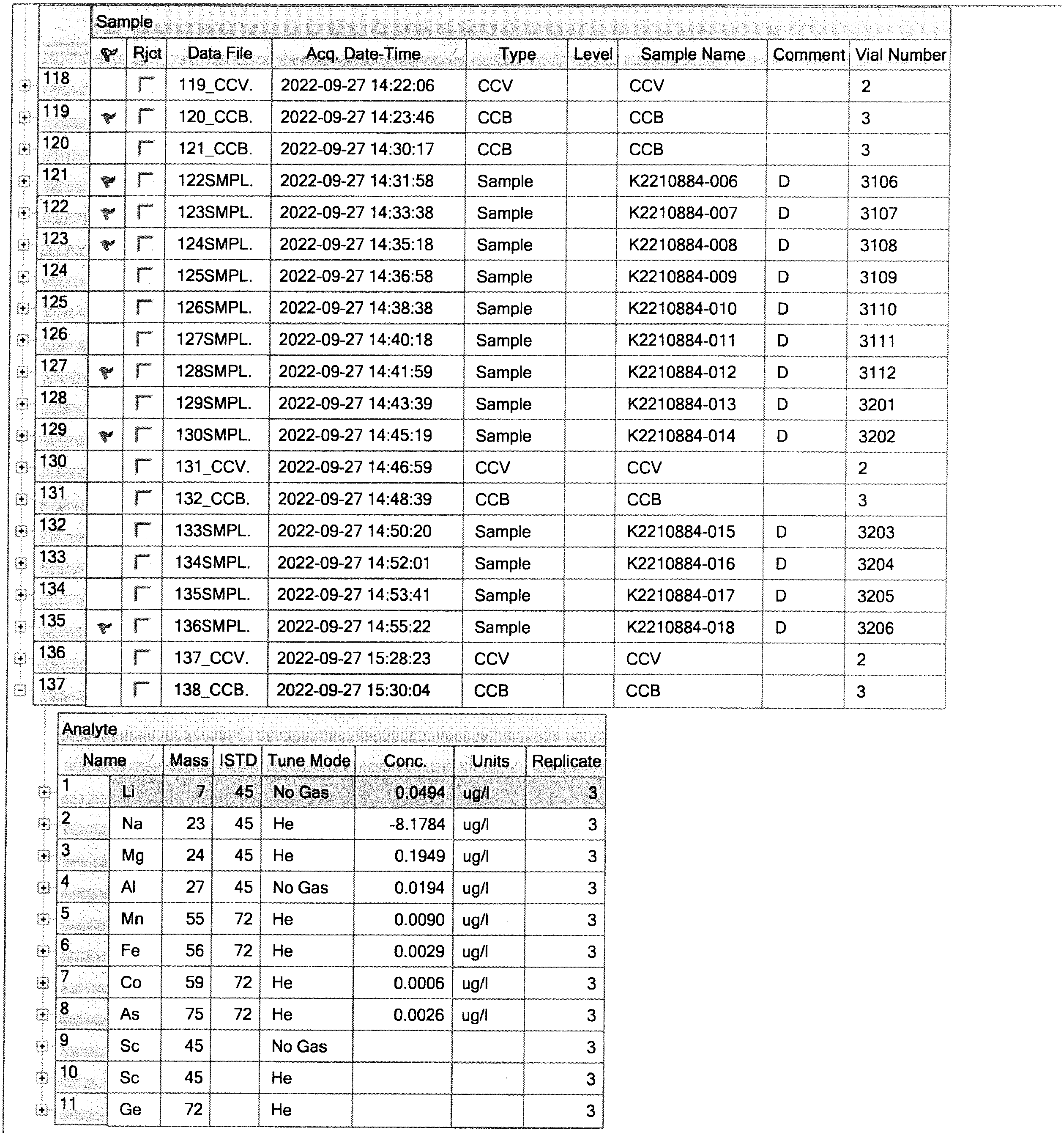
	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	002CALB.	2022-09-27 09:21:42	CalBlk		Prime		2
2		☐	003CALB.	2022-09-27 09:23:22	CalBlk		Prime		3
3		☐	004CALB.	2022-09-27 09:25:03	CalBlk		Rinse		3
4		☐	005CALB.	2022-09-27 09:26:45	CalBlk		Rinse		3
5		☐	006CALB.	2022-09-27 09:28:26	CalBlk	1	Blank		3
6		☐	007CALS.	2022-09-27 09:30:07	CalStd	2	25ppb		2
7		☐	008_ICV.d	2022-09-27 09:31:46	ICV		ICV		1103
8		☐	009_CCV.	2022-09-27 09:33:26	CCV		CCV		2
9		☐	010_ICB.d	2022-09-27 09:35:06	ICB		ICB		3
10		☐	011_CCB.	2022-09-27 09:36:48	CCB		CCB		3
11		☐	012LICV.d	2022-09-27 09:38:28	LLICV		LLICVW		1104
12		☐	013_PB.d	2022-09-27 09:40:24	PB		KQ2216188-01		2101
13		☐	014_LCS.d	2022-09-27 09:42:04	LCS		KQ2216188-03		2102
14		☐	015_LCS.d	2022-09-27 09:43:44	LCS		KQ2216188-04		2103
15		☐	016SMPL.	2022-09-27 09:45:51	Sample		K2210854-001	D	2104
16	⚑	☐	017SMPL.	2022-09-27 09:48:51	Sample		K2210854-002	D	2105
17		☐	018SMPL.	2022-09-27 09:50:57	Sample		K2210854-003	D	2106
18	⚑	☐	019SMPL.	2022-09-27 09:52:38	Sample		K2210854-004	D	2107
19	⚑	☐	020SMPL.	2022-09-27 09:54:17	Sample		K2210854-005	D	2108
20		☐	021SMPL.	2022-09-27 10:40:01	Sample		K2210854-006	D 5X	2109
21		☐	022SMPL.	2022-09-27 10:41:41	Sample		K2210854-007	D 5X	2110
22		☐	023_CCV.	2022-09-27 10:43:21	CCV		CCV		2
23		☐	024_CCB.	2022-09-27 10:45:01	CCB		CCB		3
24		☐	025SMPL.	2022-09-27 10:46:43	Sample		K2210854-008	D 5X	2111
25		☐	026SMPL.	2022-09-27 10:48:25	Sample		K2210854-009	D 5X	2112
26		☐	027SMPL.	2022-09-27 10:50:05	Sample		K2210854-010	D 5X	2201
27		☐	028SMPL.	2022-09-27 10:51:46	Sample		K2210854-011	D 5X	2202
28		☐	029SMPL.	2022-09-27 10:53:26	Sample		K2210854-012	D 5X	2203
29		☐	030SMPL.	2022-09-27 10:55:05	Sample		K2210854-013	D 5X	2204
30		☐	031SMPL.	2022-09-27 10:56:45	Sample		K2210854-014	D 5X	2205
31		☐	032SMPL.	2022-09-27 10:58:38	Sample		K2210854-015	D 5X	2206
32		☐	033SMPL.	2022-09-27 11:00:18	Sample		K2210854-016	D 5X	2207
33		☐	034SMPL.	2022-09-27 11:01:57	Sample		K2210854-017	D 5X	2208
34		☐	035_CCV.	2022-09-27 11:03:37	CCV		CCV		2
35		☐	036_CCB.	2022-09-27 11:05:18	CCB		CCB		3
36		☐	037SMPL.	2022-09-27 11:06:58	Sample		K2210854-017	D 5X	2208
37		☐	038SMPL.	2022-09-27 11:08:39	Sample		K2210854-018	D 5X	2209
38		☐	039SMPL.	2022-09-27 11:10:19	Sample		K2210854-002	D 5X	2210
39		☐	040SMPL.	2022-09-27 11:12:00	Sample		K2210854-005	D 5X	2211



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
40		☐	041_CCV.	2022-09-27 11:16:30	CCV		CCV		2
41		☐	042_CCB.	2022-09-27 11:18:11	CCB		CCB		3
42	⚑	☐	043_PB.d	2022-09-27 11:33:31	PB		KQ2216191-01		3101
43		☐	044_LCS.d	2022-09-27 11:35:12	LCS		KQ2216191-03		3102
44		☐	045_LCS.d	2022-09-27 11:36:52	LCS		KQ2216191-04		3103
45		☐	046SMPL.	2022-09-27 11:38:33	Sample		K2210884-001	D 5X	3104
46		☐	047SMPL.	2022-09-27 11:40:13	Sample		K2210884-002	D 5X	3105
47		☐	048SMPL.	2022-09-27 11:41:54	Sample		K2210884-003	D 5X	3106
48		☐	049SMPL.	2022-09-27 11:43:35	Sample		K2210884-004	D 5X	3107
49		☐	050SMPL.	2022-09-27 11:45:14	Sample		K2210884-005	D 5X	3108
50		☐	051SMPL.	2022-09-27 11:46:55	Sample		K2210884-006	D 5X	3109
51	⚑	☐	052SMPL.	2022-09-27 11:48:35	Sample		K2210884-007	D 5X	3110
52		☐	053_CCV.	2022-09-27 11:50:15	CCV		CCV		2
53		☐	054_CCB.	2022-09-27 11:51:56	CCB		CCB		3
54	⚑	☐	055SMPL.	2022-09-27 11:53:37	Sample		K2210884-008	D 5X	3111
55		☐	056SMPL.	2022-09-27 11:55:17	Sample		K2210884-009	D 5X	3112
56		☐	057SMPL.	2022-09-27 11:56:58	Sample		K2210884-010	D 5X	3201
57		☐	058SMPL.	2022-09-27 11:58:39	Sample		K2210884-011	D 5X	3202
58		☐	059SMPL.	2022-09-27 12:00:19	Sample		K2210884-012	D 5X	3203
59		☐	060SMPL.	2022-09-27 12:02:00	Sample		K2210884-013	D 5X	3204
60		☐	061SMPL.	2022-09-27 12:03:41	Sample		K2210884-014	D 5X	3205
61		☐	062SMPL.	2022-09-27 12:05:21	Sample		K2210884-015	D 5X	3206
62		☐	063SMPL.	2022-09-27 12:07:02	Sample		K2210884-016	D 5X	3207
63		☐	064SMPL.	2022-09-27 12:08:42	Sample		K2210884-017	D 5X	3208
64		☐	065_CCV.	2022-09-27 12:10:23	CCV		CCV		2
65		☐	066_CCB.	2022-09-27 12:12:03	CCB		CCB		3
66		☐	067_PB.d	2022-09-27 12:23:53	PB		KQ2216191-01		3101
67		☐	068SMPL.	2022-09-27 12:25:34	Sample		K2210884-018	D 5X	3209
68		☐	069SMPL.	2022-09-27 12:30:34	Sample		K2210884-007	D 50X	3210
69		☐	070_CCV.	2022-09-27 12:33:08	CCV		CCV		2
70		☐	071_CCB.	2022-09-27 12:34:48	CCB		CCB		3
71		☐	072_PB.d	2022-09-27 12:46:33	PB		KQ2216203-01		2101
72		☐	073_LCS.d	2022-09-27 12:48:13	LCS		KQ2216203-03		2102
73		☐	074_LCS.d	2022-09-27 12:49:53	LCS		KQ2216203-04		2103
74	⚑	☐	075SMPL.	2022-09-27 12:51:33	Sample		K2210887-001	D	2104
75	⚑	☐	076SMPL.	2022-09-27 12:53:12	Sample		K2210887-002	D	2105
76		☐	077SMPL.	2022-09-27 12:58:09	Sample		K2210887-003	D	2106
77		☐	078SMPL.	2022-09-27 12:59:49	Sample		K2210887-004	D	2107
78		☐	079SMPL.	2022-09-27 13:01:28	Sample		K2210887-005	D	2108



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
79	⚑	☐	080SMPL.	2022-09-27 13:03:09	Sample		K2210887-006	D	2109
80		☐	081SMPL.	2022-09-27 13:04:49	Sample		K2210887-007	D	2110
81		☐	082_CCV.	2022-09-27 13:06:28	CCV		CCV		2
82		☐	083_CCB.	2022-09-27 13:08:09	CCB		CCB		3
83	⚑	☐	084SMPL.	2022-09-27 13:09:50	Sample		K2210887-008	D	2111
84		☐	085SMPL.	2022-09-27 13:11:30	Sample		K2210887-009	D	2112
85		☐	086SMPL.	2022-09-27 13:13:10	Sample		K2210887-010	D	2201
86		☐	087SMPL.	2022-09-27 13:14:49	Sample		K2210887-011	D	2202
87	⚑	☐	088SMPL.	2022-09-27 13:16:29	Sample		K2210887-012	D	2203
88	⚑	☐	089SMPL.	2022-09-27 13:18:08	Sample		K2210887-013	D	2204
89		☐	090SMPL.	2022-09-27 13:19:47	Sample		K2210887-014	D	2205
90	⚑	☐	091SMPL.	2022-09-27 13:21:27	Sample		K2210887-015	D	2206
91	⚑	☐	092SMPL.	2022-09-27 13:23:06	Sample		K2210887-016	D	2207
92		☐	093SMPL.	2022-09-27 13:24:45	Sample		K2210887-017	D	2208
93		☐	094_CCV.	2022-09-27 13:26:25	CCV		CCV		2
94	⚑	☐	095_CCB.	2022-09-27 13:28:05	CCB		CCB		3
95		☐	096_CCB.	2022-09-27 13:35:25	CCB		CCB		3
96	⚑	☐	097SMPL.	2022-09-27 13:37:06	Sample		K2210887-018	D	2209
97		☐	098SMPL.	2022-09-27 13:41:30	Sample		K2210887-001	D 100X	2210
98		☐	099SMPL.	2022-09-27 13:43:11	Sample		K2210887-002	D 100X	2211
99		☐	100SMPL.	2022-09-27 13:46:46	Sample		K2210854-006	D	2212
100		☐	101SMPL.	2022-09-27 13:48:25	Sample		K2210854-007	D	2301
101		☐	102SMPL.	2022-09-27 13:50:06	Sample		K2210854-008	D	2302
102		☐	103SMPL.	2022-09-27 13:51:45	Sample		K2210854-009	D	2303
103		☐	104SMPL.	2022-09-27 13:53:26	Sample		K2210854-011	D	2304
104		☐	105SMPL.	2022-09-27 13:55:06	Sample		K2210854-012	D	2305
105	⚑	☐	106SMPL.	2022-09-27 13:56:46	Sample		K2210854-013	D	2306
106		☐	107_CCV.	2022-09-27 13:58:25	CCV		CCV		2
107		☐	108_CCB.	2022-09-27 14:00:06	CCB		CCB		3
108		☐	109SMPL.	2022-09-27 14:01:46	Sample		K2210854-014	D	2307
109	⚑	☐	110SMPL.	2022-09-27 14:03:26	Sample		K2210854-015	D	2308
110	⚑	☐	111SMPL.	2022-09-27 14:05:05	Sample		K2210854-016	D	2309
111		☐	112SMPL.	2022-09-27 14:06:45	Sample		K2210854-017	D	2310
112	⚑	☐	113SMPL.	2022-09-27 14:08:25	Sample		K2210854-018	D	2311
113	⚑	☐	114SMPL.	2022-09-27 14:13:47	Sample		K2210884-001	D	3101
114		☐	115SMPL.	2022-09-27 14:15:27	Sample		K2210884-002	D	3102
115	⚑	☐	116SMPL.	2022-09-27 14:17:07	Sample		K2210884-003	D	3103
116	⚑	☐	117SMPL.	2022-09-27 14:18:47	Sample		K2210884-004	D	3104
117		☐	118SMPL.	2022-09-27 14:20:26	Sample		K2210884-005	D	3105



Sample

	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
118		☐	119_CCV.	2022-09-27 14:22:06	CCV		CCV		2
119	⚑	☐	120_CCB.	2022-09-27 14:23:46	CCB		CCB		3
120		☐	121_CCB.	2022-09-27 14:30:17	CCB		CCB		3
121	⚑	☐	122SMPL.	2022-09-27 14:31:58	Sample		K2210884-006	D	3106
122	⚑	☐	123SMPL.	2022-09-27 14:33:38	Sample		K2210884-007	D	3107
123	⚑	☐	124SMPL.	2022-09-27 14:35:18	Sample		K2210884-008	D	3108
124		☐	125SMPL.	2022-09-27 14:36:58	Sample		K2210884-009	D	3109
125		☐	126SMPL.	2022-09-27 14:38:38	Sample		K2210884-010	D	3110
126		☐	127SMPL.	2022-09-27 14:40:18	Sample		K2210884-011	D	3111
127	⚑	☐	128SMPL.	2022-09-27 14:41:59	Sample		K2210884-012	D	3112
128		☐	129SMPL.	2022-09-27 14:43:39	Sample		K2210884-013	D	3201
129	⚑	☐	130SMPL.	2022-09-27 14:45:19	Sample		K2210884-014	D	3202
130		☐	131_CCV.	2022-09-27 14:46:59	CCV		CCV		2
131		☐	132_CCB.	2022-09-27 14:48:39	CCB		CCB		3
132		☐	133SMPL.	2022-09-27 14:50:20	Sample		K2210884-015	D	3203
133		☐	134SMPL.	2022-09-27 14:52:01	Sample		K2210884-016	D	3204
134		☐	135SMPL.	2022-09-27 14:53:41	Sample		K2210884-017	D	3205
135	⚑	☐	136SMPL.	2022-09-27 14:55:22	Sample		K2210884-018	D	3206
136		☐	137_CCV.	2022-09-27 15:28:23	CCV		CCV		2
137		☐	138_CCB.	2022-09-27 15:30:04	CCB		CCB		3

Analyte

	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Li	7	45	No Gas	0.0494	ug/l	3
2	Na	23	45	He	-8.1784	ug/l	3
3	Mg	24	45	He	0.1949	ug/l	3
4	Al	27	45	No Gas	0.0194	ug/l	3
5	Mn	55	72	He	0.0090	ug/l	3
6	Fe	56	72	He	0.0029	ug/l	3
7	Co	59	72	He	0.0006	ug/l	3
8	As	75	72	He	0.0026	ug/l	3
9	Sc	45		No Gas			3
10	Sc	45		He			3
11	Ge	72		He			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\092722.b
Acq. Date-Time	2022-09-27 07:35:35
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

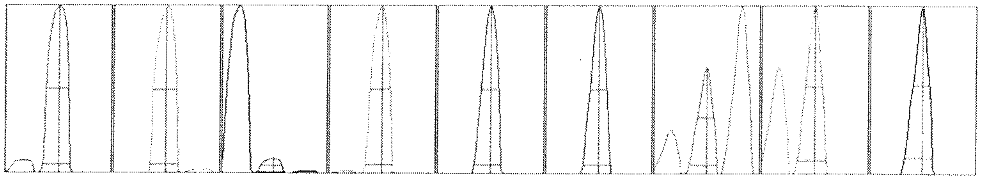
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	93266.00	1.368	5.000	
9	27664.22	2.070	5.000	
24	72422.23	2.554	5.000	
59	98024.38	1.979	5.000	
115	170957.76	1.481	5.000	
140	177755.31	1.380	5.000	
208	137282.54	1.600	5.000	
209	213760.30	1.148	5.000	
238	311655.92	1.153	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	9135	9287	9460	9329	9423
9	2667	2769	2801	2799	2797
24	6932	7225	7297	7391	7366
59	9494	9729	9942	9946	9902
115	16687	17011	17290	17252	17238
140	17417	17620	17950	17956	17934
208	13385	13651	13785	13902	13918
209	21030	21288	21376	21497	21690
238	30584	31079	31311	31349	31505

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	15497.04	7.05	6.90 - 7.10		0.778		0.900
9	4542.75	9.00	8.90 - 9.10		0.787		0.900
24	12497.42	24.00	23.90 - 24.10		0.801		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	17937.94	59.00	58.90 - 59.10		0.773		0.900
115	34941.11	115.00	114.90 - 115.10		0.760		0.900
140	37821.99	140.00	139.90 - 140.10		0.770		0.900
208	28610.02	208.00	207.90 - 208.10		0.779		0.900
209	44876.26	209.00	208.90 - 209.10		0.808		0.900
238	63860.91	238.00	237.90 - 238.10		0.796		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.7 V	Deflect	11.6 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	160 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0007	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.5 mV	Analog HV	1792 V	Pulse HV	1424 V

Calibration Blank Report

Sample Name Blank

File Name 006CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:28:26

Sample Type CalBlk

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	260.01	25.2
Al	27	45	No Gas	2390.19	7.3
Na	23	45	He	38708.80	16.6
Mg	24	45	He	3.33	173.2
Mn	55	72	He	26.67	57.3
Fe	56	72	He	640.03	9.8
Co	59	72	He	6.67	50.0
As	75	72	He	4.67	32.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	3482217.34	1.3
Sc	45	He	160566.51	2.9
Ge	72	He	125774.49	2.1

JC
9/27/22

Calibration Standard Report

Sample Name	25ppb
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:30:07
Sample Type	CalStd
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	386689.60	2.0
Al	27	45	No Gas	3603022.55	1.9
Na	23	45	He	1294900.09	0.3
Mg	24	45	He	619934.21	2.3
Mn	55	72	He	45707.63	4.7
Fe	56	72	He	803908.66	0.4
Co	59	72	He	167409.42	0.3
As	75	72	He	10978.19	0.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3503210.47	1.1	3482217.34	100.6	
Sc	45	He	156843.60	2.1	160566.51	97.68	
Ge	72	He	127796.20	2.7	125774.49	101.61	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:31:46
Sample Type	ICV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	26.4863	ug/l	1.9	405138.66	105.95	
Al	27	45	No Gas	103.0577	ug/l	0.8	1470224.51	103.06	
Na	23	45	He	233.0176	ug/l	1.6	189525.31	93.21	
Mg	24	45	He	240.2891	ug/l	1.5	76622.48	96.12	
Mn	55	72	He	24.5608	ug/l	0.6	45333.41	98.24	
Fe	56	72	He	49.5179	ug/l	0.7	161411.04	99.04	
Co	59	72	He	25.2855	ug/l	0.5	171069.39	101.14	
As	75	72	He	24.7744	ug/l	0.9	10990.54	99.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3464540.57	1.6	3482217.34	99.49	
Sc	45	He	161369.66	1.3	160566.51	100.5	
Ge	72	He	129065.16	1.6	125774.49	102.62	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	009_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:33:26
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.7537	ug/l	1.4	393232.35	103.01	
Al	27	45	No Gas	252.3151	ug/l	0.4	3589635.78	100.93	
Na	23	45	He	1962.0550	ug/l	3.4	1295533.57	98.1	
Mg	24	45	He	1950.0311	ug/l	0.2	615949.80	97.5	
Mn	55	72	He	24.5467	ug/l	3.3	45436.63	98.19	
Fe	56	72	He	248.6234	ug/l	0.8	810012.83	99.45	
Co	59	72	He	24.8882	ug/l	0.6	168857.92	99.55	
As	75	72	He	24.5531	ug/l	2.8	10925.17	98.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3458202.24	1.4	3482217.34	99.31	
Sc	45	He	159830.19	0.7	160566.51	99.54	
Ge	72	He	129427.73	0.7	125774.49	102.9	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	010_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:35:06
Sample Type	ICB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0103	ug/l	42.3	420.01	
Al	27	45	No Gas	-0.0014	ug/l	N/A	2376.86	
Na	23	45	He	-5.9255	ug/l	N/A	34336.91	
Mg	24	45	He	0.0213	ug/l	151.1	10.00	
Mn	55	72	He	-0.0111	ug/l	N/A	6.67	
Fe	56	72	He	0.0152	ug/l	300.3	696.70	
Co	59	72	He	0.0008	ug/l	34.0	12.22	
As	75	72	He	0.0097	ug/l	163.9	9.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3492705.47	1.1	3482217.34	100.3	
Sc	45	He	158454.03	0.7	160566.51	98.68	
Ge	72	He	127286.01	0.6	125774.49	101.2	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	011_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:36:48
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0053	ug/l	98.0	340.01	
Al	27	45	No Gas	0.0000	ug/l	20774.6	2380.18	
Na	23	45	He	-5.2605	ug/l	N/A	35068.37	
Mg	24	45	He	0.0311	ug/l	152.5	13.33	
Mn	55	72	He	-0.0075	ug/l	N/A	13.33	
Fe	56	72	He	0.0047	ug/l	1195.0	666.70	
Co	59	72	He	0.0005	ug/l	179.9	10.00	
As	75	72	He	0.0014	ug/l	854.6	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3468370.68	1.3	3482217.34	99.6	
Sc	45	He	159931.67	1.7	160566.51	99.6	
Ge	72	He	127846.26	0.5	125774.49	101.65	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	012LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:38:28
Sample Type	LLICV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.1129	ug/l	11.5	1973.49	112.9	
Al	27	45	No Gas	4.0228	ug/l	1.8	59354.27	100.57	
Na	23	45	He	40.9110	ug/l	1.7	64296.41	81.82	
Mg	24	45	He	9.7565	ug/l	11.0	3066.99	97.57	
Mn	55	72	He	0.1928	ug/l	28.5	383.35	96.4	
Fe	56	72	He	2.1312	ug/l	4.4	7598.52	106.56	
Co	59	72	He	0.0173	ug/l	8.0	124.44	86.5	
As	75	72	He	0.5093	ug/l	7.2	231.33	101.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3446266.20	2.0	3482217.34	98.97	
Sc	45	He	158965.27	0.9	160566.51	99	
Ge	72	He	129464.64	1.1	125774.49	102.93	

Prep Blank (PB) Report

Sample Name	KQ2216188-01
File Name	013_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:40:24
Sample Type	PB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0033	ug/l	176.4	313.34	
Al	27	45	No Gas	3.0497	ug/l	1.2	46250.48	
Na	23	45	He	-6.2268	ug/l	N/A	34310.30	
Mg	24	45	He	4.6912	ug/l	9.6	1480.09	
Mn	55	72	He	-0.0148	ug/l	0.0	0.00	
Fe	56	72	He	0.0426	ug/l	16.4	790.04	
Co	59	72	He	0.0000	ug/l	N/A	6.67	
As	75	72	He	0.0028	ug/l	138.5	6.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3497747.45	1.6	3482217.34	100.45	
Sc	45	He	159229.52	0.8	160566.51	99.17	
Ge	72	He	128124.48	0.3	125774.49	101.87	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216188-03
File Name	014_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:42:04
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.3643	ug/l	1.0	746601.45	50	96.73	
Al	27	45	No Gas	101.8926	ug/l	1.6	1467350.60	100	101.89	
Na	23	45	He	227.8727	ug/l	0.6	184684.24	250	91.15	
Mg	24	45	He	234.4170	ug/l	2.7	74135.43	250	93.77	
Mn	55	72	He	24.4331	ug/l	2.3	44751.83	25	97.73	
Fe	56	72	He	48.4120	ug/l	1.8	156597.46	50	96.82	
Co	59	72	He	24.7211	ug/l	3.7	165906.46	25	98.88	
As	75	72	He	47.2140	ug/l	3.7	20773.94	50	94.43	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3496787.97	0.7	3482217.34	100.42	
Sc	45	He	160045.81	0.9	160566.51	99.68	
Ge	72	He	128110.94	2.8	125774.49	101.86	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216188-04

File Name 015_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:43:44

Sample Type LCS

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2052	ug/l	0.4	759126.47	50	98.41	
Al	27	45	No Gas	100.9398	ug/l	0.7	1452679.20	100	100.94	
Na	23	45	He	230.9433	ug/l	2.7	187197.83	250	92.38	
Mg	24	45	He	238.5520	ug/l	2.1	75688.17	250	95.42	
Mn	55	72	He	24.7167	ug/l	0.9	45480.31	25	98.87	
Fe	56	72	He	48.7575	ug/l	2.5	158401.28	50	97.52	
Co	59	72	He	24.9330	ug/l	1.9	168133.16	25	99.73	
As	75	72	He	47.6374	ug/l	2.8	21059.61	50	95.27	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3494877.13	1.0	3482217.34	100.36	
Sc	45	He	160553.56	2.0	160566.51	99.99	
Ge	72	He	128662.86	1.6	125774.49	102.3	

Sample Report

Sample Name K2210854-001

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:45:51

Sample Type Sample

Comment – D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1930	ug/l	4.8	3390.41	
Al	27	45	No Gas	36.9888	ug/l	2.4	558946.97	
Na	23	45	He	33918.4364	ug/l	1.0	24940202.96	
Mg	24	45	He	55006.4130	ug/l	1.9	19900216.37	
Mn	55	72	He	9.5364	ug/l	2.3	19871.91	
Fe	56	72	He	8.1430	ug/l	1.4	30551.86	
Co	59	72	He	0.0128	ug/l	21.1	105.56	
As	75	72	He	0.1085	ug/l	11.4	59.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3660532.96	2.7	3482217.34	105.12	
Sc	45	He	183103.82	2.1	160566.51	114.04	
Ge	72	He	145552.70	0.5	125774.49	115.73	

Sample Report

Sample Name K2210854-002

File Name 017SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:48:51

Sample Type Sample

Comment -- D

ISTD Ref FileName 006CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.9745	ug/l	4.0	12421.20	
Al	27	45	No Gas	6.2881	ug/l	0.7	75339.50	
Na	23	45	He	149447.6049	ug/l	2.7	76559187.19	
Mg	24	45	He	15138.2606	ug/l	2.0	3821861.51	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~6640.8198~~	~~ug/l~~	~~2.3~~	~~9599709.65~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~48333.5523~~	~~ug/l~~	~~2.7~~	~~122943488.17~~	~~>LDR~~
Co	59	72	He	34.2224	ug/l	1.9	181442.21	
As	75	72	He	0.1025	ug/l	20.8	39.33	

*

XSRC
Dilution
ZL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2838802.15	1.0	3482217.34	81.52	
Sc	45	He	127773.51	1.6	160566.51	79.58	
Ge	72	He	101161.32	1.7	125774.49	80.43	

Sample Report

Sample Name K2210854-003

File Name 018SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:50:57

Sample Type Sample

Comment – D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2990	ug/l	5.9	3807.19	
Al	27	45	No Gas	28.1645	ug/l	1.0	317784.96	
Na	23	45	He	20644.3884	ug/l	2.9	12893678.98	
Mg	24	45	He	32176.3145	ug/l	1.3	9881093.39	
Mn	55	72	He	0.3051	ug/l	32.5	570.02	
Fe	56	72	He	2.7307	ug/l	2.5	9199.36	
Co	59	72	He	0.0481	ug/l	6.5	321.12	
As	75	72	He	0.1494	ug/l	6.1	68.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2728238.71	2.1	3482217.34	78.35	
Sc	45	He	155420.74	2.5	160566.51	96.8	
Ge	72	He	124696.66	0.4	125774.49	99.14	

Sample Report

Sample Name K2210854-004

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:52:38

Sample Type Sample

Comment -- D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7448	ug/l	1.3	75906.52	
Al	27	45	No Gas	119.8109	ug/l	0.8	1472629.09	
Na	23	45	He	1741697.0815	ug/l	1.1	1041892437.81	>LDR
Mg	24	45	He	5710.3251	ug/l	2.1	1683907.42	
Mn	55	72	He	89.1278	ug/l	1.5	141865.20	
Fe	56	72	He	5.9457	ug/l	2.5	17218.86	
Co	59	72	He	1.0506	ug/l	3.7	6136.68	
As	75	72	He	1.2995	ug/l	3.3	501.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2985619.85	1.0	3482217.34	85.74	
Sc	45	He	149224.08	0.7	160566.51	92.94	
Ge	72	He	111347.76	1.1	125774.49	88.53	

Sample Report

Sample Name K2210854-005
File Name 020SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 09:54:17
Sample Type Sample
Comment -- D
ISTD Ref FileName 006CALB.d
Operator ALKLS
NoUser

SC 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.4216	ug/l	5.8	8215.42	
Al	27	45	No Gas	81.5551	ug/l	2.8	1425986.49	
Na	23	45	He	39572.8567	ug/l	2.5	33686012.83	
Mg	24	45	He	43857.4577	ug/l	1.6	18378164.73	
Mn	55	72	He	10.5821	ug/l	2.8	24264.15	
Fe	56	72	He	6.9992	ug/l	3.8	29021.69	
Co	59	72	He	0.0047	ug/l	13.1	47.78	
As	75	72	He	0.0655	ug/l	29.3	42.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	4244394.73	0.6	3482217.34	121.89	
Sc	45	He	212038.40	0.6	160566.51	132.06	Flag
Ge	72	He	160189.20	1.0	125774.49	127.36	Flag

Sample Report

Sample Name	K2210854-006
File Name	021SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:40:01
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1597	ug/l	1.3	2473.56	
Al	27	45	No Gas	641.6207	ug/l	0.5	8372814.25	
Na	23	45	He	11829.2461	ug/l	0.3	6699440.11	
Mg	24	45	He	4.0595	ug/l	15.9	1130.07	
Mn	55	72	He	0.3819	ug/l	26.8	646.70	
Fe	56	72	He	3.6277	ug/l	2.5	11003.78	
Co	59	72	He	0.0140	ug/l	10.0	90.00	
As	75	72	He	0.0122	ug/l	43.4	9.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3173329.43	1.2	3482217.34	91.13	
Sc	45	He	140559.89	0.5	160566.51	87.54	
Ge	72	He	114234.04	0.9	125774.49	90.82	

Sample Report

Sample Name K2210854-007

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:41:41

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator ALKLS
NoUser

SC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1836	ug/l	6.0	2820.28	
Al	27	45	No Gas	6.7407	ug/l	1.6	90463.32	
Na	23	45	He	5669.6083	ug/l	0.5	3419963.18	
Mg	24	45	He	9792.7825	ug/l	5.0	2879423.60	
Mn	55	72	He	0.4240	ug/l	14.3	723.37	
Fe	56	72	He	0.6939	ug/l	7.9	2596.92	
Co	59	72	He	0.0080	ug/l	23.5	54.44	
As	75	72	He	0.0187	ug/l	8.5	11.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3185644.33	1.4	3482217.34	91.48	
Sc	45	He	148894.93	2.2	160566.51	92.73	
Ge	72	He	115146.97	1.9	125774.49	91.55	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	023_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:43:21
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.9329	ug/l	0.5	369342.90	103.73	
Al	27	45	No Gas	251.2663	ug/l	1.5	3334271.20	100.51	
Na	23	45	He	1977.5528	ug/l	2.5	1185670.66	98.88	
Mg	24	45	He	1999.2971	ug/l	2.2	573493.31	99.96	
Mn	55	72	He	25.4058	ug/l	2.8	42338.80	101.62	
Fe	56	72	He	251.9183	ug/l	2.7	738914.13	100.77	
Co	59	72	He	25.4505	ug/l	2.8	155459.70	101.8	
As	75	72	He	24.6563	ug/l	2.8	9876.53	98.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3225315.79	0.8	3482217.34	92.62	
Sc	45	He	145204.94	2.7	160566.51	90.43	
Ge	72	He	116606.33	4.0	125774.49	92.71	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	024_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:45:01
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0077	ug/l	60.4	346.68	
Al	27	45	No Gas	0.0005	ug/l	1162.4	2193.50	
Na	23	45	He	7.4103	ug/l	20.5	38826.28	
Mg	24	45	He	0.1303	ug/l	28.6	40.00	
Mn	55	72	He	-0.0006	ug/l	N/A	23.33	
Fe	56	72	He	0.0035	ug/l	269.5	596.69	
Co	59	72	He	-0.0001	ug/l	N/A	5.56	
As	75	72	He	0.0045	ug/l	121.4	6.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3187100.58	0.7	3482217.34	91.53	
Sc	45	He	143770.89	2.8	160566.51	89.54	
Ge	72	He	115100.49	2.3	125774.49	91.51	

Sample Report

Sample Name	K2210854-008
File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:46:43
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

SC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.0282	ug/l	2.9	28733.42	
Al	27	45	No Gas	249.7646	ug/l	2.7	3271337.14	
Na	23	45	He	22609.7813	ug/l	0.7	13173994.39	
Mg	24	45	He	134.5626	ug/l	1.7	38549.04	
Mn	55	72	He	0.7985	ug/l	8.9	1360.09	
Fe	56	72	He	1.3023	ug/l	1.3	4427.37	
Co	59	72	He	0.0115	ug/l	7.9	76.67	
As	75	72	He	0.0554	ug/l	36.8	26.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3184760.37	2.0	3482217.34	91.46	
Sc	45	He	144958.49	1.0	160566.51	90.28	
Ge	72	He	116982.01	1.2	125774.49	93.01	

Sample Report

Sample Name K2210854-009

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:48:25

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.9671	ug/l	1.0	70348.10	
Al	27	45	No Gas	6.2007	ug/l	1.8	83728.63	
Na	23	45	He	6494.6947	ug/l	1.7	3886645.88	
Mg	24	45	He	8150.8249	ug/l	2.3	2382436.94	
Mn	55	72	He	0.2741	ug/l	18.3	490.02	
Fe	56	72	He	0.5159	ug/l	29.1	2143.52	
Co	59	72	He	0.0088	ug/l	2.6	61.11	
As	75	72	He	0.0473	ug/l	22.9	23.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3198691.41	1.1	3482217.34	91.86	
Sc	45	He	147936.32	1.5	160566.51	92.13	
Ge	72	He	118821.99	1.3	125774.49	94.47	

Sample Report

Sample Name	K2210854-010
File Name	027SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:50:05
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6697	ug/l	6.5	9909.55	
Al	27	45	No Gas	1.4879	ug/l	2.0	22259.16	
Na	23	45	He	349560.7563	ug/l	1.0	211379103.52	
Mg	24	45	He	793.3002	ug/l	0.9	236445.01	
Mn	55	72	He	120.3769	ug/l	1.1	203092.80	
Fe	56	72	He	270.0030	ug/l	0.8	802088.82	
Co	59	72	He	0.0719	ug/l	2.7	451.12	
As	75	72	He	0.0714	ug/l	20.6	33.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3272773.60	2.6	3482217.34	93.99	
Sc	45	He	150817.00	0.3	160566.51	93.93	
Ge	72	He	118022.33	0.6	125774.49	93.84	

Sample Report

Sample Name K2210854-011

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:51:46

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0639	ug/l	19.3	1203.40	
Al	27	45	No Gas	7.7287	ug/l	1.4	109598.12	
Na	23	45	He	8070.0748	ug/l	0.2	5113384.40	
Mg	24	45	He	8115.9258	ug/l	1.9	2516334.86	
Mn	55	72	He	0.0495	ug/l	83.0	113.34	
Fe	56	72	He	0.3462	ug/l	5.4	1713.46	
Co	59	72	He	0.0017	ug/l	60.8	17.78	
As	75	72	He	0.0126	ug/l	96.5	10.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3376645.16	1.3	3482217.34	96.97	
Sc	45	He	156890.19	0.1	160566.51	97.71	
Ge	72	He	124176.40	1.4	125774.49	98.73	

Sample Report

Sample Name K2210854-012
File Name 029SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 10:53:26
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0394	ug/l	15.4	840.04	
Al	27	45	No Gas	89.4494	ug/l	0.6	1243171.75	
Na	23	45	He	33247.4690	ug/l	0.7	20619562.19	
Mg	24	45	He	347.9612	ug/l	0.5	106196.72	
Mn	55	72	He	3.8819	ug/l	6.8	6901.54	
Fe	56	72	He	0.4984	ug/l	5.5	2186.86	
Co	59	72	He	0.0454	ug/l	20.1	303.34	
As	75	72	He	0.2119	ug/l	14.2	94.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3374044.32	0.9	3482217.34	96.89	
Sc	45	He	154435.55	1.5	160566.51	96.18	
Ge	72	He	124075.52	3.5	125774.49	98.65	

Sample Report

Sample Name K2210854-013
File Name 030SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 10:55:05
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1536	ug/l	3.8	15240.03	
Al	27	45	No Gas	1.1660	ug/l	3.2	16177.55	
Na	23	45	He	9645.4142	ug/l	1.7	5135071.17	
Mg	24	45	He	6419.8970	ug/l	1.8	1674503.36	
Mn	55	72	He	3105.2484	ug/l	1.2	4843649.41	
Fe	56	72	He	38243.3881	ug/l	2.5	104952995.10	
~~Co~~	59	72	He	54.3127	ug/l	1.0	310712.26	
As	75	72	He	1.3849	ug/l	2.4	523.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2952480.06	3.1	3482217.34	84.79	
Sc	45	He	131995.90	1.0	160566.51	82.21	
Ge	72	He	109147.49	2.1	125774.49	86.78	

Sample Report

Sample Name	K2210854-014
File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:56:45
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

3C
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	17.7733	ug/l	2.1	232336.17	
Al	27	45	No Gas	1.5083	ug/l	0.8	20383.52	
Na	23	45	He	4178.3784	ug/l	2.7	2305190.38	
Mg	24	45	He	3575.4411	ug/l	2.1	958680.56	
Mn	55	72	He	337.6374	ug/l	1.2	542508.52	
Fe	56	72	He	2063.7475	ug/l	0.7	5835748.04	
Co	59	72	He	1.2060	ug/l	1.1	7113.72	
As	75	72	He	8.9493	ug/l	4.2	3460.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2959744.44	0.8	3482217.34	85	
Sc	45	He	135695.14	1.0	160566.51	84.51	
Ge	72	He	112422.80	1.4	125774.49	89.38	

Sample Report

Sample Name K2210854-015

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:58:38

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	54.7044	ug/l	0.7	727853.35	
Al	27	45	No Gas	1.3313	ug/l	3.8	18563.24	
Na	23	45	He	5735.1501	ug/l	1.9	3206997.55	
Mg	24	45	He	3357.9335	ug/l	0.2	916218.90	
Mn	55	72	He	696.9631	ug/l	0.8	1133497.90	
Fe	56	72	He	1547.6445	ug/l	2.1	4429651.71	
Co	59	72	He	4.3349	ug/l	0.9	25860.54	
As	75	72	He	9.8399	ug/l	1.1	3851.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3014247.87	1.1	3482217.34	86.56	
Sc	45	He	138063.49	1.2	160566.51	85.99	
Ge	72	He	113780.44	0.4	125774.49	90.46	

Sample Report

Sample Name K2210854-016
File Name 033SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:00:18
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	128.4244	ug/l	2.6	1692881.43	
Al	27	45	No Gas	1.5387	ug/l	0.1	20944.14	
Na	23	45	He	6722.8866	ug/l	2.1	3700249.74	
Mg	24	45	He	5800.3946	ug/l	2.0	1560484.35	
Mn	55	72	He	1118.7856	ug/l	1.3	1798996.43	
Fe	56	72	He	8810.7788	ug/l	1.2	24930087.13	
Co	59	72	He	7.7554	ug/l	0.9	45741.63	
As	75	72	He	5.0260	ug/l	1.1	1947.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2986781.62	0.9	3482217.34	85.77	
Sc	45	He	136138.85	3.4	160566.51	84.79	
Ge	72	He	112502.30	1.0	125774.49	89.45	

Sample Report

Sample Name K2210854-017
File Name 034SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:01:57
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

3C
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	129.7241	ug/l	5.7	1673584.19	
Al	27	45	No Gas	1.5931	ug/l	4.7	21161.08	
Na	23	45	He	9418.5379	ug/l	3.3	3717632.86	
Mg	24	45	He	5211.2870	ug/l	1.7	1007749.91	
Mn	55	72	He	315.3688	ug/l	27.0	428276.48	
Fe	56	72	He	3067.4543	ug/l	25.8	7348480.72	
Co	59	72	He	1.4512	ug/l	23.7	7283.81	
As	75	72	He	72.6174	ug/l	26.4	23738.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2926386.21	3.9	3482217.34	84.04	
Sc	45	He	97867.05	1.4	160566.51	60.95	
Ge	72	He	100649.98	31.2	125774.49	80.02	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 035_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:03:37

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2800	ug/l	0.8	349489.80	101.12	
Al	27	45	No Gas	244.1377	ug/l	1.7	3144364.54	97.66	
Na	23	45	He	2019.6255	ug/l	2.4	1184158.81	100.98	
Mg	24	45	He	1972.7636	ug/l	0.8	553753.52	98.64	
Mn	55	72	He	25.0993	ug/l	3.2	41256.28	100.4	
Fe	56	72	He	252.0251	ug/l	0.6	729045.38	100.81	
Co	59	72	He	25.3380	ug/l	1.1	152635.57	101.35	
As	75	72	He	25.0423	ug/l	1.7	9891.87	100.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130846.72	1.4	3482217.34	89.91	
Sc	45	He	142041.45	0.7	160566.51	88.46	
Ge	72	He	114921.72	0.9	125774.49	91.37	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	036_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:05:18
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0135	ug/l	47.2	423.35	
Al	27	45	No Gas	-0.0070	ug/l	N/A	2073.48	
Na	23	45	He	8.6211	ug/l	34.3	39183.76	
Mg	24	45	He	0.1188	ug/l	95.6	36.67	
Mn	55	72	He	-0.0067	ug/l	N/A	13.33	
Fe	56	72	He	0.0071	ug/l	263.7	606.70	
Co	59	72	He	0.0012	ug/l	93.2	13.33	
As	75	72	He	-0.0015	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3154954.23	1.2	3482217.34	90.6	
Sc	45	He	142501.15	0.8	160566.51	88.75	
Ge	72	He	114965.30	1.0	125774.49	91.41	

Sample Report

Sample Name	K2210854-017
File Name	037SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:06:58
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	123.9687	ug/l	2.5	1672743.31	
Al	27	45	No Gas	1.5515	ug/l	3.1	21593.32	
Na	23	45	He	9062.5631	ug/l	1.2	5083776.59	
Mg	24	45	He	5098.5353	ug/l	1.0	1400738.00	
Mn	55	72	He	358.5418	ug/l	0.8	592050.54	
Fe	56	72	He	3554.9955	ug/l	1.7	10330082.97	
Co	59	72	He	1.7196	ug/l	2.8	10420.98	
As	75	72	He	82.0109	ug/l	0.6	32558.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3057176.83	2.3	3482217.34	87.79	
Sc	45	He	139020.64	1.3	160566.51	86.58	
Ge	72	He	115528.77	0.8	125774.49	91.85	

Sample Report

Sample Name K2210854-018

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:08:39

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.8579	ug/l	1.6	11630.65	
Al	27	45	No Gas	1.4956	ug/l	2.4	20585.45	
Na	23	45	He	5428.7909	ug/l	1.4	3047446.52	
Mg	24	45	He	3602.2207	ug/l	0.8	985854.99	
Mn	55	72	He	1870.7238	ug/l	0.4	3036671.94	
Fe	56	72	He	0.8864	ug/l	7.9	3110.37	
Co	59	72	He	62.8916	ug/l	0.9	374390.30	
As	75	72	He	0.0764	ug/l	18.2	34.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3012463.18	1.7	3482217.34	86.51	
Sc	45	He	138489.81	0.7	160566.51	86.25	
Ge	72	He	113565.83	0.7	125774.49	90.29	

Sample Report

Sample Name K2210854-002

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:10:19

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2194	ug/l	6.5	3180.33	
Al	27	45	No Gas	1.6685	ug/l	2.9	22991.71	
Na	23	45	He	31377.9394	ug/l	0.9	16948241.41	
Mg	24	45	He	3252.7697	ug/l	0.3	864452.41	
Mn	55	72	He	1393.1445	ug/l	0.2	2206812.94	
Fe	56	72	He	9885.1585	ug/l	1.0	27554010.42	
Co	59	72	He	6.9641	ug/l	2.1	40459.56	
As	75	72	He	0.0173	ug/l	122.8	10.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047824.95	1.6	3482217.34	87.53	
Sc	45	He	134476.48	0.4	160566.51	83.75	
Ge	72	He	110825.23	0.8	125774.49	88.11	

Sample Report

Sample Name	K2210854-005
File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:12:00
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0920	ug/l	12.0	1516.75	
Al	27	45	No Gas	16.7339	ug/l	0.3	219538.21	
Na	23	45	He	8548.7921	ug/l	0.8	5338546.59	
Mg	24	45	He	9720.9432	ug/l	0.7	2971803.81	
Mn	55	72	He	2.1958	ug/l	2.6	3920.53	
Fe	56	72	He	1.6562	ug/l	4.8	5801.08	
Co	59	72	He	0.0019	ug/l	87.1	18.89	
As	75	72	He	0.0174	ug/l	84.5	12.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3159592.24	2.3	3482217.34	90.74	
Sc	45	He	154698.05	1.0	160566.51	96.35	
Ge	72	He	124081.66	0.2	125774.49	98.65	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:16:30
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.5512	ug/l	1.7	362624.88	102.2	
Al	27	45	No Gas	250.9760	ug/l	3.7	3318085.99	100.39	
Na	23	45	He	1972.2558	ug/l	1.5	1197479.90	98.61	
Mg	24	45	He	1977.3054	ug/l	0.3	574340.90	98.87	
Mn	55	72	He	24.6575	ug/l	3.4	42349.12	98.63	
Fe	56	72	He	248.0087	ug/l	1.4	749855.38	99.2	
Co	59	72	He	25.0417	ug/l	1.2	157675.05	100.17	
As	75	72	He	25.0058	ug/l	3.3	10322.79	100.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3213842.76	0.9	3482217.34	92.29	
Sc	45	He	146977.59	0.6	160566.51	91.54	
Ge	72	He	120124.09	1.3	125774.49	95.51	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:18:11
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0031	ug/l	91.6	280.01	
Al	27	45	No Gas	-0.0074	ug/l	N/A	2073.48	
Na	23	45	He	7.5746	ug/l	19.5	39895.32	
Mg	24	45	He	0.0588	ug/l	102.5	20.00	
Mn	55	72	He	-0.0030	ug/l	N/A	20.00	
Fe	56	72	He	-0.0078	ug/l	N/A	583.36	
Co	59	72	He	-0.0005	ug/l	N/A	3.33	
As	75	72	He	-0.0002	ug/l	N/A	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3162033.39	1.4	3482217.34	90.81	
Sc	45	He	147365.34	2.7	160566.51	91.78	
Ge	72	He	119136.67	0.9	125774.49	94.72	

Prep Blank (PB) Report

Sample Name	KQ2216191-01
File Name	043_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:33:31
Sample Type	PB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0090	ug/l	32.6	353.34	
Al	27	45	No Gas	5.7282	ug/l	1.9	74760.33	PB Main CR1 Failed
Na	23	45	He	9.3391	ug/l	16.8	38969.97	
Mg	24	45	He	6.2041	ug/l	18.0	1723.46	
Mn	55	72	He	0.0677	ug/l	3.5	133.33	
Fe	56	72	He	0.1100	ug/l	36.6	890.04	
Co	59	72	He	0.0005	ug/l	241.5	8.89	
As	75	72	He	-0.0031	ug/l	N/A	3.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085080.68	1.5	3482217.34	88.6	
Sc	45	He	140213.66	0.8	160566.51	87.32	
Ge	72	He	113142.76	1.7	125774.49	89.96	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216191-03
File Name	044_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:35:12
Sample Type	LCS
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.4686	ug/l	2.3	681210.36	50	98.94	
Al	27	45	No Gas	103.9371	ug/l	3.7	1335171.44	100	103.94	
Na	23	45	He	253.6345	ug/l	1.7	175209.87	250	101.45	
Mg	24	45	He	250.6529	ug/l	1.5	69034.82	250	100.26	
Mn	55	72	He	24.4879	ug/l	2.4	40153.87	25	97.95	
Fe	56	72	He	48.4838	ug/l	0.6	140393.59	50	96.97	
Co	59	72	He	24.7677	ug/l	0.6	148855.08	25	99.07	
As	75	72	He	47.1162	ug/l	0.7	18565.07	50	94.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3119811.20	0.8	3482217.34	89.59	
Sc	45	He	139363.09	0.2	160566.51	86.79	
Ge	72	He	114650.28	0.5	125774.49	91.16	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216191-04

File Name 045_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:36:52

Sample Type LCS

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2158	ug/l	1.3	678761.89	50	98.43	
Al	27	45	No Gas	104.1783	ug/l	1.8	1340289.67	100	104.18	
Na	23	45	He	248.3836	ug/l	3.1	175411.69	250	99.35	
Mg	24	45	He	242.0792	ug/l	2.2	67903.45	250	96.83	
Mn	55	72	He	24.8123	ug/l	1.8	40762.08	25	99.25	
Fe	56	72	He	48.5028	ug/l	2.4	140682.42	50	97.01	
Co	59	72	He	24.8355	ug/l	1.5	149509.65	25	99.34	
As	75	72	He	47.9277	ug/l	0.9	18917.78	50	95.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3124592.25	1.6	3482217.34	89.73	
Sc	45	He	141947.40	2.2	160566.51	88.4	
Ge	72	He	114851.90	1.3	125774.49	91.32	

Sample Report

Sample Name K2210884-001

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:38:33

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1882	ug/l	1.4	15353.51	
Al	27	45	No Gas	1.2960	ug/l	3.1	17362.01	
Na	23	45	He	9645.2160	ug/l	1.7	4844940.97	
Mg	24	45	He	6677.8896	ug/l	1.7	1643434.61	
Mn	55	72	He	3123.0247	ug/l	4.4	4689125.66	
Fe	56	72	He	38026.7784	ug/l	2.3	100502028.50	
Co	59	72	He	55.0062	ug/l	3.0	302959.99	
As	75	72	He	1.1066	ug/l	12.0	403.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2886983.71	2.7	3482217.34	82.91	
Sc	45	He	124549.39	1.6	160566.51	77.57	
Ge	72	He	105112.26	2.1	125774.49	83.57	

Sample Report

Sample Name K2210884-002
File Name 047SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:40:13
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	18.8689	ug/l	0.6	248236.35	
Al	27	45	No Gas	1.2804	ug/l	2.0	17722.32	
Na	23	45	He	4466.1691	ug/l	1.3	2432306.84	
Mg	24	45	He	3840.6245	ug/l	1.0	1017454.72	
Mn	55	72	He	365.4789	ug/l	0.8	578690.15	
Fe	56	72	He	2011.2069	ug/l	0.4	5604290.34	
Co	59	72	He	1.3284	ug/l	2.7	7718.45	
As	75	72	He	4.9296	ug/l	1.4	1880.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2978557.67	0.3	3482217.34	85.54	
Sc	45	He	134061.54	1.0	160566.51	83.49	
Ge	72	He	110777.68	0.8	125774.49	88.08	

Sample Report

Sample Name K2210884-003

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:41:54

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	59.8604	ug/l	0.7	797209.31	
Al	27	45	No Gas	1.7197	ug/l	0.5	23402.25	
Na	23	45	He	6331.2446	ug/l	0.6	3527929.95	
Mg	24	45	He	3682.1120	ug/l	1.1	1001902.61	
Mn	55	72	He	771.1284	ug/l	1.4	1255611.80	
Fe	56	72	He	1391.9251	ug/l	2.4	3988505.98	
Co	59	72	He	4.6912	ug/l	2.8	28016.09	
As	75	72	He	11.2718	ug/l	3.3	4415.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3017160.16	1.0	3482217.34	86.64	
Sc	45	He	137697.22	1.1	160566.51	85.76	
Ge	72	He	113932.01	1.3	125774.49	90.58	

Sample Report

Sample Name K2210884-004

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:43:35

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	127.1413	ug/l	1.2	1669812.58	
Al	27	45	No Gas	1.4908	ug/l	1.6	20280.05	
Na	23	45	He	6517.1122	ug/l	2.0	3620428.38	
Mg	24	45	He	5791.6110	ug/l	0.9	1571602.27	
Mn	55	72	He	1134.3622	ug/l	1.5	1801406.90	
Fe	56	72	He	8897.8090	ug/l	3.0	24861362.96	
Co	59	72	He	7.8052	ug/l	2.3	45458.59	
As	75	72	He	3.2145	ug/l	1.1	1231.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2975830.27	0.5	3482217.34	85.46	
Sc	45	He	137313.75	0.4	160566.51	85.52	
Ge	72	He	111110.36	1.1	125774.49	88.34	

Sample Report

Sample Name K2210884-005

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:45:14

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	140.9368	ug/l	1.4	1895580.23	
Al	27	45	No Gas	1.5704	ug/l	3.4	21766.85	
Na	23	45	He	10331.7673	ug/l	2.8	5837642.83	
Mg	24	45	He	5742.6146	ug/l	2.9	1590292.06	
Mn	55	72	He	402.2727	ug/l	1.4	674235.95	
Fe	56	72	He	3911.8724	ug/l	0.9	11538024.00	
Co	59	72	He	1.9347	ug/l	3.9	11896.37	
As	75	72	He	82.8480	ug/l	1.1	33384.80	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047572.56	0.8	3482217.34	87.52	
Sc	45	He	140180.70	2.0	160566.51	87.3	
Ge	72	He	117267.59	1.0	125774.49	93.24	

Sample Report

Sample Name K2210884-006

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:46:55

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.8278	ug/l	4.7	11190.40	
Al	27	45	No Gas	1.3912	ug/l	0.9	19230.59	
Na	23	45	He	5585.5990	ug/l	1.3	3066956.73	
Mg	24	45	He	3739.9319	ug/l	1.1	1001582.31	
Mn	55	72	He	1937.4880	ug/l	1.1	3056940.89	
~~Fe~~	56	72	He	0.9215	ug/l	9.9	3120.35	
Co	59	72	He	66.0646	ug/l	0.9	382277.83	
As	75	72	He	0.0674	ug/l	13.4	29.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3002042.25	0.6	3482217.34	86.21	
Sc	45	He	135524.03	1.1	160566.51	84.4	
Ge	72	He	110388.91	0.7	125774.49	87.77	

Sample Report

Sample Name K2210884-007

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:48:35

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2834	ug/l	8.7	4060.54	
Al	27	45	No Gas	1.7641	ug/l	3.8	24346.82	
Na	23	45	He	10496.2898	ug/l	2.6	5649409.29	
Mg	24	45	He	25384.2984	ug/l	1.0	6698024.07	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~6037.1981~~	~~ug/l~~	~~2.7~~	~~9586571.10~~	~~>LDR~~
Fe	56	72	He	108.5514	ug/l	2.0	303904.87	
Co	59	72	He	3.8284	ug/l	0.2	22303.38	
As	75	72	He	0.0215	ug/l	27.8	12.33	

See Dilution

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3068767.66	2.9	3482217.34	88.13	
Sc	45	He	133518.42	0.9	160566.51	83.15	
Ge	72	He	111106.90	0.6	125774.49	88.34	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:50:15
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2233	ug/l	1.4	360125.25	100.89	
Al	27	45	No Gas	252.2633	ug/l	0.5	3356077.14	100.91	
Na	23	45	He	1938.6450	ug/l	1.4	1201433.89	96.93	
Mg	24	45	He	1905.2366	ug/l	1.5	564584.46	95.26	
Mn	55	72	He	24.9394	ug/l	3.5	42830.18	99.76	
Fe	56	72	He	250.9608	ug/l	2.0	758596.13	100.38	
Co	59	72	He	25.2878	ug/l	1.0	159201.15	101.15	
As	75	72	He	24.8639	ug/l	2.5	10263.09	99.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3233640.89	1.5	3482217.34	92.86	
Sc	45	He	149970.60	1.6	160566.51	93.4	
Ge	72	He	120106.59	1.5	125774.49	95.49	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:51:56
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0126	ug/l	9.3	420.01	
Al	27	45	No Gas	-0.0002	ug/l	N/A	2205.16	
Na	23	45	He	5.7493	ug/l	17.5	38391.83	
Mg	24	45	He	0.0818	ug/l	48.7	26.67	
Mn	55	72	He	0.0125	ug/l	69.1	46.67	
Fe	56	72	He	0.0168	ug/l	223.7	656.70	
Co	59	72	He	-0.0003	ug/l	N/A	4.44	
As	75	72	He	-0.0026	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3217134.12	1.4	3482217.34	92.39	
Sc	45	He	145691.20	0.4	160566.51	90.74	
Ge	72	He	119241.38	2.1	125774.49	94.81	

Sample Report

Sample Name	K2210884-008
File Name	055SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:53:37
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1196	ug/l	3.3	13989.05	
Al	27	45	No Gas	1.3214	ug/l	3.3	17066.67	
Na	23	45	He	10061.5876	ug/l	1.9	4989172.22	
Mg	24	45	He	6860.4864	ug/l	0.9	1667190.96	
Mn	55	72	He	3446.7332	ug/l	0.3	4988562.53	>LDR
Fe	56	72	He	40917.0528	ug/l	1.0	104209298.45	
Co	59	72	He	37.3795	ug/l	0.6	198414.85	
As	75	72	He	0.0486	ug/l	28.2	20.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2790064.96	1.4	3482217.34	80.12	
Sc	45	He	122975.08	1.0	160566.51	76.59	
Ge	72	He	101259.44	0.2	125774.49	80.51	

Sample Report

JC
9/27/22

Sample Name K2210884-009
File Name 056SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:55:17
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.9137	ug/l	1.2	50391.11	
Al	27	45	No Gas	3.4992	ug/l	1.9	43787.49	
Na	23	45	He	4630.2380	ug/l	2.3	2652776.99	
Mg	24	45	He	12137.5159	ug/l	2.0	3384204.12	
Mn	55	72	He	0.3541	ug/l	22.6	616.70	
Fe	56	72	He	1.1600	ug/l	17.4	4007.23	
Co	59	72	He	0.0456	ug/l	19.1	285.56	
As	75	72	He	0.0896	ug/l	7.0	40.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2905266.52	1.5	3482217.34	83.43	
Sc	45	He	141081.04	0.2	160566.51	87.87	
Ge	72	He	116922.10	0.4	125774.49	92.96	

Sample Report

Sample Name	K2210884-010
File Name	057SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:56:58
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	13.5373	ug/l	1.5	186176.58	
Al	27	45	No Gas	2.1855	ug/l	1.8	30104.06	
Na	23	45	He	4743.7199	ug/l	3.5	2709441.94	
Mg	24	45	He	4063.0704	ug/l	1.8	1129783.71	
Mn	55	72	He	362.5999	ug/l	0.7	599133.17	
Fe	56	72	He	116.1536	ug/l	1.1	338296.88	
Co	59	72	He	2.3432	ug/l	2.3	14204.81	
As	75	72	He	0.1308	ug/l	24.4	56.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3113178.29	1.9	3482217.34	89.4	
Sc	45	He	140724.66	1.5	160566.51	87.64	
Ge	72	He	115603.75	1.1	125774.49	91.91	

Sample Report

Sample Name K2210884-011
File Name 058SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:58:39
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7001	ug/l	2.5	80821.78	
Al	27	45	No Gas	2.5609	ug/l	1.9	35923.21	
Na	23	45	He	6106.4368	ug/l	1.0	3787674.53	
Mg	24	45	He	13980.8861	ug/l	1.6	4233618.27	
Mn	55	72	He	0.2030	ug/l	13.2	390.01	
Fe	56	72	He	0.5019	ug/l	13.7	2220.20	
Co	59	72	He	0.0107	ug/l	19.9	76.67	
As	75	72	He	0.0278	ug/l	54.5	16.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3202958.01	1.3	3482217.34	91.98	
Sc	45	He	153210.21	1.1	160566.51	95.42	
Ge	72	He	125383.95	1.1	125774.49	99.69	

Sample Report

Sample Name K2210884-012
File Name 059SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:00:19
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	52.2152	ug/l	2.4	753835.85	
Al	27	45	No Gas	1.2855	ug/l	3.6	19529.23	
Na	23	45	He	5746.5344	ug/l	1.1	3410812.14	
Mg	24	45	He	3565.7968	ug/l	0.5	1032583.00	
Mn	55	72	He	1015.5354	ug/l	0.7	1741764.82	
Fe	56	72	He	144.0116	ug/l	1.4	435210.19	
Co	59	72	He	0.2424	ug/l	9.2	1530.08	
As	75	72	He	0.0159	ug/l	17.7	11.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3271569.84	2.2	3482217.34	93.95	
Sc	45	He	146531.99	0.3	160566.51	91.26	
Ge	72	He	119999.31	1.5	125774.49	95.41	

Sample Report

Sample Name K2210884-013
File Name 060SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:02:00
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator ALKLS
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	85.0391	ug/l	0.8	1198155.32	
Al	27	45	No Gas	4.2364	ug/l	0.8	57788.95	
Na	23	45	He	6220.1417	ug/l	1.8	3904318.69	
Mg	24	45	He	19587.1717	ug/l	2.6	6001847.62	
Mn	55	72	He	0.2107	ug/l	9.1	410.01	
Fe	56	72	He	0.4602	ug/l	5.6	2120.18	
Co	59	72	He	0.0055	ug/l	21.3	43.33	
As	75	72	He	0.0298	ug/l	48.6	17.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3192100.48	0.8	3482217.34	91.67	
Sc	45	He	155110.10	2.2	160566.51	96.6	
Ge	72	He	127171.54	2.4	125774.49	101.11	

Sample Report

Sample Name K2210884-014
File Name 061SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:03:41
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	127.2657	ug/l	4.5	1805289.24	
Al	27	45	No Gas	1.4692	ug/l	6.4	21615.00	
Na	23	45	He	6574.3701	ug/l	0.5	3851292.96	
Mg	24	45	He	5957.5388	ug/l	2.3	1705019.61	
Mn	55	72	He	1268.5481	ug/l	2.5	2132919.35	
Fe	56	72	He	3338.1349	ug/l	1.3	9878423.40	
Co	59	72	He	1.0519	ug/l	2.0	6492.39	
As	75	72	He	0.0254	ug/l	28.4	14.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3215198.18	1.4	3482217.34	92.33	
Sc	45	He	144807.57	0.9	160566.51	90.19	
Ge	72	He	117647.53	0.9	125774.49	93.54	

Sample Report

Sample Name K2210884-015

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:05:21

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	108.5931	ug/l	3.6	1586984.40	
Al	27	45	No Gas	4.3764	ug/l	2.9	61841.04	
Na	23	45	He	10138.4284	ug/l	1.0	6419224.28	
Mg	24	45	He	17812.2627	ug/l	2.6	5525797.63	
Mn	55	72	He	0.1170	ug/l	19.6	236.67	
Fe	56	72	He	0.7256	ug/l	5.9	2933.66	
Co	59	72	He	0.0088	ug/l	32.6	64.44	
As	75	72	He	0.0448	ug/l	41.2	24.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3311493.91	1.2	3482217.34	95.1	
Sc	45	He	157018.10	1.5	160566.51	97.79	
Ge	72	He	125649.87	0.2	125774.49	99.9	

Sample Report

Sample Name K2210884-016

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:07:02

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

SC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	120.2944	ug/l	1.8	1770942.42	
Al	27	45	No Gas	1.5927	ug/l	4.0	24126.57	
Na	23	45	He	11508.8314	ug/l	3.8	7023488.85	
Mg	24	45	He	5724.2321	ug/l	1.3	1713490.44	
Mn	55	72	He	510.6670	ug/l	1.1	898609.73	
Fe	56	72	He	965.1963	ug/l	0.8	2989368.71	
Co	59	72	He	0.4423	ug/l	4.7	2860.27	
As	75	72	He	0.2242	ug/l	10.4	99.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3335854.22	0.9	3482217.34	95.8	
Sc	45	He	151483.46	1.1	160566.51	94.34	
Ge	72	He	123118.67	1.2	125774.49	97.89	

Sample Report

Sample Name K2210884-017

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:08:42

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0858	ug/l	5.4	1500.10	
Al	27	45	No Gas	3.3969	ug/l	1.7	48483.05	
Na	23	45	He	5222.8801	ug/l	4.3	3302661.72	
Mg	24	45	He	11187.0370	ug/l	0.8	3447929.64	
Mn	55	72	He	0.2114	ug/l	10.0	413.35	
Fe	56	72	He	0.6719	ug/l	22.1	2816.98	
Co	59	72	He	0.0328	ug/l	10.7	226.67	
As	75	72	He	0.0681	ug/l	4.5	34.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3309313.91	1.1	3482217.34	95.03	
Sc	45	He	155961.90	0.7	160566.51	97.13	
Ge	72	He	127932.62	1.1	125774.49	101.72	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 065_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:10:23

Sample Type CCV

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4211	ug/l	0.2	384357.44	101.68	
Al	27	45	No Gas	250.6444	ug/l	0.9	3530588.91	100.26	
Na	23	45	He	1965.1301	ug/l	2.0	1260150.60	98.26	
Mg	24	45	He	1945.7783	ug/l	1.9	596852.15	97.29	
Mn	55	72	He	25.1839	ug/l	2.7	45798.19	100.74	
Fe	56	72	He	250.8784	ug/l	1.2	803116.29	100.35	
Co	59	72	He	25.0341	ug/l	1.0	166911.94	100.14	
As	75	72	He	24.5917	ug/l	1.9	10750.72	98.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3423917.87	0.1	3482217.34	98.33	
Sc	45	He	155241.86	1.8	160566.51	96.68	
Ge	72	He	127184.22	1.2	125774.49	101.12	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:12:03
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0231	ug/l	7.4	590.02	
Al	27	45	No Gas	0.0124	ug/l	129.8	2460.20	
Na	23	45	He	7.6208	ug/l	17.2	40770.69	
Mg	24	45	He	0.1006	ug/l	68.5	33.33	
Mn	55	72	He	0.0063	ug/l	345.3	36.67	
Fe	56	72	He	0.0496	ug/l	69.9	773.37	
Co	59	72	He	-0.0008	ug/l	N/A	1.11	
As	75	72	He	-0.0020	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3338379.43	1.3	3482217.34	95.87	
Sc	45	He	150471.41	1.7	160566.51	93.71	
Ge	72	He	121906.73	0.4	125774.49	96.92	

Prep Blank (PB) Report

Sample Name KQ2216191-01
File Name 067_PB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:23:53
Sample Type PB
Comment —
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0165	ug/l	35.5	463.35	
Al	27	45	No Gas	0.4107	ug/l	3.6	7449.98	
Na	23	45	He	4.8266	ug/l	19.9	37252.85	
Mg	24	45	He	0.2707	ug/l	37.8	80.00	
Mn	55	72	He	0.0134	ug/l	157.2	46.67	
Fe	56	72	He	0.0127	ug/l	205.0	623.36	
Co	59	72	He	0.0005	ug/l	142.5	8.89	
As	75	72	He	-0.0049	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3136284.33	1.6	3482217.34	90.07	
Sc	45	He	143398.72	1.3	160566.51	89.31	
Ge	72	He	115107.20	1.7	125774.49	91.52	

Sample Report

Sample Name K2210884-018

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:25:34

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6360	ug/l	5.6	8882.37	
Al	27	45	No Gas	1.6078	ug/l	3.9	22489.42	
Na	23	45	He	5653.8521	ug/l	1.0	3213505.79	
Mg	24	45	He	3956.3849	ug/l	0.9	1096834.72	
Mn	55	72	He	1571.7706	ug/l	0.5	2554899.08	
Fe	56	72	He	198.5283	ug/l	1.2	568370.19	
Co	59	72	He	3.4035	ug/l	0.3	20295.33	
As	75	72	He	0.0584	ug/l	27.9	27.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3082092.56	0.6	3482217.34	88.51	
Sc	45	He	140290.14	1.1	160566.51	87.37	
Ge	72	He	113720.41	1.3	125774.49	90.42	

Sample Report

Sample Name K2210884-007

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:30:34

Sample Type Sample

Comment D 50X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0307	ug/l	26.1	666.69	
Al	27	45	No Gas	0.4770	ug/l	2.4	8413.75	
Na	23	45	He	966.5638	ug/l	1.8	594364.19	
Mg	24	45	He	2372.1703	ug/l	0.6	677144.70	
Mn	55	72	He	542.7878	ug/l	0.2	914728.53	
Fe	56	72	He	10.3046	ug/l	4.0	31155.30	
Co	59	72	He	0.3729	ug/l	6.3	2311.28	
As	75	72	He	0.0008	ug/l	1254.2	4.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3177774.01	1.9	3482217.34	91.26	
Sc	45	He	144447.47	1.2	160566.51	89.96	
Ge	72	He	117902.55	0.5	125774.49	93.74	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	070_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:33:08
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.7593	ug/l	0.6	358926.38	103.04	
Al	27	45	No Gas	253.5231	ug/l	0.8	3291433.49	101.41	
Na	23	45	He	1959.1971	ug/l	1.7	1163811.26	97.96	
Mg	24	45	He	1956.5314	ug/l	0.3	555969.69	97.83	
Mn	55	72	He	24.4665	ug/l	3.0	40751.98	97.87	
Fe	56	72	He	249.1891	ug/l	0.5	730560.22	99.68	
Co	59	72	He	24.8552	ug/l	0.2	151750.22	99.42	
As	75	72	He	24.7051	ug/l	0.6	9890.87	98.82	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3155509.85	1.4	3482217.34	90.62	
Sc	45	He	143789.32	0.8	160566.51	89.55	
Ge	72	He	116466.02	0.3	125774.49	92.6	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	071_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:34:48
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0091	ug/l	120.6	360.01	
Al	27	45	No Gas	0.0106	ug/l	150.0	2283.50	
Na	23	45	He	4.5223	ug/l	52.1	36274.10	
Mg	24	45	He	0.0738	ug/l	157.4	23.33	
Mn	55	72	He	0.0034	ug/l	179.8	30.00	
Fe	56	72	He	0.0071	ug/l	581.3	610.02	
Co	59	72	He	0.0010	ug/l	61.6	12.22	
As	75	72	He	0.0010	ug/l	397.6	4.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130644.54	0.8	3482217.34	89.9	
Sc	45	He	140341.26	1.9	160566.51	87.4	
Ge	72	He	115538.95	0.8	125774.49	91.86	

Prep Blank (PB) Report

Sample Name KQ2216203-01

File Name 072_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:46:33

Sample Type PB

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0045	ug/l	51.2	293.34	
Al	27	45	No Gas	3.2501	ug/l	0.4	43563.55	
Na	23	45	He	3.8230	ug/l	23.8	35753.03	
Mg	24	45	He	5.5115	ug/l	6.3	1526.77	
Mn	55	72	He	0.1367	ug/l	20.4	243.34	
Fe	56	72	He	0.0958	ug/l	36.2	843.38	
Co	59	72	He	0.0005	ug/l	326.9	8.89	
As	75	72	He	0.0039	ug/l	152.9	5.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3100930.89	0.6	3482217.34	89.05	
Sc	45	He	139806.06	2.4	160566.51	87.07	
Ge	72	He	112324.41	0.7	125774.49	89.31	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216203-03
File Name	073_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:48:13
Sample Type	LCS
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.1242	ug/l	1.6	676611.92	50	98.25	
Al	27	45	No Gas	100.9854	ug/l	2.6	1297534.09	100	100.99	
Na	23	45	He	236.2023	ug/l	1.8	169529.26	250	94.48	
Mg	24	45	He	237.9265	ug/l	1.8	67130.58	250	95.17	
Mn	55	72	He	23.8965	ug/l	2.0	38887.51	25	95.59	
Fe	56	72	He	48.5894	ug/l	0.7	139622.77	50	97.18	
Co	59	72	He	24.5649	ug/l	0.5	146507.58	25	98.26	
As	75	72	He	46.8048	ug/l	1.6	18299.79	50	93.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3120088.91	0.3	3482217.34	89.6	
Sc	45	He	142777.87	0.9	160566.51	88.92	
Ge	72	He	113774.01	1.1	125774.49	90.46	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216203-04
File Name	074_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:49:53
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2382	ug/l	0.8	662519.57	50	98.48	
Al	27	45	No Gas	103.5104	ug/l	1.7	1299132.27	100	103.51	
Na	23	45	He	246.1819	ug/l	1.1	171275.19	250	98.47	
Mg	24	45	He	246.9735	ug/l	1.2	68114.56	250	98.79	
Mn	55	72	He	24.3932	ug/l	2.3	39856.41	25	97.57	
Fe	56	72	He	48.8816	ug/l	1.4	141058.29	50	97.76	
Co	59	72	He	24.5056	ug/l	1.9	146768.67	25	98.02	
As	75	72	He	46.7667	ug/l	2.3	18363.18	50	93.53	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047968.08	0.5	3482217.34	87.53	
Sc	45	He	139551.04	0.5	160566.51	86.91	
Ge	72	He	114271.43	1.6	125774.49	90.85	

Sample Report

Sample Name K2210887-001

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:51:33

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.5123	ug/l	2.0	27541.46	
Al	27	45	No Gas	4.3597	ug/l	1.4	45922.73	
Na	23	45	He	47923.7033	ug/l	0.8	21183816.35	
Mg	24	45	He	90713.9689	ug/l	2.8	19741620.96	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~68506.9060~~	~~ug/l~~	~~0.5~~	~~88795428.68~~	~~>LDR~~
Fe	56	72	He	2287.6002	ug/l	2.1	5217313.78	
Co	59	72	He	57.3978	ug/l	1.2	272823.07	
As	75	72	He	0.0696	ug/l	41.9	25.00	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2467591.58	0.2	3482217.34	70.86	
Sc	45	He	110133.12	1.2	160566.51	68.59	
Ge	72	He	90680.22	1.0	125774.49	72.1	

Sample Report

Sample Name K2210887-002
File Name 076SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:53:12
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.3512	ug/l	1.0	57957.12	
Al	27	45	No Gas	4.2396	ug/l	0.8	44320.49	
Na	23	45	He	48731.3614	ug/l	0.6	21254684.68	
Mg	24	45	He	31036.2435	ug/l	1.6	6663913.65	
Mn	55	~~72~~	~~He~~	~~15924.9220~~	ug/l	3.2	20673671.78	>LDR
Fe	56	~~72~~	~~He~~	~~192108.6459~~	~~ug/l~~	~~2.7~~	~~438915806.79~~	~~>LDR~~
Co	59	72	He	209.5085	ug/l	2.8	997533.40	
As	75	72	He	0.1757	ug/l	23.3	58.33	

X see Dilutions
X JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2446455.22	0.5	3482217.34	70.26	
Sc	45	He	108663.92	1.5	160566.51	67.68	
Ge	72	He	90881.06	3.1	125774.49	72.26	

Sample Report

Sample Name K2210887-003

File Name 077SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:58:09

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	39.0407	ug/l	0.6	491947.96	
Al	27	45	No Gas	19.8768	ug/l	0.1	235210.00	
Na	23	45	He	20171.1501	ug/l	3.1	10778792.34	
Mg	24	45	He	44324.3872	ug/l	1.8	11643678.58	
Mn	55	72	He	1.9753	ug/l	6.9	3110.35	
Fe	56	72	He	3.0211	ug/l	7.2	8859.09	
Co	59	72	He	0.1745	ug/l	2.3	1005.59	
As	75	72	He	0.4374	ug/l	1.5	168.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2854324.02	1.2	3482217.34	81.97	
Sc	45	He	132946.91	1.9	160566.51	82.8	
Ge	72	He	109305.02	0.9	125774.49	86.91	

Sample Report

Sample Name K2210887-004

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:59:49

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.5132	ug/l	1.4	1016634.65	
Al	27	45	No Gas	4.0191	ug/l	1.3	49245.09	
Na	23	45	He	20095.8081	ug/l	0.6	10408515.88	
Mg	24	45	He	17216.0584	ug/l	2.1	4382286.19	
Mn	55	72	He	2171.2807	ug/l	1.9	3276083.91	
Fe	56	72	He	3793.6639	ug/l	1.8	10073014.22	
Co	59	72	He	17.0552	ug/l	0.7	94381.58	
As	75	72	He	0.6170	ug/l	5.7	227.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2861377.77	2.5	3482217.34	82.17	
Sc	45	He	128812.88	1.0	160566.51	80.22	
Ge	72	He	105568.50	1.1	125774.49	83.93	

Sample Report

Sample Name K2210887-005

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:01:28

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	152.2600	ug/l	3.3	2124557.16	
Al	27	45	No Gas	13.7221	ug/l	1.7	180568.85	
Na	23	45	He	26674.1540	ug/l	2.0	15470606.44	
Mg	24	45	He	47985.8102	ug/l	3.2	13687550.21	
Mn	55	72	He	1.5715	ug/l	6.5	2623.58	
Fe	56	72	He	1.8200	ug/l	9.8	5887.80	
Co	59	72	He	0.0373	ug/l	11.9	232.23	
As	75	72	He	0.1116	ug/l	14.6	48.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3162908.70	1.9	3482217.34	90.83	
Sc	45	He	144381.08	1.5	160566.51	89.92	
Ge	72	He	115701.23	0.6	125774.49	91.99	

Sample Report

Sample Name K2210887-006

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:03:09

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	235.8769	ug/l	2.8	3107445.47	
Al	27	45	No Gas	4.1489	ug/l	3.9	52957.46	
Na	23	45	He	27235.7959	ug/l	2.4	14443696.04	
Mg	24	45	He	15509.0022	ug/l	0.3	4046883.38	
Mn	55	72	He	3813.8192	ug/l	1.6	6020632.20	>LDR
Fe	56	72	He	1673.0101	ug/l	1.0	4648408.79	
Co	59	72	He	0.9827	ug/l	2.6	5695.42	
As	75	72	He	0.0857	ug/l	14.0	36.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2986503.81	2.5	3482217.34	85.76	
Sc	45	He	132043.87	2.2	160566.51	82.24	
Ge	72	He	110466.41	1.8	125774.49	87.83	

Sample Report

Sample Name	K2210887-007
File Name	081SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:04:49
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	422.5218	ug/l	1.0	5753338.45	
Al	27	45	No Gas	20.2511	ug/l	1.0	259021.75	
Na	23	45	He	30770.9918	ug/l	0.4	17198751.41	
Mg	24	45	He	83598.7347	ug/l	0.8	22989537.16	
Mn	55	72	He	3.0627	ug/l	6.0	4977.57	
Fe	56	72	He	1.3837	ug/l	1.6	4517.38	
Co	59	72	He	0.0351	ug/l	20.5	214.45	
As	75	72	He	0.1057	ug/l	12.3	45.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085779.23	1.4	3482217.34	88.62	
Sc	45	He	139154.77	0.7	160566.51	86.66	
Ge	72	He	113213.89	1.3	125774.49	90.01	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	082_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:06:28
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.3440	ug/l	1.7	368570.70	101.38	
Al	27	45	No Gas	253.9263	ug/l	1.8	3440292.55	101.57	
Na	23	45	He	1958.3455	ug/l	0.9	1204120.84	97.92	
Mg	24	45	He	1958.4357	ug/l	0.4	575899.17	97.92	
Mn	55	72	He	24.7183	ug/l	3.2	43033.95	98.87	
Fe	56	72	He	248.3634	ug/l	2.4	761094.50	99.35	
Co	59	72	He	25.0407	ug/l	1.2	159830.85	100.16	
As	75	72	He	25.0137	ug/l	4.6	10464.54	100.05	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3293640.47	1.1	3482217.34	94.58	
Sc	45	He	148803.58	1.8	160566.51	92.67	
Ge	72	He	121779.30	2.2	125774.49	96.82	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	083_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:08:09
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0540	ug/l	12.3	1000.05	
Al	27	45	No Gas	0.0112	ug/l	142.3	2338.51	
Na	23	45	He	4.4508	ug/l	36.8	38158.10	
Mg	24	45	He	0.1941	ug/l	29.2	60.00	
Mn	55	72	He	0.0280	ug/l	78.5	73.33	
Fe	56	72	He	0.0856	ug/l	63.8	870.05	
Co	59	72	He	-0.0003	ug/l	N/A	4.44	
As	75	72	He	-0.0051	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3194659.32	0.6	3482217.34	91.74	
Sc	45	He	147772.11	1.9	160566.51	92.03	
Ge	72	He	120003.43	0.6	125774.49	95.41	

Sample Report

Sample Name K2210887-008

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:09:50

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	559.5089	ug/l	2.7	6769361.77	
Al	27	45	No Gas	4.6000	ug/l	1.4	53729.89	
Na	23	45	He	30180.2313	ug/l	2.0	14964966.86	
Mg	24	45	He	26245.2826	ug/l	0.8	6402050.32	
Mn	55	72	He	5115.1188	ug/l	2.4	7403702.60	>LDR
Fe	56	72	He	16846.2333	ug/l	1.7	42909584.36	
Co	59	72	He	8.2059	ug/l	1.2	43568.20	
As	75	72	He	0.2344	ug/l	16.3	85.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2741689.75	1.2	3482217.34	78.73	
Sc	45	He	123434.34	1.1	160566.51	76.87	
Ge	72	He	101283.13	1.3	125774.49	80.53	

Sample Report

Sample Name K2210887-009

File Name 085SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:11:30

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	530.9231	ug/l	0.7	7335438.02	
Al	27	45	No Gas	23.0373	ug/l	0.7	298700.19	
Na	23	45	He	45018.9904	ug/l	0.8	26466624.60	
Mg	24	45	He	58295.0771	ug/l	0.8	16870839.33	
Mn	55	72	He	1.6227	ug/l	3.9	2763.64	
Fe	56	72	He	1.6055	ug/l	8.0	5367.64	
Co	59	72	He	0.0455	ug/l	15.6	287.78	
As	75	72	He	0.1840	ug/l	9.0	79.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130922.35	1.0	3482217.34	89.91	
Sc	45	He	146450.34	1.1	160566.51	91.21	
Ge	72	He	118076.92	1.0	125774.49	93.88	

Sample Report

Sample Name K2210887-010

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:13:10

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	575.1594	ug/l	2.6	7841539.05	
Al	27	45	No Gas	4.1681	ug/l	1.5	55063.81	
Na	23	45	He	44859.4226	ug/l	0.7	25759397.95	
Mg	24	45	He	24055.3229	ug/l	2.1	6798629.06	
Mn	55	72	He	1925.1483	ug/l	1.3	3178718.70	
Fe	56	72	He	2435.7723	ug/l	0.8	7077513.64	
Co	59	72	He	1.6486	ug/l	1.4	9988.51	
As	75	72	He	0.7685	ug/l	0.8	309.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3089870.16	0.9	3482217.34	88.73	
Sc	45	He	143039.71	1.5	160566.51	89.08	
Ge	72	He	115515.81	0.6	125774.49	91.84	

Sample Report

Sample Name	K2210887-011
File Name	087SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:14:49
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6368	ug/l	3.9	8675.59	
Al	27	45	No Gas	17.6533	ug/l	1.1	220273.41	
Na	23	45	He	24609.0613	ug/l	2.1	13863768.54	
Mg	24	45	He	42874.3731	ug/l	0.6	11879618.57	
Mn	55	72	He	0.4871	ug/l	10.2	806.70	
Fe	56	72	He	2.2790	ug/l	3.0	7018.22	
Co	59	72	He	0.1356	ug/l	1.8	805.58	
As	75	72	He	0.3221	ug/l	9.5	128.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3006722.45	0.8	3482217.34	86.35	
Sc	45	He	140213.40	1.4	160566.51	87.32	
Ge	72	He	112455.15	0.7	125774.49	89.41	

Sample Report

Sample Name K2210887-012

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:16:29

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.1910	ug/l	0.9	38094.24	
Al	27	45	No Gas	4.0408	ug/l	3.3	46539.59	
Na	23	45	He	24794.6227	ug/l	2.2	12021974.40	
Mg	24	45	He	17077.6217	ug/l	2.3	4072064.84	
Mn	55	72	He	8902.6769	ug/l	2.3	12579341.89	>LDR
Fe	56	72	He	6030.1491	ug/l	2.4	14994206.03	
Co	59	72	He	22.3667	ug/l	2.8	115899.03	
As	75	72	He	0.3558	ug/l	9.3	124.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2691159.65	2.2	3482217.34	77.28	
Sc	45	He	120719.84	3.6	160566.51	75.18	
Ge	72	He	98906.00	3.2	125774.49	78.64	

Sample Report

Sample Name K2210887-013

File Name 089SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:18:08

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.0012	ug/l	0.9	63532.57	
Al	27	45	No Gas	4.4309	ug/l	1.9	45219.34	
Na	23	45	He	48831.8637	ug/l	3.0	20958244.27	
Mg	24	45	He	32470.3091	ug/l	0.6	6864276.57	
Mn	55	72	He	15353.7261	ug/l	2.4	19918491.37	>LDR
Fe	56	72	He	180640.9882	ug/l	2.1	412392513.86	>LDR
Co	59	72	He	267.7029	ug/l	1.9	1273746.86	
As	75	72	He	3.1042	ug/l	3.6	971.36	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2392229.91	0.4	3482217.34	68.7	
Sc	45	He	106983.61	2.7	160566.51	66.63	
Ge	72	He	90784.64	1.5	125774.49	72.18	

Sample Report

Sample Name K2210887-014

File Name 090SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:19:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	88.0488	ug/l	4.8	1022738.24	
Al	27	45	No Gas	3.9713	ug/l	0.7	44788.36	
Na	23	45	He	20070.0105	ug/l	0.8	9785292.35	
Mg	24	45	He	17094.3468	ug/l	2.3	4095733.17	
Mn	55	72	He	1695.4020	ug/l	2.3	2522851.37	
Fe	56	72	He	7867.5177	ug/l	1.7	20602565.94	
Co	59	72	He	5.8500	ug/l	2.9	31927.28	
As	75	72	He	12.6397	ug/l	2.9	4525.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2632565.64	1.3	3482217.34	75.6	
Sc	45	He	121262.62	1.3	160566.51	75.52	
Ge	72	He	104133.24	1.8	125774.49	82.79	

Sample Report

Sample Name K2210887-015

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:21:27

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	256.3533	ug/l	1.8	3148228.91	
Al	27	45	No Gas	3.9834	ug/l	1.6	47481.90	
Na	23	45	He	27293.8289	ug/l	1.3	14102752.29	
Mg	24	45	He	15270.1711	ug/l	1.5	3881024.42	
Mn	55	72	He	3487.6555	ug/l	0.4	5253333.36	>LDR
Fe	56	72	He	5028.5797	ug/l	1.1	13327608.55	
Co	59	72	He	20.3798	ug/l	2.1	112556.12	
As	75	72	He	39.0660	ug/l	1.2	14147.52	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2783297.56	2.0	3482217.34	79.93	
Sc	45	He	128624.95	1.7	160566.51	80.11	
Ge	72	He	105380.47	1.8	125774.49	83.79	

Sample Report

Sample Name K2210887-016

File Name 092SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:23:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	564.1121	ug/l	1.4	6773974.48	
Al	27	45	No Gas	4.0678	ug/l	0.2	47369.93	
Na	23	45	He	30467.2881	ug/l	1.2	15142996.44	
Mg	24	45	He	26069.2980	ug/l	1.2	6374825.94	
Mn	55	72	He	5030.9495	ug/l	2.0	7334195.31	>LDR
Fe	56	72	He	40069.1270	ug/l	2.4	102788891.80	
Co	59	72	He	35.6981	ug/l	2.5	190849.14	
As	75	72	He	18.1139	ug/l	1.1	6353.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2720780.79	1.4	3482217.34	78.13	
Sc	45	He	123746.93	1.4	160566.51	77.07	
Ge	72	He	102027.89	2.5	125774.49	81.12	

Sample Report

Sample Name K2210887-017

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:24:45

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	583.6056	ug/l	1.9	7739524.88	
Al	27	45	No Gas	4.0365	ug/l	2.6	51931.00	
Na	23	45	He	45266.2733	ug/l	1.3	24876916.30	
Mg	24	45	He	24628.2243	ug/l	0.9	6663747.61	
Mn	55	72	He	1879.7120	ug/l	1.7	3114246.31	
Fe	56	72	He	16437.0895	ug/l	1.3	47924329.29	
Co	59	72	He	8.2109	ug/l	1.5	49898.59	
As	75	72	He	306.6741	ug/l	1.2	122154.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3005501.83	1.1	3482217.34	86.31	
Sc	45	He	136921.05	1.2	160566.51	85.27	
Ge	72	He	115934.88	1.7	125774.49	92.18	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	094_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:26:25
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.6554	ug/l	0.8	336800.27	98.62	
Al	27	45	No Gas	245.0861	ug/l	0.9	3119405.47	98.03	
Na	23	45	He	1894.5124	ug/l	2.8	1119225.09	94.73	
Mg	24	45	He	1929.8691	ug/l	1.9	544888.85	96.49	
Mn	55	72	He	25.1667	ug/l	3.9	42138.52	100.67	
Fe	56	72	He	249.9522	ug/l	2.8	736774.16	99.98	
Co	59	72	He	24.9135	ug/l	2.7	152926.05	99.65	
As	75	72	He	24.9406	ug/l	0.6	10041.63	99.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3093531.93	1.0	3482217.34	88.84	
Sc	45	He	142908.77	2.7	160566.51	89	
Ge	72	He	117133.20	1.9	125774.49	93.13	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	095_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:28:05
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

ZL 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1114	ug/l	9.8	1723.46	CCB Failed
Al	27	45	No Gas	0.0147	ug/l	92.8	2275.17	
Na	23	45	He	0.7108	ug/l	135.0	33949.67	
Mg	24	45	He	0.1457	ug/l	74.9	43.33	
Mn	55	72	He	0.0358	ug/l	22.8	83.33	
Fe	56	72	He	0.0583	ug/l	100.4	760.03	
Co	59	72	He	-0.0003	ug/l	N/A	4.45	
As	75	72	He	-0.0074	ug/l	N/A	1.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3045998.89	1.9	3482217.34	87.47	
Sc	45	He	139528.04	1.3	160566.51	86.9	
Ge	72	He	115555.42	2.6	125774.49	91.88	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	096_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:35:25
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0576	ug/l	19.4	1013.38	
Al	27	45	No Gas	0.0184	ug/l	76.4	2348.52	
Na	23	45	He	-3.2381	ug/l	N/A	32249.68	
Mg	24	45	He	0.2018	ug/l	44.8	60.00	
Mn	55	72	He	0.0237	ug/l	54.0	63.33	
Fe	56	72	He	0.0627	ug/l	65.7	770.04	
Co	59	72	He	-0.0005	ug/l	N/A	3.33	
As	75	72	He	0.0002	ug/l	3717.6	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3082732.35	0.4	3482217.34	88.53	
Sc	45	He	141842.53	3.0	160566.51	88.34	
Ge	72	He	115425.33	0.7	125774.49	91.77	

Sample Report

Sample Name K2210887-018

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:37:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.5577	ug/l	1.3	43790.51	
Al	27	45	No Gas	3.8304	ug/l	1.6	45622.05	
Na	23	45	He	25276.8553	ug/l	2.4	12049716.90	
Mg	24	45	He	16758.7922	ug/l	0.5	3928860.25	
Mn	55	72	He	8567.6162	ug/l	2.5	11895092.74	>LDR
Fe	56	72	He	2.8236	ug/l	2.0	7395.06	
Co	59	72	He	312.1892	ug/l	2.1	1589656.78	
As	75	72	He	0.2568	ug/l	8.8	89.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2775957.25	0.4	3482217.34	79.72	
Sc	45	He	118629.39	0.5	160566.51	73.88	
Ge	72	He	97179.76	3.1	125774.49	77.27	

Sample Report

Sample Name K2210887-001

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:41:30

Sample Type Sample

Comment D 100X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0617	ug/l	12.8	1053.39	
Al	27	45	No Gas	0.1933	ug/l	8.5	4493.95	
Na	23	45	He	485.9400	ug/l	1.6	305438.83	
Mg	24	45	He	921.9633	ug/l	1.6	254284.73	
Mn	55	72	He	672.8928	ug/l	1.6	1101896.21	
Fe	56	72	He	22.3072	ug/l	1.4	64861.96	
Co	59	72	He	0.5972	ug/l	3.3	3592.63	
As	75	72	He	-0.0024	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3034289.64	0.9	3482217.34	87.14	
Sc	45	He	139582.34	1.5	160566.51	86.93	
Ge	72	He	114573.24	1.0	125774.49	91.09	

Sample Report

Sample Name K2210887-002

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:43:11

Sample Type Sample

Comment D 100X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0712	ug/l	12.7	1180.06	
Al	27	45	No Gas	0.2395	ug/l	10.0	5077.46	
Na	23	45	He	487.4917	ug/l	2.0	299940.88	
Mg	24	45	He	317.3494	ug/l	2.4	85706.65	
Mn	55	72	He	154.1131	ug/l	1.1	245813.81	
Fe	56	72	He	1970.0339	ug/l	0.8	5529530.33	
Co	59	72	He	2.1706	ug/l	1.8	12703.65	
As	75	72	He	-0.0047	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3038910.89	1.8	3482217.34	87.27	
Sc	45	He	136682.51	2.0	160566.51	85.13	
Ge	72	He	111586.70	0.6	125774.49	88.72	

Sample Report

Sample Name	K2210854-006
File Name	100SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:46:46
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6606	ug/l	1.1	9365.98	
Al	27	45	No Gas	2962.7766	ug/l	2.8	38145597.76	
Na	23	45	He	55949.0511	ug/l	1.6	30650778.71	
Mg	24	45	He	15.6397	ug/l	4.7	4220.61	
Mn	55	72	He	0.4295	ug/l	5.7	706.70	
Fe	56	72	He	16.7346	ug/l	2.6	47382.96	
Co	59	72	He	0.0201	ug/l	24.6	123.34	
As	75	72	He	0.0792	ug/l	15.2	34.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3132353.28	1.7	3482217.34	89.95	
Sc	45	He	136527.97	1.6	160566.51	85.03	
Ge	72	He	111241.20	1.6	125774.49	88.44	

Sample Report

Sample Name	K2210854-007
File Name	101SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:48:25
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.9317	ug/l	3.5	14112.55	
Al	27	45	No Gas	30.4175	ug/l	1.1	423955.25	
Na	23	45	He	26774.5632	ug/l	1.9	18074829.31	
Mg	24	45	He	44526.6946	ug/l	1.6	14785594.36	
Mn	55	72	He	0.2271	ug/l	12.0	466.68	
Fe	56	72	He	2.7215	ug/l	6.4	9936.43	
Co	59	72	He	0.0059	ug/l	51.2	48.89	
As	75	72	He	0.0969	ug/l	9.9	50.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3371897.66	1.9	3482217.34	96.83	
Sc	45	He	168048.81	1.4	160566.51	104.66	
Ge	72	He	135047.61	1.1	125774.49	107.37	

Sample Report

Sample Name K2210854-008

File Name 102SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:50:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	9.5931	ug/l	0.5	153468.97	
Al	27	45	No Gas	1230.0775	ug/l	0.9	18303137.23	
Na	23	45	He	110613.2859	ug/l	1.3	70752755.61	
Mg	24	45	He	642.0580	ug/l	2.1	202325.04	
Mn	55	72	He	2.6080	ug/l	1.9	4814.12	
Fe	56	72	He	5.7594	ug/l	0.8	19251.13	
Co	59	72	He	0.0214	ug/l	17.2	151.11	
As	75	72	He	0.2520	ug/l	8.8	116.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3618782.55	0.4	3482217.34	103.92	
Sc	45	He	159485.03	1.5	160566.51	99.33	
Ge	72	He	128390.33	2.4	125774.49	102.08	

Sample Report

Sample Name K2210854-009

File Name 103SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:51:45

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	24.0493	ug/l	1.3	384485.92	
Al	27	45	No Gas	26.9005	ug/l	1.2	402877.79	
Na	23	45	He	30760.6968	ug/l	2.3	21180332.60	
Mg	24	45	He	38620.7178	ug/l	1.1	13084571.06	
Mn	55	72	He	0.3700	ug/l	3.4	760.04	
Fe	56	72	He	1.9269	ug/l	7.6	7401.75	
Co	59	72	He	0.0091	ug/l	43.5	73.34	
As	75	72	He	0.1689	ug/l	7.5	85.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3620423.90	0.5	3482217.34	103.97	
Sc	45	He	171433.25	0.4	160566.51	106.77	
Ge	72	He	138192.22	0.2	125774.49	109.87	

Sample Report

Sample Name	K2210854-011
File Name	104SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:53:26
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.3555	ug/l	2.8	6344.62	
Al	27	45	No Gas	36.7029	ug/l	0.9	585212.37	
Na	23	45	He	37465.9682	ug/l	2.5	27426447.09	
Mg	24	45	He	38101.8215	ug/l	1.0	13728493.13	
Mn	55	72	He	0.2270	ug/l	8.1	503.35	
Fe	56	72	He	1.3070	ug/l	7.6	5531.03	
Co	59	72	He	0.0131	ug/l	27.9	107.78	
As	75	72	He	0.0591	ug/l	12.1	35.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3860725.99	0.9	3482217.34	110.87	
Sc	45	He	182320.97	0.4	160566.51	113.55	
Ge	72	He	145671.20	0.4	125774.49	115.82	

Sample Report

Sample Name K2210854-012

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:55:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2386	ug/l	4.4	4067.22	
Al	27	45	No Gas	415.8968	ug/l	2.8	6168586.57	
Na	23	45	He	159303.3907	ug/l	1.2	107666378.40	
Mg	24	45	He	1660.3986	ug/l	0.5	552971.74	
Mn	55	72	He	18.8316	ug/l	1.3	35850.99	
Fe	56	72	He	1.9262	ug/l	3.0	7124.95	
Co	59	72	He	0.1957	ug/l	7.5	1372.29	
As	75	72	He	0.9657	ug/l	4.7	446.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3607292.55	1.9	3482217.34	103.59	
Sc	45	He	168525.18	1.1	160566.51	104.96	
Ge	72	He	133096.07	1.6	125774.49	105.82	

Sample Report

Sample Name	K2210854-013
File Name	106SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:56:46
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6697	ug/l	0.6	64478.93	
Al	27	45	No Gas	5.0606	ug/l	0.6	55221.00	
Na	23	45	He	46478.5124	ug/l	0.2	21895262.17	
Mg	24	45	He	29918.3983	ug/l	1.6	6939230.73	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15050.5300~~	~~ug/l~~	~~2.2~~	~~20647154.27~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~185495.9050~~	~~ug/l~~	~~2.7~~	~~447498140.00~~	~~>LDR~~
Co	59	72	He	262.4734	ug/l	2.2	1319797.34	
As	75	72	He	7.4223	ug/l	4.6	2448.85	

* See Dilution
*
31
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2569392.57	0.1	3482217.34	73.79	
Sc	45	He	117359.55	0.7	160566.51	73.09	
Ge	72	He	95959.35	2.7	125774.49	76.29	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 107_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:58:25

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.3386	ug/l	1.9	299288.90	97.35	
Al	27	45	No Gas	243.5252	ug/l	3.5	2788946.00	97.41	
Na	23	45	He	1925.6592	ug/l	0.6	1018513.37	96.28	
Mg	24	45	He	1946.2633	ug/l	1.9	492100.87	97.31	
Mn	55	72	He	24.2998	ug/l	1.2	37197.07	97.2	
Fe	56	72	He	245.9864	ug/l	0.9	662762.41	98.39	
Co	59	72	He	24.5485	ug/l	0.9	137739.53	98.19	
As	75	72	He	24.4535	ug/l	0.7	8997.37	97.81	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2785738.50	3.2	3482217.34	80	
Sc	45	He	127957.12	1.0	160566.51	79.69	
Ge	72	He	107037.39	0.7	125774.49	85.1	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	108_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:00:06
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0344	ug/l	21.9	636.69	
Al	27	45	No Gas	0.0087	ug/l	34.5	2028.47	
Na	23	45	He	-6.9304	ug/l	N/A	27224.64	
Mg	24	45	He	0.1471	ug/l	80.5	40.00	
Mn	55	72	He	0.0141	ug/l	24.8	43.33	
Fe	56	72	He	0.1504	ug/l	32.7	930.05	
Co	59	72	He	0.0006	ug/l	54.8	8.89	
As	75	72	He	-0.0053	ug/l	N/A	2.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2809307.35	1.0	3482217.34	80.68	
Sc	45	He	128010.66	0.6	160566.51	79.72	
Ge	72	He	104898.09	1.5	125774.49	83.4	

Sample Report

Sample Name K2210854-014

File Name 109SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:01:46

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	85.7084	ug/l	0.3	1025295.22	
Al	27	45	No Gas	5.5043	ug/l	1.9	63192.47	
Na	23	45	He	19681.1159	ug/l	1.5	9751451.10	
Mg	24	45	He	16795.5754	ug/l	2.4	4089884.10	
Mn	55	72	He	1605.9533	ug/l	2.0	2485575.69	
Fe	56	72	He	9321.6901	ug/l	1.6	25386670.45	
Co	59	72	He	5.6230	ug/l	2.7	31917.31	
As	75	72	He	41.3224	ug/l	1.7	15377.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2710267.36	0.7	3482217.34	77.83	
Sc	45	He	123226.40	0.7	160566.51	76.74	
Ge	72	He	108298.87	2.0	125774.49	86.11	

Sample Report

Sample Name K2210854-015

File Name 110SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:03:26

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	252.5342	ug/l	1.6	3163531.93	
Al	27	45	No Gas	4.4078	ug/l	1.9	53381.89	
Na	23	45	He	26662.5514	ug/l	2.4	13888514.79	
Mg	24	45	He	15149.2184	ug/l	1.6	3881531.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3365.2468~~	~~ug/l~~	~~0.7~~	~~5137371.49~~	~~>LDR~~
Fe	56	72	He	7039.8891	ug/l	2.0	18911355.55	
Co	59	72	He	20.2090	ug/l	1.2	113155.53	
As	75	72	He	45.9736	ug/l	1.6	16875.33	

See
Dilution
SL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2838667.46	1.1	3482217.34	81.52	
Sc	45	He	129669.30	1.4	160566.51	80.76	
Ge	72	He	106809.80	0.9	125774.49	84.92	

Sample Report

Sample Name K2210854-016

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:05:05

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	539.3136	ug/l	0.3	6749798.65	
Al	27	45	No Gas	4.9283	ug/l	1.2	59410.95	
Na	23	45	He	29647.1938	ug/l	1.9	14949371.03	
Mg	24	45	He	25686.0349	ug/l	1.1	6373410.95	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4976.1959~~	~~ug/l~~	~~1.8~~	~~7392962.39~~	~~>LDR~~
Fe	56	72	He	40360.2494	ug/l	1.6	105512951.76	
Co	59	72	He	34.8715	ug/l	2.3	189981.67	
As	75	72	He	23.6573	ug/l	3.5	8450.76	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2835973.92	0.9	3482217.34	81.44	
Sc	45	He	125566.44	2.4	160566.51	78.2	
Ge	72	He	103965.58	2.4	125774.49	82.66	

Sample Report

Sample Name	K2210854-017
File Name	112SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:06:45
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	570.2366	ug/l	1.5	7645740.51	
Al	27	45	No Gas	4.5478	ug/l	2.1	58882.53	
Na	23	45	He	43670.0407	ug/l	0.9	24245459.64	
Mg	24	45	He	23844.6142	ug/l	2.3	6515942.40	
Mn	55	72	He	1822.5634	ug/l	2.0	3049627.24	
Fe	56	72	He	16719.7785	ug/l	2.0	49230757.60	
Co	59	72	He	8.0795	ug/l	1.4	49598.88	
As	75	72	He	401.0648	ug/l	1.4	161346.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3038456.31	2.3	3482217.34	87.26	
Sc	45	He	138305.48	1.4	160566.51	86.14	
Ge	72	He	117100.49	2.3	125774.49	93.1	

Sample Report

Sample Name K2210854-018

File Name 113SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:08:25

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.7516	ug/l	0.7	45267.33	
Al	27	45	No Gas	4.6058	ug/l	2.0	53407.16	
Na	23	45	He	24302.2074	ug/l	1.5	12248338.57	
Mg	24	45	He	15790.8280	ug/l	0.4	3913916.30	
~~Mn~~	~~55~~	~~72~~	He	8206.0454	ug/l	2.2	12090733.57	>LDR
Fe	56	72	He	4.2098	ug/l	6.5	11437.34	
Co	59	72	He	304.0011	ug/l	0.6	1642698.13	
As	75	72	He	0.3342	ug/l	18.3	122.33	

SC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2721832.98	1.3	3482217.34	78.16	
Sc	45	He	125425.19	1.5	160566.51	78.11	
Ge	72	He	103086.62	0.9	125774.49	81.96	

Sample Report

Sample Name K2210884-001

File Name 114SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:13:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7200	ug/l	2.7	63422.00	
Al	27	45	No Gas	4.3183	ug/l	1.6	46203.52	
Na	23	45	He	47798.5046	ug/l	1.1	20893708.86	
Mg	24	45	He	30387.5599	ug/l	1.3	6539958.24	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15254.8319~~	~~ug/l~~	~~1.3~~	~~20011997.62~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~178925.8421~~	~~ug/l~~	~~0.9~~	~~413057020.51~~	~~>LDR~~
Co	59	72	He	261.6168	ug/l	1.2	1258689.36	
As	75	72	He	5.2155	ug/l	2.9	1648.75	

* see Dilution
*
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2506261.42	2.5	3482217.34	71.97	
Sc	45	He	108909.36	0.9	160566.51	67.83	
Ge	72	He	91790.45	1.2	125774.49	72.98	

Sample Report

Sample Name K2210884-002
File Name 115SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:15:27
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	86.7099	ug/l	4.3	1011258.50	
Al	27	45	No Gas	4.3621	ug/l	2.4	49196.52	
Na	23	45	He	19750.2214	ug/l	1.6	9646410.06	
Mg	24	45	He	16698.0282	ug/l	2.4	4008051.61	
Mn	55	72	He	1597.9488	ug/l	1.7	2464231.99	
Fe	56	72	He	8382.5652	ug/l	1.2	22749323.83	
Co	59	72	He	5.6103	ug/l	2.5	31734.76	
As	75	72	He	20.5146	ug/l	0.6	7610.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2642237.25	0.3	3482217.34	75.88	
Sc	45	He	121498.63	2.4	160566.51	75.67	
Ge	72	He	107906.20	1.4	125774.49	85.79	

Sample Report

Sample Name K2210884-003

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:17:07

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	253.9458	ug/l	2.5	3150361.83	
Al	27	45	No Gas	5.8742	ug/l	0.4	69831.92	
Na	23	45	He	26413.4696	ug/l	3.4	13670355.63	
Mg	24	45	He	15223.7263	ug/l	1.9	3876370.88	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3431.4714~~	~~ug/l~~	~~0.1~~	~~5183283.88~~	~~>LDR~~
Fe	56	72	He	5871.8864	ug/l	1.2	15608342.68	
Co	59	72	He	20.3052	ug/l	1.0	112489.11	
As	75	72	He	49.0264	ug/l	0.4	17806.94	

See
Dilution
SL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2811672.67	1.4	3482217.34	80.74	
Sc	45	He	128883.24	2.6	160566.51	80.27	
Ge	72	He	105679.54	1.0	125774.49	84.02	

Sample Report

Sample Name	K2210884-004
File Name	117SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:18:47
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	572.2361	ug/l	1.6	6937683.02	
Al	27	45	No Gas	4.9230	ug/l	4.1	57468.09	
Na	23	45	He	29907.8099	ug/l	1.5	15129902.28	
Mg	24	45	He	25708.7172	ug/l	2.1	6397359.28	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4977.9001~~	~~ug/l~~	~~0.7~~	~~7501628.43~~	~~>LDR~~
Fe	56	72	He	39695.5398	ug/l	2.3	105254771.77	
Co	59	72	He	34.8484	ug/l	1.5	192596.27	
As	75	72	He	15.1476	ug/l	3.1	5490.56	

SC 9/27/22
see Dilution

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2747851.42	2.2	3482217.34	78.91	
Sc	45	He	125945.85	1.8	160566.51	78.44	
Ge	72	He	105437.73	1.1	125774.49	83.83	

Sample Report

Sample Name K2210884-005

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:20:26

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	589.7554	ug/l	1.5	7857114.46	
Al	27	45	No Gas	4.9696	ug/l	1.4	63754.59	
Na	23	45	He	44082.6877	ug/l	1.3	24105779.64	
Mg	24	45	He	24106.4624	ug/l	1.4	6489489.70	
Mn	55	72	He	1836.7750	ug/l	1.7	3054028.18	
Fe	56	72	He	16740.8121	ug/l	1.5	48981704.27	
Co	59	72	He	8.1744	ug/l	2.3	49849.49	
As	75	72	He	364.5893	ug/l	1.3	145735.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3019542.25	2.1	3482217.34	86.71	
Sc	45	He	136231.22	1.1	160566.51	84.84	
Ge	72	He	116348.11	1.9	125774.49	92.51	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 119_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:22:06

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.3139	ug/l	1.7	334612.98	97.26	
Al	27	45	No Gas	241.6908	ug/l	1.6	3098873.70	96.68	
Na	23	45	He	1941.1791	ug/l	2.4	1139712.87	97.06	
Mg	24	45	He	1939.9174	ug/l	0.9	544679.69	97	
Mn	55	72	He	23.8002	ug/l	1.1	39666.06	95.2	
Fe	56	72	He	247.8949	ug/l	1.1	727134.13	99.16	
Co	59	72	He	25.1791	ug/l	0.8	153809.93	100.72	
As	75	72	He	24.8028	ug/l	1.5	9935.90	99.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3117420.68	2.9	3482217.34	89.52	
Sc	45	He	142074.80	0.6	160566.51	88.48	
Ge	72	He	116532.60	0.8	125774.49	92.65	

Continuing Calibration Blank (CCB) Report

JL
9/27/22

Sample Name	CCB
File Name	120_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:23:46
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1238	ug/l	5.7	1933.49	CCB Failed
Al	27	45	No Gas	0.0053	ug/l	149.4	2203.49	
Na	23	45	He	-2.4156	ug/l	N/A	32820.81	
Mg	24	45	He	0.4059	ug/l	57.0	116.67	
Mn	55	72	He	0.0524	ug/l	77.9	113.33	
Fe	56	72	He	0.2379	ug/l	43.1	1310.09	
Co	59	72	He	0.0022	ug/l	168.4	20.00	
As	75	72	He	0.0048	ug/l	26.5	6.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3112176.72	0.6	3482217.34	89.37	
Sc	45	He	142223.09	1.0	160566.51	88.58	
Ge	72	He	118415.60	1.0	125774.49	94.15	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 121_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:30:17

Sample Type CCB

Comment —

ISTD Ref FileName 006CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0644	ug/l	4.8	1113.39	
Al	27	45	No Gas	0.0036	ug/l	185.9	2175.15	
Na	23	45	He	-2.7836	ug/l	N/A	31501.93	
Mg	24	45	He	0.0508	ug/l	42.9	16.67	
Mn	55	72	He	0.0056	ug/l	334.1	33.33	
Fe	56	72	He	0.0844	ug/l	37.5	820.04	
Co	59	72	He	-0.0006	ug/l	N/A	2.22	
As	75	72	He	0.0028	ug/l	133.9	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3100745.58	3.2	3482217.34	89.05	
Sc	45	He	137471.59	1.6	160566.51	85.62	
Ge	72	He	113710.77	1.6	125774.49	90.41	

Sample Report

Sample Name K2210884-006

File Name 122SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:31:58

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.6214	ug/l	3.2	43620.02	
Al	27	45	No Gas	4.5596	ug/l	2.2	52801.79	
Na	23	45	He	24877.0388	ug/l	1.4	11972368.99	
Mg	24	45	He	16262.8616	ug/l	1.3	3849086.09	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8366.2400~~	~~ug/l~~	~~1.3~~	~~11887521.90~~	~~>LDR~~
Fe	56	72	He	2.7927	ug/l	5.3	7491.78	
Co	59	72	He	309.5298	ug/l	0.8	1613046.43	
As	75	72	He	0.2718	ug/l	28.6	96.33	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2718179.75	2.5	3482217.34	78.06	
Sc	45	He	119775.95	1.3	160566.51	74.6	
Ge	72	He	99419.07	1.1	125774.49	79.05	

Sample Report

Sample Name K2210884-007
File Name 123SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:33:38
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.2989	ug/l	5.1	14435.96	
Al	27	45	No Gas	6.4295	ug/l	2.1	67449.43	
Na	23	45	He	46714.2793	ug/l	2.6	20536532.61	
Mg	24	45	He	112149.4391	ug/l	1.3	24277107.97	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~27725.0332~~	~~ug/l~~	~~1.7~~	~~35106647.81~~	~~>LDR~~
Fe	56	72	He	509.5255	ug/l	1.5	1135783.79	
Co	59	72	He	17.3511	ug/l	1.2	80585.86	
As	75	72	He	0.0560	ug/l	32.3	20.33	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2487902.93	2.3	3482217.34	71.45	
Sc	45	He	109546.00	1.3	160566.51	68.22	
Ge	72	He	88602.55	1.4	125774.49	70.45	

Sample Report

Sample Name K2210884-008

File Name 124SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:35:18

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.2006	ug/l	1.9	54639.99	
Al	27	45	No Gas	4.6024	ug/l	0.8	46536.13	
Na	23	45	He	47090.9907	ug/l	2.9	20245320.95	
Mg	24	45	He	30895.1986	ug/l	0.4	6539973.44	
Mn	55	72	He	16198.2653	ug/l	2.1	20718893.86	>LDR
~~Fe~~	~~56~~	~~72~~	~~He~~	~~190282.6493~~	~~ug/l~~	~~2.3~~	~~428284526.95~~	~~>LDR~~
Co	59	72	He	171.5150	ug/l	0.4	804639.34	
As	75	72	He	0.1344	ug/l	21.8	44.67	

9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2373560.02	1.8	3482217.34	68.16	
Sc	45	He	107114.88	0.5	160566.51	66.71	
Ge	72	He	89497.52	0.8	125774.49	71.16	

Sample Report

Sample Name K2210884-009

File Name 125SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:36:58

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	16.7880	ug/l	1.1	208157.52	
Al	27	45	No Gas	13.1105	ug/l	1.5	153207.80	
Na	23	45	He	19514.5723	ug/l	2.7	10614422.13	
Mg	24	45	He	50675.0762	ug/l	1.5	13547083.97	
Mn	55	72	He	1.4171	ug/l	5.8	2263.55	
Fe	56	72	He	3.3718	ug/l	1.7	9943.11	
Co	59	72	He	0.1840	ug/l	7.2	1072.26	
As	75	72	He	0.6014	ug/l	13.3	232.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2807160.90	2.0	3482217.34	80.61	
Sc	45	He	135285.26	1.0	160566.51	84.25	
Ge	72	He	110592.94	0.6	125774.49	87.93	

Sample Report

Sample Name K2210884-010

File Name 126SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:38:38

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	60.8123	ug/l	1.9	774694.73	
Al	27	45	No Gas	7.8189	ug/l	3.7	94737.04	
Na	23	45	He	21126.0840	ug/l	0.7	11083613.17	
Mg	24	45	He	17870.8652	ug/l	0.7	4608927.12	
Mn	55	72	He	1759.3244	ug/l	0.4	2707125.90	
Fe	56	72	He	566.9506	ug/l	0.9	1535636.02	
Co	59	72	He	10.4810	ug/l	1.7	59142.94	
As	75	72	He	0.6197	ug/l	7.1	233.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2886394.65	1.3	3482217.34	82.89	
Sc	45	He	130502.36	0.3	160566.51	81.28	
Ge	72	He	107651.57	1.2	125774.49	85.59	

Sample Report

Sample Name K2210884-011

File Name 127SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:40:18

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	24.0559	ug/l	0.8	347316.57	
Al	27	45	No Gas	9.4057	ug/l	1.3	128656.84	
Na	23	45	He	27052.4785	ug/l	2.0	14312813.12	
Mg	24	45	He	61220.2214	ug/l	2.1	15933327.26	
Mn	55	72	He	0.8697	ug/l	17.1	1343.41	
Fe	56	72	He	1.9079	ug/l	2.9	5731.12	
Co	59	72	He	0.0297	ug/l	12.4	173.34	
As	75	72	He	0.1312	ug/l	2.7	52.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3269474.12	1.4	3482217.34	93.89	
Sc	45	He	131937.71	14.1	160566.51	82.17	
Ge	72	He	107736.27	13.0	125774.49	85.66	

Sample Report

Sample Name K2210884-012
File Name 128SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:41:59
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	237.3640	ug/l	1.2	3119564.23	
Al	27	45	No Gas	4.6015	ug/l	3.4	58362.53	
Na	23	45	He	27043.3091	ug/l	0.6	14122814.37	
Mg	24	45	He	16427.1275	ug/l	1.3	4219673.27	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4519.5603~~	~~ug/l~~	~~1.6~~	~~7017567.60~~	~~>LDR~~
Fe	56	72	He	718.4086	ug/l	1.8	1963438.10	
Co	59	72	He	1.1416	ug/l	1.1	6506.83	
As	75	72	He	0.1018	ug/l	29.0	42.00	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2978372.35	2.3	3482217.34	85.53	
Sc	45	He	129985.16	0.8	160566.51	80.95	
Ge	72	He	108637.36	0.5	125774.49	86.37	

Sample Report

Sample Name	K2210884-013
File Name	129SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:43:39
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	377.1365	ug/l	0.5	5150027.84	
Al	27	45	No Gas	18.5766	ug/l	0.8	238434.97	
Na	23	45	He	28956.9430	ug/l	1.2	16898374.75	
Mg	24	45	He	90668.2169	ug/l	0.5	26031520.44	
Mn	55	72	He	0.7443	ug/l	13.8	1283.41	
Fe	56	72	He	1.6670	ug/l	7.4	5561.03	
Co	59	72	He	0.0358	ug/l	9.9	227.78	
As	75	72	He	0.1594	ug/l	23.3	69.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3094238.81	0.8	3482217.34	88.86	
Sc	45	He	145284.82	1.3	160566.51	90.48	
Ge	72	He	118194.41	2.2	125774.49	93.97	

Sample Report

Sample Name K2210884-014

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:45:19

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	550.3235	ug/l	2.0	6697434.48	
Al	27	45	No Gas	4.7984	ug/l	1.1	56296.08	
Na	23	45	He	29496.4012	ug/l	1.0	15028450.61	
Mg	24	45	He	25204.1447	ug/l	1.2	6318326.57	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~5446.9239~~	~~ug/l~~	~~0.6~~	~~8143787.38~~	~~>LDR~~
Fe	56	72	He	15123.1088	ug/l	1.8	39786571.91	
Co	59	72	He	4.7668	ug/l	1.4	26145.37	
As	75	72	He	0.1579	ug/l	12.5	60.67	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2757733.40	0.4	3482217.34	79.19	
Sc	45	He	126844.87	1.1	160566.51	79	
Ge	72	He	104606.25	0.8	125774.49	83.17	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	131_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:46:59
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.9826	ug/l	3.9	338566.92	99.93	
Al	27	45	No Gas	248.8130	ug/l	0.6	3143993.49	99.53	
Na	23	45	He	1968.8268	ug/l	3.0	1160279.49	98.44	
Mg	24	45	He	1942.1604	ug/l	0.7	547556.22	97.11	
Mn	55	72	He	24.9533	ug/l	2.2	41764.30	99.81	
Fe	56	72	He	250.6991	ug/l	1.6	738587.49	100.28	
Co	59	72	He	25.1318	ug/l	1.5	154200.11	100.53	
As	75	72	He	25.3926	ug/l	0.9	10218.07	101.57	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3071099.33	2.8	3482217.34	88.19	
Sc	45	He	142659.91	0.0	160566.51	88.85	
Ge	72	He	117059.08	1.8	125774.49	93.07	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	132_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:48:39
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0893	ug/l	5.7	1446.75	
Al	27	45	No Gas	0.0294	ug/l	17.9	2490.21	
Na	23	45	He	-2.6483	ug/l	N/A	32313.20	
Mg	24	45	He	0.1918	ug/l	104.3	56.67	
Mn	55	72	He	0.0317	ug/l	78.6	76.67	
Fe	56	72	He	0.0904	ug/l	44.2	853.38	
Co	59	72	He	0.0006	ug/l	86.5	10.00	
As	75	72	He	-0.0024	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085661.52	1.7	3482217.34	88.61	
Sc	45	He	140626.19	2.1	160566.51	87.58	
Ge	72	He	115777.06	1.0	125774.49	92.05	

Sample Report

Sample Name K2210884-015

File Name 133SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:50:20

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	457.0016	ug/l	0.9	6666587.40	
Al	27	45	No Gas	17.2505	ug/l	1.1	236702.83	
Na	23	45	He	44310.4769	ug/l	3.0	27428312.92	
Mg	24	45	He	75768.2562	ug/l	2.1	23090928.82	
Mn	55	72	He	0.4025	ug/l	28.5	746.70	
Fe	56	72	He	2.5255	ug/l	5.9	8579.00	
Co	59	72	He	0.0331	ug/l	19.3	223.33	
As	75	72	He	0.2104	ug/l	9.8	95.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3305913.18	1.9	3482217.34	94.94	
Sc	45	He	154252.33	2.1	160566.51	96.07	
Ge	72	He	125056.59	0.9	125774.49	99.43	

Sample Report

Sample Name K2210884-016

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:52:01

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	518.0769	ug/l	1.7	7163982.60	
Al	27	45	No Gas	4.7490	ug/l	1.4	63324.64	
Na	23	45	He	49656.4135	ug/l	1.1	28715475.40	
Mg	24	45	He	23580.3957	ug/l	2.8	6712604.69	
Mn	55	72	He	2337.8566	ug/l	0.9	3839372.75	
Fe	56	72	He	4132.8453	ug/l	1.6	11942977.32	
Co	59	72	He	1.8834	ug/l	0.9	11350.46	
As	75	72	He	0.8965	ug/l	9.7	357.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3133161.31	1.4	3482217.34	89.98	
Sc	45	He	144097.61	1.9	160566.51	89.74	
Ge	72	He	114915.28	2.6	125774.49	91.37	

Sample Report

Sample Name K2210884-017

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:53:41

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.5484	ug/l	2.6	7721.81	
Al	27	45	No Gas	13.9958	ug/l	1.2	180171.34	
Na	23	45	He	24465.9283	ug/l	0.9	14156004.37	
Mg	24	45	He	53431.8039	ug/l	0.7	15203033.10	
Mn	55	72	He	1.0136	ug/l	14.7	1736.80	
Fe	56	72	He	2.6896	ug/l	6.6	8602.43	
Co	59	72	He	0.1306	ug/l	6.1	817.80	
As	75	72	He	0.3107	ug/l	18.9	130.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3094491.41	1.1	3482217.34	88.87	
Sc	45	He	143980.50	0.6	160566.51	89.67	
Ge	72	He	118375.96	2.9	125774.49	94.12	

Sample Report

Sample Name K2210884-018

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:55:22

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.9890	ug/l	2.0	37249.02	
Al	27	45	No Gas	5.5796	ug/l	2.1	66330.28	
Na	23	45	He	25630.7231	ug/l	1.4	12737117.31	
Mg	24	45	He	17981.9655	ug/l	1.5	4394823.89	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~7007.9868~~	~~ug/l~~	~~1.4~~	~~10165047.35~~	~~>LDR~~
Fe	56	72	He	982.5310	ug/l	2.3	2508171.89	
Co	59	72	He	15.3175	ug/l	0.5	81495.63	
As	75	72	He	0.2501	ug/l	12.8	91.00	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2807809.02	0.7	3482217.34	80.63	
Sc	45	He	123682.94	1.4	160566.51	77.03	
Ge	72	He	101494.05	1.4	125774.49	80.7	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	137_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 15:28:23
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.4654	ug/l	2.2	329840.95	97.86	
Al	27	45	No Gas	245.7995	ug/l	4.7	3086196.62	98.32	
Na	23	45	He	1966.9691	ug/l	2.8	1052549.86	98.35	
Mg	24	45	He	1977.1994	ug/l	2.1	506185.51	98.86	
Mn	55	72	He	24.4034	ug/l	3.0	37587.96	97.61	
Fe	56	72	He	247.1790	ug/l	1.9	670215.93	98.87	
Co	59	72	He	24.7055	ug/l	3.0	139474.94	98.82	
As	75	72	He	24.2483	ug/l	4.5	8974.70	96.99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3053944.43	2.4	3482217.34	87.7	
Sc	45	He	129582.50	2.2	160566.51	80.7	
Ge	72	He	107748.75	2.5	125774.49	85.67	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 138_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 15:30:04

Sample Type CCB

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0494	ug/l	6.2	870.05	
Al	27	45	No Gas	0.0194	ug/l	26.0	2275.17	
Na	23	45	He	-8.1784	ug/l	N/A	27204.73	
Mg	24	45	He	0.1949	ug/l	21.5	53.33	
Mn	55	72	He	0.0090	ug/l	232.5	36.67	
Fe	56	72	He	0.0029	ug/l	722.6	560.02	
Co	59	72	He	0.0006	ug/l	163.6	8.89	
As	75	72	He	0.0026	ug/l	9.4	5.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2972286.73	1.9	3482217.34	85.36	
Sc	45	He	130979.19	1.6	160566.51	81.57	
Ge	72	He	108353.07	1.8	125774.49	86.15	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 27, 2022

Analytical Report for Service Request No: K2210884

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 20, 2022
For your reference, these analyses have been assigned our service request number **K2210884.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2210884
Project: Greene County Treatability
Date Received: 09/20/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Eighteen water samples were received for analysis at ALS Environmental on 09/20/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 09/27/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:	503-972-5019
Date:	9/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Comments/Preservation
1	MW-1-INF-20220913	9/13/2022	8:04	Water	1	X		X	HNO3 preserved.
2	MW-5-INF-20220913	9/13/2022	8:05	Water	1	X	X		HNO3 preserved.
3	MW-10-INF-20220913	9/13/2022	8:06	Water	1	X	X		HNO3 preserved.
4	MW-14-INF-20220913	9/13/2022	8:07	Water	1	X	X	X	HNO3 preserved.
5	MW-17-INF-20220913	9/13/2022	8:08	Water	1	X	X		HNO3 preserved.
6	MW-44H-INF-20220913	9/13/2022	8:09	Water	1			X	HNO3 preserved.
7									
8									
9									
10									
11									
12									
13									
14									
15									

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 9/19/22 8:30
Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by: ALS 9/20/22 0940

Signature/Print Name:

Received by:

Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/13/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Dissolved Sodium							
1	MW-1-HT-MMO-20220913	9/13/2022	10:22	Water	1	X		X	X	X	X	X	X							HNO3 preserved.
2	MW-1-FB-20220913	9/13/2022	10:23	Water	1	X		X	X											HNO3 preserved.
3	MW-5-HT-MMO-20220913	9/13/2022	10:24	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
4	MW-5-FB-20220913	9/13/2022	10:25	Water	1	X	X		X											HNO3 preserved.
5	MW-10-HT-MMO-20220913	9/13/2022	10:26	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
6	MW-10-FB-20220913	9/13/2022	10:27	Water	1	X	X		X											HNO3 preserved.
7	MW-14-HT-MMO-20220913	9/13/2022	10:28	Water	1	X	X	X	X	X	X	X	X							HNO3 preserved.
8	MW-14-FB-20220913	9/13/2022	10:29	Water	1	X	X	X	X											HNO3 preserved.
9	MW-17-HT-MMO-20220913	9/13/2022	10:30	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
10	MW-17-FB-20220913	9/13/2022	10:31	Water	1	X	X		X											HNO3 preserved.
11	MW-44H-HT-MMO-20220913	9/13/2022	10:32	Water	1			X	X	X	X	X	X							HNO3 preserved.
12	MW-44H-FB-20220913	9/13/2022	10:33	Water	1			X	X											HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	ALS 9/20/22 0940	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	8:30 9/19/22		
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM________

Cooler Receipt and Preservation Form

Client Anchor Service Request **K22**

Received: 9/20/22 Opened: 9/20/22 By: ______ Unloaded: 9/20/22 By: ______

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*__________ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front
   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.8		IR01		—	—		
5.2		''					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* __________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:__________

:__________

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 08:04
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-INF-20220913	**Basis:**	NA
Lab Code:	K2210884-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.22**	ug/L	0.50	0.09	1	09/27/22 14:13	09/23/22	
Cobalt	200.8	**262**	ug/L	0.020	0.009	1	09/27/22 14:13	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 08:05
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-INF-20220913	**Basis:**	NA
Lab Code:	K2210884-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**20.5**	ug/L	0.50	0.09	1	09/27/22 14:15	09/23/22	
Lithium	200.8	**86.7**	ug/L	0.10	0.10	1	09/27/22 14:15	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 08:06
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-INF-20220913	**Basis:**	NA
Lab Code:	K2210884-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**49.0**	ug/L	0.50	0.09	1	09/27/22 14:17	09/23/22	
Lithium	200.8	**254**	ug/L	0.10	0.10	1	09/27/22 14:17	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 08:07
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-INF-20220913	**Basis:**	NA
Lab Code:	K2210884-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**15.1**	ug/L	0.50	0.09	1	09/27/22 14:18	09/23/22	
Cobalt	200.8	**34.8**	ug/L	0.020	0.009	1	09/27/22 14:18	09/23/22	
Lithium	200.8	**572**	ug/L	0.10	0.10	1	09/27/22 14:18	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 08:08
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-INF-20220913	**Basis:**	NA
Lab Code:	K2210884-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**365**	ug/L	0.50	0.09	1	09/27/22 14:20	09/23/22	
Lithium	200.8	**590**	ug/L	0.10	0.10	1	09/27/22 14:20	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 08:09
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-INF-20220913	**Basis:**	NA
Lab Code:	K2210884-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**310**	ug/L	0.020	0.009	1	09/27/22 14:31	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:22
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-HT-MMO-20220913	**Basis:**	NA
Lab Code:	K2210884-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**6.4**	ug/L	4.0	0.5	1	09/27/22 14:33	09/23/22	
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	09/27/22 14:33	09/23/22	
Cobalt	200.8	**17.4**	ug/L	0.020	0.009	1	09/27/22 14:33	09/23/22	
Iron	200.8	**510**	ug/L	2.0	0.3	1	09/27/22 14:33	09/23/22	
Magnesium	200.8	**112000**	ug/L	10	2	1	09/27/22 14:33	09/23/22	
Manganese	200.8	**27100**	ug/L	10	2	50	09/27/22 12:30	09/23/22	
Sodium	200.8	**46700**	ug/L	50	20	1	09/27/22 14:33	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:23
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-FB-20220913	**Basis:**	NA
Lab Code:	K2210884-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	09/27/22 14:35	09/23/22	
Cobalt	200.8	**172**	ug/L	0.020	0.009	1	09/27/22 14:35	09/23/22	
Iron	200.8	**205000**	ug/L	10	2	5	09/27/22 11:53	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:24
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-HT-MMO-20220913	**Basis:**	NA
Lab Code:	K2210884-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**13.1**	ug/L	4.0	0.5	1	09/27/22 14:36	09/23/22	
Arsenic	200.8	**0.60**	ug/L	0.50	0.09	1	09/27/22 14:36	09/23/22	
Iron	200.8	**3.4**	ug/L	2.0	0.3	1	09/27/22 14:36	09/23/22	
Lithium	200.8	**16.8**	ug/L	0.10	0.10	1	09/27/22 14:36	09/23/22	
Magnesium	200.8	**50700**	ug/L	10	2	1	09/27/22 14:36	09/23/22	
Manganese	200.8	**1.42**	ug/L	0.20	0.04	1	09/27/22 14:36	09/23/22	
Sodium	200.8	**19500**	ug/L	50	20	1	09/27/22 14:36	09/23/22	

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2210884
Date Collected: 09/13/22 10:25
Date Received: 09/20/22 09:40

Sample Name: MW-5-FB-20220913
Lab Code: K2210884-010

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.62**	ug/L	0.50	0.09	1	09/27/22 14:38	09/23/22	
Iron	200.8	**567**	ug/L	2.0	0.3	1	09/27/22 14:38	09/23/22	
Lithium	200.8	**60.8**	ug/L	0.10	0.10	1	09/27/22 14:38	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:26
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-HT-MMO-20220913	**Basis:**	NA
Lab Code:	K2210884-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**9.4**	ug/L	4.0	0.5	1	09/27/22 14:40	09/23/22	
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	09/27/22 14:40	09/23/22	
Iron	200.8	**1.9 J**	ug/L	2.0	0.3	1	09/27/22 14:40	09/23/22	
Lithium	200.8	**24.1**	ug/L	0.10	0.10	1	09/27/22 14:40	09/23/22	
Magnesium	200.8	**61200**	ug/L	10	2	1	09/27/22 14:40	09/23/22	
Manganese	200.8	**0.87**	ug/L	0.20	0.04	1	09/27/22 14:40	09/23/22	
Sodium	200.8	**27100**	ug/L	50	20	1	09/27/22 14:40	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:27
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-FB-20220913	**Basis:**	NA
Lab Code:	K2210884-012		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	09/27/22 14:41	09/23/22	
Iron	200.8	**718**		ug/L	2.0	0.3	1	09/27/22 14:41	09/23/22	
Lithium	200.8	**237**		ug/L	0.10	0.10	1	09/27/22 14:41	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:28
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-HT-MMO-20220913	**Basis:**	NA
Lab Code:	K2210884-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**18.6**		ug/L	4.0	0.5	1	09/27/22 14:43	09/23/22	
Arsenic	200.8	**0.16**	**J**	ug/L	0.50	0.09	1	09/27/22 14:43	09/23/22	
Cobalt	200.8	**0.036**		ug/L	0.020	0.009	1	09/27/22 14:43	09/23/22	
Iron	200.8	**1.7**	**J**	ug/L	2.0	0.3	1	09/27/22 14:43	09/23/22	
Lithium	200.8	**377**		ug/L	0.10	0.10	1	09/27/22 14:43	09/23/22	
Magnesium	200.8	**90700**		ug/L	10	2	1	09/27/22 14:43	09/23/22	
Manganese	200.8	**0.74**		ug/L	0.20	0.04	1	09/27/22 14:43	09/23/22	
Sodium	200.8	**29000**		ug/L	50	20	1	09/27/22 14:43	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:29
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-FB-20220913	**Basis:**	NA
Lab Code:	K2210884-014		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.16**	**J**	ug/L	0.50	0.09	1	09/27/22 14:45	09/23/22	
Cobalt	200.8	**4.77**		ug/L	0.020	0.009	1	09/27/22 14:45	09/23/22	
Iron	200.8	**15100**		ug/L	2.0	0.3	1	09/27/22 14:45	09/23/22	
Lithium	200.8	**550**		ug/L	0.10	0.10	1	09/27/22 14:45	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:30
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-HT-MMO-20220913	**Basis:**	NA
Lab Code:	K2210884-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**17.3**	ug/L	4.0	0.5	1	09/27/22 14:50	09/23/22	
Arsenic	200.8	**0.21 J**	ug/L	0.50	0.09	1	09/27/22 14:50	09/23/22	
Iron	200.8	**2.5**	ug/L	2.0	0.3	1	09/27/22 14:50	09/23/22	
Lithium	200.8	**457**	ug/L	0.10	0.10	1	09/27/22 14:50	09/23/22	
Magnesium	200.8	**75800**	ug/L	10	2	1	09/27/22 14:50	09/23/22	
Manganese	200.8	**0.40**	ug/L	0.20	0.04	1	09/27/22 14:50	09/23/22	
Sodium	200.8	**44300**	ug/L	50	20	1	09/27/22 14:50	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:31
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-FB-20220913	**Basis:**	NA
Lab Code:	K2210884-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.90**	ug/L	0.50	0.09	1	09/27/22 14:52	09/23/22	
Iron	200.8	**4130**	ug/L	2.0	0.3	1	09/27/22 14:52	09/23/22	
Lithium	200.8	**518**	ug/L	0.10	0.10	1	09/27/22 14:52	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:32
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-HT-MMO-20220913	**Basis:**	NA
Lab Code:	K2210884-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**14.0**	ug/L	4.0	0.5	1	09/27/22 14:53	09/23/22	
Cobalt	200.8	**0.131**	ug/L	0.020	0.009	1	09/27/22 14:53	09/23/22	
Iron	200.8	**2.7**	ug/L	2.0	0.3	1	09/27/22 14:53	09/23/22	
Magnesium	200.8	**53400**	ug/L	10	2	1	09/27/22 14:53	09/23/22	
Manganese	200.8	**1.01**	ug/L	0.20	0.04	1	09/27/22 14:53	09/23/22	
Sodium	200.8	**24500**	ug/L	50	20	1	09/27/22 14:53	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/13/22 10:33
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-FB-20220913	**Basis:**	NA
Lab Code:	K2210884-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**15.3**	ug/L	0.020	0.009	1	09/27/22 14:55	09/23/22	
Iron	200.8	**983**	ug/L	2.0	0.3	1	09/27/22 14:55	09/23/22	

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2210884
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2216191-01

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	ND U	ug/L	4.0	0.5	1	09/27/22 12:23	09/23/22	
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	09/27/22 12:23	09/23/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	09/27/22 12:23	09/23/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	09/27/22 12:23	09/23/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	09/27/22 12:23	09/23/22	
Magnesium	200.8	ND U	ug/L	10	2	1	09/27/22 12:23	09/23/22	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	09/27/22 12:23	09/23/22	
Sodium	200.8	ND U	ug/L	50	20	1	09/27/22 12:23	09/23/22	

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2210884
Date Analyzed: 09/27/22

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216191-03			Duplicate Lab Control Sample KQ2216191-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	108	100	108	108	100	108	85-115	<1	20
Arsenic	200.8	49.0	50.0	98	49.8	50.0	100	85-115	2	20
Cobalt	200.8	25.8	25.0	103	25.8	25.0	103	85-115	<1	20
Iron	200.8	50.4	50.0	101	50.4	50.0	101	85-115	<1	20
Lithium	200.8	51.4	50.0	103	51.2	50.0	102	85-115	<1	20
Magnesium	200.8	261	250	104	252	250	101	85-115	4	20
Manganese	200.8	25.5	25.0	102	25.8	25.0	103	85-115	1	20
Sodium	200.8	264	250	106	258	250	103	85-115	2	20

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: Anchor QEA, LLC
Service Request: K2210884
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0
Extraction Lot: 406846
Analytical Method: 200.8
Extraction Date: 09/23/22 14:02

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-INF-20220913	K2210884-001	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-5-INF-20220913	K2210884-002	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-10-INF-20220913	K2210884-003	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-14-INF-20220913	K2210884-004	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-17-INF-20220913	K2210884-005	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-44H-INF-20220913	K2210884-006	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-1-HT-MMO-20220913	K2210884-007	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-1-FB-20220913	K2210884-008	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-5-HT-MMO-20220913	K2210884-009	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-5-FB-20220913	K2210884-010	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220913	K2210884-011	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-10-FB-20220913	K2210884-012	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220913	K2210884-013	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-14-FB-20220913	K2210884-014	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220913	K2210884-015	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-17-FB-20220913	K2210884-016	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-44H-HT-MMO-20220913	K2210884-017	9/13/22	9/20/22	10.0000 mL	10 mL	
MW-44H-FB-20220913	K2210884-018	9/13/22	9/20/22	10.0000 mL	10 mL	
Method Blank	KQ2216191-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216191-03LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate Lab Control Sample	KQ2216191-04DLCS	NA	NA	10.0000 mL	10.4 mL	

Printed 9/27/2022 4:44:39 PM
Superset Reference:

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 09/27/22 09:31						
Arsenic	200.8	779009	24.8	25.0	99	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Lithium	200.8	779009	26.5	25.0	106	90-110
Aluminum	200.8	779009	103	100	103	90-110
Iron	200.8	779009	49.5	50.0	99	90-110
Magnesium	200.8	779009	240	250	96	90-110
Manganese	200.8	779009	24.6	25.0	98	90-110
Sodium	200.8	779009	233	250	93	90-110
CCV 09/27/22 09:33						
Arsenic	200.8	779009	24.6	25.0	98	90-110
Cobalt	200.8	779009	24.9	25.0	100	90-110
Lithium	200.8	779009	25.8	25.0	103	90-110
Aluminum	200.8	779009	252	250	101	90-110
Iron	200.8	779009	249	250	99	90-110
Magnesium	200.8	779009	1950	2000	98	90-110
Manganese	200.8	779009	24.5	25.0	98	90-110
Sodium	200.8	779009	1960	2000	98	90-110
CCV 09/27/22 10:43						
Arsenic	200.8	779009	24.7	25.0	99	90-110
Cobalt	200.8	779009	25.5	25.0	102	90-110
Lithium	200.8	779009	25.9	25.0	104	90-110
Aluminum	200.8	779009	251	250	101	90-110
Iron	200.8	779009	252	250	101	90-110
Magnesium	200.8	779009	2000	2000	100	90-110
Manganese	200.8	779009	25.4	25.0	102	90-110
Sodium	200.8	779009	1980	2000	99	90-110
CCV 09/27/22 11:03						
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Lithium	200.8	779009	25.3	25.0	101	90-110
Aluminum	200.8	779009	244	250	98	90-110
Iron	200.8	779009	252	250	101	90-110
Magnesium	200.8	779009	1970	2000	99	90-110
Manganese	200.8	779009	25.1	25.0	100	90-110
Sodium	200.8	779009	2020	2000	101	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/27/22 11:16						
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Lithium	200.8	779009	25.6	25.0	102	90-110
Aluminum	200.8	779009	251	250	100	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1980	2000	99	90-110
Manganese	200.8	779009	24.7	25.0	99	90-110
Sodium	200.8	779009	1970	2000	99	90-110
CCV 09/27/22 11:50						
Arsenic	200.8	779009	24.9	25.0	99	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Lithium	200.8	779009	25.2	25.0	101	90-110
Aluminum	200.8	779009	252	250	101	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1910	2000	95	90-110
Manganese	200.8	779009	24.9	25.0	100	90-110
Sodium	200.8	779009	1940	2000	97	90-110
CCV 09/27/22 12:10						
Arsenic	200.8	779009	24.6	25.0	98	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Lithium	200.8	779009	25.4	25.0	102	90-110
Aluminum	200.8	779009	251	250	100	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1950	2000	97	90-110
Manganese	200.8	779009	25.2	25.0	101	90-110
Sodium	200.8	779009	1970	2000	98	90-110
CCV 09/27/22 12:33						
Arsenic	200.8	779009	24.7	25.0	99	90-110
Cobalt	200.8	779009	24.9	25.0	99	90-110
Lithium	200.8	779009	25.8	25.0	103	90-110
Aluminum	200.8	779009	254	250	101	90-110
Iron	200.8	779009	249	250	100	90-110
Magnesium	200.8	779009	1960	2000	98	90-110
Manganese	200.8	779009	24.5	25.0	98	90-110
Sodium	200.8	779009	1960	2000	98	90-110

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/27/22 13:06						
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Lithium	200.8	779009	25.3	25.0	101	90-110
Aluminum	200.8	779009	254	250	102	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1960	2000	98	90-110
Manganese	200.8	779009	24.7	25.0	99	90-110
Sodium	200.8	779009	1960	2000	98	90-110
CCV 09/27/22 13:26						
Arsenic	200.8	779009	24.9	25.0	100	90-110
Cobalt	200.8	779009	24.9	25.0	100	90-110
Lithium	200.8	779009	24.7	25.0	99	90-110
Aluminum	200.8	779009	245	250	98	90-110
Iron	200.8	779009	250	250	100	90-110
Magnesium	200.8	779009	1930	2000	96	90-110
Manganese	200.8	779009	25.2	25.0	101	90-110
Sodium	200.8	779009	1890	2000	95	90-110
CCV 09/27/22 13:58						
Arsenic	200.8	779009	24.5	25.0	98	90-110
Cobalt	200.8	779009	24.5	25.0	98	90-110
Lithium	200.8	779009	24.3	25.0	97	90-110
Aluminum	200.8	779009	244	250	97	90-110
Iron	200.8	779009	246	250	98	90-110
Magnesium	200.8	779009	1950	2000	97	90-110
Manganese	200.8	779009	24.3	25.0	97	90-110
Sodium	200.8	779009	1930	2000	96	90-110
CCV 09/27/22 14:22						
Arsenic	200.8	779009	24.8	25.0	99	90-110
Cobalt	200.8	779009	25.2	25.0	101	90-110
Lithium	200.8	779009	24.3	25.0	97	90-110
Aluminum	200.8	779009	242	250	97	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1940	2000	97	90-110
Manganese	200.8	779009	23.8	25.0	95	90-110
Sodium	200.8	779009	1940	2000	97	90-110

Client:	Anchor QEA, LLC	**Service Request:** K2210884
Project:	Greene County Treatability/221114-01.05 Task 05	

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
CCV 09/27/22 14:46						
Arsenic	200.8	779009	25.4	25.0	102	90-110
Cobalt	200.8	779009	25.1	25.0	101	90-110
Lithium	200.8	779009	25.0	25.0	100	90-110
Aluminum	200.8	779009	249	250	100	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1940	2000	97	90-110
Manganese	200.8	779009	25.0	25.0	100	90-110
Sodium	200.8	779009	1970	2000	98	90-110
CCV 09/27/22 15:28						
Arsenic	200.8	779009	24.2	25.0	97	90-110
Cobalt	200.8	779009	24.7	25.0	99	90-110
Lithium	200.8	779009	24.5	25.0	98	90-110
Aluminum	200.8	779009	246	250	98	90-110
Iron	200.8	779009	247	250	99	90-110
Magnesium	200.8	779009	1980	2000	99	90-110
Manganese	200.8	779009	24.4	25.0	98	90-110
Sodium	200.8	779009	1970	2000	98	90-110

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
ICB 09/27/22 09:35				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 09:36				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 10:45				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 11:05				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 09/27/22 11:18				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 11:51				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 12:12				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 12:34				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
CCB 09/27/22 13:08				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 13:35				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 14:00				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 14:30				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 09/27/22 14:48				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
CCB 09/27/22 15:30				
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Lithium	200.8	779009	0.10	U
Aluminum	200.8	779009	0.5	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Arsenic	200.8	779009	0.51	0.5	102	50-199	09/27/22 09:38
Cobalt	200.8	779009	0.017	0.02	87	50-199	09/27/22 09:38
Lithium	200.8	779009	0.11	0.1	113	50-199	09/27/22 09:38
Aluminum	200.8	779009	4.0	4.0	101	50-199	09/27/22 09:38
Iron	200.8	779009	2.1	2.0	107	50-199	09/27/22 09:38
Magnesium	200.8	779009	9.8	10.0	98	50-199	09/27/22 09:38
Manganese	200.8	779009	0.19	0.2	96	50-199	09/27/22 09:38
Sodium	200.8	779009	40.9	50.0	82	50-199	09/27/22 09:38

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-05 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.1	0.1	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.2	0.04	200.8
Sodium	23	ug/L	50	20	200.8

Client:	Anchor QEA, LLC	**Service Request:**	K2210884
Project:	Greene County Treatability/221114-01.05 Task 05		

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	3150	200.8
Cobalt 59	3150	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	3150	200.8
Sodium 23	450000	200.8

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 09:28								
ZZZZZZ	1	09/27/22 09:30								
ICV	1	09/27/22 09:31	X	X	X	X	X	X	X	X
CCV	1	09/27/22 09:33	X	X	X	X	X	X	X	X
ICB	1	09/27/22 09:35	X	X	X	X	X	X	X	X
CCB	1	09/27/22 09:36	X	X	X	X	X	X	X	X
LLICVW	1	09/27/22 09:38	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 09:40								
ZZZZZZ	1	09/27/22 09:42								
ZZZZZZ	1	09/27/22 09:43								
ZZZZZZ	1	09/27/22 09:45								
ZZZZZZ	1	09/27/22 09:48								
ZZZZZZ	1	09/27/22 09:50								
ZZZZZZ	1	09/27/22 09:52								
ZZZZZZ	1	09/27/22 09:54								
ZZZZZZ	5	09/27/22 10:40								
ZZZZZZ	5	09/27/22 10:41								
CCV	1	09/27/22 10:43	X	X	X	X	X	X	X	X
CCB	1	09/27/22 10:45	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 10:46								
ZZZZZZ	5	09/27/22 10:48								
ZZZZZZ	5	09/27/22 10:50								
ZZZZZZ	5	09/27/22 10:51								
ZZZZZZ	5	09/27/22 10:53								
ZZZZZZ	5	09/27/22 10:55								
ZZZZZZ	5	09/27/22 10:56								
ZZZZZZ	5	09/27/22 10:58								
ZZZZZZ	5	09/27/22 11:00								
ZZZZZZ	5	09/27/22 11:01								
CCV	1	09/27/22 11:03	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:05	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 11:06								
ZZZZZZ	5	09/27/22 11:08								
ZZZZZZ	5	09/27/22 11:10								
ZZZZZZ	5	09/27/22 11:12								
CCV	1	09/27/22 11:16	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:18	X	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 11:33								
KQ2216191-03LCS	1	09/27/22 11:35	X	X	X	X	X	X	X	X
KQ2216191-04DLCS	1	09/27/22 11:36	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 11:38								
ZZZZZZ	5	09/27/22 11:40								
ZZZZZZ	5	09/27/22 11:41								
ZZZZZZ	5	09/27/22 11:43								
ZZZZZZ	5	09/27/22 11:45								
ZZZZZZ	5	09/27/22 11:46								
ZZZZZZ	5	09/27/22 11:48								
CCV	1	09/27/22 11:50	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:51	X	X	X	X	X	X	X	X
K2210884-008	5	09/27/22 11:53				X				
ZZZZZZ	5	09/27/22 11:55								
ZZZZZZ	5	09/27/22 11:56								
ZZZZZZ	5	09/27/22 11:58								
ZZZZZZ	5	09/27/22 12:00								
ZZZZZZ	5	09/27/22 12:02								
ZZZZZZ	5	09/27/22 12:03								
ZZZZZZ	5	09/27/22 12:05								
ZZZZZZ	5	09/27/22 12:07								
ZZZZZZ	5	09/27/22 12:08								
CCV	1	09/27/22 12:10	X	X	X	X	X	X	X	X
CCB	1	09/27/22 12:12	X	X	X	X	X	X	X	X
KQ2216191-01MB	1	09/27/22 12:23	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 12:25								
K2210884-007	50	09/27/22 12:30							X	
CCV	1	09/27/22 12:33	X	X	X	X	X	X	X	X
CCB	1	09/27/22 12:34	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 12:46								
ZZZZZZ	1	09/27/22 12:48								
ZZZZZZ	1	09/27/22 12:49								
ZZZZZZ	1	09/27/22 12:51								
ZZZZZZ	1	09/27/22 12:53								
ZZZZZZ	1	09/27/22 12:58								
ZZZZZZ	1	09/27/22 12:59								
ZZZZZZ	1	09/27/22 13:01								

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Service Request: K2210884

Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05**

Analytical BatchID: **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 13:03								
ZZZZZZ	1	09/27/22 13:04								
CCV	1	09/27/22 13:06	X	X	X	X	X	X	X	X
CCB	1	09/27/22 13:08	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:09								
ZZZZZZ	1	09/27/22 13:11								
ZZZZZZ	1	09/27/22 13:13								
ZZZZZZ	1	09/27/22 13:14								
ZZZZZZ	1	09/27/22 13:16								
ZZZZZZ	1	09/27/22 13:18								
ZZZZZZ	1	09/27/22 13:19								
ZZZZZZ	1	09/27/22 13:21								
ZZZZZZ	1	09/27/22 13:23								
ZZZZZZ	1	09/27/22 13:24								
CCV	1	09/27/22 13:26	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:28								
CCB	1	09/27/22 13:35	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:37								
ZZZZZZ	100	09/27/22 13:41								
ZZZZZZ	100	09/27/22 13:43								
ZZZZZZ	1	09/27/22 13:46								
ZZZZZZ	1	09/27/22 13:48								
ZZZZZZ	1	09/27/22 13:50								
ZZZZZZ	1	09/27/22 13:51								
ZZZZZZ	1	09/27/22 13:53								
ZZZZZZ	1	09/27/22 13:55								
ZZZZZZ	1	09/27/22 13:56								
CCV	1	09/27/22 13:58	X	X	X	X	X	X	X	X
CCB	1	09/27/22 14:00	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 14:01								
ZZZZZZ	1	09/27/22 14:03								
ZZZZZZ	1	09/27/22 14:05								
ZZZZZZ	1	09/27/22 14:06								
ZZZZZZ	1	09/27/22 14:08								
K2210884-001	1	09/27/22 14:13		X	X					
K2210884-002	1	09/27/22 14:15		X			X			
K2210884-003	1	09/27/22 14:17		X			X			

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
K2210884-004	1	09/27/22 14:18		X	X		X			
K2210884-005	1	09/27/22 14:20		X			X			
CCV	1	09/27/22 14:22	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 14:23								
CCB	1	09/27/22 14:30	X	X	X	X	X	X	X	X
K2210884-006	1	09/27/22 14:31			X					
K2210884-007	1	09/27/22 14:33	X	X	X	X		X		X
K2210884-008	1	09/27/22 14:35		X	X					
K2210884-009	1	09/27/22 14:36	X	X		X	X	X	X	X
K2210884-010	1	09/27/22 14:38		X		X	X			
K2210884-011	1	09/27/22 14:40	X	X		X	X	X	X	X
K2210884-012	1	09/27/22 14:41		X		X	X			
K2210884-013	1	09/27/22 14:43	X	X	X	X	X	X	X	X
K2210884-014	1	09/27/22 14:45		X	X	X	X			
CCV	1	09/27/22 14:46	X	X	X	X	X	X	X	X
CCB	1	09/27/22 14:48	X	X	X	X	X	X	X	X
K2210884-015	1	09/27/22 14:50	X	X		X	X	X	X	X
K2210884-016	1	09/27/22 14:52		X		X	X			
K2210884-017	1	09/27/22 14:53	X		X	X		X	X	X
K2210884-018	1	09/27/22 14:55			X	X				
CCV	1	09/27/22 15:28	X	X	X	X	X	X	X	X
CCB	1	09/27/22 15:30	X	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 09:28			
ZZZZZZ	09/27/22 09:30			
ICV	09/27/22 09:31	99	101	103
CCV	09/27/22 09:33	99	100	103
ICB	09/27/22 09:35	100	99	101
CCB	09/27/22 09:36	100	100	102
LLICVW	09/27/22 09:38	99	99	103
ZZZZZZ	09/27/22 09:40			
ZZZZZZ	09/27/22 09:42			
ZZZZZZ	09/27/22 09:43			
ZZZZZZ	09/27/22 09:45			
ZZZZZZ	09/27/22 09:48			
ZZZZZZ	09/27/22 09:50			
ZZZZZZ	09/27/22 09:52			
ZZZZZZ	09/27/22 09:54			
ZZZZZZ	09/27/22 10:40			
ZZZZZZ	09/27/22 10:41			
CCV	09/27/22 10:43	93	90	93
CCB	09/27/22 10:45	92	90	92
ZZZZZZ	09/27/22 10:46			
ZZZZZZ	09/27/22 10:48			
ZZZZZZ	09/27/22 10:50			
ZZZZZZ	09/27/22 10:51			
ZZZZZZ	09/27/22 10:53			
ZZZZZZ	09/27/22 10:55			
ZZZZZZ	09/27/22 10:56			
ZZZZZZ	09/27/22 10:58			
ZZZZZZ	09/27/22 11:00			
ZZZZZZ	09/27/22 11:01			
CCV	09/27/22 11:03	90	88	91
CCB	09/27/22 11:05	91	89	91
ZZZZZZ	09/27/22 11:06			
ZZZZZZ	09/27/22 11:08			
ZZZZZZ	09/27/22 11:10			
ZZZZZZ	09/27/22 11:12			
CCV	09/27/22 11:16	92	92	96
CCB	09/27/22 11:18	91	92	95

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 11:33			
KQ2216191-03LCS	09/27/22 11:35	90	87	91
KQ2216191-04DLCS	09/27/22 11:36	90	88	91
ZZZZZZ	09/27/22 11:38			
ZZZZZZ	09/27/22 11:40			
ZZZZZZ	09/27/22 11:41			
ZZZZZZ	09/27/22 11:43			
ZZZZZZ	09/27/22 11:45			
ZZZZZZ	09/27/22 11:46			
ZZZZZZ	09/27/22 11:48			
CCV	09/27/22 11:50	93	93	95
CCB	09/27/22 11:51	92	91	95
K2210884-008	09/27/22 11:53	80	77	81
ZZZZZZ	09/27/22 11:55			
ZZZZZZ	09/27/22 11:56			
ZZZZZZ	09/27/22 11:58			
ZZZZZZ	09/27/22 12:00			
ZZZZZZ	09/27/22 12:02			
ZZZZZZ	09/27/22 12:03			
ZZZZZZ	09/27/22 12:05			
ZZZZZZ	09/27/22 12:07			
ZZZZZZ	09/27/22 12:08			
CCV	09/27/22 12:10	98	97	101
CCB	09/27/22 12:12	96	94	97
KQ2216191-01MB	09/27/22 12:23	90	89	92
ZZZZZZ	09/27/22 12:25			
K2210884-007	09/27/22 12:30	91	90	94
CCV	09/27/22 12:33	91	90	93
CCB	09/27/22 12:34	90	87	92
ZZZZZZ	09/27/22 12:46			
ZZZZZZ	09/27/22 12:48			
ZZZZZZ	09/27/22 12:49			
ZZZZZZ	09/27/22 12:51			
ZZZZZZ	09/27/22 12:53			
ZZZZZZ	09/27/22 12:58			
ZZZZZZ	09/27/22 12:59			
ZZZZZZ	09/27/22 13:01			

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 13:03			
ZZZZZZ	09/27/22 13:04			
CCV	09/27/22 13:06	95	93	97
CCB	09/27/22 13:08	92	92	95
ZZZZZZ	09/27/22 13:09			
ZZZZZZ	09/27/22 13:11			
ZZZZZZ	09/27/22 13:13			
ZZZZZZ	09/27/22 13:14			
ZZZZZZ	09/27/22 13:16			
ZZZZZZ	09/27/22 13:18			
ZZZZZZ	09/27/22 13:19			
ZZZZZZ	09/27/22 13:21			
ZZZZZZ	09/27/22 13:23			
ZZZZZZ	09/27/22 13:24			
CCV	09/27/22 13:26	89	89	93
ZZZZZZ	09/27/22 13:28			
CCB	09/27/22 13:35	89	88	92
ZZZZZZ	09/27/22 13:37			
ZZZZZZ	09/27/22 13:41			
ZZZZZZ	09/27/22 13:43			
ZZZZZZ	09/27/22 13:46			
ZZZZZZ	09/27/22 13:48			
ZZZZZZ	09/27/22 13:50			
ZZZZZZ	09/27/22 13:51			
ZZZZZZ	09/27/22 13:53			
ZZZZZZ	09/27/22 13:55			
ZZZZZZ	09/27/22 13:56			
CCV	09/27/22 13:58	80	80	85
CCB	09/27/22 14:00	81	80	83
ZZZZZZ	09/27/22 14:01			
ZZZZZZ	09/27/22 14:03			
ZZZZZZ	09/27/22 14:05			
ZZZZZZ	09/27/22 14:06			
ZZZZZZ	09/27/22 14:08			
K2210884-001	09/27/22 14:13	72	68	73
K2210884-002	09/27/22 14:15	76	76	86
K2210884-003	09/27/22 14:17	81	80	84

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210884
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
K2210884-004	09/27/22 14:18	79	78	84
K2210884-005	09/27/22 14:20	87	85	93
CCV	09/27/22 14:22	90	88	93
ZZZZZZ	09/27/22 14:23			
CCB	09/27/22 14:30	89	86	90
K2210884-006	09/27/22 14:31	78	75	79
K2210884-007	09/27/22 14:33	71	68	70
K2210884-008	09/27/22 14:35	68	67	71
K2210884-009	09/27/22 14:36	81	84	88
K2210884-010	09/27/22 14:38	83	81	86
K2210884-011	09/27/22 14:40	94	82	86
K2210884-012	09/27/22 14:41	86	81	86
K2210884-013	09/27/22 14:43	89	90	94
K2210884-014	09/27/22 14:45	79	79	83
CCV	09/27/22 14:46	88	89	93
CCB	09/27/22 14:48	89	88	92
K2210884-015	09/27/22 14:50	95	96	99
K2210884-016	09/27/22 14:52	90	90	91
K2210884-017	09/27/22 14:53	89	90	94
K2210884-018	09/27/22 14:55	81	77	81
CCV	09/27/22 15:28	88	81	86
CCB	09/27/22 15:30	85	82	86

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 406846
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216191-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1% HNO3 0.2% HCl
2	KQ2216191-03	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
3	KQ2216191-04	DLCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
4	K2210884-001	MW-1-INF-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
5	K2210884-002	MW-5-INF-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
6	K2210884-003	MW-10-INF-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
7	K2210884-004	MW-14-INF-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
8	K2210884-005	MW-17-INF-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
9	K2210884-006	MW-44H-INF-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
10	K2210884-007	MW-1-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
11	K2210884-008	MW-1-FB-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
12	K2210884-009	MW-5-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
13	K2210884-010	MW-5-FB-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
14	K2210884-011	MW-10-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
15	K2210884-012	MW-10-FB-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
16	K2210884-013	MW-14-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
17	K2210884-014	MW-14-FB-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
18	K2210884-015	MW-17-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
19	K2210884-016	MW-17-FB-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
20	K2210884-017	MW-44H-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
21	K2210884-018	MW-44H-FB-20220913	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216191-03 0.10mL KQ2216191-04 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216191-03 0.10mL KQ2216191-04 0.10mL

Name: K-MET 10ppm Li Inventory ID 223041 Logbook Ref: MET4-29-F Expires On: 10/31/2023

KQ2216191-03 0.05mL KQ2216191-04 0.05mL

Preparation Information Benchsheet

Prep Run#:	406846	**Prep WorkFlow:**	MetDigAqMS	**Status:**	Prepped
Team:	Metals/SSOLADEY	**Prep Method:**	EPA CLP ILM04.0	**Prep Date/Time:**	9/23/22 14:02

Name:	K-MET Mo/U 5ppm	Inventory ID	223460	Logbook Ref:	MET4-30-A	Expires On:	03/31/2023

KQ2216191-03	0.05mL	KQ2216191-04	0.05mL

Name:	k-met Sb 1ug/mL Sb	Inventory ID	225112	Logbook Ref:	MET4-32-E	Expires On:	06/08/2023

KQ2216191-03	0.10mL	KQ2216191-04	0.10mL

Preparation Materials

K-MET 16 mL Tube	P498723 (223738)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 9/23/22 14:02
Finished: 9/23/22 16:02
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-18	Digestion	IR Thermometer ID: IR03		K-BlockDigester-18	Digestion	Temperature	94 deg C
K-BlockDigester-18	Digestion	Temperature Check Location	11	K-CR100-1000A	Digestion		
K-CR 20-200B	Digestion						

Comments: ______

Reviewed By: ______ Date: 9.26.22

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

9/23/22 12:02-16:02
B28/TL11/T94

Preparation Information Benchsheet

*Li 223041

9128

Prep Run#: 406846
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 11:37

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216191-01	MB		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
2	KQ2216191-02	LCS/DLCS		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
3	K2210884-001	MW-1-INF-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
4	KQ2216191-04	K2210884-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
~~5~~	~~KQ2216191-03~~	~~K2210884-001 MS~~	~~.01~~	~~200.8/Metals D~~		~~Liquid~~	~~10.0000mL~~		~~1% HNO3 0.2% HCl~~
6	K2210884-002	MW-5-INF-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
7	KQ2216191-06	K2210884-002 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
~~8~~	~~KQ2216191-05~~	~~K2210884-002 MS~~	~~.01~~	~~200.8/Metals D~~		~~Liquid~~	~~10.0000mL~~		~~1% HNO3 0.2% HCl~~
9	K2210884-003	MW-10-INF-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
10	K2210884-004	MW-14-INF-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
11	K2210884-005	MW-17-INF-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
12	K2210884-006	MW-44H-INF-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
13	K2210884-007	MW-1-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
14	K2210884-008	MW-1-FB-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
15	K2210884-009	MW-5-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
16	K2210884-010	MW-5-FB-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
17	K2210884-011	MW-10-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
18	K2210884-012	MW-10-FB-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
19	K2210884-013	MW-14-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
20	K2210884-014	MW-14-FB-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
21	K2210884-015	MW-17-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
22	K2210884-016	MW-17-FB-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
23	K2210884-017	MW-44H-HT-MMO-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
24	K2210884-018	MW-44H-FB-20220913	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3	Inventory ID 221910	Logbook Ref: MET4-24-I	Expires On: 03/02/2023

KQ2216191-02 0.10mL KQ2216191-03 0.10mL KQ2216191-05 0.10mL

Name: k-met 1/100 QCP CICV-1	Inventory ID 221911	Logbook Ref: MET4-25-A	Expires On: 12/02/2022

KQ2216191-02 0.10mL KQ2216191-03 0.10mL KQ2216191-05 0.10mL

Preparation Information Benchsheet

Prep Run#: 406846
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 11:37

Name: k-met Sb 1ug/mL Sb	Inventory ID 222918	Logbook Ref: MET4-29-E	Expires On: 07/12/2023

KQ2216191-02 0.10mL KQ2216191-03 0.10mL KQ2216191-05 0.10mL

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023

KQ2216191-02 0.05mL KQ2216191-03 0.05mL KQ2216191-05 0.05mL

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ______________________________

Reviewed By: ____________________ Date: ______________

Printed 9/22/22 12:37

Service Request # K2210854, K2210884, K2210887
Instrument ID # K-ICP-MS-05
Calibration 092722AICPMS05
ALS LIMS Run # 779009
Cal Std: MS30-38-G ICSA Std: NA
ICV Std: MS30-39-I ICSAB Std: NA
LLICV Std: MS30-38-H
I.S. Solution: MS30-9-K
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments:

Prep Batch: 406844, 406846, 406857

Primary Review by JC Date 9/27/22

Secondary Review by Date 9/27/22

Data Review Form

Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\092722A.csv**
RUNNO: **779009**

K2210854

No exceptions to report.

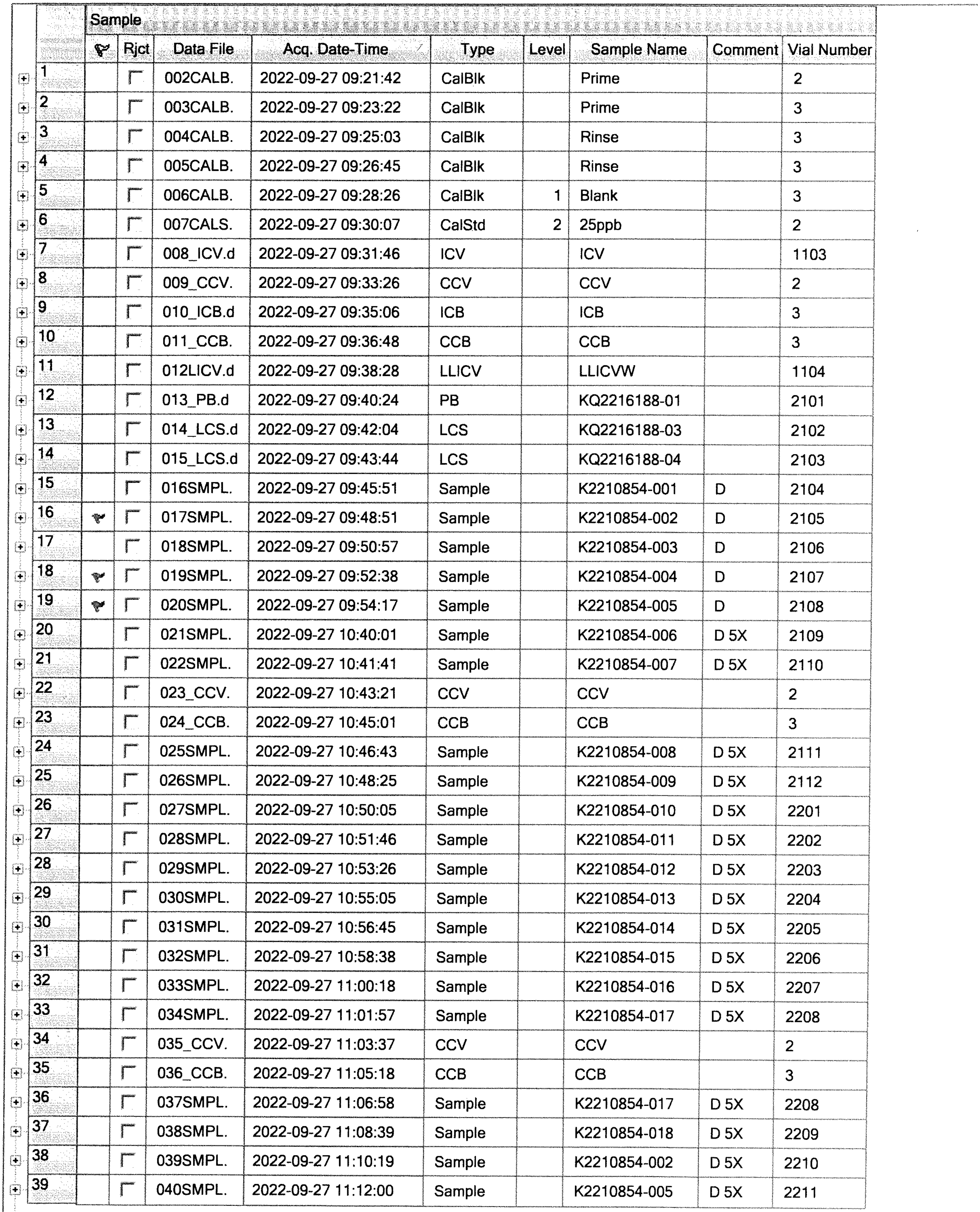
K2210884

No exceptions to report.

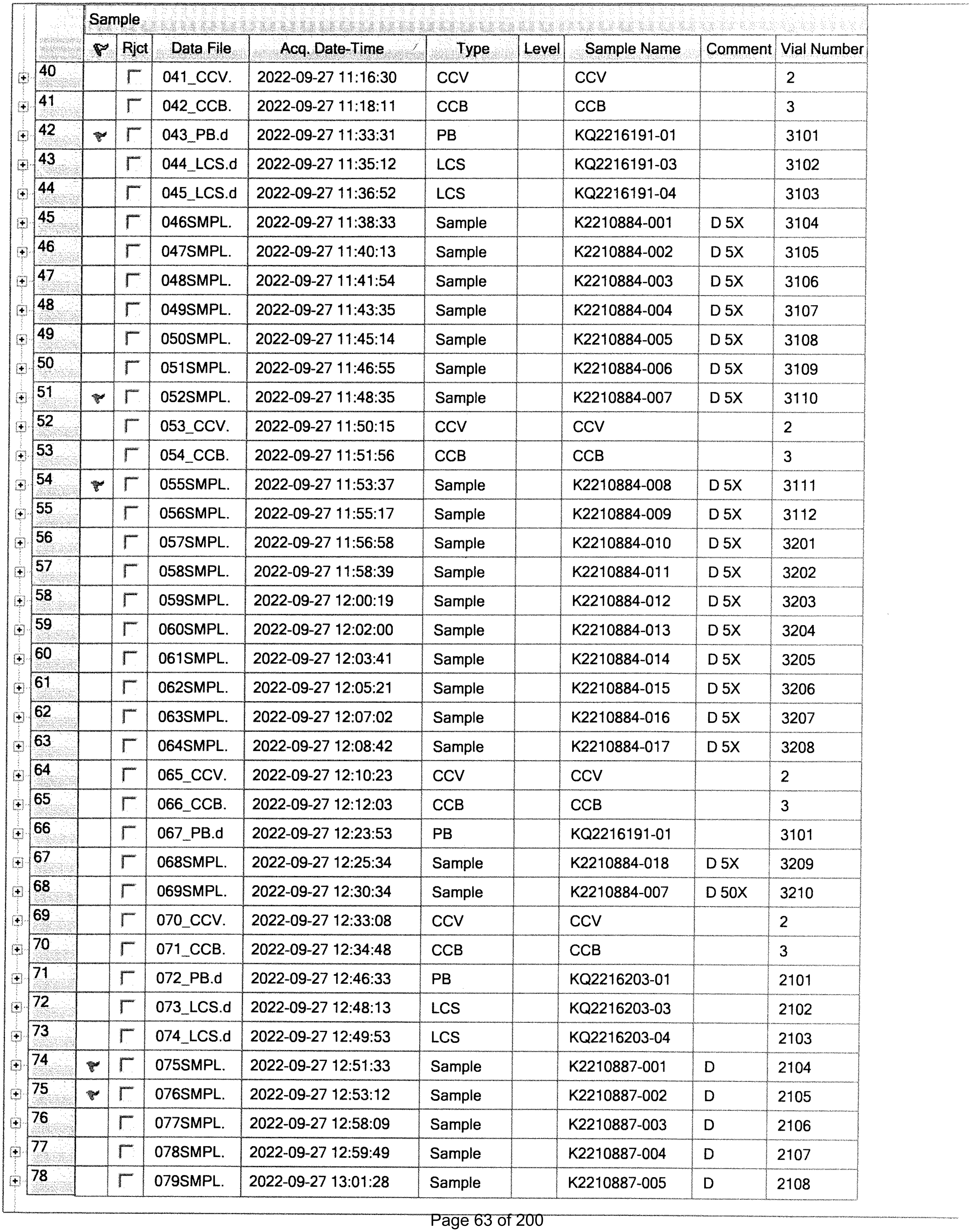
K2210887

No exceptions to report.

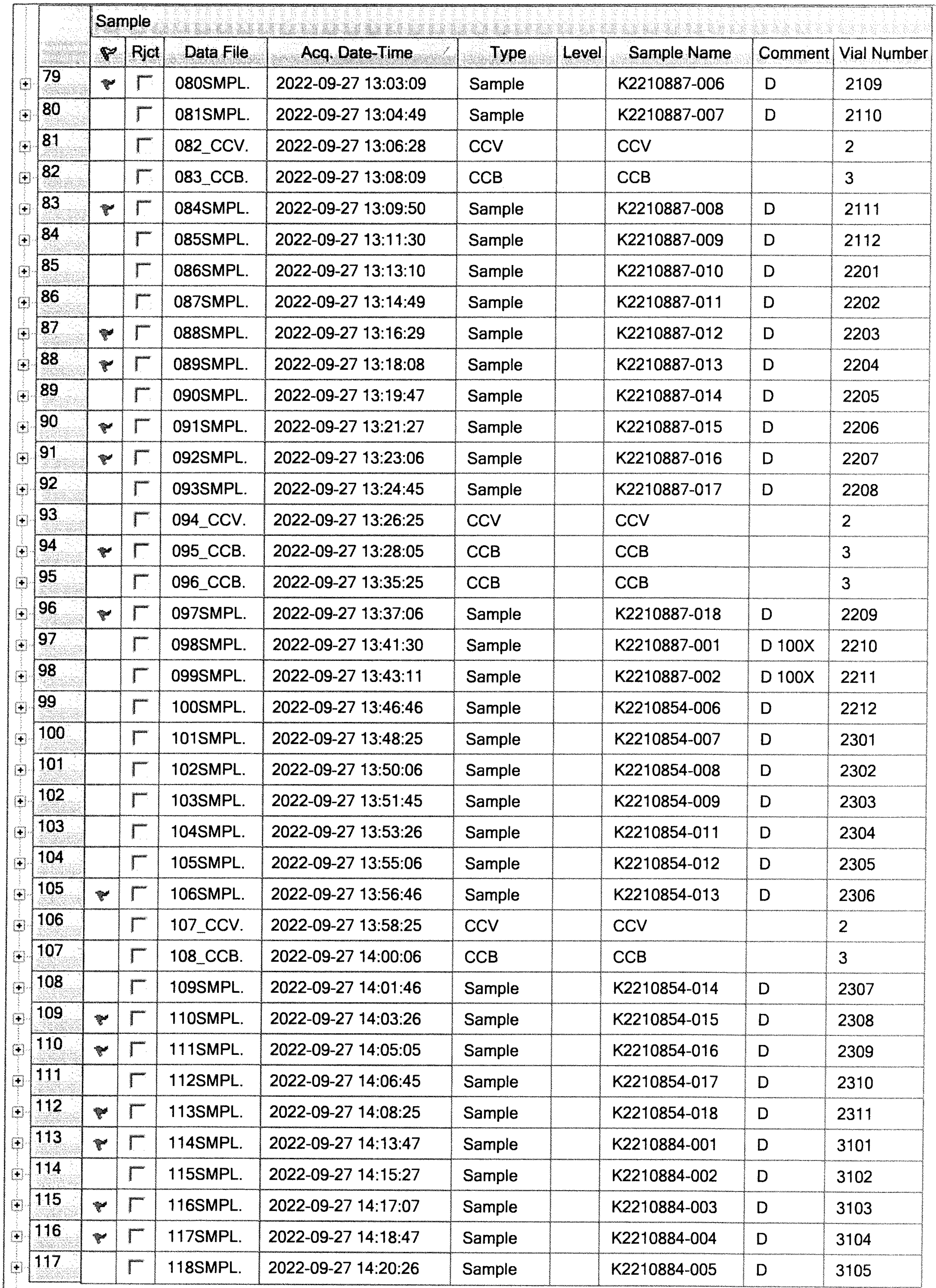
Primary Approver: 9/27/22
Secondary Approver: 9/27/22



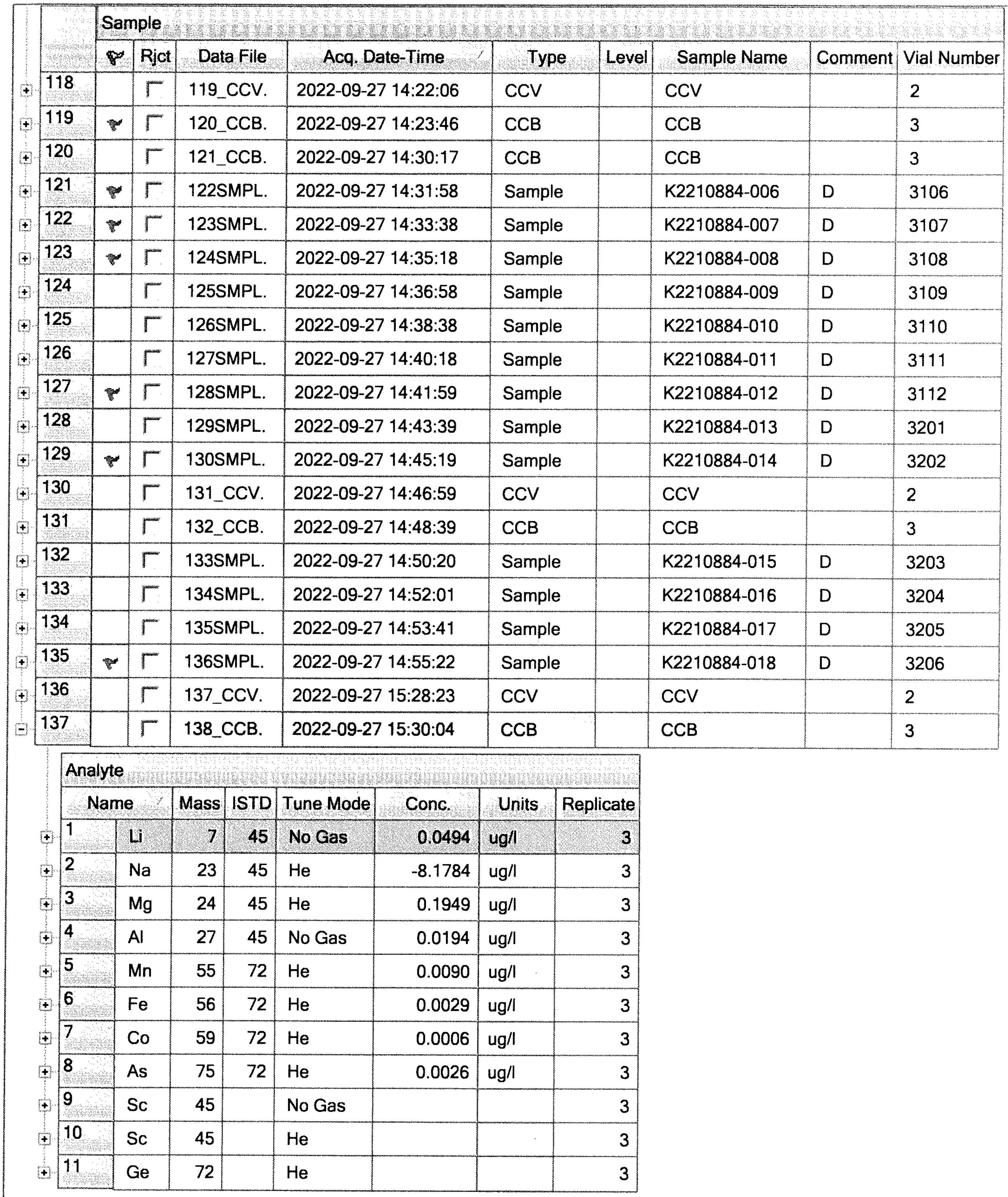
	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	002CALB.	2022-09-27 09:21:42	CalBlk		Prime		2
2		☐	003CALB.	2022-09-27 09:23:22	CalBlk		Prime		3
3		☐	004CALB.	2022-09-27 09:25:03	CalBlk		Rinse		3
4		☐	005CALB.	2022-09-27 09:26:45	CalBlk		Rinse		3
5		☐	006CALB.	2022-09-27 09:28:26	CalBlk	1	Blank		3
6		☐	007CALS.	2022-09-27 09:30:07	CalStd	2	25ppb		2
7		☐	008_ICV.d	2022-09-27 09:31:46	ICV		ICV		1103
8		☐	009_CCV.	2022-09-27 09:33:26	CCV		CCV		2
9		☐	010_ICB.d	2022-09-27 09:35:06	ICB		ICB		3
10		☐	011_CCB.	2022-09-27 09:36:48	CCB		CCB		3
11		☐	012LICV.d	2022-09-27 09:38:28	LLICV		LLICVW		1104
12		☐	013_PB.d	2022-09-27 09:40:24	PB		KQ2216188-01		2101
13		☐	014_LCS.d	2022-09-27 09:42:04	LCS		KQ2216188-03		2102
14		☐	015_LCS.d	2022-09-27 09:43:44	LCS		KQ2216188-04		2103
15		☐	016SMPL.	2022-09-27 09:45:51	Sample		K2210854-001	D	2104
16	⚑	☐	017SMPL.	2022-09-27 09:48:51	Sample		K2210854-002	D	2105
17		☐	018SMPL.	2022-09-27 09:50:57	Sample		K2210854-003	D	2106
18	⚑	☐	019SMPL.	2022-09-27 09:52:38	Sample		K2210854-004	D	2107
19	⚑	☐	020SMPL.	2022-09-27 09:54:17	Sample		K2210854-005	D	2108
20		☐	021SMPL.	2022-09-27 10:40:01	Sample		K2210854-006	D 5X	2109
21		☐	022SMPL.	2022-09-27 10:41:41	Sample		K2210854-007	D 5X	2110
22		☐	023_CCV.	2022-09-27 10:43:21	CCV		CCV		2
23		☐	024_CCB.	2022-09-27 10:45:01	CCB		CCB		3
24		☐	025SMPL.	2022-09-27 10:46:43	Sample		K2210854-008	D 5X	2111
25		☐	026SMPL.	2022-09-27 10:48:25	Sample		K2210854-009	D 5X	2112
26		☐	027SMPL.	2022-09-27 10:50:05	Sample		K2210854-010	D 5X	2201
27		☐	028SMPL.	2022-09-27 10:51:46	Sample		K2210854-011	D 5X	2202
28		☐	029SMPL.	2022-09-27 10:53:26	Sample		K2210854-012	D 5X	2203
29		☐	030SMPL.	2022-09-27 10:55:05	Sample		K2210854-013	D 5X	2204
30		☐	031SMPL.	2022-09-27 10:56:45	Sample		K2210854-014	D 5X	2205
31		☐	032SMPL.	2022-09-27 10:58:38	Sample		K2210854-015	D 5X	2206
32		☐	033SMPL.	2022-09-27 11:00:18	Sample		K2210854-016	D 5X	2207
33		☐	034SMPL.	2022-09-27 11:01:57	Sample		K2210854-017	D 5X	2208
34		☐	035_CCV.	2022-09-27 11:03:37	CCV		CCV		2
35		☐	036_CCB.	2022-09-27 11:05:18	CCB		CCB		3
36		☐	037SMPL.	2022-09-27 11:06:58	Sample		K2210854-017	D 5X	2208
37		☐	038SMPL.	2022-09-27 11:08:39	Sample		K2210854-018	D 5X	2209
38		☐	039SMPL.	2022-09-27 11:10:19	Sample		K2210854-002	D 5X	2210
39		☐	040SMPL.	2022-09-27 11:12:00	Sample		K2210854-005	D 5X	2211



		Sample								
		⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
⊞	40		☐	041_CCV.	2022-09-27 11:16:30	CCV		CCV		2
⊞	41		☐	042_CCB.	2022-09-27 11:18:11	CCB		CCB		3
⊞	42	⚑	☐	043_PB.d	2022-09-27 11:33:31	PB		KQ2216191-01		3101
⊞	43		☐	044_LCS.d	2022-09-27 11:35:12	LCS		KQ2216191-03		3102
⊞	44		☐	045_LCS.d	2022-09-27 11:36:52	LCS		KQ2216191-04		3103
⊞	45		☐	046SMPL.	2022-09-27 11:38:33	Sample		K2210884-001	D 5X	3104
⊞	46		☐	047SMPL.	2022-09-27 11:40:13	Sample		K2210884-002	D 5X	3105
⊞	47		☐	048SMPL.	2022-09-27 11:41:54	Sample		K2210884-003	D 5X	3106
⊞	48		☐	049SMPL.	2022-09-27 11:43:35	Sample		K2210884-004	D 5X	3107
⊞	49		☐	050SMPL.	2022-09-27 11:45:14	Sample		K2210884-005	D 5X	3108
⊞	50		☐	051SMPL.	2022-09-27 11:46:55	Sample		K2210884-006	D 5X	3109
⊞	51	⚑	☐	052SMPL.	2022-09-27 11:48:35	Sample		K2210884-007	D 5X	3110
⊞	52		☐	053_CCV.	2022-09-27 11:50:15	CCV		CCV		2
⊞	53		☐	054_CCB.	2022-09-27 11:51:56	CCB		CCB		3
⊞	54	⚑	☐	055SMPL.	2022-09-27 11:53:37	Sample		K2210884-008	D 5X	3111
⊞	55		☐	056SMPL.	2022-09-27 11:55:17	Sample		K2210884-009	D 5X	3112
⊞	56		☐	057SMPL.	2022-09-27 11:56:58	Sample		K2210884-010	D 5X	3201
⊞	57		☐	058SMPL.	2022-09-27 11:58:39	Sample		K2210884-011	D 5X	3202
⊞	58		☐	059SMPL.	2022-09-27 12:00:19	Sample		K2210884-012	D 5X	3203
⊞	59		☐	060SMPL.	2022-09-27 12:02:00	Sample		K2210884-013	D 5X	3204
⊞	60		☐	061SMPL.	2022-09-27 12:03:41	Sample		K2210884-014	D 5X	3205
⊞	61		☐	062SMPL.	2022-09-27 12:05:21	Sample		K2210884-015	D 5X	3206
⊞	62		☐	063SMPL.	2022-09-27 12:07:02	Sample		K2210884-016	D 5X	3207
⊞	63		☐	064SMPL.	2022-09-27 12:08:42	Sample		K2210884-017	D 5X	3208
⊞	64		☐	065_CCV.	2022-09-27 12:10:23	CCV		CCV		2
⊞	65		☐	066_CCB.	2022-09-27 12:12:03	CCB		CCB		3
⊞	66		☐	067_PB.d	2022-09-27 12:23:53	PB		KQ2216191-01		3101
⊞	67		☐	068SMPL.	2022-09-27 12:25:34	Sample		K2210884-018	D 5X	3209
⊞	68		☐	069SMPL.	2022-09-27 12:30:34	Sample		K2210884-007	D 50X	3210
⊞	69		☐	070_CCV.	2022-09-27 12:33:08	CCV		CCV		2
⊞	70		☐	071_CCB.	2022-09-27 12:34:48	CCB		CCB		3
⊞	71		☐	072_PB.d	2022-09-27 12:46:33	PB		KQ2216203-01		2101
⊞	72		☐	073_LCS.d	2022-09-27 12:48:13	LCS		KQ2216203-03		2102
⊞	73		☐	074_LCS.d	2022-09-27 12:49:53	LCS		KQ2216203-04		2103
⊞	74	⚑	☐	075SMPL.	2022-09-27 12:51:33	Sample		K2210887-001	D	2104
⊞	75	⚑	☐	076SMPL.	2022-09-27 12:53:12	Sample		K2210887-002	D	2105
⊞	76		☐	077SMPL.	2022-09-27 12:58:09	Sample		K2210887-003	D	2106
⊞	77		☐	078SMPL.	2022-09-27 12:59:49	Sample		K2210887-004	D	2107
⊞	78		☐	079SMPL.	2022-09-27 13:01:28	Sample		K2210887-005	D	2108



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
79	⚑	☐	080SMPL.	2022-09-27 13:03:09	Sample		K2210887-006	D	2109
80		☐	081SMPL.	2022-09-27 13:04:49	Sample		K2210887-007	D	2110
81		☐	082_CCV.	2022-09-27 13:06:28	CCV		CCV		2
82		☐	083_CCB.	2022-09-27 13:08:09	CCB		CCB		3
83	⚑	☐	084SMPL.	2022-09-27 13:09:50	Sample		K2210887-008	D	2111
84		☐	085SMPL.	2022-09-27 13:11:30	Sample		K2210887-009	D	2112
85		☐	086SMPL.	2022-09-27 13:13:10	Sample		K2210887-010	D	2201
86		☐	087SMPL.	2022-09-27 13:14:49	Sample		K2210887-011	D	2202
87	⚑	☐	088SMPL.	2022-09-27 13:16:29	Sample		K2210887-012	D	2203
88	⚑	☐	089SMPL.	2022-09-27 13:18:08	Sample		K2210887-013	D	2204
89		☐	090SMPL.	2022-09-27 13:19:47	Sample		K2210887-014	D	2205
90	⚑	☐	091SMPL.	2022-09-27 13:21:27	Sample		K2210887-015	D	2206
91	⚑	☐	092SMPL.	2022-09-27 13:23:06	Sample		K2210887-016	D	2207
92		☐	093SMPL.	2022-09-27 13:24:45	Sample		K2210887-017	D	2208
93		☐	094_CCV.	2022-09-27 13:26:25	CCV		CCV		2
94	⚑	☐	095_CCB.	2022-09-27 13:28:05	CCB		CCB		3
95		☐	096_CCB.	2022-09-27 13:35:25	CCB		CCB		3
96	⚑	☐	097SMPL.	2022-09-27 13:37:06	Sample		K2210887-018	D	2209
97		☐	098SMPL.	2022-09-27 13:41:30	Sample		K2210887-001	D 100X	2210
98		☐	099SMPL.	2022-09-27 13:43:11	Sample		K2210887-002	D 100X	2211
99		☐	100SMPL.	2022-09-27 13:46:46	Sample		K2210854-006	D	2212
100		☐	101SMPL.	2022-09-27 13:48:25	Sample		K2210854-007	D	2301
101		☐	102SMPL.	2022-09-27 13:50:06	Sample		K2210854-008	D	2302
102		☐	103SMPL.	2022-09-27 13:51:45	Sample		K2210854-009	D	2303
103		☐	104SMPL.	2022-09-27 13:53:26	Sample		K2210854-011	D	2304
104		☐	105SMPL.	2022-09-27 13:55:06	Sample		K2210854-012	D	2305
105	⚑	☐	106SMPL.	2022-09-27 13:56:46	Sample		K2210854-013	D	2306
106		☐	107_CCV.	2022-09-27 13:58:25	CCV		CCV		2
107		☐	108_CCB.	2022-09-27 14:00:06	CCB		CCB		3
108		☐	109SMPL.	2022-09-27 14:01:46	Sample		K2210854-014	D	2307
109	⚑	☐	110SMPL.	2022-09-27 14:03:26	Sample		K2210854-015	D	2308
110	⚑	☐	111SMPL.	2022-09-27 14:05:05	Sample		K2210854-016	D	2309
111		☐	112SMPL.	2022-09-27 14:06:45	Sample		K2210854-017	D	2310
112	⚑	☐	113SMPL.	2022-09-27 14:08:25	Sample		K2210854-018	D	2311
113	⚑	☐	114SMPL.	2022-09-27 14:13:47	Sample		K2210884-001	D	3101
114		☐	115SMPL.	2022-09-27 14:15:27	Sample		K2210884-002	D	3102
115	⚑	☐	116SMPL.	2022-09-27 14:17:07	Sample		K2210884-003	D	3103
116	⚑	☐	117SMPL.	2022-09-27 14:18:47	Sample		K2210884-004	D	3104
117		☐	118SMPL.	2022-09-27 14:20:26	Sample		K2210884-005	D	3105



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
118		☐	119_CCV.	2022-09-27 14:22:06	CCV		CCV		2
119	⚑	☐	120_CCB.	2022-09-27 14:23:46	CCB		CCB		3
120		☐	121_CCB.	2022-09-27 14:30:17	CCB		CCB		3
121	⚑	☐	122SMPL.	2022-09-27 14:31:58	Sample		K2210884-006	D	3106
122	⚑	☐	123SMPL.	2022-09-27 14:33:38	Sample		K2210884-007	D	3107
123	⚑	☐	124SMPL.	2022-09-27 14:35:18	Sample		K2210884-008	D	3108
124		☐	125SMPL.	2022-09-27 14:36:58	Sample		K2210884-009	D	3109
125		☐	126SMPL.	2022-09-27 14:38:38	Sample		K2210884-010	D	3110
126		☐	127SMPL.	2022-09-27 14:40:18	Sample		K2210884-011	D	3111
127	⚑	☐	128SMPL.	2022-09-27 14:41:59	Sample		K2210884-012	D	3112
128		☐	129SMPL.	2022-09-27 14:43:39	Sample		K2210884-013	D	3201
129	⚑	☐	130SMPL.	2022-09-27 14:45:19	Sample		K2210884-014	D	3202
130		☐	131_CCV.	2022-09-27 14:46:59	CCV		CCV		2
131		☐	132_CCB.	2022-09-27 14:48:39	CCB		CCB		3
132		☐	133SMPL.	2022-09-27 14:50:20	Sample		K2210884-015	D	3203
133		☐	134SMPL.	2022-09-27 14:52:01	Sample		K2210884-016	D	3204
134		☐	135SMPL.	2022-09-27 14:53:41	Sample		K2210884-017	D	3205
135	⚑	☐	136SMPL.	2022-09-27 14:55:22	Sample		K2210884-018	D	3206
136		☐	137_CCV.	2022-09-27 15:28:23	CCV		CCV		2
137		☐	138_CCB.	2022-09-27 15:30:04	CCB		CCB		3

Analyte							
Name		Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Li	7	45	No Gas	0.0494	ug/l	3
2	Na	23	45	He	-8.1784	ug/l	3
3	Mg	24	45	He	0.1949	ug/l	3
4	Al	27	45	No Gas	0.0194	ug/l	3
5	Mn	55	72	He	0.0090	ug/l	3
6	Fe	56	72	He	0.0029	ug/l	3
7	Co	59	72	He	0.0006	ug/l	3
8	As	75	72	He	0.0026	ug/l	3
9	Sc	45		No Gas			3
10	Sc	45		He			3
11	Ge	72		He			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\092722.b
Acq. Date-Time	2022-09-27 07:35:35
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

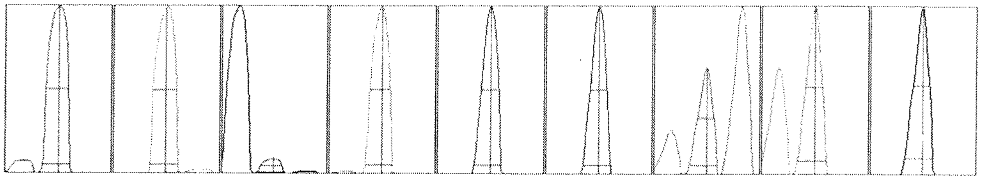
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	93266.00	1.368	5.000	
9	27664.22	2.070	5.000	
24	72422.23	2.554	5.000	
59	98024.38	1.979	5.000	
115	170957.76	1.481	5.000	
140	177755.31	1.380	5.000	
208	137282.54	1.600	5.000	
209	213760.30	1.148	5.000	
238	311655.92	1.153	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	9135	9287	9460	9329	9423
9	2667	2769	2801	2799	2797
24	6932	7225	7297	7391	7366
59	9494	9729	9942	9946	9902
115	16687	17011	17290	17252	17238
140	17417	17620	17950	17956	17934
208	13385	13651	13785	13902	13918
209	21030	21288	21376	21497	21690
238	30584	31079	31311	31349	31505

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	15497.04	7.05	6.90 - 7.10		0.778		0.900
9	4542.75	9.00	8.90 - 9.10		0.787		0.900
24	12497.42	24.00	23.90 - 24.10		0.801		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	17937.94	59.00	58.90 - 59.10		0.773		0.900
115	34941.11	115.00	114.90 - 115.10		0.760		0.900
140	37821.99	140.00	139.90 - 140.10		0.770		0.900
208	28610.02	208.00	207.90 - 208.10		0.779		0.900
209	44876.26	209.00	208.90 - 209.10		0.808		0.900
238	63860.91	238.00	237.90 - 238.10		0.796		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.7 V	Deflect	11.6 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	160 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0007	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.5 mV	Analog HV	1792 V	Pulse HV	1424 V

Calibration Blank Report

Sample Name Blank

File Name 006CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:28:26

Sample Type CalBlk

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	260.01	25.2
Al	27	45	No Gas	2390.19	7.3
Na	23	45	He	38708.80	16.6
Mg	24	45	He	3.33	173.2
Mn	55	72	He	26.67	57.3
Fe	56	72	He	640.03	9.8
Co	59	72	He	6.67	50.0
As	75	72	He	4.67	32.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	3482217.34	1.3
Sc	45	He	160566.51	2.9
Ge	72	He	125774.49	2.1

JC
9/27/22

Calibration Standard Report

Sample Name	25ppb
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:30:07
Sample Type	CalStd
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	386689.60	2.0
Al	27	45	No Gas	3603022.55	1.9
Na	23	45	He	1294900.09	0.3
Mg	24	45	He	619934.21	2.3
Mn	55	72	He	45707.63	4.7
Fe	56	72	He	803908.66	0.4
Co	59	72	He	167409.42	0.3
As	75	72	He	10978.19	0.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3503210.47	1.1	3482217.34	100.6	
Sc	45	He	156843.60	2.1	160566.51	97.68	
Ge	72	He	127796.20	2.7	125774.49	101.61	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:31:46
Sample Type	ICV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	26.4863	ug/l	1.9	405138.66	105.95	
Al	27	45	No Gas	103.0577	ug/l	0.8	1470224.51	103.06	
Na	23	45	He	233.0176	ug/l	1.6	189525.31	93.21	
Mg	24	45	He	240.2891	ug/l	1.5	76622.48	96.12	
Mn	55	72	He	24.5608	ug/l	0.6	45333.41	98.24	
Fe	56	72	He	49.5179	ug/l	0.7	161411.04	99.04	
Co	59	72	He	25.2855	ug/l	0.5	171069.39	101.14	
As	75	72	He	24.7744	ug/l	0.9	10990.54	99.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3464540.57	1.6	3482217.34	99.49	
Sc	45	He	161369.66	1.3	160566.51	100.5	
Ge	72	He	129065.16	1.6	125774.49	102.62	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	009_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:33:26
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.7537	ug/l	1.4	393232.35	103.01	
Al	27	45	No Gas	252.3151	ug/l	0.4	3589635.78	100.93	
Na	23	45	He	1962.0550	ug/l	3.4	1295533.57	98.1	
Mg	24	45	He	1950.0311	ug/l	0.2	615949.80	97.5	
Mn	55	72	He	24.5467	ug/l	3.3	45436.63	98.19	
Fe	56	72	He	248.6234	ug/l	0.8	810012.83	99.45	
Co	59	72	He	24.8882	ug/l	0.6	168857.92	99.55	
As	75	72	He	24.5531	ug/l	2.8	10925.17	98.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3458202.24	1.4	3482217.34	99.31	
Sc	45	He	159830.19	0.7	160566.51	99.54	
Ge	72	He	129427.73	0.7	125774.49	102.9	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	010_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:35:06
Sample Type	ICB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0103	ug/l	42.3	420.01	
Al	27	45	No Gas	-0.0014	ug/l	N/A	2376.86	
Na	23	45	He	-5.9255	ug/l	N/A	34336.91	
Mg	24	45	He	0.0213	ug/l	151.1	10.00	
Mn	55	72	He	-0.0111	ug/l	N/A	6.67	
Fe	56	72	He	0.0152	ug/l	300.3	696.70	
Co	59	72	He	0.0008	ug/l	34.0	12.22	
As	75	72	He	0.0097	ug/l	163.9	9.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3492705.47	1.1	3482217.34	100.3	
Sc	45	He	158454.03	0.7	160566.51	98.68	
Ge	72	He	127286.01	0.6	125774.49	101.2	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	011_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:36:48
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0053	ug/l	98.0	340.01	
Al	27	45	No Gas	0.0000	ug/l	20774.6	2380.18	
Na	23	45	He	-5.2605	ug/l	N/A	35068.37	
Mg	24	45	He	0.0311	ug/l	152.5	13.33	
Mn	55	72	He	-0.0075	ug/l	N/A	13.33	
Fe	56	72	He	0.0047	ug/l	1195.0	666.70	
Co	59	72	He	0.0005	ug/l	179.9	10.00	
As	75	72	He	0.0014	ug/l	854.6	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3468370.68	1.3	3482217.34	99.6	
Sc	45	He	159931.67	1.7	160566.51	99.6	
Ge	72	He	127846.26	0.5	125774.49	101.65	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	012LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:38:28
Sample Type	LLICV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.1129	ug/l	11.5	1973.49	112.9	
Al	27	45	No Gas	4.0228	ug/l	1.8	59354.27	100.57	
Na	23	45	He	40.9110	ug/l	1.7	64296.41	81.82	
Mg	24	45	He	9.7565	ug/l	11.0	3066.99	97.57	
Mn	55	72	He	0.1928	ug/l	28.5	383.35	96.4	
Fe	56	72	He	2.1312	ug/l	4.4	7598.52	106.56	
Co	59	72	He	0.0173	ug/l	8.0	124.44	86.5	
As	75	72	He	0.5093	ug/l	7.2	231.33	101.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3446266.20	2.0	3482217.34	98.97	
Sc	45	He	158965.27	0.9	160566.51	99	
Ge	72	He	129464.64	1.1	125774.49	102.93	

Prep Blank (PB) Report

Sample Name	KQ2216188-01
File Name	013_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:40:24
Sample Type	PB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0033	ug/l	176.4	313.34	
Al	27	45	No Gas	3.0497	ug/l	1.2	46250.48	
Na	23	45	He	-6.2268	ug/l	N/A	34310.30	
Mg	24	45	He	4.6912	ug/l	9.6	1480.09	
Mn	55	72	He	-0.0148	ug/l	0.0	0.00	
Fe	56	72	He	0.0426	ug/l	16.4	790.04	
Co	59	72	He	0.0000	ug/l	N/A	6.67	
As	75	72	He	0.0028	ug/l	138.5	6.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3497747.45	1.6	3482217.34	100.45	
Sc	45	He	159229.52	0.8	160566.51	99.17	
Ge	72	He	128124.48	0.3	125774.49	101.87	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216188-03
File Name	014_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:42:04
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.3643	ug/l	1.0	746601.45	50	96.73	
Al	27	45	No Gas	101.8926	ug/l	1.6	1467350.60	100	101.89	
Na	23	45	He	227.8727	ug/l	0.6	184684.24	250	91.15	
Mg	24	45	He	234.4170	ug/l	2.7	74135.43	250	93.77	
Mn	55	72	He	24.4331	ug/l	2.3	44751.83	25	97.73	
Fe	56	72	He	48.4120	ug/l	1.8	156597.46	50	96.82	
Co	59	72	He	24.7211	ug/l	3.7	165906.46	25	98.88	
As	75	72	He	47.2140	ug/l	3.7	20773.94	50	94.43	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3496787.97	0.7	3482217.34	100.42	
Sc	45	He	160045.81	0.9	160566.51	99.68	
Ge	72	He	128110.94	2.8	125774.49	101.86	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216188-04

File Name 015_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:43:44

Sample Type LCS

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2052	ug/l	0.4	759126.47	50	98.41	
Al	27	45	No Gas	100.9398	ug/l	0.7	1452679.20	100	100.94	
Na	23	45	He	230.9433	ug/l	2.7	187197.83	250	92.38	
Mg	24	45	He	238.5520	ug/l	2.1	75688.17	250	95.42	
Mn	55	72	He	24.7167	ug/l	0.9	45480.31	25	98.87	
Fe	56	72	He	48.7575	ug/l	2.5	158401.28	50	97.52	
Co	59	72	He	24.9330	ug/l	1.9	168133.16	25	99.73	
As	75	72	He	47.6374	ug/l	2.8	21059.61	50	95.27	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3494877.13	1.0	3482217.34	100.36	
Sc	45	He	160553.56	2.0	160566.51	99.99	
Ge	72	He	128662.86	1.6	125774.49	102.3	

Sample Report

Sample Name	K2210854-001
File Name	016SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:45:51
Sample Type	Sample
Comment	– D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1930	ug/l	4.8	3390.41	
Al	27	45	No Gas	36.9888	ug/l	2.4	558946.97	
Na	23	45	He	33918.4364	ug/l	1.0	24940202.96	
Mg	24	45	He	55006.4130	ug/l	1.9	19900216.37	
Mn	55	72	He	9.5364	ug/l	2.3	19871.91	
Fe	56	72	He	8.1430	ug/l	1.4	30551.86	
Co	59	72	He	0.0128	ug/l	21.1	105.56	
As	75	72	He	0.1085	ug/l	11.4	59.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3660532.96	2.7	3482217.34	105.12	
Sc	45	He	183103.82	2.1	160566.51	114.04	
Ge	72	He	145552.70	0.5	125774.49	115.73	

Sample Report

Sample Name K2210854-002
File Name 017SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 09:48:51
Sample Type Sample
Comment -- D
ISTD Ref FileName 006CALB.d
Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.9745	ug/l	4.0	12421.20	
Al	27	45	No Gas	6.2881	ug/l	0.7	75339.50	
Na	23	45	He	149447.6049	ug/l	2.7	76559187.19	
Mg	24	45	He	15138.2606	ug/l	2.0	3821861.51	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~6640.8198~~	~~ug/l~~	~~2.3~~	~~9599709.65~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~48333.5523~~	~~ug/l~~	~~2.7~~	~~122943488.17~~	~~>LDR~~
Co	59	72	He	34.2224	ug/l	1.9	181442.21	
As	75	72	He	0.1025	ug/l	20.8	39.33	

XSIC
Dilution
ZL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2838802.15	1.0	3482217.34	81.52	
Sc	45	He	127773.51	1.6	160566.51	79.58	
Ge	72	He	101161.32	1.7	125774.49	80.43	

Sample Report

Sample Name	K2210854-003
File Name	018SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:50:57
Sample Type	Sample
Comment	– D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2990	ug/l	5.9	3807.19	
Al	27	45	No Gas	28.1645	ug/l	1.0	317784.96	
Na	23	45	He	20644.3884	ug/l	2.9	12893678.98	
Mg	24	45	He	32176.3145	ug/l	1.3	9881093.39	
Mn	55	72	He	0.3051	ug/l	32.5	570.02	
Fe	56	72	He	2.7307	ug/l	2.5	9199.36	
Co	59	72	He	0.0481	ug/l	6.5	321.12	
As	75	72	He	0.1494	ug/l	6.1	68.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2728238.71	2.1	3482217.34	78.35	
Sc	45	He	155420.74	2.5	160566.51	96.8	
Ge	72	He	124696.66	0.4	125774.49	99.14	

Sample Report

Sample Name	K2210854-004
File Name	019SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:52:38
Sample Type	Sample
Comment	— D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7448	ug/l	1.3	75906.52	
Al	27	45	No Gas	119.8109	ug/l	0.8	1472629.09	
Na	23	45	He	1741697.0815	ug/l	1.1	1041892437.81	>LDR
Mg	24	45	He	5710.3251	ug/l	2.1	1683907.42	
Mn	55	72	He	89.1278	ug/l	1.5	141865.20	
Fe	56	72	He	5.9457	ug/l	2.5	17218.86	
Co	59	72	He	1.0506	ug/l	3.7	6136.68	
As	75	72	He	1.2995	ug/l	3.3	501.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2985619.85	1.0	3482217.34	85.74	
Sc	45	He	149224.08	0.7	160566.51	92.94	
Ge	72	He	111347.76	1.1	125774.49	88.53	

Sample Report

Sample Name K2210854-005
File Name 020SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 09:54:17
Sample Type Sample
Comment — D
ISTD Ref FileName 006CALB.d
Operator ALKLS
NoUser
QC Analyte Table

SC 9/27/22

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.4216	ug/l	5.8	8215.42	
Al	27	45	No Gas	81.5551	ug/l	2.8	1425986.49	
Na	23	45	He	39572.8567	ug/l	2.5	33686012.83	
Mg	24	45	He	43857.4577	ug/l	1.6	18378164.73	
Mn	55	72	He	10.5821	ug/l	2.8	24264.15	
Fe	56	72	He	6.9992	ug/l	3.8	29021.69	
Co	59	72	He	0.0047	ug/l	13.1	47.78	
As	75	72	He	0.0655	ug/l	29.3	42.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	4244394.73	0.6	3482217.34	121.89	
Sc	45	He	212038.40	0.6	160566.51	132.06	Flag
Ge	72	He	160189.20	1.0	125774.49	127.36	Flag

Sample Report

Sample Name K2210854-006

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:40:01

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1597	ug/l	1.3	2473.56	
Al	27	45	No Gas	641.6207	ug/l	0.5	8372814.25	
Na	23	45	He	11829.2461	ug/l	0.3	6699440.11	
Mg	24	45	He	4.0595	ug/l	15.9	1130.07	
Mn	55	72	He	0.3819	ug/l	26.8	646.70	
Fe	56	72	He	3.6277	ug/l	2.5	11003.78	
Co	59	72	He	0.0140	ug/l	10.0	90.00	
As	75	72	He	0.0122	ug/l	43.4	9.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3173329.43	1.2	3482217.34	91.13	
Sc	45	He	140559.89	0.5	160566.51	87.54	
Ge	72	He	114234.04	0.9	125774.49	90.82	

Sample Report

Sample Name K2210854-007

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:41:41

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

SL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1836	ug/l	6.0	2820.28	
Al	27	45	No Gas	6.7407	ug/l	1.6	90463.32	
Na	23	45	He	5669.6083	ug/l	0.5	3419963.18	
Mg	24	45	He	9792.7825	ug/l	5.0	2879423.60	
Mn	55	72	He	0.4240	ug/l	14.3	723.37	
Fe	56	72	He	0.6939	ug/l	7.9	2596.92	
Co	59	72	He	0.0080	ug/l	23.5	54.44	
As	75	72	He	0.0187	ug/l	8.5	11.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3185644.33	1.4	3482217.34	91.48	
Sc	45	He	148894.93	2.2	160566.51	92.73	
Ge	72	He	115146.97	1.9	125774.49	91.55	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	023_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:43:21
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.9329	ug/l	0.5	369342.90	103.73	
Al	27	45	No Gas	251.2663	ug/l	1.5	3334271.20	100.51	
Na	23	45	He	1977.5528	ug/l	2.5	1185670.66	98.88	
Mg	24	45	He	1999.2971	ug/l	2.2	573493.31	99.96	
Mn	55	72	He	25.4058	ug/l	2.8	42338.80	101.62	
Fe	56	72	He	251.9183	ug/l	2.7	738914.13	100.77	
Co	59	72	He	25.4505	ug/l	2.8	155459.70	101.8	
As	75	72	He	24.6563	ug/l	2.8	9876.53	98.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3225315.79	0.8	3482217.34	92.62	
Sc	45	He	145204.94	2.7	160566.51	90.43	
Ge	72	He	116606.33	4.0	125774.49	92.71	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 024_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:45:01

Sample Type CCB

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0077	ug/l	60.4	346.68	
Al	27	45	No Gas	0.0005	ug/l	1162.4	2193.50	
Na	23	45	He	7.4103	ug/l	20.5	38826.28	
Mg	24	45	He	0.1303	ug/l	28.6	40.00	
Mn	55	72	He	-0.0006	ug/l	N/A	23.33	
Fe	56	72	He	0.0035	ug/l	269.5	596.69	
Co	59	72	He	-0.0001	ug/l	N/A	5.56	
As	75	72	He	0.0045	ug/l	121.4	6.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3187100.58	0.7	3482217.34	91.53	
Sc	45	He	143770.89	2.8	160566.51	89.54	
Ge	72	He	115100.49	2.3	125774.49	91.51	

Sample Report

Sample Name K2210854-008
File Name 025SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 10:46:43
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

SC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.0282	ug/l	2.9	28733.42	
Al	27	45	No Gas	249.7646	ug/l	2.7	3271337.14	
Na	23	45	He	22609.7813	ug/l	0.7	13173994.39	
Mg	24	45	He	134.5626	ug/l	1.7	38549.04	
Mn	55	72	He	0.7985	ug/l	8.9	1360.09	
Fe	56	72	He	1.3023	ug/l	1.3	4427.37	
Co	59	72	He	0.0115	ug/l	7.9	76.67	
As	75	72	He	0.0554	ug/l	36.8	26.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3184760.37	2.0	3482217.34	91.46	
Sc	45	He	144958.49	1.0	160566.51	90.28	
Ge	72	He	116982.01	1.2	125774.49	93.01	

Sample Report

Sample Name K2210854-009

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:48:25

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

3C
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.9671	ug/l	1.0	70348.10	
Al	27	45	No Gas	6.2007	ug/l	1.8	83728.63	
Na	23	45	He	6494.6947	ug/l	1.7	3886645.88	
Mg	24	45	He	8150.8249	ug/l	2.3	2382436.94	
Mn	55	72	He	0.2741	ug/l	18.3	490.02	
Fe	56	72	He	0.5159	ug/l	29.1	2143.52	
Co	59	72	He	0.0088	ug/l	2.6	61.11	
As	75	72	He	0.0473	ug/l	22.9	23.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3198691.41	1.1	3482217.34	91.86	
Sc	45	He	147936.32	1.5	160566.51	92.13	
Ge	72	He	118821.99	1.3	125774.49	94.47	

Sample Report

Sample Name	K2210854-010
File Name	027SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:50:05
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6697	ug/l	6.5	9909.55	
Al	27	45	No Gas	1.4879	ug/l	2.0	22259.16	
Na	23	45	He	349560.7563	ug/l	1.0	211379103.52	
Mg	24	45	He	793.3002	ug/l	0.9	236445.01	
Mn	55	72	He	120.3769	ug/l	1.1	203092.80	
Fe	56	72	He	270.0030	ug/l	0.8	802088.82	
Co	59	72	He	0.0719	ug/l	2.7	451.12	
As	75	72	He	0.0714	ug/l	20.6	33.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3272773.60	2.6	3482217.34	93.99	
Sc	45	He	150817.00	0.3	160566.51	93.93	
Ge	72	He	118022.33	0.6	125774.49	93.84	

Sample Report

Sample Name K2210854-011

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:51:46

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0639	ug/l	19.3	1203.40	
Al	27	45	No Gas	7.7287	ug/l	1.4	109698.12	
Na	23	45	He	8070.0748	ug/l	0.2	6113384.40	
Mg	24	45	He	8115.9258	ug/l	1.9	2516334.86	
Mn	55	72	He	0.0495	ug/l	83.0	113.34	
Fe	56	72	He	0.3462	ug/l	5.4	1713.46	
Co	59	72	He	0.0017	ug/l	60.8	17.78	
As	75	72	He	0.0126	ug/l	96.5	10.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3376645.16	1.3	3482217.34	96.97	
Sc	45	He	156890.19	0.1	160566.51	97.71	
Ge	72	He	124176.40	1.4	125774.49	98.73	

Sample Report

Sample Name	K2210854-012
File Name	029SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:53:26
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0394	ug/l	15.4	840.04	
Al	27	45	No Gas	89.4494	ug/l	0.6	1243171.75	
Na	23	45	He	33247.4690	ug/l	0.7	20619562.19	
Mg	24	45	He	347.9612	ug/l	0.5	106196.72	
Mn	55	72	He	3.8819	ug/l	6.8	6901.54	
Fe	56	72	He	0.4984	ug/l	5.5	2186.86	
Co	59	72	He	0.0454	ug/l	20.1	303.34	
As	75	72	He	0.2119	ug/l	14.2	94.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3374044.32	0.9	3482217.34	96.89	
Sc	45	He	154435.55	1.5	160566.51	96.18	
Ge	72	He	124075.52	3.5	125774.49	98.65	

Sample Report

Sample Name K2210854-013

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:55:05

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1536	ug/l	3.8	15240.03	
Al	27	45	No Gas	1.1660	ug/l	3.2	16177.55	
Na	23	45	He	9645.4142	ug/l	1.7	5135071.17	
Mg	24	45	He	6419.8970	ug/l	1.8	1674503.36	
Mn	55	72	He	3105.2484	ug/l	1.2	4843649.41	
Fe	56	72	He	38243.3881	ug/l	2.5	104952995.10	
~~Co~~	59	72	He	54.3127	ug/l	1.0	310712.26	
As	75	72	He	1.3849	ug/l	2.4	523.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2952480.06	3.1	3482217.34	84.79	
Sc	45	He	131995.90	1.0	160566.51	82.21	
Ge	72	He	109147.49	2.1	125774.49	86.78	

Sample Report

Sample Name K2210854-014

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:56:45

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	17.7733	ug/l	2.1	232336.17	
Al	27	45	No Gas	1.5083	ug/l	0.8	20383.52	
Na	23	45	He	4178.3784	ug/l	2.7	2305190.38	
Mg	24	45	He	3575.4411	ug/l	2.1	958680.56	
Mn	55	72	He	337.6374	ug/l	1.2	542508.52	
Fe	56	72	He	2063.7475	ug/l	0.7	5835748.04	
Co	59	72	He	1.2060	ug/l	1.1	7113.72	
As	75	72	He	8.9493	ug/l	4.2	3460.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2959744.44	0.8	3482217.34	85	
Sc	45	He	135695.14	1.0	160566.51	84.51	
Ge	72	He	112422.80	1.4	125774.49	89.38	

Sample Report

Sample Name K2210854-015

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:58:38

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	54.7044	ug/l	0.7	727853.35	
Al	27	45	No Gas	1.3313	ug/l	3.8	18563.24	
Na	23	45	He	5735.1501	ug/l	1.9	3206997.55	
Mg	24	45	He	3357.9335	ug/l	0.2	916218.90	
Mn	55	72	He	696.9631	ug/l	0.8	1133497.90	
Fe	56	72	He	1547.6445	ug/l	2.1	4429651.71	
Co	59	72	He	4.3349	ug/l	0.9	25860.54	
As	75	72	He	9.8399	ug/l	1.1	3851.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3014247.87	1.1	3482217.34	86.56	
Sc	45	He	138063.49	1.2	160566.51	85.99	
Ge	72	He	113780.44	0.4	125774.49	90.46	

Sample Report

Sample Name	K2210854-016
File Name	033SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:00:18
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	128.4244	ug/l	2.6	1692881.43	
Al	27	45	No Gas	1.5387	ug/l	0.1	20944.14	
Na	23	45	He	6722.8866	ug/l	2.1	3700249.74	
Mg	24	45	He	5800.3946	ug/l	2.0	1560484.35	
Mn	55	72	He	1118.7856	ug/l	1.3	1798996.43	
Fe	56	72	He	8810.7788	ug/l	1.2	24930087.13	
Co	59	72	He	7.7554	ug/l	0.9	45741.63	
As	75	72	He	5.0260	ug/l	1.1	1947.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2986781.62	0.9	3482217.34	85.77	
Sc	45	He	136138.85	3.4	160566.51	84.79	
Ge	72	He	112502.30	1.0	125774.49	89.45	

Sample Report

Sample Name K2210854-017

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:01:57

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	129.7241	ug/l	5.7	1673584.19	
Al	27	45	No Gas	1.5931	ug/l	4.7	21161.08	
Na	23	45	He	9418.5379	ug/l	3.3	3717632.86	
Mg	24	45	He	5211.2870	ug/l	1.7	1007749.91	
Mn	55	72	He	315.3688	ug/l	27.0	428276.48	
Fe	56	72	He	3067.4543	ug/l	25.8	7348480.72	
Co	59	72	He	1.4512	ug/l	23.7	7283.81	
As	75	72	He	72.6174	ug/l	26.4	23738.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2926386.21	3.9	3482217.34	84.04	
Sc	45	He	97867.05	1.4	160566.51	60.95	
Ge	72	He	100649.98	31.2	125774.49	80.02	

SC
9/27/22

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 035_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:03:37

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2800	ug/l	0.8	349489.80	101.12	
Al	27	45	No Gas	244.1377	ug/l	1.7	3144364.54	97.66	
Na	23	45	He	2019.6255	ug/l	2.4	1184158.81	100.98	
Mg	24	45	He	1972.7636	ug/l	0.8	553753.52	98.64	
Mn	55	72	He	25.0993	ug/l	3.2	41256.28	100.4	
Fe	56	72	He	252.0251	ug/l	0.6	729045.38	100.81	
Co	59	72	He	25.3380	ug/l	1.1	152635.57	101.35	
As	75	72	He	25.0423	ug/l	1.7	9891.87	100.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130846.72	1.4	3482217.34	89.91	
Sc	45	He	142041.45	0.7	160566.51	88.46	
Ge	72	He	114921.72	0.9	125774.49	91.37	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	036_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:05:18
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0135	ug/l	47.2	423.35	
Al	27	45	No Gas	-0.0070	ug/l	N/A	2073.48	
Na	23	45	He	8.6211	ug/l	34.3	39183.76	
Mg	24	45	He	0.1188	ug/l	95.6	36.67	
Mn	55	72	He	-0.0067	ug/l	N/A	13.33	
Fe	56	72	He	0.0071	ug/l	263.7	606.70	
Co	59	72	He	0.0012	ug/l	93.2	13.33	
As	75	72	He	-0.0015	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3154954.23	1.2	3482217.34	90.6	
Sc	45	He	142501.15	0.8	160566.51	88.75	
Ge	72	He	114965.30	1.0	125774.49	91.41	

Sample Report

Sample Name	K2210854-017
File Name	037SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:06:58
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

Si
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	123.9687	ug/l	2.5	1672743.31	
Al	27	45	No Gas	1.5515	ug/l	3.1	21593.32	
Na	23	45	He	9062.5631	ug/l	1.2	5083776.59	
Mg	24	45	He	5098.5353	ug/l	1.0	1400738.00	
Mn	55	72	He	358.5418	ug/l	0.8	592050.54	
Fe	56	72	He	3554.9955	ug/l	1.7	10330082.97	
Co	59	72	He	1.7196	ug/l	2.8	10420.98	
As	75	72	He	82.0109	ug/l	0.6	32558.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3057176.83	2.3	3482217.34	87.79	
Sc	45	He	139020.64	1.3	160566.51	86.58	
Ge	72	He	115528.77	0.8	125774.49	91.85	

Sample Report

Sample Name K2210854-018

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:08:39

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.8579	ug/l	1.6	11630.65	
Al	27	45	No Gas	1.4956	ug/l	2.4	20585.45	
Na	23	45	He	5428.7909	ug/l	1.4	3047446.52	
Mg	24	45	He	3602.2207	ug/l	0.8	985854.99	
Mn	55	72	He	1870.7238	ug/l	0.4	3036671.94	
Fe	56	72	He	0.8864	ug/l	7.9	3110.37	
Co	59	72	He	62.8916	ug/l	0.9	374390.30	
As	75	72	He	0.0764	ug/l	18.2	34.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3012463.18	1.7	3482217.34	86.51	
Sc	45	He	138489.81	0.7	160566.51	86.25	
Ge	72	He	113565.83	0.7	125774.49	90.29	

Sample Report

Sample Name K2210854-002
File Name 039SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:10:19
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2194	ug/l	6.5	3180.33	
Al	27	45	No Gas	1.6685	ug/l	2.9	22991.71	
Na	23	45	He	31377.9394	ug/l	0.9	16948241.41	
Mg	24	45	He	3252.7697	ug/l	0.3	864452.41	
Mn	55	72	He	1393.1445	ug/l	0.2	2206812.94	
Fe	56	72	He	9885.1585	ug/l	1.0	27554010.42	
~~Co~~	59	72	He	6.9641	ug/l	2.1	40459.56	
As	75	72	He	0.0173	ug/l	122.8	10.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047824.95	1.6	3482217.34	87.53	
Sc	45	He	134476.48	0.4	160566.51	83.75	
Ge	72	He	110825.23	0.8	125774.49	88.11	

Sample Report

Sample Name	K2210854-005
File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:12:00
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0920	ug/l	12.0	1516.75	
Al	27	45	No Gas	16.7339	ug/l	0.3	219538.21	
Na	23	45	He	8548.7921	ug/l	0.8	5338546.59	
Mg	24	45	He	9720.9432	ug/l	0.7	2971803.81	
Mn	55	72	He	2.1958	ug/l	2.6	3920.53	
Fe	56	72	He	1.6562	ug/l	4.8	5801.08	
Co	59	72	He	0.0019	ug/l	87.1	18.89	
As	75	72	He	0.0174	ug/l	84.5	12.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3159592.24	2.3	3482217.34	90.74	
Sc	45	He	154698.05	1.0	160566.51	96.35	
Ge	72	He	124081.66	0.2	125774.49	98.65	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:16:30
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.5512	ug/l	1.7	362624.88	102.2	
Al	27	45	No Gas	250.9760	ug/l	3.7	3318085.99	100.39	
Na	23	45	He	1972.2558	ug/l	1.5	1197479.90	98.61	
Mg	24	45	He	1977.3054	ug/l	0.3	574340.90	98.87	
Mn	55	72	He	24.6575	ug/l	3.4	42349.12	98.63	
Fe	56	72	He	248.0087	ug/l	1.4	749855.38	99.2	
Co	59	72	He	25.0417	ug/l	1.2	157675.05	100.17	
As	75	72	He	25.0058	ug/l	3.3	10322.79	100.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3213842.76	0.9	3482217.34	92.29	
Sc	45	He	146977.59	0.6	160566.51	91.54	
Ge	72	He	120124.09	1.3	125774.49	95.51	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:18:11
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0031	ug/l	91.6	280.01	
Al	27	45	No Gas	-0.0074	ug/l	N/A	2073.48	
Na	23	45	He	7.5746	ug/l	19.5	39895.32	
Mg	24	45	He	0.0588	ug/l	102.5	20.00	
Mn	55	72	He	-0.0030	ug/l	N/A	20.00	
Fe	56	72	He	-0.0078	ug/l	N/A	583.36	
Co	59	72	He	-0.0005	ug/l	N/A	3.33	
As	75	72	He	-0.0002	ug/l	N/A	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3162033.39	1.4	3482217.34	90.81	
Sc	45	He	147365.34	2.7	160566.51	91.78	
Ge	72	He	119136.67	0.9	125774.49	94.72	

Prep Blank (PB) Report

Sample Name	KQ2216191-01
File Name	043_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:33:31
Sample Type	PB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0090	ug/l	32.6	353.34	
Al	27	45	No Gas	5.7282	ug/l	1.9	74760.33	PB Main CR1 Failed
Na	23	45	He	9.3391	ug/l	16.8	38969.97	
Mg	24	45	He	6.2041	ug/l	18.0	1723.46	
Mn	55	72	He	0.0677	ug/l	3.5	133.33	
Fe	56	72	He	0.1100	ug/l	36.6	890.04	
Co	59	72	He	0.0005	ug/l	241.5	8.89	
As	75	72	He	-0.0031	ug/l	N/A	3.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085080.68	1.5	3482217.34	88.6	
Sc	45	He	140213.66	0.8	160566.51	87.32	
Ge	72	He	113142.76	1.7	125774.49	89.96	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216191-03

File Name 044_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:35:12

Sample Type LCS

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.4686	ug/l	2.3	681210.36	50	98.94	
Al	27	45	No Gas	103.9371	ug/l	3.7	1335171.44	100	103.94	
Na	23	45	He	253.6345	ug/l	1.7	175209.87	250	101.45	
Mg	24	45	He	250.6529	ug/l	1.5	69034.82	250	100.26	
Mn	55	72	He	24.4879	ug/l	2.4	40153.87	25	97.95	
Fe	56	72	He	48.4838	ug/l	0.6	140393.59	50	96.97	
Co	59	72	He	24.7677	ug/l	0.6	148855.08	25	99.07	
As	75	72	He	47.1162	ug/l	0.7	18565.07	50	94.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3119811.20	0.8	3482217.34	89.59	
Sc	45	He	139363.09	0.2	160566.51	86.79	
Ge	72	He	114650.28	0.5	125774.49	91.16	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216191-04

File Name 045_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:36:52

Sample Type LCS

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2158	ug/l	1.3	678761.89	50	98.43	
Al	27	45	No Gas	104.1783	ug/l	1.8	1340289.67	100	104.18	
Na	23	45	He	248.3836	ug/l	3.1	175411.69	250	99.35	
Mg	24	45	He	242.0792	ug/l	2.2	67903.45	250	96.83	
Mn	55	72	He	24.8123	ug/l	1.8	40762.08	25	99.25	
Fe	56	72	He	48.5028	ug/l	2.4	140682.42	50	97.01	
Co	59	72	He	24.8355	ug/l	1.5	149509.65	25	99.34	
As	75	72	He	47.9277	ug/l	0.9	18917.78	50	95.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3124592.25	1.6	3482217.34	89.73	
Sc	45	He	141947.40	2.2	160566.51	88.4	
Ge	72	He	114851.90	1.3	125774.49	91.32	

Sample Report

Sample Name	K2210884-001
File Name	046SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:38:33
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1882	ug/l	1.4	15353.51	
Al	27	45	No Gas	1.2960	ug/l	3.1	17362.01	
Na	23	45	He	9645.2160	ug/l	1.7	4844940.97	
Mg	24	45	He	6677.8896	ug/l	1.7	1643434.61	
Mn	55	72	He	3123.0247	ug/l	4.4	4689125.66	
Fe	56	72	He	38026.7784	ug/l	2.3	100502028.50	
Co	59	72	He	55.0062	ug/l	3.0	302959.99	
As	75	72	He	1.1066	ug/l	12.0	403.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2886983.71	2.7	3482217.34	82.91	
Sc	45	He	124549.39	1.6	160566.51	77.57	
Ge	72	He	105112.26	2.1	125774.49	83.57	

Sample Report

Sample Name K2210884-002

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:40:13

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

3C 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	18.8689	ug/l	0.6	248236.35	
Al	27	45	No Gas	1.2804	ug/l	2.0	17722.32	
Na	23	45	He	4466.1691	ug/l	1.3	2432306.84	
Mg	24	45	He	3840.6245	ug/l	1.0	1017454.72	
Mn	55	72	He	365.4789	ug/l	0.8	578690.15	
Fe	56	72	He	2011.2069	ug/l	0.4	5604290.34	
Co	59	72	He	1.3284	ug/l	2.7	7718.45	
As	75	72	He	4.9296	ug/l	1.4	1880.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2978557.67	0.3	3482217.34	85.54	
Sc	45	He	134061.54	1.0	160566.51	83.49	
Ge	72	He	110777.68	0.8	125774.49	88.08	

Sample Report

Sample Name K2210884-003

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:41:54

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	59.8604	ug/l	0.7	797209.31	
Al	27	45	No Gas	1.7197	ug/l	0.5	23402.25	
Na	23	45	He	6331.2446	ug/l	0.6	3527929.95	
Mg	24	45	He	3682.1120	ug/l	1.1	1001902.61	
Mn	55	72	He	771.1284	ug/l	1.4	1255611.80	
Fe	56	72	He	1391.9251	ug/l	2.4	3988505.98	
Co	59	72	He	4.6912	ug/l	2.8	28016.09	
As	75	72	He	11.2718	ug/l	3.3	4415.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3017160.16	1.0	3482217.34	86.64	
Sc	45	He	137697.22	1.1	160566.51	85.76	
Ge	72	He	113932.01	1.3	125774.49	90.58	

Sample Report

Sample Name K2210884-004

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:43:35

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	127.1413	ug/l	1.2	1669812.58	
Al	27	45	No Gas	1.4908	ug/l	1.6	20280.05	
Na	23	45	He	6517.1122	ug/l	2.0	3620428.38	
Mg	24	45	He	5791.6110	ug/l	0.9	1571602.27	
Mn	55	72	He	1134.3622	ug/l	1.5	1801406.90	
Fe	56	72	He	8897.8090	ug/l	3.0	24861362.96	
Co	59	72	He	7.8052	ug/l	2.3	45458.59	
As	75	72	He	3.2145	ug/l	1.1	1231.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2975830.27	0.5	3482217.34	85.46	
Sc	45	He	137313.75	0.4	160566.51	85.52	
Ge	72	He	111110.36	1.1	125774.49	88.34	

Sample Report

Sample Name	K2210884-005
File Name	050SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:45:14
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	140.9368	ug/l	1.4	1895580.23	
Al	27	45	No Gas	1.5704	ug/l	3.4	21766.85	
Na	23	45	He	10331.7673	ug/l	2.8	5837642.83	
Mg	24	45	He	5742.6146	ug/l	2.9	1590292.06	
Mn	55	72	He	402.2727	ug/l	1.4	674235.95	
Fe	56	72	He	3911.8724	ug/l	0.9	11538024.00	
Co	59	72	He	1.9347	ug/l	3.9	11896.37	
As	75	72	He	82.8480	ug/l	1.1	33384.80	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047572.56	0.8	3482217.34	87.52	
Sc	45	He	140180.70	2.0	160566.51	87.3	
Ge	72	He	117267.59	1.0	125774.49	93.24	

Sample Report

Sample Name	K2210884-006
File Name	051SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:46:55
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.8278	ug/l	4.7	11190.40	
Al	27	45	No Gas	1.3912	ug/l	0.9	19230.59	
Na	23	45	He	5585.5990	ug/l	1.3	3066956.73	
Mg	24	45	He	3739.9319	ug/l	1.1	1001582.31	
Mn	55	72	He	1937.4880	ug/l	1.1	3056940.89	
Fe	56	72	He	0.9215	ug/l	9.9	3120.35	
Co	59	72	He	66.0646	ug/l	0.9	382277.83	
As	75	72	He	0.0674	ug/l	13.4	29.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3002042.25	0.6	3482217.34	86.21	
Sc	45	He	135524.03	1.1	160566.51	84.4	
Ge	72	He	110388.91	0.7	125774.49	87.77	

Sample Report

Sample Name K2210884-007

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:48:35

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2834	ug/l	8.7	4060.54	
Al	27	45	No Gas	1.7641	ug/l	3.8	24346.82	
Na	23	45	He	10496.2898	ug/l	2.6	5649409.29	
Mg	24	45	He	25384.2984	ug/l	1.0	6698024.07	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~6037.1981~~	~~ug/l~~	~~2.7~~	~~9586571.10~~	~~>LDR~~
Fe	56	72	He	108.5514	ug/l	2.0	303904.87	
Co	59	72	He	3.8284	ug/l	0.2	22303.38	
As	75	72	He	0.0215	ug/l	27.8	12.33	

See Dilution

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3068767.66	2.9	3482217.34	88.13	
Sc	45	He	133518.42	0.9	160566.51	83.15	
Ge	72	He	111106.90	0.6	125774.49	88.34	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:50:15
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2233	ug/l	1.4	360125.25	100.89	
Al	27	45	No Gas	252.2633	ug/l	0.5	3356077.14	100.91	
Na	23	45	He	1938.6450	ug/l	1.4	1201433.89	96.93	
Mg	24	45	He	1905.2366	ug/l	1.5	564584.46	95.26	
Mn	55	72	He	24.9394	ug/l	3.5	42830.18	99.76	
Fe	56	72	He	250.9608	ug/l	2.0	758596.13	100.38	
Co	59	72	He	25.2878	ug/l	1.0	159201.15	101.15	
As	75	72	He	24.8639	ug/l	2.5	10263.09	99.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3233640.89	1.5	3482217.34	92.86	
Sc	45	He	149970.60	1.6	160566.51	93.4	
Ge	72	He	120106.59	1.5	125774.49	95.49	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:51:56
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0126	ug/l	9.3	420.01	
Al	27	45	No Gas	-0.0002	ug/l	N/A	2205.16	
Na	23	45	He	5.7493	ug/l	17.5	38391.83	
Mg	24	45	He	0.0818	ug/l	48.7	26.67	
Mn	55	72	He	0.0125	ug/l	69.1	46.67	
Fe	56	72	He	0.0168	ug/l	223.7	656.70	
Co	59	72	He	-0.0003	ug/l	N/A	4.44	
As	75	72	He	-0.0026	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3217134.12	1.4	3482217.34	92.39	
Sc	45	He	145691.20	0.4	160566.51	90.74	
Ge	72	He	119241.38	2.1	125774.49	94.81	

Sample Report

Sample Name K2210884-008

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:53:37

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1196	ug/l	3.3	13989.05	
Al	27	45	No Gas	1.3214	ug/l	3.3	17066.67	
Na	23	45	He	10061.5876	ug/l	1.9	4989172.22	
Mg	24	45	He	6860.4864	ug/l	0.9	1667190.96	
Mn	55	72	He	3446.7332	ug/l	0.3	4988562.53	>LDR
Fe	56	72	He	40917.0528	ug/l	1.0	104209298.45	
Co	59	72	He	37.3795	ug/l	0.6	198414.85	
As	75	72	He	0.0486	ug/l	28.2	20.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2790064.96	1.4	3482217.34	80.12	
Sc	45	He	122975.08	1.0	160566.51	76.59	
Ge	72	He	101259.44	0.2	125774.49	80.51	

Sample Report

Sample Name K2210884-009

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:55:17

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.9137	ug/l	1.2	50391.11	
Al	27	45	No Gas	3.4992	ug/l	1.9	43787.49	
Na	23	45	He	4630.2380	ug/l	2.3	2652776.99	
Mg	24	45	He	12137.5159	ug/l	2.0	3384204.12	
Mn	55	72	He	0.3541	ug/l	22.6	616.70	
Fe	56	72	He	1.1600	ug/l	17.4	4007.23	
Co	59	72	He	0.0456	ug/l	19.1	285.56	
As	75	72	He	0.0896	ug/l	7.0	40.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2905266.52	1.5	3482217.34	83.43	
Sc	45	He	141081.04	0.2	160566.51	87.87	
Ge	72	He	116922.10	0.4	125774.49	92.96	

Sample Report

Sample Name K2210884-010

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:56:58

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	13.5373	ug/l	1.5	186176.58	
Al	27	45	No Gas	2.1855	ug/l	1.8	30104.06	
Na	23	45	He	4743.7199	ug/l	3.5	2709441.94	
Mg	24	45	He	4063.0704	ug/l	1.8	1129783.71	
Mn	55	72	He	362.5999	ug/l	0.7	599133.17	
Fe	56	72	He	116.1536	ug/l	1.1	338296.88	
Co	59	72	He	2.3432	ug/l	2.3	14204.81	
As	75	72	He	0.1308	ug/l	24.4	56.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3113178.29	1.9	3482217.34	89.4	
Sc	45	He	140724.66	1.5	160566.51	87.64	
Ge	72	He	115603.75	1.1	125774.49	91.91	

Sample Report

Sample Name	K2210884-011
File Name	058SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:58:39
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7001	ug/l	2.5	80821.78	
Al	27	45	No Gas	2.5609	ug/l	1.9	35923.21	
Na	23	45	He	6106.4368	ug/l	1.0	3787674.53	
Mg	24	45	He	13980.8861	ug/l	1.6	4233618.27	
Mn	55	72	He	0.2030	ug/l	13.2	390.01	
Fe	56	72	He	0.5019	ug/l	13.7	2220.20	
Co	59	72	He	0.0107	ug/l	19.9	76.67	
As	75	72	He	0.0278	ug/l	54.5	16.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3202958.01	1.3	3482217.34	91.98	
Sc	45	He	153210.21	1.1	160566.51	95.42	
Ge	72	He	125383.95	1.1	125774.49	99.69	

Sample Report

Sample Name K2210884-012

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:00:19

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	52.2152	ug/l	2.4	753835.85	
Al	27	45	No Gas	1.2855	ug/l	3.6	19529.23	
Na	23	45	He	5746.5344	ug/l	1.1	3410812.14	
Mg	24	45	He	3565.7968	ug/l	0.5	1032583.00	
Mn	55	72	He	1015.5354	ug/l	0.7	1741764.82	
Fe	56	72	He	144.0116	ug/l	1.4	435210.19	
Co	59	72	He	0.2424	ug/l	9.2	1530.08	
As	75	72	He	0.0159	ug/l	17.7	11.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3271569.84	2.2	3482217.34	93.95	
Sc	45	He	146531.99	0.3	160566.51	91.26	
Ge	72	He	119999.31	1.5	125774.49	95.41	

Sample Report

Sample Name K2210884-013
File Name 060SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:02:00
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	85.0391	ug/l	0.8	1198155.32	
Al	27	45	No Gas	4.2364	ug/l	0.8	57788.95	
Na	23	45	He	6220.1417	ug/l	1.8	3904318.69	
Mg	24	45	He	19587.1717	ug/l	2.6	6001847.62	
Mn	55	72	He	0.2107	ug/l	9.1	410.01	
Fe	56	72	He	0.4602	ug/l	5.6	2120.18	
Co	59	72	He	0.0055	ug/l	21.3	43.33	
As	75	72	He	0.0298	ug/l	48.6	17.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3192100.48	0.8	3482217.34	91.67	
Sc	45	He	155110.10	2.2	160566.51	96.6	
Ge	72	He	127171.54	2.4	125774.49	101.11	

Sample Report

Sample Name	K2210884-014
File Name	061SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:03:41
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	127.2657	ug/l	4.5	1805289.24	
Al	27	45	No Gas	1.4692	ug/l	6.4	21615.00	
Na	23	45	He	6574.3701	ug/l	0.5	3851292.96	
Mg	24	45	He	5957.5388	ug/l	2.3	1705019.61	
Mn	55	72	He	1268.5481	ug/l	2.5	2132919.35	
Fe	56	72	He	3338.1349	ug/l	1.3	9878423.40	
Co	59	72	He	1.0519	ug/l	2.0	6492.39	
As	75	72	He	0.0254	ug/l	28.4	14.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3215198.18	1.4	3482217.34	92.33	
Sc	45	He	144807.57	0.9	160566.51	90.19	
Ge	72	He	117647.53	0.9	125774.49	93.54	

Sample Report

Sample Name K2210884-015
File Name 062SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:05:21
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	108.5931	ug/l	3.6	1586984.40	
Al	27	45	No Gas	4.3764	ug/l	2.9	61841.04	
Na	23	45	He	10138.4284	ug/l	1.0	6419224.28	
Mg	24	45	He	17812.2627	ug/l	2.6	5525797.63	
Mn	55	72	He	0.1170	ug/l	19.6	236.67	
Fe	56	72	He	0.7256	ug/l	5.9	2933.66	
Co	59	72	He	0.0088	ug/l	32.6	64.44	
As	75	72	He	0.0448	ug/l	41.2	24.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3311493.91	1.2	3482217.34	95.1	
Sc	45	He	157018.10	1.5	160566.51	97.79	
Ge	72	He	125649.87	0.2	125774.49	99.9	

3C
9/27/22

Sample Report

SC
9/27/22

Sample Name	K2210884-016
File Name	063SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:07:02
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	120.2944	ug/l	1.8	1770942.42	
Al	27	45	No Gas	1.5927	ug/l	4.0	24126.57	
Na	23	45	He	11508.8314	ug/l	3.8	7023488.85	
Mg	24	45	He	5724.2321	ug/l	1.3	1713490.44	
Mn	55	72	He	510.6670	ug/l	1.1	898609.73	
Fe	56	72	He	965.1963	ug/l	0.8	2989368.71	
Co	59	72	He	0.4423	ug/l	4.7	2860.27	
As	75	72	He	0.2242	ug/l	10.4	99.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3335854.22	0.9	3482217.34	95.8	
Sc	45	He	151483.46	1.1	160566.51	94.34	
Ge	72	He	123118.67	1.2	125774.49	97.89	

Sample Report

Sample Name K2210884-017
File Name 064SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:08:42
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0858	ug/l	5.4	1500.10	
Al	27	45	No Gas	3.3969	ug/l	1.7	48483.05	
Na	23	45	He	5222.8801	ug/l	4.3	3302661.72	
Mg	24	45	He	11187.0370	ug/l	0.8	3447929.64	
Mn	55	72	He	0.2114	ug/l	10.0	413.35	
Fe	56	72	He	0.6719	ug/l	22.1	2816.98	
Co	59	72	He	0.0328	ug/l	10.7	226.67	
As	75	72	He	0.0681	ug/l	4.5	34.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3309313.91	1.1	3482217.34	95.03	
Sc	45	He	155961.90	0.7	160566.51	97.13	
Ge	72	He	127932.62	1.1	125774.49	101.72	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:10:23
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4211	ug/l	0.2	384357.44	101.68	
Al	27	45	No Gas	250.6444	ug/l	0.9	3530588.91	100.26	
Na	23	45	He	1965.1301	ug/l	2.0	1260150.60	98.26	
Mg	24	45	He	1945.7783	ug/l	1.9	596852.15	97.29	
Mn	55	72	He	25.1839	ug/l	2.7	45798.19	100.74	
Fe	56	72	He	250.8784	ug/l	1.2	803116.29	100.35	
Co	59	72	He	25.0341	ug/l	1.0	166911.94	100.14	
As	75	72	He	24.5917	ug/l	1.9	10750.72	98.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3423917.87	0.1	3482217.34	98.33	
Sc	45	He	155241.86	1.8	160566.51	96.68	
Ge	72	He	127184.22	1.2	125774.49	101.12	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:12:03
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0231	ug/l	7.4	590.02	
Al	27	45	No Gas	0.0124	ug/l	129.8	2460.20	
Na	23	45	He	7.6208	ug/l	17.2	40770.69	
Mg	24	45	He	0.1006	ug/l	68.5	33.33	
Mn	55	72	He	0.0063	ug/l	345.3	36.67	
Fe	56	72	He	0.0496	ug/l	69.9	773.37	
Co	59	72	He	-0.0008	ug/l	N/A	1.11	
As	75	72	He	-0.0020	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3338379.43	1.3	3482217.34	95.87	
Sc	45	He	150471.41	1.7	160566.51	93.71	
Ge	72	He	121906.73	0.4	125774.49	96.92	

Prep Blank (PB) Report

Sample Name	KQ2216191-01
File Name	067_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:23:53
Sample Type	PB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0165	ug/l	35.5	463.35	
Al	27	45	No Gas	0.4107	ug/l	3.6	7449.98	
Na	23	45	He	4.8266	ug/l	19.9	37252.85	
Mg	24	45	He	0.2707	ug/l	37.8	80.00	
Mn	55	72	He	0.0134	ug/l	157.2	46.67	
Fe	56	72	He	0.0127	ug/l	205.0	623.36	
Co	59	72	He	0.0005	ug/l	142.5	8.89	
As	75	72	He	-0.0049	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3136284.33	1.6	3482217.34	90.07	
Sc	45	He	143398.72	1.3	160566.51	89.31	
Ge	72	He	115107.20	1.7	125774.49	91.52	

Sample Report

Sample Name	K2210884-018
File Name	068SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:25:34
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6360	ug/l	5.6	8882.37	
Al	27	45	No Gas	1.6078	ug/l	3.9	22489.42	
Na	23	45	He	5653.8521	ug/l	1.0	3213505.79	
Mg	24	45	He	3956.3849	ug/l	0.9	1096834.72	
Mn	55	72	He	1571.7706	ug/l	0.5	2554899.08	
Fe	56	72	He	198.5283	ug/l	1.2	568370.19	
Co	59	72	He	3.4035	ug/l	0.3	20295.33	
As	75	72	He	0.0584	ug/l	27.9	27.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3082092.56	0.6	3482217.34	88.51	
Sc	45	He	140290.14	1.1	160566.51	87.37	
Ge	72	He	113720.41	1.3	125774.49	90.42	

Sample Report

Sample Name K2210884-007

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:30:34

Sample Type Sample

Comment D 50X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0307	ug/l	26.1	666.69	
Al	27	45	No Gas	0.4770	ug/l	2.4	8413.75	
Na	23	45	He	966.5638	ug/l	1.8	594364.19	
Mg	24	45	He	2372.1703	ug/l	0.6	677144.70	
Mn	55	72	He	542.7878	ug/l	0.2	914728.53	
Fe	56	72	He	10.3046	ug/l	4.0	31155.30	
Co	59	72	He	0.3729	ug/l	6.3	2311.28	
As	75	72	He	0.0008	ug/l	1254.2	4.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3177774.01	1.9	3482217.34	91.26	
Sc	45	He	144447.47	1.2	160566.51	89.96	
Ge	72	He	117902.55	0.5	125774.49	93.74	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	070_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:33:08
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.7593	ug/l	0.6	358926.38	103.04	
Al	27	45	No Gas	253.5231	ug/l	0.8	3291433.49	101.41	
Na	23	45	He	1959.1971	ug/l	1.7	1163811.26	97.96	
Mg	24	45	He	1956.5314	ug/l	0.3	555969.69	97.83	
Mn	55	72	He	24.4665	ug/l	3.0	40751.98	97.87	
Fe	56	72	He	249.1891	ug/l	0.5	730560.22	99.68	
Co	59	72	He	24.8552	ug/l	0.2	151750.22	99.42	
As	75	72	He	24.7051	ug/l	0.6	9890.87	98.82	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3155509.85	1.4	3482217.34	90.62	
Sc	45	He	143789.32	0.8	160566.51	89.55	
Ge	72	He	116466.02	0.3	125774.49	92.6	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	071_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:34:48
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0091	ug/l	120.6	360.01	
Al	27	45	No Gas	0.0106	ug/l	150.0	2283.50	
Na	23	45	He	4.5223	ug/l	52.1	36274.10	
Mg	24	45	He	0.0738	ug/l	157.4	23.33	
Mn	55	72	He	0.0034	ug/l	179.8	30.00	
Fe	56	72	He	0.0071	ug/l	581.3	610.02	
Co	59	72	He	0.0010	ug/l	61.6	12.22	
As	75	72	He	0.0010	ug/l	397.6	4.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130644.54	0.8	3482217.34	89.9	
Sc	45	He	140341.26	1.9	160566.51	87.4	
Ge	72	He	115538.95	0.8	125774.49	91.86	

Prep Blank (PB) Report

Sample Name	KQ2216203-01
File Name	072_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:46:33
Sample Type	PB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0045	ug/l	51.2	293.34	
Al	27	45	No Gas	3.2501	ug/l	0.4	43563.55	
Na	23	45	He	3.8230	ug/l	23.8	35753.03	
Mg	24	45	He	5.5115	ug/l	6.3	1526.77	
Mn	55	72	He	0.1367	ug/l	20.4	243.34	
Fe	56	72	He	0.0958	ug/l	36.2	843.38	
Co	59	72	He	0.0005	ug/l	326.9	8.89	
As	75	72	He	0.0039	ug/l	152.9	5.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3100930.89	0.6	3482217.34	89.05	
Sc	45	He	139806.06	2.4	160566.51	87.07	
Ge	72	He	112324.41	0.7	125774.49	89.31	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216203-03
File Name	073_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:48:13
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.1242	ug/l	1.6	676611.92	50	98.25	
Al	27	45	No Gas	100.9854	ug/l	2.6	1297534.09	100	100.99	
Na	23	45	He	236.2023	ug/l	1.8	169529.26	250	94.48	
Mg	24	45	He	237.9265	ug/l	1.8	67130.58	250	95.17	
Mn	55	72	He	23.8965	ug/l	2.0	38887.51	25	95.59	
Fe	56	72	He	48.5894	ug/l	0.7	139622.77	50	97.18	
Co	59	72	He	24.5649	ug/l	0.5	146507.58	25	98.26	
As	75	72	He	46.8048	ug/l	1.6	18299.79	50	93.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3120088.91	0.3	3482217.34	89.6	
Sc	45	He	142777.87	0.9	160566.51	88.92	
Ge	72	He	113774.01	1.1	125774.49	90.46	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216203-04
File Name	074_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:49:53
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2382	ug/l	0.8	662519.57	50	98.48	
Al	27	45	No Gas	103.5104	ug/l	1.7	1299132.27	100	103.51	
Na	23	45	He	246.1819	ug/l	1.1	171275.19	250	98.47	
Mg	24	45	He	246.9735	ug/l	1.2	68114.56	250	98.79	
Mn	55	72	He	24.3932	ug/l	2.3	39856.41	25	97.57	
Fe	56	72	He	48.8816	ug/l	1.4	141058.29	50	97.76	
Co	59	72	He	24.5056	ug/l	1.9	146768.67	25	98.02	
As	75	72	He	46.7667	ug/l	2.3	18363.18	50	93.53	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047968.08	0.5	3482217.34	87.53	
Sc	45	He	139551.04	0.5	160566.51	86.91	
Ge	72	He	114271.43	1.6	125774.49	90.85	

Sample Report

Sample Name	K2210887-001
File Name	075SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:51:33
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.5123	ug/l	2.0	27541.46	
Al	27	45	No Gas	4.3597	ug/l	1.4	45922.73	
Na	23	45	He	47923.7033	ug/l	0.8	21183816.35	
Mg	24	45	He	90713.9689	ug/l	2.8	19741620.96	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~68506.9060~~	~~ug/l~~	~~0.5~~	~~88795428.68~~	>LDR
Fe	56	72	He	2287.6002	ug/l	2.1	5217313.78	
Co	59	72	He	57.3978	ug/l	1.2	272823.07	
As	75	72	He	0.0696	ug/l	41.9	25.00	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2467591.58	0.2	3482217.34	70.86	
Sc	45	He	110133.12	1.2	160566.51	68.59	
Ge	72	He	90680.22	1.0	125774.49	72.1	

Sample Report

Sample Name K2210887-002

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:53:12

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.3512	ug/l	1.0	57957.12	
Al	27	45	No Gas	4.2396	ug/l	0.8	44320.49	
Na	23	45	He	48731.3614	ug/l	0.6	21254684.68	
Mg	24	45	He	31036.2435	ug/l	1.6	6663913.65	
Mn	~~55~~	~~72~~	~~He~~	~~15924.9220~~	ug/l	3.2	20673671.78	>LDR
Fe	~~56~~	~~72~~	~~He~~	~~192108.6459~~	~~ug/l~~	~~2.7~~	~~438915806.79~~	~~>LDR~~
Co	59	72	He	209.5085	ug/l	2.8	997533.40	
As	75	72	He	0.1757	ug/l	23.3	58.33	

X see Dilutions
X JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2446455.22	0.5	3482217.34	70.26	
Sc	45	He	108663.92	1.5	160566.51	67.68	
Ge	72	He	90881.06	3.1	125774.49	72.26	

Sample Report

Sample Name	K2210887-003
File Name	077SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:58:09
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	39.0407	ug/l	0.6	491947.96	
Al	27	45	No Gas	19.8768	ug/l	0.1	235210.00	
Na	23	45	He	20171.1501	ug/l	3.1	10778792.34	
Mg	24	45	He	44324.3872	ug/l	1.8	11643678.58	
Mn	55	72	He	1.9753	ug/l	6.9	3110.35	
Fe	56	72	He	3.0211	ug/l	7.2	8859.09	
Co	59	72	He	0.1745	ug/l	2.3	1005.59	
As	75	72	He	0.4374	ug/l	1.5	168.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2854324.02	1.2	3482217.34	81.97	
Sc	45	He	132946.91	1.9	160566.51	82.8	
Ge	72	He	109305.02	0.9	125774.49	86.91	

Sample Report

Sample Name	K2210887-004
File Name	078SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:59:49
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.5132	ug/l	1.4	1016634.65	
Al	27	45	No Gas	4.0191	ug/l	1.3	49245.09	
Na	23	45	He	20095.8081	ug/l	0.6	10408515.88	
Mg	24	45	He	17216.0584	ug/l	2.1	4382286.19	
Mn	55	72	He	2171.2807	ug/l	1.9	3276083.91	
Fe	56	72	He	3793.6639	ug/l	1.8	10073014.22	
Co	59	72	He	17.0552	ug/l	0.7	94381.58	
As	75	72	He	0.6170	ug/l	5.7	227.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2861377.77	2.5	3482217.34	82.17	
Sc	45	He	128812.88	1.0	160566.51	80.22	
Ge	72	He	105568.50	1.1	125774.49	83.93	

Sample Report

Sample Name	K2210887-005
File Name	079SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:01:28
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	152.2600	ug/l	3.3	2124557.16	
Al	27	45	No Gas	13.7221	ug/l	1.7	180568.85	
Na	23	45	He	26674.1540	ug/l	2.0	15470606.44	
Mg	24	45	He	47985.8102	ug/l	3.2	13687550.21	
Mn	55	72	He	1.5715	ug/l	6.5	2623.58	
Fe	56	72	He	1.8200	ug/l	9.8	5887.80	
Co	59	72	He	0.0373	ug/l	11.9	232.23	
As	75	72	He	0.1116	ug/l	14.6	48.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3162908.70	1.9	3482217.34	90.83	
Sc	45	He	144381.08	1.5	160566.51	89.92	
Ge	72	He	115701.23	0.6	125774.49	91.99	

Sample Report

Sample Name K2210887-006

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:03:09

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	235.8769	ug/l	2.8	3107445.47	
Al	27	45	No Gas	4.1489	ug/l	3.9	52957.46	
Na	23	45	He	27235.7959	ug/l	2.4	14443696.04	
Mg	24	45	He	15509.0022	ug/l	0.3	4046883.38	
Mn	55	72	He	3813.8192	ug/l	1.6	6020632.20	>LDR
Fe	56	72	He	1673.0101	ug/l	1.0	4648408.79	
Co	59	72	He	0.9827	ug/l	2.6	5695.42	
As	75	72	He	0.0857	ug/l	14.0	36.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2986503.81	2.5	3482217.34	85.76	
Sc	45	He	132043.87	2.2	160566.51	82.24	
Ge	72	He	110466.41	1.8	125774.49	87.83	

Sample Report

Sample Name K2210887-007

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:04:49

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	422.5218	ug/l	1.0	5753338.45	
Al	27	45	No Gas	20.2511	ug/l	1.0	259021.75	
Na	23	45	He	30770.9918	ug/l	0.4	17198751.41	
Mg	24	45	He	83598.7347	ug/l	0.8	22989537.16	
Mn	55	72	He	3.0627	ug/l	6.0	4977.57	
Fe	56	72	He	1.3837	ug/l	1.6	4517.38	
Co	59	72	He	0.0351	ug/l	20.5	214.45	
As	75	72	He	0.1057	ug/l	12.3	45.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085779.23	1.4	3482217.34	88.62	
Sc	45	He	139154.77	0.7	160566.51	86.66	
Ge	72	He	113213.89	1.3	125774.49	90.01	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	082_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:06:28
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.3440	ug/l	1.7	368570.70	101.38	
Al	27	45	No Gas	253.9263	ug/l	1.8	3440292.55	101.57	
Na	23	45	He	1958.3455	ug/l	0.9	1204120.84	97.92	
Mg	24	45	He	1958.4357	ug/l	0.4	575899.17	97.92	
Mn	55	72	He	24.7183	ug/l	3.2	43033.95	98.87	
Fe	56	72	He	248.3634	ug/l	2.4	761094.50	99.35	
Co	59	72	He	25.0407	ug/l	1.2	159830.85	100.16	
As	75	72	He	25.0137	ug/l	4.6	10464.54	100.05	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3293640.47	1.1	3482217.34	94.58	
Sc	45	He	148803.58	1.8	160566.51	92.67	
Ge	72	He	121779.30	2.2	125774.49	96.82	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	083_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:08:09
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0540	ug/l	12.3	1000.05	
Al	27	45	No Gas	0.0112	ug/l	142.3	2338.51	
Na	23	45	He	4.4508	ug/l	36.8	38158.10	
Mg	24	45	He	0.1941	ug/l	29.2	60.00	
Mn	55	72	He	0.0280	ug/l	78.5	73.33	
Fe	56	72	He	0.0856	ug/l	63.8	870.05	
Co	59	72	He	-0.0003	ug/l	N/A	4.44	
As	75	72	He	-0.0051	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3194659.32	0.6	3482217.34	91.74	
Sc	45	He	147772.11	1.9	160566.51	92.03	
Ge	72	He	120003.43	0.6	125774.49	95.41	

Sample Report

Sample Name K2210887-008

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:09:50

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	559.5089	ug/l	2.7	6769361.77	
Al	27	45	No Gas	4.6000	ug/l	1.4	53729.89	
Na	23	45	He	30180.2313	ug/l	2.0	14964966.86	
Mg	24	45	He	26245.2826	ug/l	0.8	6402050.32	
Mn	55	72	He	5115.1188	ug/l	2.4	7403702.60	>LDR
Fe	56	72	He	16846.2333	ug/l	1.7	42909584.36	
Co	59	72	He	8.2059	ug/l	1.2	43568.20	
As	75	72	He	0.2344	ug/l	16.3	85.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2741689.75	1.2	3482217.34	78.73	
Sc	45	He	123434.34	1.1	160566.51	76.87	
Ge	72	He	101283.13	1.3	125774.49	80.53	

Sample Report

Sample Name	K2210887-009
File Name	085SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:11:30
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	530.9231	ug/l	0.7	7335438.02	
Al	27	45	No Gas	23.0373	ug/l	0.7	298700.19	
Na	23	45	He	45018.9904	ug/l	0.8	26466624.60	
Mg	24	45	He	58295.0771	ug/l	0.8	16870839.33	
Mn	55	72	He	1.6227	ug/l	3.9	2763.64	
Fe	56	72	He	1.6055	ug/l	8.0	5367.64	
Co	59	72	He	0.0455	ug/l	15.6	287.78	
As	75	72	He	0.1840	ug/l	9.0	79.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130922.35	1.0	3482217.34	89.91	
Sc	45	He	146450.34	1.1	160566.51	91.21	
Ge	72	He	118076.92	1.0	125774.49	93.88	

Sample Report

Sample Name	K2210887-010
File Name	086SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:13:10
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	575.1594	ug/l	2.6	7841539.05	
Al	27	45	No Gas	4.1681	ug/l	1.5	55063.81	
Na	23	45	He	44859.4226	ug/l	0.7	25759397.95	
Mg	24	45	He	24055.3229	ug/l	2.1	6798629.06	
Mn	55	72	He	1925.1483	ug/l	1.3	3178718.70	
Fe	56	72	He	2435.7723	ug/l	0.8	7077513.64	
Co	59	72	He	1.6486	ug/l	1.4	9988.51	
As	75	72	He	0.7685	ug/l	0.8	309.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3089870.16	0.9	3482217.34	88.73	
Sc	45	He	143039.71	1.5	160566.51	89.08	
Ge	72	He	115515.81	0.6	125774.49	91.84	

Sample Report

Sample Name	K2210887-011
File Name	087SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:14:49
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6368	ug/l	3.9	8675.59	
Al	27	45	No Gas	17.6533	ug/l	1.1	220273.41	
Na	23	45	He	24609.0613	ug/l	2.1	13863768.54	
Mg	24	45	He	42874.3731	ug/l	0.6	11879618.57	
Mn	55	72	He	0.4871	ug/l	10.2	806.70	
Fe	56	72	He	2.2790	ug/l	3.0	7018.22	
Co	59	72	He	0.1356	ug/l	1.8	805.58	
As	75	72	He	0.3221	ug/l	9.5	128.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3006722.45	0.8	3482217.34	86.35	
Sc	45	He	140213.40	1.4	160566.51	87.32	
Ge	72	He	112455.15	0.7	125774.49	89.41	

Sample Report

Sample Name K2210887-012

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:16:29

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.1910	ug/l	0.9	38094.24	
Al	27	45	No Gas	4.0408	ug/l	3.3	46539.59	
Na	23	45	He	24794.6227	ug/l	2.2	12021974.40	
Mg	24	45	He	17077.6217	ug/l	2.3	4072064.84	
Mn	55	72	He	8902.6769	ug/l	2.3	12579341.89	>LDR
Fe	56	72	He	6030.1491	ug/l	2.4	14994206.03	
Co	59	72	He	22.3667	ug/l	2.8	115899.03	
As	75	72	He	0.3558	ug/l	9.3	124.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2691159.65	2.2	3482217.34	77.28	
Sc	45	He	120719.84	3.6	160566.51	75.18	
Ge	72	He	98906.00	3.2	125774.49	78.64	

Sample Report

Sample Name	K2210887-013
File Name	089SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:18:08
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.0012	ug/l	0.9	63532.57	
Al	27	45	No Gas	4.4309	ug/l	1.9	45219.34	
Na	23	45	He	48831.8637	ug/l	3.0	20958244.27	
Mg	24	45	He	32470.3091	ug/l	0.6	6864276.57	
Mn	55	72	He	15353.7261	ug/l	2.4	19918491.37	>LDR
Fe	56	72	He	180640.9882	ug/l	2.1	412392513.86	>LDR
Co	59	72	He	267.7029	ug/l	1.9	1273746.86	
As	75	72	He	3.1042	ug/l	3.6	971.36	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2392229.91	0.4	3482217.34	68.7	
Sc	45	He	106983.61	2.7	160566.51	66.63	
Ge	72	He	90784.64	1.5	125774.49	72.18	

Sample Report

Sample Name K2210887-014

File Name 090SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:19:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	88.0488	ug/l	4.8	1022738.24	
Al	27	45	No Gas	3.9713	ug/l	0.7	44788.36	
Na	23	45	He	20070.0105	ug/l	0.8	9785292.35	
Mg	24	45	He	17094.3468	ug/l	2.3	4095733.17	
Mn	55	72	He	1695.4020	ug/l	2.3	2522851.37	
Fe	56	72	He	7867.5177	ug/l	1.7	20602565.94	
Co	59	72	He	5.8500	ug/l	2.9	31927.28	
As	75	72	He	12.6397	ug/l	2.9	4525.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2632565.64	1.3	3482217.34	75.6	
Sc	45	He	121262.62	1.3	160566.51	75.52	
Ge	72	He	104133.24	1.8	125774.49	82.79	

Sample Report

Sample Name K2210887-015

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:21:27

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	256.3533	ug/l	1.8	3148228.91	
Al	27	45	No Gas	3.9834	ug/l	1.6	47481.90	
Na	23	45	He	27293.8289	ug/l	1.3	14102752.29	
Mg	24	45	He	15270.1711	ug/l	1.5	3881024.42	
Mn	55	72	He	3487.6555	ug/l	0.4	5253333.36	>LDR
Fe	56	72	He	5028.5797	ug/l	1.1	13327608.55	
Co	59	72	He	20.3798	ug/l	2.1	112556.12	
As	75	72	He	39.0660	ug/l	1.2	14147.52	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2783297.56	2.0	3482217.34	79.93	
Sc	45	He	128624.95	1.7	160566.51	80.11	
Ge	72	He	105380.47	1.8	125774.49	83.79	

Sample Report

Sample Name	K2210887-016
File Name	092SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:23:06
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	564.1121	ug/l	1.4	6773974.48	
Al	27	45	No Gas	4.0678	ug/l	0.2	47369.93	
Na	23	45	He	30467.2881	ug/l	1.2	15142996.44	
Mg	24	45	He	26069.2980	ug/l	1.2	6374825.94	
Mn	55	72	He	5030.9495	ug/l	2.0	7334195.31	>LDR
Fe	56	72	He	40069.1270	ug/l	2.4	102788891.80	
Co	59	72	He	35.6981	ug/l	2.5	190849.14	
As	75	72	He	18.1139	ug/l	1.1	6353.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2720780.79	1.4	3482217.34	78.13	
Sc	45	He	123746.93	1.4	160566.51	77.07	
Ge	72	He	102027.89	2.5	125774.49	81.12	

Sample Report

Sample Name K2210887-017

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:24:45

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	583.6056	ug/l	1.9	7739524.88	
Al	27	45	No Gas	4.0365	ug/l	2.6	51931.00	
Na	23	45	He	45266.2733	ug/l	1.3	24876916.30	
Mg	24	45	He	24628.2243	ug/l	0.9	6663747.61	
Mn	55	72	He	1879.7120	ug/l	1.7	3114246.31	
Fe	56	72	He	16437.0895	ug/l	1.3	47924329.29	
Co	59	72	He	8.2109	ug/l	1.5	49898.59	
As	75	72	He	306.6741	ug/l	1.2	122154.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3005501.83	1.1	3482217.34	86.31	
Sc	45	He	136921.05	1.2	160566.51	85.27	
Ge	72	He	115934.88	1.7	125774.49	92.18	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	094_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:26:25
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.6554	ug/l	0.8	336800.27	98.62	
Al	27	45	No Gas	245.0861	ug/l	0.9	3119405.47	98.03	
Na	23	45	He	1894.5124	ug/l	2.8	1119225.09	94.73	
Mg	24	45	He	1929.8691	ug/l	1.9	544888.85	96.49	
Mn	55	72	He	25.1667	ug/l	3.9	42138.52	100.67	
Fe	56	72	He	249.9522	ug/l	2.8	736774.16	99.98	
Co	59	72	He	24.9135	ug/l	2.7	152926.05	99.65	
As	75	72	He	24.9406	ug/l	0.6	10041.63	99.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3093531.93	1.0	3482217.34	88.84	
Sc	45	He	142908.77	2.7	160566.51	89	
Ge	72	He	117133.20	1.9	125774.49	93.13	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	095_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:28:05
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	ALKLS NoUser

3C 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1114	ug/l	9.8	1723.46	CCB Failed
Al	27	45	No Gas	0.0147	ug/l	92.8	2275.17	
Na	23	45	He	0.7108	ug/l	135.0	33949.67	
Mg	24	45	He	0.1457	ug/l	74.9	43.33	
Mn	55	72	He	0.0358	ug/l	22.8	83.33	
Fe	56	72	He	0.0583	ug/l	100.4	760.03	
Co	59	72	He	-0.0003	ug/l	N/A	4.45	
As	75	72	He	-0.0074	ug/l	N/A	1.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3045998.89	1.9	3482217.34	87.47	
Sc	45	He	139528.04	1.3	160566.51	86.9	
Ge	72	He	115555.42	2.6	125774.49	91.88	

Continuing Calibration Blank (CCB) Report

Sample Name CCB
File Name 096_CCB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 13:35:25
Sample Type CCB
Comment —
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0576	ug/l	19.4	1013.38	
Al	27	45	No Gas	0.0184	ug/l	76.4	2348.52	
Na	23	45	He	-3.2381	ug/l	N/A	32249.68	
Mg	24	45	He	0.2018	ug/l	44.8	60.00	
Mn	55	72	He	0.0237	ug/l	54.0	63.33	
Fe	56	72	He	0.0627	ug/l	65.7	770.04	
Co	59	72	He	-0.0005	ug/l	N/A	3.33	
As	75	72	He	0.0002	ug/l	3717.6	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3082732.35	0.4	3482217.34	88.53	
Sc	45	He	141842.53	3.0	160566.51	88.34	
Ge	72	He	115425.33	0.7	125774.49	91.77	

Sample Report

Sample Name K2210887-018

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:37:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.5577	ug/l	1.3	43790.51	
Al	27	45	No Gas	3.8304	ug/l	1.6	45622.05	
Na	23	45	He	25276.8553	ug/l	2.4	12049716.90	
Mg	24	45	He	16758.7922	ug/l	0.5	3928860.25	
Mn	55	72	He	8567.6162	ug/l	2.5	11895092.74	>LDR
Fe	56	72	He	2.8236	ug/l	2.0	7395.06	
Co	59	72	He	312.1892	ug/l	2.1	1589656.78	
As	75	72	He	0.2568	ug/l	8.8	89.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2775957.25	0.4	3482217.34	79.72	
Sc	45	He	118629.39	0.5	160566.51	73.88	
Ge	72	He	97179.76	3.1	125774.49	77.27	

Sample Report

Sample Name K2210887-001

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:41:30

Sample Type Sample

Comment D 100X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0617	ug/l	12.8	1053.39	
Al	27	45	No Gas	0.1933	ug/l	8.5	4493.95	
Na	23	45	He	485.9400	ug/l	1.6	305438.83	
Mg	24	45	He	921.9633	ug/l	1.6	254284.73	
Mn	55	72	He	672.8928	ug/l	1.6	1101896.21	
Fe	56	72	He	22.3072	ug/l	1.4	64861.96	
Co	59	72	He	0.5972	ug/l	3.3	3592.63	
As	75	72	He	-0.0024	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3034289.64	0.9	3482217.34	87.14	
Sc	45	He	139582.34	1.5	160566.51	86.93	
Ge	72	He	114573.24	1.0	125774.49	91.09	

Sample Report

Sample Name K2210887-002

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:43:11

Sample Type Sample

Comment D 100X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0712	ug/l	12.7	1180.06	
Al	27	45	No Gas	0.2395	ug/l	10.0	5077.46	
Na	23	45	He	487.4917	ug/l	2.0	299940.88	
Mg	24	45	He	317.3494	ug/l	2.4	85706.65	
Mn	55	72	He	154.1131	ug/l	1.1	245813.81	
Fe	56	72	He	1970.0339	ug/l	0.8	5529530.33	
Co	59	72	He	2.1706	ug/l	1.8	12703.65	
As	75	72	He	-0.0047	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3038910.89	1.8	3482217.34	87.27	
Sc	45	He	136682.51	2.0	160566.51	85.13	
Ge	72	He	111586.70	0.6	125774.49	88.72	

Sample Report

Sample Name	K2210854-006
File Name	100SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:46:46
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6606	ug/l	1.1	9365.98	
Al	27	45	No Gas	2962.7766	ug/l	2.8	38145597.76	
Na	23	45	He	55949.0511	ug/l	1.6	30650778.71	
Mg	24	45	He	15.6397	ug/l	4.7	4220.61	
Mn	55	72	He	0.4295	ug/l	5.7	706.70	
Fe	56	72	He	16.7346	ug/l	2.6	47382.96	
Co	59	72	He	0.0201	ug/l	24.6	123.34	
As	75	72	He	0.0792	ug/l	15.2	34.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3132353.28	1.7	3482217.34	89.95	
Sc	45	He	136527.97	1.6	160566.51	85.03	
Ge	72	He	111241.20	1.6	125774.49	88.44	

Sample Report

Sample Name K2210854-007

File Name 101SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:48:25

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.9317	ug/l	3.5	14112.55	
Al	27	45	No Gas	30.4175	ug/l	1.1	423955.25	
Na	23	45	He	26774.5632	ug/l	1.9	18074829.31	
Mg	24	45	He	44526.6946	ug/l	1.6	14785594.36	
Mn	55	72	He	0.2271	ug/l	12.0	466.68	
Fe	56	72	He	2.7215	ug/l	6.4	9936.43	
Co	59	72	He	0.0059	ug/l	51.2	48.89	
As	75	72	He	0.0969	ug/l	9.9	50.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3371897.66	1.9	3482217.34	96.83	
Sc	45	He	168048.81	1.4	160566.51	104.66	
Ge	72	He	135047.61	1.1	125774.49	107.37	

Sample Report

Sample Name	K2210854-008
File Name	102SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:50:06
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	9.5931	ug/l	0.5	153468.97	
Al	27	45	No Gas	1230.0775	ug/l	0.9	18303137.23	
Na	23	45	He	110613.2859	ug/l	1.3	70752755.61	
Mg	24	45	He	642.0580	ug/l	2.1	202325.04	
Mn	55	72	He	2.6080	ug/l	1.9	4814.12	
Fe	56	72	He	5.7594	ug/l	0.8	19251.13	
Co	59	72	He	0.0214	ug/l	17.2	151.11	
As	75	72	He	0.2520	ug/l	8.8	116.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3618782.55	0.4	3482217.34	103.92	
Sc	45	He	159485.03	1.5	160566.51	99.33	
Ge	72	He	128390.33	2.4	125774.49	102.08	

Sample Report

Sample Name	K2210854-009
File Name	103SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:51:45
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	24.0493	ug/l	1.3	384485.92	
Al	27	45	No Gas	26.9005	ug/l	1.2	402877.79	
Na	23	45	He	30760.6968	ug/l	2.3	21180332.60	
Mg	24	45	He	38620.7178	ug/l	1.1	13084571.06	
Mn	55	72	He	0.3700	ug/l	3.4	760.04	
Fe	56	72	He	1.9269	ug/l	7.6	7401.75	
Co	59	72	He	0.0091	ug/l	43.5	73.34	
As	75	72	He	0.1689	ug/l	7.5	85.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3620423.90	0.5	3482217.34	103.97	
Sc	45	He	171433.25	0.4	160566.51	106.77	
Ge	72	He	138192.22	0.2	125774.49	109.87	

Sample Report

Sample Name K2210854-011

File Name 104SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:53:26

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.3555	ug/l	2.8	6344.62	
Al	27	45	No Gas	36.7029	ug/l	0.9	585212.37	
Na	23	45	He	37465.9682	ug/l	2.5	27426447.09	
Mg	24	45	He	38101.8215	ug/l	1.0	13728493.13	
Mn	55	72	He	0.2270	ug/l	8.1	503.35	
Fe	56	72	He	1.3070	ug/l	7.6	5531.03	
Co	59	72	He	0.0131	ug/l	27.9	107.78	
As	75	72	He	0.0591	ug/l	12.1	35.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3860725.99	0.9	3482217.34	110.87	
Sc	45	He	182320.97	0.4	160566.51	113.55	
Ge	72	He	145671.20	0.4	125774.49	115.82	

Sample Report

Sample Name	K2210854-012
File Name	105SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:55:06
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2386	ug/l	4.4	4067.22	
Al	27	45	No Gas	415.8968	ug/l	2.8	6168586.57	
Na	23	45	He	159303.3907	ug/l	1.2	107666378.40	
Mg	24	45	He	1660.3986	ug/l	0.5	552971.74	
Mn	55	72	He	18.8316	ug/l	1.3	35850.99	
Fe	56	72	He	1.9262	ug/l	3.0	7124.95	
Co	59	72	He	0.1957	ug/l	7.5	1372.29	
As	75	72	He	0.9657	ug/l	4.7	446.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3607292.55	1.9	3482217.34	103.59	
Sc	45	He	168525.18	1.1	160566.51	104.96	
Ge	72	He	133096.07	1.6	125774.49	105.82	

Sample Report

Sample Name K2210854-013
File Name 106SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 13:56:46
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6697	ug/l	0.6	64478.93	
Al	27	45	No Gas	5.0606	ug/l	0.6	55221.00	
Na	23	45	He	46478.5124	ug/l	0.2	21895262.17	
Mg	24	45	He	29918.3983	ug/l	1.6	6939230.73	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15059.5390~~	~~ug/l~~	~~2.2~~	~~20647154.27~~	~~>LDR~~ *
~~Fe~~	~~56~~	~~72~~	~~He~~	~~185495.9050~~	~~ug/l~~	~~2.7~~	~~447498140.00~~	~~>LDR~~ *
Co	59	72	He	262.4734	ug/l	2.2	1319797.34	
As	75	72	He	7.4223	ug/l	4.6	2448.85	

* See Dilution
31
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2569392.57	0.1	3482217.34	73.79	
Sc	45	He	117359.55	0.7	160566.51	73.09	
Ge	72	He	95959.35	2.7	125774.49	76.29	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	107_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:58:25
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.3386	ug/l	1.9	299288.90	97.35	
Al	27	45	No Gas	243.5252	ug/l	3.5	2788946.00	97.41	
Na	23	45	He	1925.6592	ug/l	0.6	1018513.37	96.28	
Mg	24	45	He	1946.2633	ug/l	1.9	492100.87	97.31	
Mn	55	72	He	24.2998	ug/l	1.2	37197.07	97.2	
Fe	56	72	He	245.9864	ug/l	0.9	662762.41	98.39	
Co	59	72	He	24.5485	ug/l	0.9	137739.53	98.19	
As	75	72	He	24.4535	ug/l	0.7	8997.37	97.81	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2785738.50	3.2	3482217.34	80	
Sc	45	He	127957.12	1.0	160566.51	79.69	
Ge	72	He	107037.39	0.7	125774.49	85.1	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	108_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:00:06
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0344	ug/l	21.9	636.69	
Al	27	45	No Gas	0.0087	ug/l	34.5	2028.47	
Na	23	45	He	-6.9304	ug/l	N/A	27224.64	
Mg	24	45	He	0.1471	ug/l	80.5	40.00	
Mn	55	72	He	0.0141	ug/l	24.8	43.33	
Fe	56	72	He	0.1504	ug/l	32.7	930.05	
Co	59	72	He	0.0006	ug/l	54.8	8.89	
As	75	72	He	-0.0053	ug/l	N/A	2.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2809307.35	1.0	3482217.34	80.68	
Sc	45	He	128010.66	0.6	160566.51	79.72	
Ge	72	He	104898.09	1.5	125774.49	83.4	

Sample Report

Sample Name	K2210854-014
File Name	109SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:01:46
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	85.7084	ug/l	0.3	1025295.22	
Al	27	45	No Gas	5.5043	ug/l	1.9	63192.47	
Na	23	45	He	19681.1159	ug/l	1.5	9751451.10	
Mg	24	45	He	16795.5754	ug/l	2.4	4089884.10	
Mn	55	72	He	1605.9533	ug/l	2.0	2485575.69	
Fe	56	72	He	9321.6901	ug/l	1.6	25386670.45	
Co	59	72	He	5.6230	ug/l	2.7	31917.31	
As	75	72	He	41.3224	ug/l	1.7	15377.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2710267.36	0.7	3482217.34	77.83	
Sc	45	He	123226.40	0.7	160566.51	76.74	
Ge	72	He	108298.87	2.0	125774.49	86.11	

Sample Report

Sample Name	K2210854-015
File Name	110SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:03:26
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	252.5342	ug/l	1.6	3163531.93	
Al	27	45	No Gas	4.4078	ug/l	1.9	53381.89	
Na	23	45	He	26662.5514	ug/l	2.4	13888514.79	
Mg	24	45	He	15149.2184	ug/l	1.6	3881531.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3365.2468~~	~~ug/l~~	~~0.7~~	~~5137371.49~~	~~>LDR~~
Fe	56	72	He	7039.8891	ug/l	2.0	18911355.55	
Co	59	72	He	20.2090	ug/l	1.2	113155.53	
As	75	72	He	45.9736	ug/l	1.6	16875.33	

See Dilution
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2838667.46	1.1	3482217.34	81.52	
Sc	45	He	129669.30	1.4	160566.51	80.76	
Ge	72	He	106809.80	0.9	125774.49	84.92	

Sample Report

Sample Name K2210854-016

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:05:05

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	539.3136	ug/l	0.3	6749798.65	
Al	27	45	No Gas	4.9283	ug/l	1.2	59410.95	
Na	23	45	He	29647.1938	ug/l	1.9	14949371.03	
Mg	24	45	He	25686.0349	ug/l	1.1	6373410.95	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4976.1959~~	~~ug/l~~	~~1.8~~	~~7392962.39~~	~~>LDR~~
Fe	56	72	He	40360.2494	ug/l	1.6	105512951.76	
Co	59	72	He	34.8715	ug/l	2.3	189981.67	
As	75	72	He	23.6573	ug/l	3.5	8450.76	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2835973.92	0.9	3482217.34	81.44	
Sc	45	He	125566.44	2.4	160566.51	78.2	
Ge	72	He	103965.58	2.4	125774.49	82.66	

Sample Report

Sample Name K2210854-017

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:06:45

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	570.2366	ug/l	1.5	7645740.51	
Al	27	45	No Gas	4.5478	ug/l	2.1	58882.53	
Na	23	45	He	43670.0407	ug/l	0.9	24245459.64	
Mg	24	45	He	23844.6142	ug/l	2.3	6515942.40	
Mn	55	72	He	1822.5634	ug/l	2.0	3049627.24	
Fe	56	72	He	16719.7785	ug/l	2.0	49230757.60	
Co	59	72	He	8.0795	ug/l	1.4	49598.88	
As	75	72	He	401.0648	ug/l	1.4	161346.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3038456.31	2.3	3482217.34	87.26	
Sc	45	He	138305.48	1.4	160566.51	86.14	
Ge	72	He	117100.49	2.3	125774.49	93.1	

Sample Report

Sample Name K2210854-018
File Name 113SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:08:25
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.7516	ug/l	0.7	45267.33	
Al	27	45	No Gas	4.6058	ug/l	2.0	53407.16	
Na	23	45	He	24302.2074	ug/l	1.5	12248338.57	
Mg	24	45	He	15790.8280	ug/l	0.4	3913916.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8206.0454~~	~~ug/l~~	~~2.2~~	~~12090733.57~~	~~>LDR~~
Fe	56	72	He	4.2098	ug/l	6.5	11437.34	
Co	59	72	He	304.0011	ug/l	0.6	1642698.13	
As	75	72	He	0.3342	ug/l	18.3	122.33	

SC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2721832.98	1.3	3482217.34	78.16	
Sc	45	He	125425.19	1.5	160566.51	78.11	
Ge	72	He	103086.62	0.9	125774.49	81.96	

Sample Report

Sample Name K2210884-001

File Name 114SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:13:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7200	ug/l	2.7	63422.00	
Al	27	45	No Gas	4.3183	ug/l	1.6	46203.52	
Na	23	45	He	47798.5046	ug/l	1.1	20893708.86	
Mg	24	45	He	30387.5599	ug/l	1.3	6539958.24	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15254.8319~~	~~ug/l~~	~~1.3~~	~~20011997.62~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~178925.8421~~	~~ug/l~~	~~0.9~~	~~413057020.51~~	~~>LDR~~
Co	59	72	He	261.6168	ug/l	1.2	1258689.36	
As	75	72	He	5.2155	ug/l	2.9	1648.75	

* see Dilution
* 3(
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2506261.42	2.5	3482217.34	71.97	
Sc	45	He	108909.36	0.9	160566.51	67.83	
Ge	72	He	91790.45	1.2	125774.49	72.98	

Sample Report

Sample Name K2210884-002

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:15:27

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	86.7099	ug/l	4.3	1011258.50	
Al	27	45	No Gas	4.3621	ug/l	2.4	49196.52	
Na	23	45	He	19750.2214	ug/l	1.6	9646410.06	
Mg	24	45	He	16698.0282	ug/l	2.4	4008051.61	
Mn	55	72	He	1597.9488	ug/l	1.7	2464231.99	
Fe	56	72	He	8382.5652	ug/l	1.2	22749323.83	
Co	59	72	He	5.6103	ug/l	2.5	31734.76	
As	75	72	He	20.5146	ug/l	0.6	7610.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2642237.25	0.3	3482217.34	75.88	
Sc	45	He	121498.63	2.4	160566.51	75.67	
Ge	72	He	107906.20	1.4	125774.49	85.79	

Sample Report

Sample Name K2210884-003

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:17:07

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	253.9458	ug/l	2.5	3150361.83	
Al	27	45	No Gas	5.8742	ug/l	0.4	69831.92	
Na	23	45	He	26413.4696	ug/l	3.4	13670355.63	
Mg	24	45	He	15223.7263	ug/l	1.9	3876370.88	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3431.4714~~	~~ug/l~~	~~0.1~~	5183283.88	>LDR
Fe	56	72	He	5871.8864	ug/l	1.2	15608342.68	
Co	59	72	He	20.3052	ug/l	1.0	112489.11	
As	75	72	He	49.0264	ug/l	0.4	17806.94	

See
Dilution
SL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2811672.67	1.4	3482217.34	80.74	
Sc	45	He	128883.24	2.6	160566.51	80.27	
Ge	72	He	105679.54	1.0	125774.49	84.02	

Sample Report

Sample Name K2210884-004

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:18:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	572.2361	ug/l	1.6	6937683.02	
Al	27	45	No Gas	4.9230	ug/l	4.1	57468.09	
Na	23	45	He	29907.8099	ug/l	1.5	15129902.28	
Mg	24	45	He	25708.7172	ug/l	2.1	6397359.28	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4977.9001~~	~~ug/l~~	~~0.7~~	7501628.43	>LDR
Fe	56	72	He	39695.5398	ug/l	2.3	105254771.77	
Co	59	72	He	34.8484	ug/l	1.5	192596.27	
As	75	72	He	15.1476	ug/l	3.1	5490.56	

Sc 9/27/22
see
Dilution

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2747851.42	2.2	3482217.34	78.91	
Sc	45	He	125945.85	1.8	160566.51	78.44	
Ge	72	He	105437.73	1.1	125774.49	83.83	

Sample Report

Sample Name	K2210884-005
File Name	118SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:20:26
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	589.7554	ug/l	1.5	7857114.46	
Al	27	45	No Gas	4.9696	ug/l	1.4	63754.59	
Na	23	45	He	44082.6877	ug/l	1.3	24105779.64	
Mg	24	45	He	24106.4624	ug/l	1.4	6489489.70	
Mn	55	72	He	1836.7750	ug/l	1.7	3054028.18	
Fe	56	72	He	16740.8121	ug/l	1.5	48981704.27	
Co	59	72	He	8.1744	ug/l	2.3	49849.49	
As	75	72	He	364.5893	ug/l	1.3	145735.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3019542.25	2.1	3482217.34	86.71	
Sc	45	He	136231.22	1.1	160566.51	84.84	
Ge	72	He	116348.11	1.9	125774.49	92.51	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 119_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:22:06

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.3139	ug/l	1.7	334612.98	97.26	
Al	27	45	No Gas	241.6908	ug/l	1.6	3098873.70	96.68	
Na	23	45	He	1941.1791	ug/l	2.4	1139712.87	97.06	
Mg	24	45	He	1939.9174	ug/l	0.9	544679.69	97	
Mn	55	72	He	23.8002	ug/l	1.1	39666.06	95.2	
Fe	56	72	He	247.8949	ug/l	1.1	727134.13	99.16	
Co	59	72	He	25.1791	ug/l	0.8	153809.93	100.72	
As	75	72	He	24.8028	ug/l	1.5	9935.90	99.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3117420.68	2.9	3482217.34	89.52	
Sc	45	He	142074.80	0.6	160566.51	88.48	
Ge	72	He	116532.60	0.8	125774.49	92.65	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	120_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:23:46
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1238	ug/l	5.7	1933.49	CCB Failed
Al	27	45	No Gas	0.0053	ug/l	149.4	2203.49	
Na	23	45	He	-2.4156	ug/l	N/A	32820.81	
Mg	24	45	He	0.4059	ug/l	57.0	116.67	
Mn	55	72	He	0.0524	ug/l	77.9	113.33	
Fe	56	72	He	0.2379	ug/l	43.1	1310.09	
Co	59	72	He	0.0022	ug/l	168.4	20.00	
As	75	72	He	0.0048	ug/l	26.5	6.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3112176.72	0.6	3482217.34	89.37	
Sc	45	He	142223.09	1.0	160566.51	88.58	
Ge	72	He	118415.60	1.0	125774.49	94.15	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 121_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:30:17

Sample Type CCB

Comment —

ISTD Ref FileName 006CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0644	ug/l	4.8	1113.39	
Al	27	45	No Gas	0.0036	ug/l	185.9	2175.15	
Na	23	45	He	-2.7836	ug/l	N/A	31501.93	
Mg	24	45	He	0.0508	ug/l	42.9	16.67	
Mn	55	72	He	0.0056	ug/l	334.1	33.33	
Fe	56	72	He	0.0844	ug/l	37.5	820.04	
Co	59	72	He	-0.0006	ug/l	N/A	2.22	
As	75	72	He	0.0028	ug/l	133.9	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3100745.58	3.2	3482217.34	89.05	
Sc	45	He	137471.59	1.6	160566.51	85.62	
Ge	72	He	113710.77	1.6	125774.49	90.41	

Sample Report

Sample Name	K2210884-006
File Name	122SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:31:58
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.6214	ug/l	3.2	43620.02	
Al	27	45	No Gas	4.5596	ug/l	2.2	52801.79	
Na	23	45	He	24877.0388	ug/l	1.4	11972368.99	
Mg	24	45	He	16262.8616	ug/l	1.3	3849086.09	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8366.2400~~	~~ug/l~~	~~1.3~~	~~11887521.90~~	~~>LDR~~
Fe	56	72	He	2.7927	ug/l	5.3	7491.78	
Co	59	72	He	309.5298	ug/l	0.8	1613046.43	
As	75	72	He	0.2718	ug/l	28.6	96.33	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2718179.75	2.5	3482217.34	78.06	
Sc	45	He	119775.95	1.3	160566.51	74.6	
Ge	72	He	99419.07	1.1	125774.49	79.05	

Sample Report

Sample Name	K2210884-007
File Name	123SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:33:38
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.2989	ug/l	5.1	14435.96	
Al	27	45	No Gas	6.4295	ug/l	2.1	67449.43	
Na	23	45	He	46714.2793	ug/l	2.6	20536532.61	
Mg	24	45	He	112149.4391	ug/l	1.3	24277107.97	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~27725.0332~~	~~ug/l~~	~~1.7~~	~~35106647.81~~	~~>LDR~~
Fe	56	72	He	509.5255	ug/l	1.5	1135783.79	
Co	59	72	He	17.3511	ug/l	1.2	80585.86	
As	75	72	He	0.0560	ug/l	32.3	20.33	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2487902.93	2.3	3482217.34	71.45	
Sc	45	He	109546.00	1.3	160566.51	68.22	
Ge	72	He	88602.55	1.4	125774.49	70.45	

Sample Report

Sample Name	K2210884-008
File Name	124SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:35:18
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	ALKLS NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.2006	ug/l	1.9	54639.99	
Al	27	45	No Gas	4.6024	ug/l	0.8	46536.13	
Na	23	45	He	47090.9907	ug/l	2.9	20245320.95	
Mg	24	45	He	30895.1986	ug/l	0.4	6539973.44	
Mn	55	72	He	16198.2653	ug/l	2.1	20718893.86	>LDR
Fe	56	72	~~He~~	~~190282.6493~~	~~ug/l~~	~~2.3~~	428284526.95	>LDR
Co	59	72	He	171.5150	ug/l	0.4	804639.34	
As	75	72	He	0.1344	ug/l	21.8	44.67	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2373560.02	1.8	3482217.34	68.16	
Sc	45	He	107114.88	0.5	160566.51	66.71	
Ge	72	He	89497.52	0.8	125774.49	71.16	

Sample Report

Sample Name	K2210884-009
File Name	125SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:36:58
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	16.7880	ug/l	1.1	208157.52	
Al	27	45	No Gas	13.1105	ug/l	1.5	153207.80	
Na	23	45	He	19514.5723	ug/l	2.7	10614422.13	
Mg	24	45	He	50675.0762	ug/l	1.5	13547083.97	
Mn	55	72	He	1.4171	ug/l	5.8	2263.55	
Fe	56	72	He	3.3718	ug/l	1.7	9943.11	
Co	59	72	He	0.1840	ug/l	7.2	1072.26	
As	75	72	He	0.6014	ug/l	13.3	232.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2807160.90	2.0	3482217.34	80.61	
Sc	45	He	135285.26	1.0	160566.51	84.25	
Ge	72	He	110592.94	0.6	125774.49	87.93	

Sample Report

Sample Name	K2210884-010
File Name	126SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:38:38
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	60.8123	ug/l	1.9	774694.73	
Al	27	45	No Gas	7.8189	ug/l	3.7	94737.04	
Na	23	45	He	21126.0840	ug/l	0.7	11083613.17	
Mg	24	45	He	17870.8652	ug/l	0.7	4608927.12	
Mn	55	72	He	1759.3244	ug/l	0.4	2707125.90	
Fe	56	72	He	566.9506	ug/l	0.9	1535636.02	
Co	59	72	He	10.4810	ug/l	1.7	59142.94	
As	75	72	He	0.6197	ug/l	7.1	233.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2886394.65	1.3	3482217.34	82.89	
Sc	45	He	130502.36	0.3	160566.51	81.28	
Ge	72	He	107651.57	1.2	125774.49	85.59	

Sample Report

Sample Name K2210884-011

File Name 127SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:40:18

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	24.0559	ug/l	0.8	347316.57	
Al	27	45	No Gas	9.4057	ug/l	1.3	128656.84	
Na	23	45	He	27052.4785	ug/l	2.0	14312813.12	
Mg	24	45	He	61220.2214	ug/l	2.1	15933327.26	
Mn	55	72	He	0.8697	ug/l	17.1	1343.41	
Fe	56	72	He	1.9079	ug/l	2.9	5731.12	
Co	59	72	He	0.0297	ug/l	12.4	173.34	
As	75	72	He	0.1312	ug/l	2.7	52.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3269474.12	1.4	3482217.34	93.89	
Sc	45	He	131937.71	14.1	160566.51	82.17	
Ge	72	He	107736.27	13.0	125774.49	85.66	

Sample Report

Sample Name	K2210884-012
File Name	128SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:41:59
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	237.3640	ug/l	1.2	3119564.23	
Al	27	45	No Gas	4.6015	ug/l	3.4	58362.53	
Na	23	45	He	27043.3091	ug/l	0.6	14122814.37	
Mg	24	45	He	16427.1275	ug/l	1.3	4219673.27	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4519.5603~~	~~ug/l~~	~~1.6~~	~~7017567.60~~	~~>LDR~~
Fe	56	72	He	718.4086	ug/l	1.8	1963438.10	
Co	59	72	He	1.1416	ug/l	1.1	6506.83	
As	75	72	He	0.1018	ug/l	29.0	42.00	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2978372.35	2.3	3482217.34	85.53	
Sc	45	He	129985.16	0.8	160566.51	80.95	
Ge	72	He	108637.36	0.5	125774.49	86.37	

Sample Report

Sample Name K2210884-013

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:43:39

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	377.1365	ug/l	0.5	5150027.84	
Al	27	45	No Gas	18.5766	ug/l	0.8	238434.97	
Na	23	45	He	28956.9430	ug/l	1.2	16898374.75	
Mg	24	45	He	90668.2169	ug/l	0.5	26031520.44	
Mn	55	72	He	0.7443	ug/l	13.8	1283.41	
Fe	56	72	He	1.6670	ug/l	7.4	5561.03	
Co	59	72	He	0.0358	ug/l	9.9	227.78	
As	75	72	He	0.1594	ug/l	23.3	69.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3094238.81	0.8	3482217.34	88.86	
Sc	45	He	145284.82	1.3	160566.51	90.48	
Ge	72	He	118194.41	2.2	125774.49	93.97	

Sample Report

Sample Name K2210884-014

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:45:19

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	550.3235	ug/l	2.0	6697434.48	
Al	27	45	No Gas	4.7984	ug/l	1.1	56296.08	
Na	23	45	He	29496.4012	ug/l	1.0	15028450.61	
Mg	24	45	He	25204.1447	ug/l	1.2	6318326.57	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~5446.9239~~	~~ug/l~~	~~0.6~~	~~8143787.38~~	~~>LDR~~
Fe	56	72	He	15123.1088	ug/l	1.8	39786571.91	
Co	59	72	He	4.7668	ug/l	1.4	26145.37	
As	75	72	He	0.1579	ug/l	12.5	60.67	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2757733.40	0.4	3482217.34	79.19	
Sc	45	He	126844.87	1.1	160566.51	79	
Ge	72	He	104606.25	0.8	125774.49	83.17	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	131_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:46:59
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.9826	ug/l	3.9	338566.92	99.93	
Al	27	45	No Gas	248.8130	ug/l	0.6	3143993.49	99.53	
Na	23	45	He	1968.8268	ug/l	3.0	1160279.49	98.44	
Mg	24	45	He	1942.1604	ug/l	0.7	547556.22	97.11	
Mn	55	72	He	24.9533	ug/l	2.2	41764.30	99.81	
Fe	56	72	He	250.6991	ug/l	1.6	738587.49	100.28	
Co	59	72	He	25.1318	ug/l	1.5	154200.11	100.53	
As	75	72	He	25.3926	ug/l	0.9	10218.07	101.57	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3071099.33	2.8	3482217.34	88.19	
Sc	45	He	142659.91	0.0	160566.51	88.85	
Ge	72	He	117059.08	1.8	125774.49	93.07	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	132_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:48:39
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0893	ug/l	5.7	1446.75	
Al	27	45	No Gas	0.0294	ug/l	17.9	2490.21	
Na	23	45	He	-2.6483	ug/l	N/A	32313.20	
Mg	24	45	He	0.1918	ug/l	104.3	56.67	
Mn	55	72	He	0.0317	ug/l	78.6	76.67	
Fe	56	72	He	0.0904	ug/l	44.2	853.38	
Co	59	72	He	0.0006	ug/l	86.5	10.00	
As	75	72	He	-0.0024	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085661.52	1.7	3482217.34	88.61	
Sc	45	He	140626.19	2.1	160566.51	87.58	
Ge	72	He	115777.06	1.0	125774.49	92.05	

Sample Report

Sample Name	K2210884-015
File Name	133SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:50:20
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	457.0016	ug/l	0.9	6666587.40	
Al	27	45	No Gas	17.2505	ug/l	1.1	236702.83	
Na	23	45	He	44310.4769	ug/l	3.0	27428312.92	
Mg	24	45	He	75768.2562	ug/l	2.1	23090928.82	
Mn	55	72	He	0.4025	ug/l	28.5	746.70	
Fe	56	72	He	2.5255	ug/l	5.9	8579.00	
Co	59	72	He	0.0331	ug/l	19.3	223.33	
As	75	72	He	0.2104	ug/l	9.8	95.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3305913.18	1.9	3482217.34	94.94	
Sc	45	He	154252.33	2.1	160566.51	96.07	
Ge	72	He	125056.59	0.9	125774.49	99.43	

Sample Report

Sample Name K2210884-016

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:52:01

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	518.0769	ug/l	1.7	7163982.60	
Al	27	45	No Gas	4.7490	ug/l	1.4	63324.64	
Na	23	45	He	49656.4135	ug/l	1.1	28715475.40	
Mg	24	45	He	23580.3957	ug/l	2.8	6712604.69	
Mn	55	72	He	2337.8566	ug/l	0.9	3839372.75	
Fe	56	72	He	4132.8453	ug/l	1.6	11942977.32	
Co	59	72	He	1.8834	ug/l	0.9	11350.46	
As	75	72	He	0.8965	ug/l	9.7	357.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3133161.31	1.4	3482217.34	89.98	
Sc	45	He	144097.61	1.9	160566.51	89.74	
Ge	72	He	114915.28	2.6	125774.49	91.37	

Sample Report

Sample Name K2210884-017

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:53:41

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.5484	ug/l	2.6	7721.81	
Al	27	45	No Gas	13.9958	ug/l	1.2	180171.34	
Na	23	45	He	24465.9283	ug/l	0.9	14156004.37	
Mg	24	45	He	53431.8039	ug/l	0.7	15203033.10	
Mn	55	72	He	1.0136	ug/l	14.7	1736.80	
Fe	56	72	He	2.6896	ug/l	6.6	8602.43	
Co	59	72	He	0.1306	ug/l	6.1	817.80	
As	75	72	He	0.3107	ug/l	18.9	130.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3094491.41	1.1	3482217.34	88.87	
Sc	45	He	143980.50	0.6	160566.51	89.67	
Ge	72	He	118375.96	2.9	125774.49	94.12	

Sample Report

Sample Name K2210884-018

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:55:22

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.9890	ug/l	2.0	37249.02	
Al	27	45	No Gas	5.5796	ug/l	2.1	66330.28	
Na	23	45	He	25630.7231	ug/l	1.4	12737117.31	
Mg	24	45	He	17981.9655	ug/l	1.5	4394823.89	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~7007.9868~~	~~ug/l~~	~~1.4~~	~~10165047.35~~	~~>LDR~~
Fe	56	72	He	982.5310	ug/l	2.3	2508171.89	
Co	59	72	He	15.3175	ug/l	0.5	81495.63	
As	75	72	He	0.2501	ug/l	12.8	91.00	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2807809.02	0.7	3482217.34	80.63	
Sc	45	He	123682.94	1.4	160566.51	77.03	
Ge	72	He	101494.05	1.4	125774.49	80.7	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	137_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 15:28:23
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.4654	ug/l	2.2	329840.95	97.86	
Al	27	45	No Gas	245.7995	ug/l	4.7	3086196.62	98.32	
Na	23	45	He	1966.9691	ug/l	2.8	1052549.86	98.35	
Mg	24	45	He	1977.1994	ug/l	2.1	506185.51	98.86	
Mn	55	72	He	24.4034	ug/l	3.0	37587.96	97.61	
Fe	56	72	He	247.1790	ug/l	1.9	670215.93	98.87	
Co	59	72	He	24.7055	ug/l	3.0	139474.94	98.82	
As	75	72	He	24.2483	ug/l	4.5	8974.70	96.99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3053944.43	2.4	3482217.34	87.7	
Sc	45	He	129582.50	2.2	160566.51	80.7	
Ge	72	He	107748.75	2.5	125774.49	85.67	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	138_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 15:30:04
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0494	ug/l	6.2	870.05	
Al	27	45	No Gas	0.0194	ug/l	26.0	2275.17	
Na	23	45	He	-8.1784	ug/l	N/A	27204.73	
Mg	24	45	He	0.1949	ug/l	21.5	53.33	
Mn	55	72	He	0.0090	ug/l	232.5	36.67	
Fe	56	72	He	0.0029	ug/l	722.6	560.02	
Co	59	72	He	0.0006	ug/l	163.6	8.89	
As	75	72	He	0.0026	ug/l	9.4	5.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2972286.73	1.9	3482217.34	85.36	
Sc	45	He	130979.19	1.6	160566.51	81.57	
Ge	72	He	108353.07	1.8	125774.49	86.15	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 27, 2022

Analytical Report for Service Request No: K2210887

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 20, 2022
For your reference, these analyses have been assigned our service request number **K2210887.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability	**Date Received:**	09/20/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Eighteen water samples were received for analysis at ALS Environmental on 09/20/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 09/27/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/14/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Dissolved Sodium							
1	MW-1-HT-MMO-20220914	9/14/2022	9:46	Water	1	X		X	X	X	X	X	X							HNO3 preserved.
2	MW-1-FB-20220914	9/14/2022	9:47	Water	1	X		X	X											HNO3 preserved.
3	MW-5-HT-MMO-20220914	9/14/2022	9:48	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
4	MW-5-FB-20220914	9/14/2022	9:49	Water	1	X	X		X											HNO3 preserved.
5	MW-10-HT-MMO-20220914	9/14/2022	9:50	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
6	MW-10-FB-20220914	9/14/2022	9:51	Water	1	X	X		X											HNO3 preserved.
7	MW-14-HT-MMO-20220914	9/14/2022	9:52	Water	1	X	X	X	X	X	X	X	X							HNO3 preserved.
8	MW-14-FB-20220914	9/14/2022	9:53	Water	1	X	X	X	X											HNO3 preserved.
9	MW-17-HT-MMO-20220914	9/14/2022	9:54	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
10	MW-17-FB-20220914	9/14/2022	9:55	Water	1	X	X		X											HNO3 preserved.
11	MW-44H-HT-MMO-20220914	9/14/2022	9:56	Water	1			X	X	X	X	X	X							HNO3 preserved.
12	MW-44H-FB-20220914	9/14/2022	9:57	Water	1			X	X											HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: ALS 9/20/22 0940
Signature/Print Name:	Date/Time: 9/19/22 8:30	Signature/Print Name:
Relinquished by:	Company:	Received by:
Signature/Print Name:	Date/Time:	Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	9/14/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters															Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt													
1	MW-1-INF-20220914	9/14/2022	7:36	Water	1	X		X													HNO3 preserved.
2	MW-5-INF-20220914	9/14/2022	7:37	Water	1	X	X														HNO3 preserved.
3	MW-10-INF-20220914	9/14/2022	7:38	Water	1	X	X														HNO3 preserved.
4	MW-14-INF-20220914	9/14/2022	7:39	Water	1	X	X	X													HNO3 preserved.
5	MW-17-INF-20220914	9/14/2022	7:40	Water	1	X	X														HNO3 preserved.
6	MW-44H-INF-20220914	9/14/2022	7:41	Water	1			X													HNO3 preserved.
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 9/19/22 8:30

Received by:
ALS 9/20/22 0940
Signature/Print Name:

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM________

Cooler Receipt and Preservation Form

Client Anchor ________ Service Request **K22**________

Received: 9/20/22 Opened: 9/20/22 By:________ Unloaded: 9/20/22 By:________

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front
   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.8		IR01		—	—		
5.2		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

:________

1/13/22 ***Page of***

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:46
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-HT-MMO-20220914	**Basis:**	NA
Lab Code:	K2210887-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.4**		ug/L	4.0	0.5	1	09/27/22 12:51	09/23/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/27/22 12:51	09/23/22	
Cobalt	200.8	**57.4**		ug/L	0.020	0.009	1	09/27/22 12:51	09/23/22	
Iron	200.8	**2290**		ug/L	2.0	0.3	1	09/27/22 12:51	09/23/22	
Magnesium	200.8	**90700**		ug/L	10	2	1	09/27/22 12:51	09/23/22	
Manganese	200.8	**67300**		ug/L	20	4	100	09/27/22 13:41	09/23/22	
Sodium	200.8	**47900**		ug/L	50	20	1	09/27/22 12:51	09/23/22	

Printed 9/27/2022 4:50:05 PM

Superset Reference:

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:47
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-FB-20220914	**Basis:**	NA
Lab Code:	K2210887-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.18 J**	ug/L	0.50	0.09	1	09/27/22 12:53	09/23/22	
Cobalt	200.8	**210**	ug/L	0.020	0.009	1	09/27/22 12:53	09/23/22	
Iron	200.8	**197000**	ug/L	200	30	100	09/27/22 13:43	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:48
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-HT-MMO-20220914	**Basis:**	NA
Lab Code:	K2210887-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**19.9**	ug/L	4.0	0.5	1	09/27/22 12:58	09/23/22	
Arsenic	200.8	**0.44 J**	ug/L	0.50	0.09	1	09/27/22 12:58	09/23/22	
Iron	200.8	**3.0**	ug/L	2.0	0.3	1	09/27/22 12:58	09/23/22	
Lithium	200.8	**39.0**	ug/L	0.10	0.10	1	09/27/22 12:58	09/23/22	
Magnesium	200.8	**44300**	ug/L	10	2	1	09/27/22 12:58	09/23/22	
Manganese	200.8	**1.98**	ug/L	0.20	0.04	1	09/27/22 12:58	09/23/22	
Sodium	200.8	**20200**	ug/L	50	20	1	09/27/22 12:58	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:49
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-FB-20220914	**Basis:**	NA
Lab Code:	K2210887-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.62**	ug/L	0.50	0.09	1	09/27/22 12:59	09/23/22	
Iron	200.8	**3790**	ug/L	2.0	0.3	1	09/27/22 12:59	09/23/22	
Lithium	200.8	**80.5**	ug/L	0.10	0.10	1	09/27/22 12:59	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:50
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-HT-MMO-20220914	**Basis:**	NA
Lab Code:	K2210887-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**13.7**	ug/L	4.0	0.5	1	09/27/22 13:01	09/23/22	
Arsenic	200.8	**0.11 J**	ug/L	0.50	0.09	1	09/27/22 13:01	09/23/22	
Iron	200.8	**1.8 J**	ug/L	2.0	0.3	1	09/27/22 13:01	09/23/22	
Lithium	200.8	**152**	ug/L	0.10	0.10	1	09/27/22 13:01	09/23/22	
Magnesium	200.8	**48000**	ug/L	10	2	1	09/27/22 13:01	09/23/22	
Manganese	200.8	**1.57**	ug/L	0.20	0.04	1	09/27/22 13:01	09/23/22	
Sodium	200.8	**26700**	ug/L	50	20	1	09/27/22 13:01	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:51
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-FB-20220914	**Basis:**	NA
Lab Code:	K2210887-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/27/22 13:03	09/23/22	
Iron	200.8	**1670**		ug/L	2.0	0.3	1	09/27/22 13:03	09/23/22	
Lithium	200.8	**236**		ug/L	0.10	0.10	1	09/27/22 13:03	09/23/22	

Printed 9/27/2022 4:50:06 PM

Superset Reference:

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:52
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-HT-MMO-20220914	**Basis:**	NA
Lab Code:	K2210887-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**20.3**	ug/L	4.0	0.5	1	09/27/22 13:04	09/23/22	
Arsenic	200.8	**0.11 J**	ug/L	0.50	0.09	1	09/27/22 13:04	09/23/22	
Cobalt	200.8	**0.035**	ug/L	0.020	0.009	1	09/27/22 13:04	09/23/22	
Iron	200.8	**1.4 J**	ug/L	2.0	0.3	1	09/27/22 13:04	09/23/22	
Lithium	200.8	**423**	ug/L	0.10	0.10	1	09/27/22 13:04	09/23/22	
Magnesium	200.8	**83600**	ug/L	10	2	1	09/27/22 13:04	09/23/22	
Manganese	200.8	**3.06**	ug/L	0.20	0.04	1	09/27/22 13:04	09/23/22	
Sodium	200.8	**30800**	ug/L	50	20	1	09/27/22 13:04	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:53
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-FB-20220914	**Basis:**	NA
Lab Code:	K2210887-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.23 J**	ug/L	0.50	0.09	1	09/27/22 13:09	09/23/22	
Cobalt	200.8	**8.21**	ug/L	0.020	0.009	1	09/27/22 13:09	09/23/22	
Iron	200.8	**16800**	ug/L	2.0	0.3	1	09/27/22 13:09	09/23/22	
Lithium	200.8	**560**	ug/L	0.10	0.10	1	09/27/22 13:09	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:54
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-HT-MMO-20220914	**Basis:**	NA
Lab Code:	K2210887-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**23.0**	ug/L	4.0	0.5	1	09/27/22 13:11	09/23/22	
Arsenic	200.8	**0.18 J**	ug/L	0.50	0.09	1	09/27/22 13:11	09/23/22	
Iron	200.8	**1.6 J**	ug/L	2.0	0.3	1	09/27/22 13:11	09/23/22	
Lithium	200.8	**531**	ug/L	0.10	0.10	1	09/27/22 13:11	09/23/22	
Magnesium	200.8	**58300**	ug/L	10	2	1	09/27/22 13:11	09/23/22	
Manganese	200.8	**1.62**	ug/L	0.20	0.04	1	09/27/22 13:11	09/23/22	
Sodium	200.8	**45000**	ug/L	50	20	1	09/27/22 13:11	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:55
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-FB-20220914	**Basis:**	NA
Lab Code:	K2210887-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.77**	ug/L	0.50	0.09	1	09/27/22 13:13	09/23/22	
Iron	200.8	**2440**	ug/L	2.0	0.3	1	09/27/22 13:13	09/23/22	
Lithium	200.8	**575**	ug/L	0.10	0.10	1	09/27/22 13:13	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:56
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-HT-MMO-20220914	**Basis:**	NA
Lab Code:	K2210887-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**17.7**	ug/L	4.0	0.5	1	09/27/22 13:14	09/23/22	
Cobalt	200.8	**0.136**	ug/L	0.020	0.009	1	09/27/22 13:14	09/23/22	
Iron	200.8	**2.3**	ug/L	2.0	0.3	1	09/27/22 13:14	09/23/22	
Magnesium	200.8	**42900**	ug/L	10	2	1	09/27/22 13:14	09/23/22	
Manganese	200.8	**0.49**	ug/L	0.20	0.04	1	09/27/22 13:14	09/23/22	
Sodium	200.8	**24600**	ug/L	50	20	1	09/27/22 13:14	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 09:57
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-FB-20220914	**Basis:**	NA
Lab Code:	K2210887-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**22.4**	ug/L	0.020	0.009	1	09/27/22 13:16	09/23/22	
Iron	200.8	**6030**	ug/L	2.0	0.3	1	09/27/22 13:16	09/23/22	

Printed 9/27/2022 4:50:07 PM

Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 07:36
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-INF-20220914	**Basis:**	NA
Lab Code:	K2210887-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.10**	ug/L	0.50	0.09	1	09/27/22 13:18	09/23/22	
Cobalt	200.8	**268**	ug/L	0.020	0.009	1	09/27/22 13:18	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 07:37
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-INF-20220914	**Basis:**	NA
Lab Code:	K2210887-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**12.6**	ug/L	0.50	0.09	1	09/27/22 13:19	09/23/22	
Lithium	200.8	**88.0**	ug/L	0.10	0.10	1	09/27/22 13:19	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 07:38
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-INF-20220914	**Basis:**	NA
Lab Code:	K2210887-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**39.1**	ug/L	0.50	0.09	1	09/27/22 13:21	09/23/22	
Lithium	200.8	**256**	ug/L	0.10	0.10	1	09/27/22 13:21	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 07:39
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-INF-20220914	**Basis:**	NA
Lab Code:	K2210887-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**18.1**	ug/L	0.50	0.09	1	09/27/22 13:23	09/23/22	
Cobalt	200.8	**35.7**	ug/L	0.020	0.009	1	09/27/22 13:23	09/23/22	
Lithium	200.8	**564**	ug/L	0.10	0.10	1	09/27/22 13:23	09/23/22	

Printed 9/27/2022 4:50:07 PM

Superset Reference:

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 07:40
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-INF-20220914	**Basis:**	NA
Lab Code:	K2210887-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**307**	ug/L	0.50	0.09	1	09/27/22 13:24	09/23/22	
Lithium	200.8	**584**	ug/L	0.10	0.10	1	09/27/22 13:24	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/14/22 07:41
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-INF-20220914	**Basis:**	NA
Lab Code:	K2210887-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**312**	ug/L	0.020	0.009	1	09/27/22 13:37	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216203-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**3.3**	**J**	ug/L	4.0	0.5	1	09/27/22 12:46	09/23/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/27/22 12:46	09/23/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	09/27/22 12:46	09/23/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	09/27/22 12:46	09/23/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	09/27/22 12:46	09/23/22	
Magnesium	200.8	**6**	**J**	ug/L	10	2	1	09/27/22 12:46	09/23/22	
Manganese	200.8	**0.14**	**J**	ug/L	0.20	0.04	1	09/27/22 12:46	09/23/22	
Sodium	200.8	ND	U	ug/L	50	20	1	09/27/22 12:46	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	09/27/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216203-03			Duplicate Lab Control Sample KQ2216203-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	105	100	105	108	100	108	85-115	3	20
Arsenic	200.8	48.7	50.0	97	48.6	50.0	97	85-115	<1	20
Cobalt	200.8	25.5	25.0	102	25.5	25.0	102	85-115	<1	20
Iron	200.8	50.5	50.0	101	50.8	50.0	102	85-115	<1	20
Lithium	200.8	51.1	50.0	102	51.2	50.0	102	85-115	<1	20
Magnesium	200.8	247	250	99	257	250	103	85-115	4	20
Manganese	200.8	24.9	25.0	99	25.4	25.0	101	85-115	2	20
Sodium	200.8	246	250	98	256	250	102	85-115	4	20

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210887
Project:	Greene County Treatability/221114-01.05 Task 05		
Sample Matrix:	Water		

Metals

Prep Method:	EPA CLP ILM04.0	**Extraction Lot:**	406857
Analytical Method:	200.8	**Extraction Date:**	09/23/22 14:02

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-HT-MMO-20220914	K2210887-001	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-1-FB-20220914	K2210887-002	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-5-HT-MMO-20220914	K2210887-003	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-5-FB-20220914	K2210887-004	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220914	K2210887-005	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-10-FB-20220914	K2210887-006	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220914	K2210887-007	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-14-FB-20220914	K2210887-008	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220914	K2210887-009	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-17-FB-20220914	K2210887-010	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-44H-HT-MMO-20220914	K2210887-011	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-44H-FB-20220914	K2210887-012	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-1-INF-20220914	K2210887-013	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-5-INF-20220914	K2210887-014	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-10-INF-20220914	K2210887-015	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-14-INF-20220914	K2210887-016	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-17-INF-20220914	K2210887-017	9/14/22	9/20/22	10.0000 mL	10 mL	
MW-44H-INF-20220914	K2210887-018	9/14/22	9/20/22	10.0000 mL	10 mL	
Method Blank	KQ2216203-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216203-03LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate Lab Control Sample	KQ2216203-04DLCS	NA	NA	10.0000 mL	10.4 mL	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
ICV 09/27/22 09:31						
Aluminum	200.8	779009	103	100	103	90-110
Arsenic	200.8	779009	24.8	25.0	99	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Iron	200.8	779009	49.5	50.0	99	90-110
Magnesium	200.8	779009	240	250	96	90-110
Manganese	200.8	779009	24.6	25.0	98	90-110
Sodium	200.8	779009	233	250	93	90-110
Lithium	200.8	779009	26.5	25.0	106	90-110
CCV 09/27/22 09:33						
Aluminum	200.8	779009	252	250	101	90-110
Arsenic	200.8	779009	24.6	25.0	98	90-110
Cobalt	200.8	779009	24.9	25.0	100	90-110
Iron	200.8	779009	249	250	99	90-110
Magnesium	200.8	779009	1950	2000	98	90-110
Manganese	200.8	779009	24.5	25.0	98	90-110
Sodium	200.8	779009	1960	2000	98	90-110
Lithium	200.8	779009	25.8	25.0	103	90-110
CCV 09/27/22 10:43						
Aluminum	200.8	779009	251	250	101	90-110
Arsenic	200.8	779009	24.7	25.0	99	90-110
Cobalt	200.8	779009	25.5	25.0	102	90-110
Iron	200.8	779009	252	250	101	90-110
Magnesium	200.8	779009	2000	2000	100	90-110
Manganese	200.8	779009	25.4	25.0	102	90-110
Sodium	200.8	779009	1980	2000	99	90-110
Lithium	200.8	779009	25.9	25.0	104	90-110
CCV 09/27/22 11:03						
Aluminum	200.8	779009	244	250	98	90-110
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Iron	200.8	779009	252	250	101	90-110
Magnesium	200.8	779009	1970	2000	99	90-110
Manganese	200.8	779009	25.1	25.0	100	90-110
Sodium	200.8	779009	2020	2000	101	90-110
Lithium	200.8	779009	25.3	25.0	101	90-110

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/27/22 11:16						
Aluminum	200.8	779009	251	250	100	90-110
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1980	2000	99	90-110
Manganese	200.8	779009	24.7	25.0	99	90-110
Sodium	200.8	779009	1970	2000	99	90-110
Lithium	200.8	779009	25.6	25.0	102	90-110
CCV 09/27/22 11:50						
Aluminum	200.8	779009	252	250	101	90-110
Arsenic	200.8	779009	24.9	25.0	99	90-110
Cobalt	200.8	779009	25.3	25.0	101	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1910	2000	95	90-110
Manganese	200.8	779009	24.9	25.0	100	90-110
Sodium	200.8	779009	1940	2000	97	90-110
Lithium	200.8	779009	25.2	25.0	101	90-110
CCV 09/27/22 12:10						
Aluminum	200.8	779009	251	250	100	90-110
Arsenic	200.8	779009	24.6	25.0	98	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Iron	200.8	779009	251	250	100	90-110
Magnesium	200.8	779009	1950	2000	97	90-110
Manganese	200.8	779009	25.2	25.0	101	90-110
Sodium	200.8	779009	1970	2000	98	90-110
Lithium	200.8	779009	25.4	25.0	102	90-110
CCV 09/27/22 12:33						
Aluminum	200.8	779009	254	250	101	90-110
Arsenic	200.8	779009	24.7	25.0	99	90-110
Cobalt	200.8	779009	24.9	25.0	99	90-110
Iron	200.8	779009	249	250	100	90-110
Magnesium	200.8	779009	1960	2000	98	90-110
Manganese	200.8	779009	24.5	25.0	98	90-110
Sodium	200.8	779009	1960	2000	98	90-110
Lithium	200.8	779009	25.8	25.0	103	90-110

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/27/22 13:06						
Aluminum	200.8	779009	254	250	102	90-110
Arsenic	200.8	779009	25.0	25.0	100	90-110
Cobalt	200.8	779009	25.0	25.0	100	90-110
Iron	200.8	779009	248	250	99	90-110
Magnesium	200.8	779009	1960	2000	98	90-110
Manganese	200.8	779009	24.7	25.0	99	90-110
Sodium	200.8	779009	1960	2000	98	90-110
Lithium	200.8	779009	25.3	25.0	101	90-110
CCV 09/27/22 13:26						
Aluminum	200.8	779009	245	250	98	90-110
Arsenic	200.8	779009	24.9	25.0	100	90-110
Cobalt	200.8	779009	24.9	25.0	100	90-110
Iron	200.8	779009	250	250	100	90-110
Magnesium	200.8	779009	1930	2000	96	90-110
Manganese	200.8	779009	25.2	25.0	101	90-110
Sodium	200.8	779009	1890	2000	95	90-110
Lithium	200.8	779009	24.7	25.0	99	90-110
CCV 09/27/22 13:58						
Aluminum	200.8	779009	244	250	97	90-110
Arsenic	200.8	779009	24.5	25.0	98	90-110
Cobalt	200.8	779009	24.5	25.0	98	90-110
Iron	200.8	779009	246	250	98	90-110
Magnesium	200.8	779009	1950	2000	97	90-110
Manganese	200.8	779009	24.3	25.0	97	90-110
Sodium	200.8	779009	1930	2000	96	90-110
Lithium	200.8	779009	24.3	25.0	97	90-110

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID / **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 09/27/22 09:35				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 09:36				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 10:45				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 11:05				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 09/27/22 11:18				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 11:51				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 12:12				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 12:34				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID / **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
CCB 09/27/22 13:08				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 13:35				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U
CCB 09/27/22 14:00				
Aluminum	200.8	779009	0.5	U
Arsenic	200.8	779009	0.09	U
Cobalt	200.8	779009	0.009	U
Iron	200.8	779009	0.3	U
Magnesium	200.8	779009	2	U
Manganese	200.8	779009	0.04	U
Sodium	200.8	779009	20	U
Lithium	200.8	779009	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Aluminum	200.8	779009	4.0	4.0	101	50-199	09/27/22 09:38
Arsenic	200.8	779009	0.51	0.5	102	50-199	09/27/22 09:38
Cobalt	200.8	779009	0.017	0.02	87	50-199	09/27/22 09:38
Iron	200.8	779009	2.1	2.0	107	50-199	09/27/22 09:38
Magnesium	200.8	779009	9.8	10.0	98	50-199	09/27/22 09:38
Manganese	200.8	779009	0.19	0.2	96	50-199	09/27/22 09:38
Sodium	200.8	779009	40.9	50.0	82	50-199	09/27/22 09:38
Lithium	200.8	779009	0.11	0.1	113	50-199	09/27/22 09:38

Client: Anchor QEA, LLC
Service Request: K2210887
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-05
Matrix: Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.1	0.1	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.2	0.04	200.8
Sodium	23	ug/L	50	20	200.8

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	3150	200.8
Cobalt 59	3150	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	3150	200.8
Sodium 23	450000	200.8

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 09:28								
ZZZZZZ	1	09/27/22 09:30								
ICV	1	09/27/22 09:31	X	X	X	X	X	X	X	X
CCV	1	09/27/22 09:33	X	X	X	X	X	X	X	X
ICB	1	09/27/22 09:35	X	X	X	X	X	X	X	X
CCB	1	09/27/22 09:36	X	X	X	X	X	X	X	X
LLICVW	1	09/27/22 09:38	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 09:40								
ZZZZZZ	1	09/27/22 09:42								
ZZZZZZ	1	09/27/22 09:43								
ZZZZZZ	1	09/27/22 09:45								
ZZZZZZ	1	09/27/22 09:48								
ZZZZZZ	1	09/27/22 09:50								
ZZZZZZ	1	09/27/22 09:52								
ZZZZZZ	1	09/27/22 09:54								
ZZZZZZ	5	09/27/22 10:40								
ZZZZZZ	5	09/27/22 10:41								
CCV	1	09/27/22 10:43	X	X	X	X	X	X	X	X
CCB	1	09/27/22 10:45	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 10:46								
ZZZZZZ	5	09/27/22 10:48								
ZZZZZZ	5	09/27/22 10:50								
ZZZZZZ	5	09/27/22 10:51								
ZZZZZZ	5	09/27/22 10:53								
ZZZZZZ	5	09/27/22 10:55								
ZZZZZZ	5	09/27/22 10:56								
ZZZZZZ	5	09/27/22 10:58								
ZZZZZZ	5	09/27/22 11:00								
ZZZZZZ	5	09/27/22 11:01								
CCV	1	09/27/22 11:03	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:05	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 11:06								
ZZZZZZ	5	09/27/22 11:08								
ZZZZZZ	5	09/27/22 11:10								
ZZZZZZ	5	09/27/22 11:12								
CCV	1	09/27/22 11:16	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:18	X	X	X	X	X	X	X	X

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/27/22 11:33								
ZZZZZZ	1	09/27/22 11:35								
ZZZZZZ	1	09/27/22 11:36								
ZZZZZZ	5	09/27/22 11:38								
ZZZZZZ	5	09/27/22 11:40								
ZZZZZZ	5	09/27/22 11:41								
ZZZZZZ	5	09/27/22 11:43								
ZZZZZZ	5	09/27/22 11:45								
ZZZZZZ	5	09/27/22 11:46								
ZZZZZZ	5	09/27/22 11:48								
CCV	1	09/27/22 11:50	X	X	X	X	X	X	X	X
CCB	1	09/27/22 11:51	X	X	X	X	X	X	X	X
ZZZZZZ	5	09/27/22 11:53								
ZZZZZZ	5	09/27/22 11:55								
ZZZZZZ	5	09/27/22 11:56								
ZZZZZZ	5	09/27/22 11:58								
ZZZZZZ	5	09/27/22 12:00								
ZZZZZZ	5	09/27/22 12:02								
ZZZZZZ	5	09/27/22 12:03								
ZZZZZZ	5	09/27/22 12:05								
ZZZZZZ	5	09/27/22 12:07								
ZZZZZZ	5	09/27/22 12:08								
CCV	1	09/27/22 12:10	X	X	X	X	X	X	X	X
CCB	1	09/27/22 12:12	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 12:23								
ZZZZZZ	5	09/27/22 12:25								
ZZZZZZ	50	09/27/22 12:30								
CCV	1	09/27/22 12:33	X	X	X	X	X	X	X	X
CCB	1	09/27/22 12:34	X	X	X	X	X	X	X	X
KQ2216203-01MB	1	09/27/22 12:46	X	X	X	X	X	X	X	X
KQ2216203-03LCS	1	09/27/22 12:48	X	X	X	X	X	X	X	X
KQ2216203-04DLCS	1	09/27/22 12:49	X	X	X	X	X	X	X	X
K2210887-001	1	09/27/22 12:51	X	X	X	X		X		X
K2210887-002	1	09/27/22 12:53		X	X					
K2210887-003	1	09/27/22 12:58	X	X		X	X	X	X	X
K2210887-004	1	09/27/22 12:59		X		X	X			
K2210887-005	1	09/27/22 13:01	X	X		X	X	X	X	X

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:** K2210887
Project:	Greene County Treatability/221114-01.05 Task 05	

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
K2210887-006	1	09/27/22 13:03		X		X	X			
K2210887-007	1	09/27/22 13:04	X	X	X	X	X	X	X	X
CCV	1	09/27/22 13:06	X	X	X	X	X	X	X	X
CCB	1	09/27/22 13:08	X	X	X	X	X	X	X	X
K2210887-008	1	09/27/22 13:09		X	X	X	X			
K2210887-009	1	09/27/22 13:11	X	X		X	X	X	X	X
K2210887-010	1	09/27/22 13:13		X		X	X			
K2210887-011	1	09/27/22 13:14	X		X	X		X	X	X
K2210887-012	1	09/27/22 13:16			X	X				
K2210887-013	1	09/27/22 13:18		X	X					
K2210887-014	1	09/27/22 13:19		X			X			
K2210887-015	1	09/27/22 13:21		X			X			
K2210887-016	1	09/27/22 13:23		X	X		X			
K2210887-017	1	09/27/22 13:24		X			X			
CCV	1	09/27/22 13:26	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 13:28								
CCB	1	09/27/22 13:35	X	X	X	X	X	X	X	X
K2210887-018	1	09/27/22 13:37			X					
K2210887-001	100	09/27/22 13:41							X	
K2210887-002	100	09/27/22 13:43				X				
ZZZZZZ	1	09/27/22 13:46								
ZZZZZZ	1	09/27/22 13:48								
ZZZZZZ	1	09/27/22 13:50								
ZZZZZZ	1	09/27/22 13:51								
ZZZZZZ	1	09/27/22 13:53								
ZZZZZZ	1	09/27/22 13:55								
ZZZZZZ	1	09/27/22 13:56								
CCV	1	09/27/22 13:58	X	X	X	X	X	X	X	X
CCB	1	09/27/22 14:00	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/27/22 14:01								
ZZZZZZ	1	09/27/22 14:03								
ZZZZZZ	1	09/27/22 14:05								
ZZZZZZ	1	09/27/22 14:06								
ZZZZZZ	1	09/27/22 14:08								
ZZZZZZ	1	09/27/22 14:13								
ZZZZZZ	1	09/27/22 14:15								
ZZZZZZ	1	09/27/22 14:17								

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 09:28			
ZZZZZZ	09/27/22 09:30			
ICV	09/27/22 09:31	99	101	103
CCV	09/27/22 09:33	99	100	103
ICB	09/27/22 09:35	100	99	101
CCB	09/27/22 09:36	100	100	102
LLICVW	09/27/22 09:38	99	99	103
ZZZZZZ	09/27/22 09:40			
ZZZZZZ	09/27/22 09:42			
ZZZZZZ	09/27/22 09:43			
ZZZZZZ	09/27/22 09:45			
ZZZZZZ	09/27/22 09:48			
ZZZZZZ	09/27/22 09:50			
ZZZZZZ	09/27/22 09:52			
ZZZZZZ	09/27/22 09:54			
ZZZZZZ	09/27/22 10:40			
ZZZZZZ	09/27/22 10:41			
CCV	09/27/22 10:43	93	90	93
CCB	09/27/22 10:45	92	90	92
ZZZZZZ	09/27/22 10:46			
ZZZZZZ	09/27/22 10:48			
ZZZZZZ	09/27/22 10:50			
ZZZZZZ	09/27/22 10:51			
ZZZZZZ	09/27/22 10:53			
ZZZZZZ	09/27/22 10:55			
ZZZZZZ	09/27/22 10:56			
ZZZZZZ	09/27/22 10:58			
ZZZZZZ	09/27/22 11:00			
ZZZZZZ	09/27/22 11:01			
CCV	09/27/22 11:03	90	88	91
CCB	09/27/22 11:05	91	89	91
ZZZZZZ	09/27/22 11:06			
ZZZZZZ	09/27/22 11:08			
ZZZZZZ	09/27/22 11:10			
ZZZZZZ	09/27/22 11:12			
CCV	09/27/22 11:16	92	92	96
CCB	09/27/22 11:18	91	92	95

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/27/22 11:33			
ZZZZZZ	09/27/22 11:35			
ZZZZZZ	09/27/22 11:36			
ZZZZZZ	09/27/22 11:38			
ZZZZZZ	09/27/22 11:40			
ZZZZZZ	09/27/22 11:41			
ZZZZZZ	09/27/22 11:43			
ZZZZZZ	09/27/22 11:45			
ZZZZZZ	09/27/22 11:46			
ZZZZZZ	09/27/22 11:48			
CCV	09/27/22 11:50	93	93	95
CCB	09/27/22 11:51	92	91	95
ZZZZZZ	09/27/22 11:53			
ZZZZZZ	09/27/22 11:55			
ZZZZZZ	09/27/22 11:56			
ZZZZZZ	09/27/22 11:58			
ZZZZZZ	09/27/22 12:00			
ZZZZZZ	09/27/22 12:02			
ZZZZZZ	09/27/22 12:03			
ZZZZZZ	09/27/22 12:05			
ZZZZZZ	09/27/22 12:07			
ZZZZZZ	09/27/22 12:08			
CCV	09/27/22 12:10	98	97	101
CCB	09/27/22 12:12	96	94	97
ZZZZZZ	09/27/22 12:23			
ZZZZZZ	09/27/22 12:25			
ZZZZZZ	09/27/22 12:30			
CCV	09/27/22 12:33	91	90	93
CCB	09/27/22 12:34	90	87	92
KQ2216203-01MB	09/27/22 12:46	89	87	89
KQ2216203-03LCS	09/27/22 12:48	90	89	90
KQ2216203-04DLCS	09/27/22 12:49	88	87	91
K2210887-001	09/27/22 12:51	71	69	72
K2210887-002	09/27/22 12:53	70	68	72
K2210887-003	09/27/22 12:58	82	83	87
K2210887-004	09/27/22 12:59	82	80	84
K2210887-005	09/27/22 13:01	91	90	92

Client: Anchor QEA, LLC **Service Request:** K2210887
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779009**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
K2210887-006	09/27/22 13:03	86	82	88
K2210887-007	09/27/22 13:04	89	87	90
CCV	09/27/22 13:06	95	93	97
CCB	09/27/22 13:08	92	92	95
K2210887-008	09/27/22 13:09	79	77	81
K2210887-009	09/27/22 13:11	90	91	94
K2210887-010	09/27/22 13:13	89	89	92
K2210887-011	09/27/22 13:14	86	87	89
K2210887-012	09/27/22 13:16	77	75	79
K2210887-013	09/27/22 13:18	69	67	72
K2210887-014	09/27/22 13:19	76	76	83
K2210887-015	09/27/22 13:21	80	80	84
K2210887-016	09/27/22 13:23	78	77	81
K2210887-017	09/27/22 13:24	86	85	92
CCV	09/27/22 13:26	89	89	93
ZZZZZZ	09/27/22 13:28			
CCB	09/27/22 13:35	89	88	92
K2210887-018	09/27/22 13:37	80	74	77
K2210887-001	09/27/22 13:41	87	87	91
K2210887-002	09/27/22 13:43	87	85	89
ZZZZZZ	09/27/22 13:46			
ZZZZZZ	09/27/22 13:48			
ZZZZZZ	09/27/22 13:50			
ZZZZZZ	09/27/22 13:51			
ZZZZZZ	09/27/22 13:53			
ZZZZZZ	09/27/22 13:55			
ZZZZZZ	09/27/22 13:56			
CCV	09/27/22 13:58	80	80	85
CCB	09/27/22 14:00	81	80	83
ZZZZZZ	09/27/22 14:01			
ZZZZZZ	09/27/22 14:03			
ZZZZZZ	09/27/22 14:05			
ZZZZZZ	09/27/22 14:06			
ZZZZZZ	09/27/22 14:08			
ZZZZZZ	09/27/22 14:13			
ZZZZZZ	09/27/22 14:15			
ZZZZZZ	09/27/22 14:17			

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 406857
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216203-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1% HNO3 0.2% HCl
2	KQ2216203-03	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
3	KQ2216203-04	DLCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
4	K2210887-001	MW-1-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
5	K2210887-002	MW-1-FB-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
6	K2210887-003	MW-5-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
7	K2210887-004	MW-5-FB-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
8	K2210887-005	MW-10-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
9	K2210887-006	MW-10-FB-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
10	K2210887-007	MW-14-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
11	K2210887-008	MW-14-FB-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
12	K2210887-009	MW-17-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
13	K2210887-010	MW-17-FB-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
14	K2210887-011	MW-44H-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
15	K2210887-012	MW-44H-FB-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
16	K2210887-013	MW-1-INF-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
17	K2210887-014	MW-5-INF-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
18	K2210887-015	MW-10-INF-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
19	K2210887-016	MW-14-INF-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
20	K2210887-017	MW-17-INF-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
21	K2210887-018	MW-44H-INF-20220914	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216203-03 0.10mL KQ2216203-04 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216203-03 0.10mL KQ2216203-04 0.10mL

Name: K-MET 10ppm Li Inventory ID 223041 Logbook Ref: MET4-29-F Expires On: 10/31/2023

KQ2216203-03 0.05mL KQ2216203-04 0.05mL

Preparation Information Benchsheet

Prep Run#: 406857
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023

KQ2216203-03 0.05mL KQ2216203-04 0.05mL

Name: k-met Sb 1ug/mL Sb	Inventory ID 225112	Logbook Ref: MET4-32-E	Expires On: 06/08/2023

KQ2216203-03 0.10mL KQ2216203-04 0.10mL

Preparation Materials

K-MET 16 mL Tube	P498723 (223738)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 9/23/22 14:02
Finished: 9/23/22 16:02
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-18	Digestion	IR Thermometer ID: IR03		K-BlockDigester-18	Digestion	Temperature	94 deg C
K-BlockDigester-18	Digestion	Temperature Check Location	11	K-CR100-1000A	Digestion		
K-CR 20-200B	Digestion						

Comments: ______

Reviewed By: ______ Date: 9.26.22

Printed 9/26/22 6:41

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

9/23/22 14:02-16:02
B~~20~~ 18 /TZ11 /T94

Preparation Information Benchsheet

× L: 223041

9 KB

Prep Run#: 406857
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 12:34

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216203-01	MB		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
2	KQ2216203-02	LCS / DLCS		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
3	K2210887-001	MW-1-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
4	KQ2216203-04	K2210887-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
~~5~~	~~KQ2216203-03~~	~~K2210887-001 MS~~	~~.01~~	~~200.8/Metals D~~		~~Liquid~~	~~10.0000mL~~		~~1% HNO3 0.2% HCl~~
6	K2210887-002	MW-1-FB-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
7	KQ2216203-06	K2210887-002 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
~~8~~	~~KQ2216203-05~~	~~K2210887-002 MS~~	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
9	K2210887-003	MW-5-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
10	K2210887-004	MW-5-FB-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
11	K2210887-005	MW-10-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
12	K2210887-006	MW-10-FB-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
13	K2210887-007	MW-14-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
14	K2210887-008	MW-14-FB-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
15	K2210887-009	MW-17-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
16	K2210887-010	MW-17-FB-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
17	K2210887-011	MW-44H-HT-MMO-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
18	K2210887-012	MW-44H-FB-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
19	K2210887-013	MW-1-INF-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
20	K2210887-014	MW-5-INF-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
21	K2210887-015	MW-10-INF-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
22	K2210887-016	MW-14-INF-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
23	K2210887-017	MW-17-INF-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
24	K2210887-018	MW-44H-INF-20220914	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216203-02 0.10mL KQ2216203-03 0.10mL KQ2216203-05 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216203-02 0.10mL KQ2216203-03 0.10mL KQ2216203-05 0.10mL

Preparation Information Benchsheet

Prep Run#: 406857
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 12:34

Name: k-met Sb 1ug/mL Sb	Inventory ID 222918	Logbook Ref: MET4-29-E	Expires On: 07/12/2023
KQ2216203-02 0.10mL	KQ2216203-03 0.10mL	KQ2216203-05 0.10mL	
Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216203-02 0.05mL	KQ2216203-03 0.05mL	KQ2216203-05 0.05mL	

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ______________________________

Reviewed By: ____________________ Date: ______________

Service Request # K2210854, K2210884, K2210887
Instrument ID # K-ICP-MS-05
Calibration 092722AICPMS05
ALS LIMS Run # 779009
Cal Std: MS30-38-G
ICSA Std: NA
ICV Std: MS30-39-I
ICSAB Std: NA
LLICV Std: MS30-38-H
I.S. Solution: MS30-9-K
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments:

Prep Batch: 406844, 406846, 406857

Primary Review by JC Date 9/27/22

Secondary Review by Date 9/27/22

Data Review Form

Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\092722A.csv**
RUNNO: **779009**

K2210854

No exceptions to report.

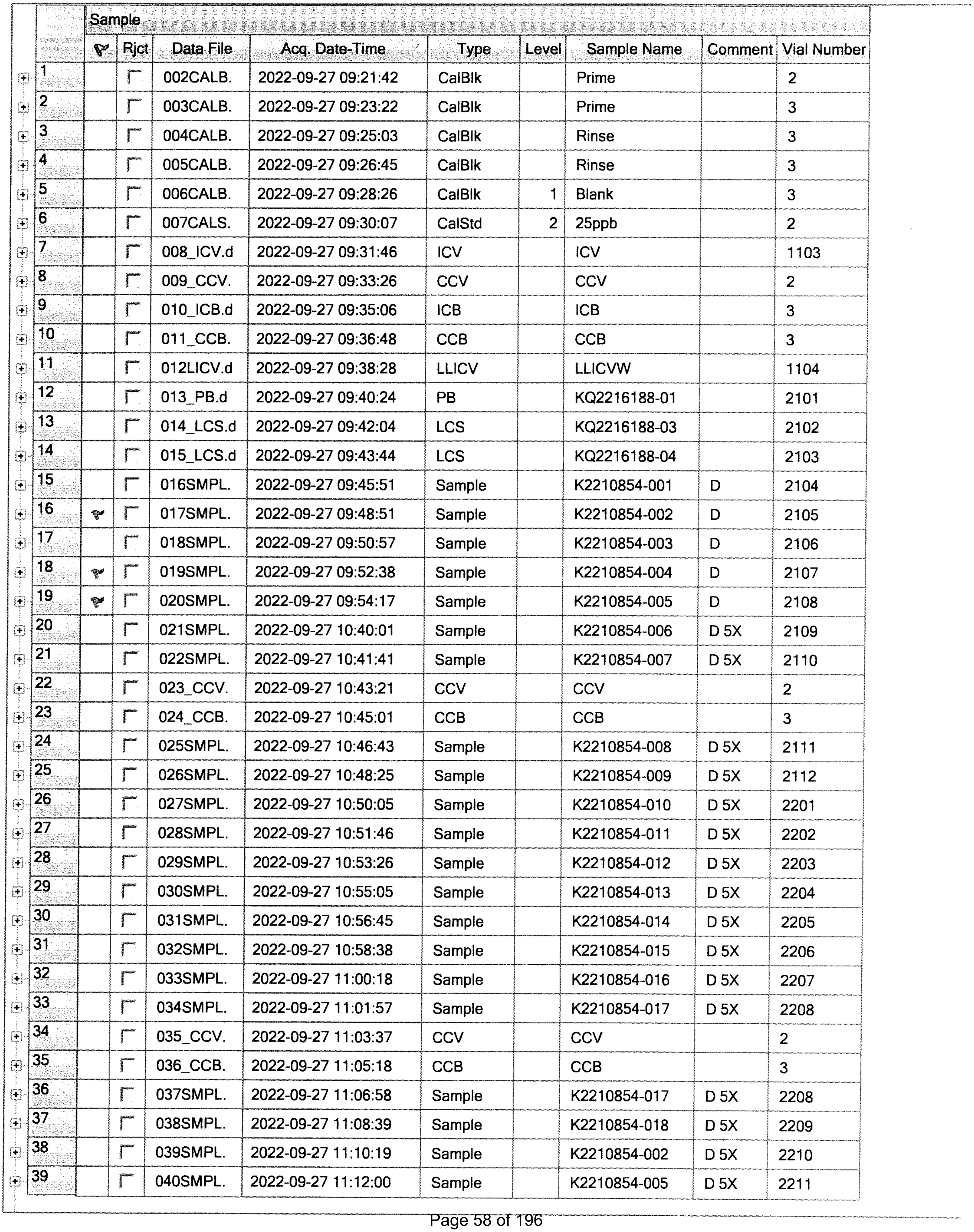
K2210884

No exceptions to report.

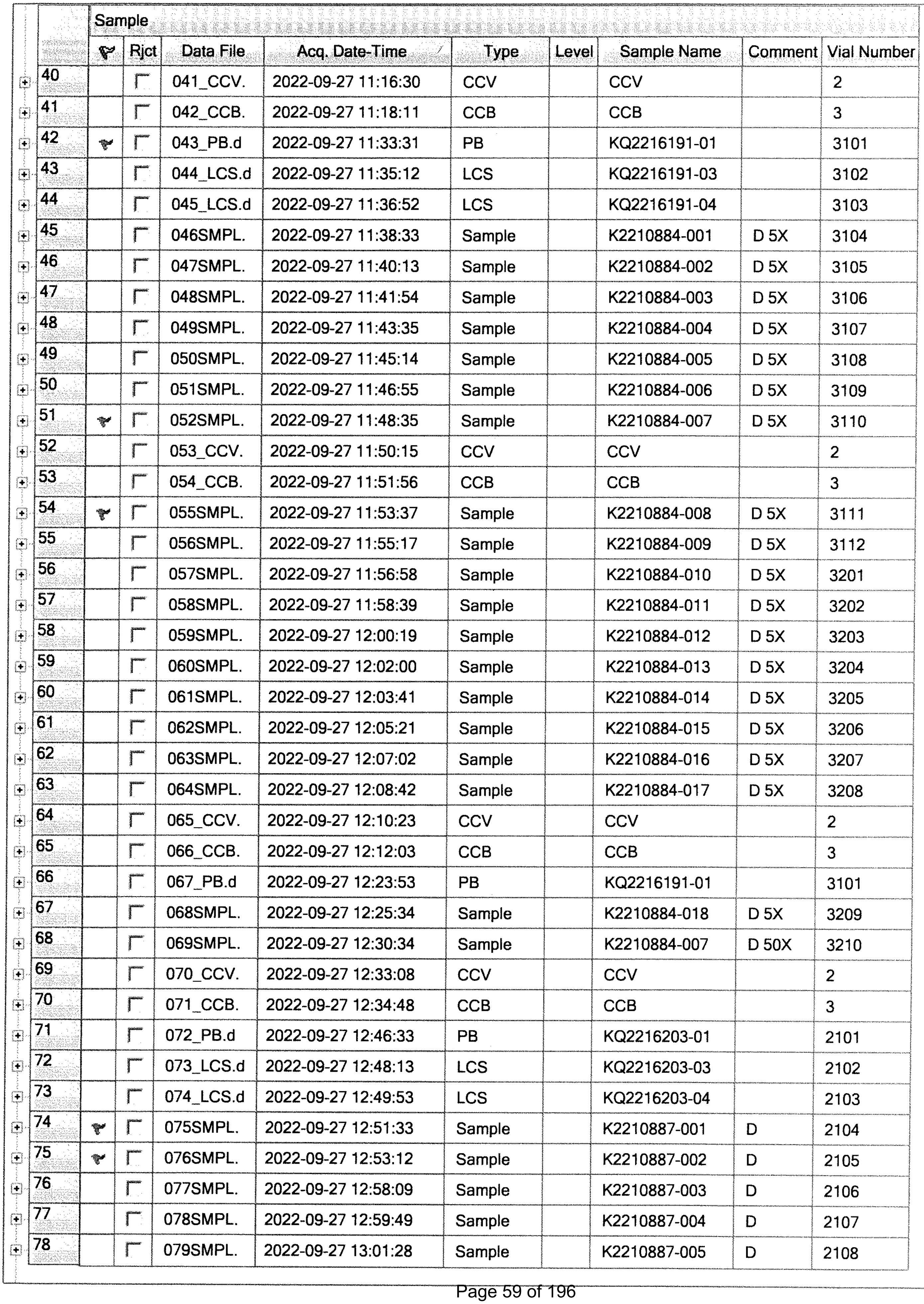
K2210887

No exceptions to report.

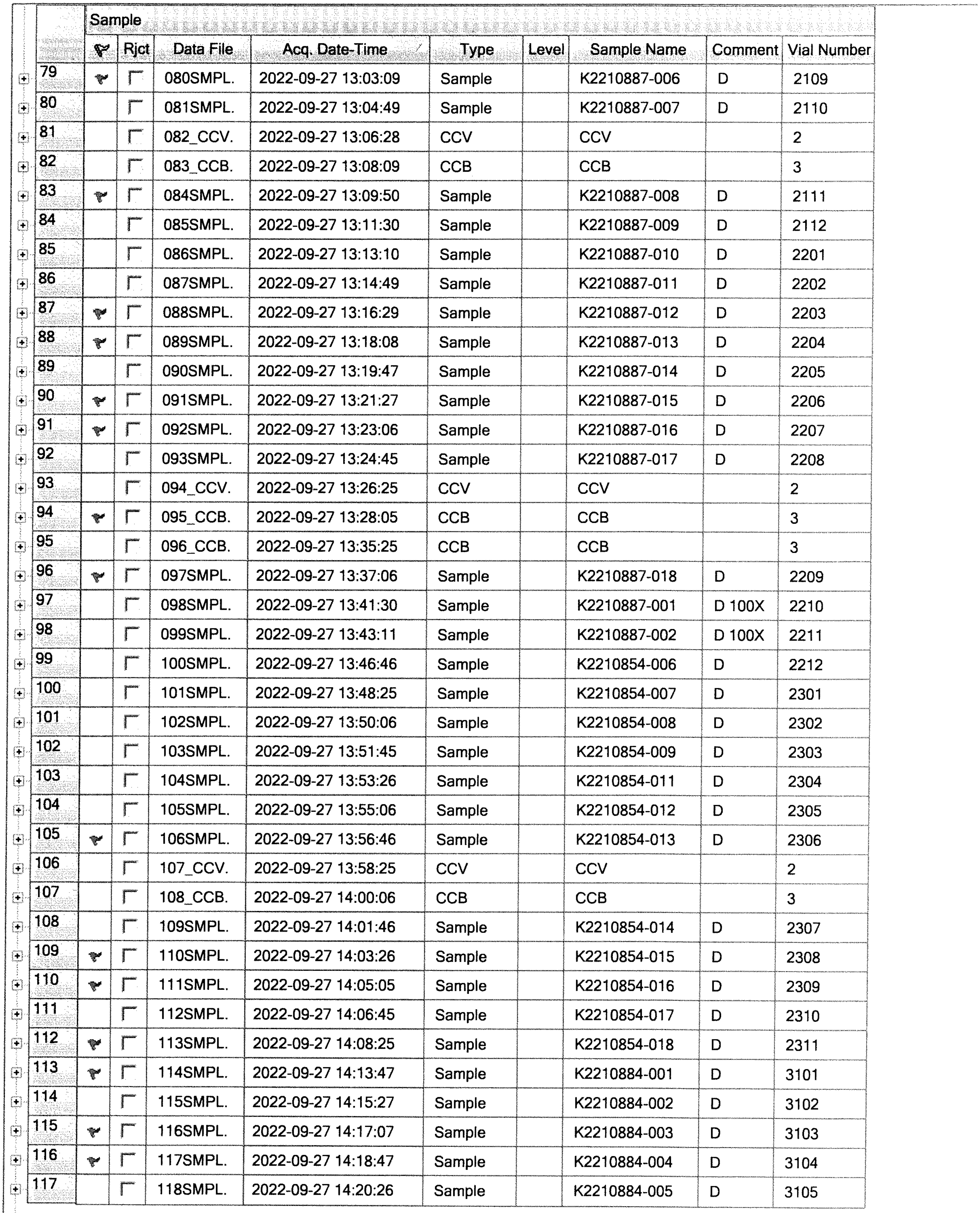
Primary Approver: 9/27/22
Secondary Approver: 9/27/22



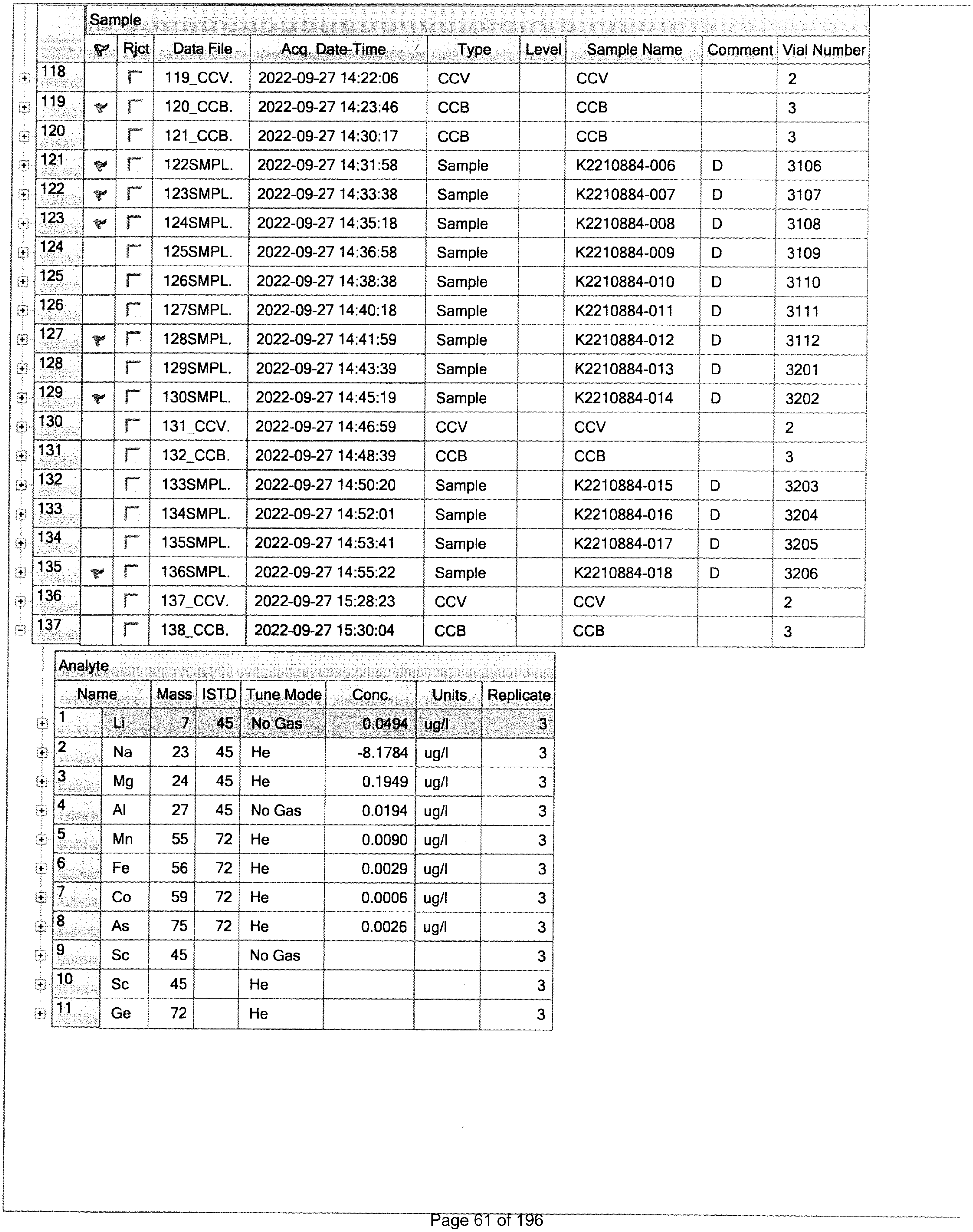
	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	002CALB.	2022-09-27 09:21:42	CalBlk		Prime		2
2		☐	003CALB.	2022-09-27 09:23:22	CalBlk		Prime		3
3		☐	004CALB.	2022-09-27 09:25:03	CalBlk		Rinse		3
4		☐	005CALB.	2022-09-27 09:26:45	CalBlk		Rinse		3
5		☐	006CALB.	2022-09-27 09:28:26	CalBlk	1	Blank		3
6		☐	007CALS.	2022-09-27 09:30:07	CalStd	2	25ppb		2
7		☐	008_ICV.d	2022-09-27 09:31:46	ICV		ICV		1103
8		☐	009_CCV.	2022-09-27 09:33:26	CCV		CCV		2
9		☐	010_ICB.d	2022-09-27 09:35:06	ICB		ICB		3
10		☐	011_CCB.	2022-09-27 09:36:48	CCB		CCB		3
11		☐	012LICV.d	2022-09-27 09:38:28	LLICV		LLICVW		1104
12		☐	013_PB.d	2022-09-27 09:40:24	PB		KQ2216188-01		2101
13		☐	014_LCS.d	2022-09-27 09:42:04	LCS		KQ2216188-03		2102
14		☐	015_LCS.d	2022-09-27 09:43:44	LCS		KQ2216188-04		2103
15		☐	016SMPL.	2022-09-27 09:45:51	Sample		K2210854-001	D	2104
16	⚑	☐	017SMPL.	2022-09-27 09:48:51	Sample		K2210854-002	D	2105
17		☐	018SMPL.	2022-09-27 09:50:57	Sample		K2210854-003	D	2106
18	⚑	☐	019SMPL.	2022-09-27 09:52:38	Sample		K2210854-004	D	2107
19	⚑	☐	020SMPL.	2022-09-27 09:54:17	Sample		K2210854-005	D	2108
20		☐	021SMPL.	2022-09-27 10:40:01	Sample		K2210854-006	D 5X	2109
21		☐	022SMPL.	2022-09-27 10:41:41	Sample		K2210854-007	D 5X	2110
22		☐	023_CCV.	2022-09-27 10:43:21	CCV		CCV		2
23		☐	024_CCB.	2022-09-27 10:45:01	CCB		CCB		3
24		☐	025SMPL.	2022-09-27 10:46:43	Sample		K2210854-008	D 5X	2111
25		☐	026SMPL.	2022-09-27 10:48:25	Sample		K2210854-009	D 5X	2112
26		☐	027SMPL.	2022-09-27 10:50:05	Sample		K2210854-010	D 5X	2201
27		☐	028SMPL.	2022-09-27 10:51:46	Sample		K2210854-011	D 5X	2202
28		☐	029SMPL.	2022-09-27 10:53:26	Sample		K2210854-012	D 5X	2203
29		☐	030SMPL.	2022-09-27 10:55:05	Sample		K2210854-013	D 5X	2204
30		☐	031SMPL.	2022-09-27 10:56:45	Sample		K2210854-014	D 5X	2205
31		☐	032SMPL.	2022-09-27 10:58:38	Sample		K2210854-015	D 5X	2206
32		☐	033SMPL.	2022-09-27 11:00:18	Sample		K2210854-016	D 5X	2207
33		☐	034SMPL.	2022-09-27 11:01:57	Sample		K2210854-017	D 5X	2208
34		☐	035_CCV.	2022-09-27 11:03:37	CCV		CCV		2
35		☐	036_CCB.	2022-09-27 11:05:18	CCB		CCB		3
36		☐	037SMPL.	2022-09-27 11:06:58	Sample		K2210854-017	D 5X	2208
37		☐	038SMPL.	2022-09-27 11:08:39	Sample		K2210854-018	D 5X	2209
38		☐	039SMPL.	2022-09-27 11:10:19	Sample		K2210854-002	D 5X	2210
39		☐	040SMPL.	2022-09-27 11:12:00	Sample		K2210854-005	D 5X	2211



		Sample								
		⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
⊞	40		☐	041_CCV.	2022-09-27 11:16:30	CCV		CCV		2
⊞	41		☐	042_CCB.	2022-09-27 11:18:11	CCB		CCB		3
⊞	42	⚑	☐	043_PB.d	2022-09-27 11:33:31	PB		KQ2216191-01		3101
⊞	43		☐	044_LCS.d	2022-09-27 11:35:12	LCS		KQ2216191-03		3102
⊞	44		☐	045_LCS.d	2022-09-27 11:36:52	LCS		KQ2216191-04		3103
⊞	45		☐	046SMPL.	2022-09-27 11:38:33	Sample		K2210884-001	D 5X	3104
⊞	46		☐	047SMPL.	2022-09-27 11:40:13	Sample		K2210884-002	D 5X	3105
⊞	47		☐	048SMPL.	2022-09-27 11:41:54	Sample		K2210884-003	D 5X	3106
⊞	48		☐	049SMPL.	2022-09-27 11:43:35	Sample		K2210884-004	D 5X	3107
⊞	49		☐	050SMPL.	2022-09-27 11:45:14	Sample		K2210884-005	D 5X	3108
⊞	50		☐	051SMPL.	2022-09-27 11:46:55	Sample		K2210884-006	D 5X	3109
⊞	51	⚑	☐	052SMPL.	2022-09-27 11:48:35	Sample		K2210884-007	D 5X	3110
⊞	52		☐	053_CCV.	2022-09-27 11:50:15	CCV		CCV		2
⊞	53		☐	054_CCB.	2022-09-27 11:51:56	CCB		CCB		3
⊞	54	⚑	☐	055SMPL.	2022-09-27 11:53:37	Sample		K2210884-008	D 5X	3111
⊞	55		☐	056SMPL.	2022-09-27 11:55:17	Sample		K2210884-009	D 5X	3112
⊞	56		☐	057SMPL.	2022-09-27 11:56:58	Sample		K2210884-010	D 5X	3201
⊞	57		☐	058SMPL.	2022-09-27 11:58:39	Sample		K2210884-011	D 5X	3202
⊞	58		☐	059SMPL.	2022-09-27 12:00:19	Sample		K2210884-012	D 5X	3203
⊞	59		☐	060SMPL.	2022-09-27 12:02:00	Sample		K2210884-013	D 5X	3204
⊞	60		☐	061SMPL.	2022-09-27 12:03:41	Sample		K2210884-014	D 5X	3205
⊞	61		☐	062SMPL.	2022-09-27 12:05:21	Sample		K2210884-015	D 5X	3206
⊞	62		☐	063SMPL.	2022-09-27 12:07:02	Sample		K2210884-016	D 5X	3207
⊞	63		☐	064SMPL.	2022-09-27 12:08:42	Sample		K2210884-017	D 5X	3208
⊞	64		☐	065_CCV.	2022-09-27 12:10:23	CCV		CCV		2
⊞	65		☐	066_CCB.	2022-09-27 12:12:03	CCB		CCB		3
⊞	66		☐	067_PB.d	2022-09-27 12:23:53	PB		KQ2216191-01		3101
⊞	67		☐	068SMPL.	2022-09-27 12:25:34	Sample		K2210884-018	D 5X	3209
⊞	68		☐	069SMPL.	2022-09-27 12:30:34	Sample		K2210884-007	D 50X	3210
⊞	69		☐	070_CCV.	2022-09-27 12:33:08	CCV		CCV		2
⊞	70		☐	071_CCB.	2022-09-27 12:34:48	CCB		CCB		3
⊞	71		☐	072_PB.d	2022-09-27 12:46:33	PB		KQ2216203-01		2101
⊞	72		☐	073_LCS.d	2022-09-27 12:48:13	LCS		KQ2216203-03		2102
⊞	73		☐	074_LCS.d	2022-09-27 12:49:53	LCS		KQ2216203-04		2103
⊞	74	⚑	☐	075SMPL.	2022-09-27 12:51:33	Sample		K2210887-001	D	2104
⊞	75	⚑	☐	076SMPL.	2022-09-27 12:53:12	Sample		K2210887-002	D	2105
⊞	76		☐	077SMPL.	2022-09-27 12:58:09	Sample		K2210887-003	D	2106
⊞	77		☐	078SMPL.	2022-09-27 12:59:49	Sample		K2210887-004	D	2107
⊞	78		☐	079SMPL.	2022-09-27 13:01:28	Sample		K2210887-005	D	2108



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
79	⚑	☐	080SMPL.	2022-09-27 13:03:09	Sample		K2210887-006	D	2109
80		☐	081SMPL.	2022-09-27 13:04:49	Sample		K2210887-007	D	2110
81		☐	082_CCV.	2022-09-27 13:06:28	CCV		CCV		2
82		☐	083_CCB.	2022-09-27 13:08:09	CCB		CCB		3
83	⚑	☐	084SMPL.	2022-09-27 13:09:50	Sample		K2210887-008	D	2111
84		☐	085SMPL.	2022-09-27 13:11:30	Sample		K2210887-009	D	2112
85		☐	086SMPL.	2022-09-27 13:13:10	Sample		K2210887-010	D	2201
86		☐	087SMPL.	2022-09-27 13:14:49	Sample		K2210887-011	D	2202
87	⚑	☐	088SMPL.	2022-09-27 13:16:29	Sample		K2210887-012	D	2203
88	⚑	☐	089SMPL.	2022-09-27 13:18:08	Sample		K2210887-013	D	2204
89		☐	090SMPL.	2022-09-27 13:19:47	Sample		K2210887-014	D	2205
90	⚑	☐	091SMPL.	2022-09-27 13:21:27	Sample		K2210887-015	D	2206
91	⚑	☐	092SMPL.	2022-09-27 13:23:06	Sample		K2210887-016	D	2207
92		☐	093SMPL.	2022-09-27 13:24:45	Sample		K2210887-017	D	2208
93		☐	094_CCV.	2022-09-27 13:26:25	CCV		CCV		2
94	⚑	☐	095_CCB.	2022-09-27 13:28:05	CCB		CCB		3
95		☐	096_CCB.	2022-09-27 13:35:25	CCB		CCB		3
96	⚑	☐	097SMPL.	2022-09-27 13:37:06	Sample		K2210887-018	D	2209
97		☐	098SMPL.	2022-09-27 13:41:30	Sample		K2210887-001	D 100X	2210
98		☐	099SMPL.	2022-09-27 13:43:11	Sample		K2210887-002	D 100X	2211
99		☐	100SMPL.	2022-09-27 13:46:46	Sample		K2210854-006	D	2212
100		☐	101SMPL.	2022-09-27 13:48:25	Sample		K2210854-007	D	2301
101		☐	102SMPL.	2022-09-27 13:50:06	Sample		K2210854-008	D	2302
102		☐	103SMPL.	2022-09-27 13:51:45	Sample		K2210854-009	D	2303
103		☐	104SMPL.	2022-09-27 13:53:26	Sample		K2210854-011	D	2304
104		☐	105SMPL.	2022-09-27 13:55:06	Sample		K2210854-012	D	2305
105	⚑	☐	106SMPL.	2022-09-27 13:56:46	Sample		K2210854-013	D	2306
106		☐	107_CCV.	2022-09-27 13:58:25	CCV		CCV		2
107		☐	108_CCB.	2022-09-27 14:00:06	CCB		CCB		3
108		☐	109SMPL.	2022-09-27 14:01:46	Sample		K2210854-014	D	2307
109	⚑	☐	110SMPL.	2022-09-27 14:03:26	Sample		K2210854-015	D	2308
110	⚑	☐	111SMPL.	2022-09-27 14:05:05	Sample		K2210854-016	D	2309
111		☐	112SMPL.	2022-09-27 14:06:45	Sample		K2210854-017	D	2310
112	⚑	☐	113SMPL.	2022-09-27 14:08:25	Sample		K2210854-018	D	2311
113	⚑	☐	114SMPL.	2022-09-27 14:13:47	Sample		K2210884-001	D	3101
114		☐	115SMPL.	2022-09-27 14:15:27	Sample		K2210884-002	D	3102
115	⚑	☐	116SMPL.	2022-09-27 14:17:07	Sample		K2210884-003	D	3103
116	⚑	☐	117SMPL.	2022-09-27 14:18:47	Sample		K2210884-004	D	3104
117		☐	118SMPL.	2022-09-27 14:20:26	Sample		K2210884-005	D	3105



Sample

	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
118		☐	119_CCV.	2022-09-27 14:22:06	CCV		CCV		2
119	⚑	☐	120_CCB.	2022-09-27 14:23:46	CCB		CCB		3
120		☐	121_CCB.	2022-09-27 14:30:17	CCB		CCB		3
121	⚑	☐	122SMPL.	2022-09-27 14:31:58	Sample		K2210884-006	D	3106
122	⚑	☐	123SMPL.	2022-09-27 14:33:38	Sample		K2210884-007	D	3107
123	⚑	☐	124SMPL.	2022-09-27 14:35:18	Sample		K2210884-008	D	3108
124		☐	125SMPL.	2022-09-27 14:36:58	Sample		K2210884-009	D	3109
125		☐	126SMPL.	2022-09-27 14:38:38	Sample		K2210884-010	D	3110
126		☐	127SMPL.	2022-09-27 14:40:18	Sample		K2210884-011	D	3111
127	⚑	☐	128SMPL.	2022-09-27 14:41:59	Sample		K2210884-012	D	3112
128		☐	129SMPL.	2022-09-27 14:43:39	Sample		K2210884-013	D	3201
129	⚑	☐	130SMPL.	2022-09-27 14:45:19	Sample		K2210884-014	D	3202
130		☐	131_CCV.	2022-09-27 14:46:59	CCV		CCV		2
131		☐	132_CCB.	2022-09-27 14:48:39	CCB		CCB		3
132		☐	133SMPL.	2022-09-27 14:50:20	Sample		K2210884-015	D	3203
133		☐	134SMPL.	2022-09-27 14:52:01	Sample		K2210884-016	D	3204
134		☐	135SMPL.	2022-09-27 14:53:41	Sample		K2210884-017	D	3205
135	⚑	☐	136SMPL.	2022-09-27 14:55:22	Sample		K2210884-018	D	3206
136		☐	137_CCV.	2022-09-27 15:28:23	CCV		CCV		2
137		☐	138_CCB.	2022-09-27 15:30:04	CCB		CCB		3

Analyte

	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Li	7	45	No Gas	0.0494	ug/l	3
2	Na	23	45	He	-8.1784	ug/l	3
3	Mg	24	45	He	0.1949	ug/l	3
4	Al	27	45	No Gas	0.0194	ug/l	3
5	Mn	55	72	He	0.0090	ug/l	3
6	Fe	56	72	He	0.0029	ug/l	3
7	Co	59	72	He	0.0006	ug/l	3
8	As	75	72	He	0.0026	ug/l	3
9	Sc	45		No Gas			3
10	Sc	45		He			3
11	Ge	72		He			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\092722.b
Acq. Date-Time	2022-09-27 07:35:35
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

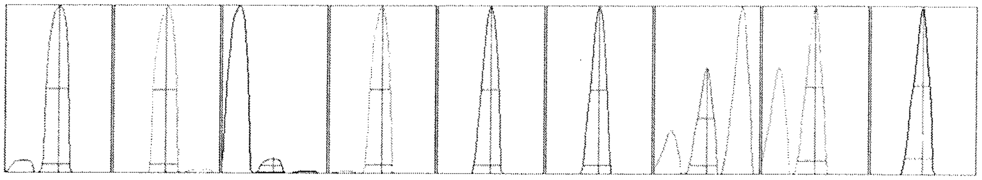
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	93266.00	1.368	5.000	
9	27664.22	2.070	5.000	
24	72422.23	2.554	5.000	
59	98024.38	1.979	5.000	
115	170957.76	1.481	5.000	
140	177755.31	1.380	5.000	
208	137282.54	1.600	5.000	
209	213760.30	1.148	5.000	
238	311655.92	1.153	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	9135	9287	9460	9329	9423
9	2667	2769	2801	2799	2797
24	6932	7225	7297	7391	7366
59	9494	9729	9942	9946	9902
115	16687	17011	17290	17252	17238
140	17417	17620	17950	17956	17934
208	13385	13651	13785	13902	13918
209	21030	21288	21376	21497	21690
238	30584	31079	31311	31349	31505

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	15497.04	7.05	6.90 - 7.10		0.778		0.900
9	4542.75	9.00	8.90 - 9.10		0.787		0.900
24	12497.42	24.00	23.90 - 24.10		0.801		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	17937.94	59.00	58.90 - 59.10		0.773		0.900
115	34941.11	115.00	114.90 - 115.10		0.760		0.900
140	37821.99	140.00	139.90 - 140.10		0.770		0.900
208	28610.02	208.00	207.90 - 208.10		0.779		0.900
209	44876.26	209.00	208.90 - 209.10		0.808		0.900
238	63860.91	238.00	237.90 - 238.10		0.796		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.7 V	Deflect	11.6 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	160 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0007	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.5 mV	Analog HV	1792 V	Pulse HV	1424 V

Calibration Blank Report

Sample Name Blank

File Name 006CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:28:26

Sample Type CalBlk

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	260.01	25.2
Al	27	45	No Gas	2390.19	7.3
Na	23	45	He	38708.80	16.6
Mg	24	45	He	3.33	173.2
Mn	55	72	He	26.67	57.3
Fe	56	72	He	640.03	9.8
Co	59	72	He	6.67	50.0
As	75	72	He	4.67	32.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	3482217.34	1.3
Sc	45	He	160566.51	2.9
Ge	72	He	125774.49	2.1

JC
9/27/22

Calibration Standard Report

Sample Name	25ppb
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:30:07
Sample Type	CalStd
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	386689.60	2.0
Al	27	45	No Gas	3603022.55	1.9
Na	23	45	He	1294900.09	0.3
Mg	24	45	He	619934.21	2.3
Mn	55	72	He	45707.63	4.7
Fe	56	72	He	803908.66	0.4
Co	59	72	He	167409.42	0.3
As	75	72	He	10978.19	0.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3503210.47	1.1	3482217.34	100.6	
Sc	45	He	156843.60	2.1	160566.51	97.68	
Ge	72	He	127796.20	2.7	125774.49	101.61	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:31:46
Sample Type	ICV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	26.4863	ug/l	1.9	405138.66	105.95	
Al	27	45	No Gas	103.0577	ug/l	0.8	1470224.51	103.06	
Na	23	45	He	233.0176	ug/l	1.6	189525.31	93.21	
Mg	24	45	He	240.2891	ug/l	1.5	76622.48	96.12	
Mn	55	72	He	24.5608	ug/l	0.6	45333.41	98.24	
Fe	56	72	He	49.5179	ug/l	0.7	161411.04	99.04	
Co	59	72	He	25.2855	ug/l	0.5	171069.39	101.14	
As	75	72	He	24.7744	ug/l	0.9	10990.54	99.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3464540.57	1.6	3482217.34	99.49	
Sc	45	He	161369.66	1.3	160566.51	100.5	
Ge	72	He	129065.16	1.6	125774.49	102.62	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 009_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:33:26

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.7537	ug/l	1.4	393232.35	103.01	
Al	27	45	No Gas	252.3151	ug/l	0.4	3589635.78	100.93	
Na	23	45	He	1962.0550	ug/l	3.4	1295533.57	98.1	
Mg	24	45	He	1950.0311	ug/l	0.2	615949.80	97.5	
Mn	55	72	He	24.5467	ug/l	3.3	45436.63	98.19	
Fe	56	72	He	248.6234	ug/l	0.8	810012.83	99.45	
Co	59	72	He	24.8882	ug/l	0.6	168857.92	99.55	
As	75	72	He	24.5531	ug/l	2.8	10925.17	98.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3458202.24	1.4	3482217.34	99.31	
Sc	45	He	159830.19	0.7	160566.51	99.54	
Ge	72	He	129427.73	0.7	125774.49	102.9	

Initial Calibration Blank (ICB) Report

Sample Name ICB
File Name 010_ICB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 09:35:06
Sample Type ICB
Comment —
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0103	ug/l	42.3	420.01	
Al	27	45	No Gas	-0.0014	ug/l	N/A	2376.86	
Na	23	45	He	-5.9255	ug/l	N/A	34336.91	
Mg	24	45	He	0.0213	ug/l	151.1	10.00	
Mn	55	72	He	-0.0111	ug/l	N/A	6.67	
Fe	56	72	He	0.0152	ug/l	300.3	696.70	
Co	59	72	He	0.0008	ug/l	34.0	12.22	
As	75	72	He	0.0097	ug/l	163.9	9.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3492705.47	1.1	3482217.34	100.3	
Sc	45	He	158454.03	0.7	160566.51	98.68	
Ge	72	He	127286.01	0.6	125774.49	101.2	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	011_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:36:48
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0053	ug/l	98.0	340.01	
Al	27	45	No Gas	0.0000	ug/l	20774.6	2380.18	
Na	23	45	He	-5.2605	ug/l	N/A	35068.37	
Mg	24	45	He	0.0311	ug/l	152.5	13.33	
Mn	55	72	He	-0.0075	ug/l	N/A	13.33	
Fe	56	72	He	0.0047	ug/l	1195.0	666.70	
Co	59	72	He	0.0005	ug/l	179.9	10.00	
As	75	72	He	0.0014	ug/l	854.6	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3468370.68	1.3	3482217.34	99.6	
Sc	45	He	159931.67	1.7	160566.51	99.6	
Ge	72	He	127846.26	0.5	125774.49	101.65	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	012LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:38:28
Sample Type	LLICV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.1129	ug/l	11.5	1973.49	112.9	
Al	27	45	No Gas	4.0228	ug/l	1.8	59354.27	100.57	
Na	23	45	He	40.9110	ug/l	1.7	64296.41	81.82	
Mg	24	45	He	9.7565	ug/l	11.0	3066.99	97.57	
Mn	55	72	He	0.1928	ug/l	28.5	383.35	96.4	
Fe	56	72	He	2.1312	ug/l	4.4	7598.52	106.56	
Co	59	72	He	0.0173	ug/l	8.0	124.44	86.5	
As	75	72	He	0.5093	ug/l	7.2	231.33	101.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3446266.20	2.0	3482217.34	98.97	
Sc	45	He	158965.27	0.9	160566.51	99	
Ge	72	He	129464.64	1.1	125774.49	102.93	

Prep Blank (PB) Report

Sample Name	KQ2216188-01
File Name	013_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:40:24
Sample Type	PB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0033	ug/l	176.4	313.34	
Al	27	45	No Gas	3.0497	ug/l	1.2	46250.48	
Na	23	45	He	-6.2268	ug/l	N/A	34310.30	
Mg	24	45	He	4.6912	ug/l	9.6	1480.09	
Mn	55	72	He	-0.0148	ug/l	0.0	0.00	
Fe	56	72	He	0.0426	ug/l	16.4	790.04	
Co	59	72	He	0.0000	ug/l	N/A	6.67	
As	75	72	He	0.0028	ug/l	138.5	6.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3497747.45	1.6	3482217.34	100.45	
Sc	45	He	159229.52	0.8	160566.51	99.17	
Ge	72	He	128124.48	0.3	125774.49	101.87	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216188-03
File Name	014_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:42:04
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.3643	ug/l	1.0	746601.45	50	96.73	
Al	27	45	No Gas	101.8926	ug/l	1.6	1467350.60	100	101.89	
Na	23	45	He	227.8727	ug/l	0.6	184684.24	250	91.15	
Mg	24	45	He	234.4170	ug/l	2.7	74135.43	250	93.77	
Mn	55	72	He	24.4331	ug/l	2.3	44751.83	25	97.73	
Fe	56	72	He	48.4120	ug/l	1.8	156597.46	50	96.82	
Co	59	72	He	24.7211	ug/l	3.7	165906.46	25	98.88	
As	75	72	He	47.2140	ug/l	3.7	20773.94	50	94.43	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3496787.97	0.7	3482217.34	100.42	
Sc	45	He	160045.81	0.9	160566.51	99.68	
Ge	72	He	128110.94	2.8	125774.49	101.86	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216188-04
File Name	015_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:43:44
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2052	ug/l	0.4	759126.47	50	98.41	
Al	27	45	No Gas	100.9398	ug/l	0.7	1452679.20	100	100.94	
Na	23	45	He	230.9433	ug/l	2.7	187197.83	250	92.38	
Mg	24	45	He	238.5520	ug/l	2.1	75688.17	250	95.42	
Mn	55	72	He	24.7167	ug/l	0.9	45480.31	25	98.87	
Fe	56	72	He	48.7575	ug/l	2.5	158401.28	50	97.52	
Co	59	72	He	24.9330	ug/l	1.9	168133.16	25	99.73	
As	75	72	He	47.6374	ug/l	2.8	21059.61	50	95.27	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3494877.13	1.0	3482217.34	100.36	
Sc	45	He	160553.56	2.0	160566.51	99.99	
Ge	72	He	128662.86	1.6	125774.49	102.3	

Sample Report

Sample Name K2210854-001

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 09:45:51

Sample Type Sample

Comment – D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1930	ug/l	4.8	3390.41	
Al	27	45	No Gas	36.9888	ug/l	2.4	558946.97	
Na	23	45	He	33918.4364	ug/l	1.0	24940202.96	
Mg	24	45	He	55006.4130	ug/l	1.9	19900216.37	
Mn	55	72	He	9.5364	ug/l	2.3	19871.91	
Fe	56	72	He	8.1430	ug/l	1.4	30551.86	
Co	59	72	He	0.0128	ug/l	21.1	105.56	
As	75	72	He	0.1085	ug/l	11.4	59.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3660532.96	2.7	3482217.34	105.12	
Sc	45	He	183103.82	2.1	160566.51	114.04	
Ge	72	He	145552.70	0.5	125774.49	115.73	

Sample Report

Sample Name	K2210854-002
File Name	017SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:48:51
Sample Type	Sample
Comment	-- D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.9745	ug/l	4.0	12421.20	
Al	27	45	No Gas	6.2881	ug/l	0.7	75339.50	
Na	23	45	He	149447.6049	ug/l	2.7	76559187.19	
Mg	24	45	He	15138.2606	ug/l	2.0	3821861.51	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~6640.8198~~	~~ug/l~~	~~2.3~~	~~9599709.65~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~48333.5523~~	~~ug/l~~	~~2.7~~	~~122943488.17~~	~~>LDR~~
Co	59	72	He	34.2224	ug/l	1.9	181442.21	
As	75	72	He	0.1025	ug/l	20.8	39.33	

*

XSIC
Dilution
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2838802.15	1.0	3482217.34	81.52	
Sc	45	He	127773.51	1.6	160566.51	79.58	
Ge	72	He	101161.32	1.7	125774.49	80.43	

Sample Report

Sample Name K2210854-003
File Name 018SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 09:50:57
Sample Type Sample
Comment – D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2990	ug/l	5.9	3807.19	
Al	27	45	No Gas	28.1645	ug/l	1.0	317784.96	
Na	23	45	He	20644.3884	ug/l	2.9	12893678.98	
Mg	24	45	He	32176.3145	ug/l	1.3	9881093.39	
Mn	55	72	He	0.3051	ug/l	32.5	570.02	
Fe	56	72	He	2.7307	ug/l	2.5	9199.36	
Co	59	72	He	0.0481	ug/l	6.5	321.12	
As	75	72	He	0.1494	ug/l	6.1	68.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2728238.71	2.1	3482217.34	78.35	
Sc	45	He	155420.74	2.5	160566.51	96.8	
Ge	72	He	124696.66	0.4	125774.49	99.14	

Sample Report

Sample Name	K2210854-004
File Name	019SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 09:52:38
Sample Type	Sample
Comment	-- D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7448	ug/l	1.3	75906.52	
Al	27	45	No Gas	119.8109	ug/l	0.8	1472629.09	
Na	23	45	He	1741697.0815	ug/l	1.1	1041892437.81	>LDR
Mg	24	45	He	5710.3251	ug/l	2.1	1683907.42	
Mn	55	72	He	89.1278	ug/l	1.5	141865.20	
Fe	56	72	He	5.9457	ug/l	2.5	17218.86	
Co	59	72	He	1.0506	ug/l	3.7	6136.68	
As	75	72	He	1.2995	ug/l	3.3	501.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2985619.85	1.0	3482217.34	85.74	
Sc	45	He	149224.08	0.7	160566.51	92.94	
Ge	72	He	111347.76	1.1	125774.49	88.53	

Sample Report

Sample Name K2210854-005
File Name 020SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 09:54:17
Sample Type Sample
Comment -- D
ISTD Ref FileName 006CALB.d
Operator ALKLS
NoUser

SC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.4216	ug/l	5.8	8215.42	
Al	27	45	No Gas	81.5551	ug/l	2.8	1425986.49	
Na	23	45	He	39572.8567	ug/l	2.5	33686012.83	
Mg	24	45	He	43857.4577	ug/l	1.6	18378164.73	
Mn	55	72	He	10.5821	ug/l	2.8	24264.15	
Fe	56	72	He	6.9992	ug/l	3.8	29021.69	
Co	59	72	He	0.0047	ug/l	13.1	47.78	
As	75	72	He	0.0655	ug/l	29.3	42.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	4244394.73	0.6	3482217.34	121.89	
Sc	45	He	212038.40	0.6	160566.51	132.06	Flag
Ge	72	He	160189.20	1.0	125774.49	127.36	Flag

Sample Report

Sample Name K2210854-006

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:40:01

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1597	ug/l	1.3	2473.58	
Al	27	45	No Gas	641.6207	ug/l	0.5	8372814.25	
Na	23	45	He	11829.2461	ug/l	0.3	6699440.11	
Mg	24	45	He	4.0595	ug/l	15.9	1130.07	
Mn	55	72	He	0.3819	ug/l	26.8	646.70	
Fe	56	72	He	3.6277	ug/l	2.5	11003.78	
Co	59	72	He	0.0140	ug/l	10.0	90.00	
As	75	72	He	0.0122	ug/l	43.4	9.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3173329.43	1.2	3482217.34	91.13	
Sc	45	He	140559.89	0.5	160566.51	87.54	
Ge	72	He	114234.04	0.9	125774.49	90.82	

Sample Report

Sample Name K2210854-007

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:41:41

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

SC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1836	ug/l	6.0	2820.28	
Al	27	45	No Gas	6.7407	ug/l	1.6	90463.32	
Na	23	45	He	5669.6083	ug/l	0.5	3419963.18	
Mg	24	45	He	9792.7825	ug/l	5.0	2879423.60	
Mn	55	72	He	0.4240	ug/l	14.3	723.37	
Fe	56	72	He	0.6939	ug/l	7.9	2596.92	
Co	59	72	He	0.0080	ug/l	23.5	54.44	
As	75	72	He	0.0187	ug/l	8.5	11.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3185644.33	1.4	3482217.34	91.48	
Sc	45	He	148894.93	2.2	160566.51	92.73	
Ge	72	He	115146.97	1.9	125774.49	91.55	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 023_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:43:21

Sample Type CCV

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.9329	ug/l	0.5	369342.90	103.73	
Al	27	45	No Gas	251.2663	ug/l	1.5	3334271.20	100.51	
Na	23	45	He	1977.5528	ug/l	2.5	1185670.66	98.88	
Mg	24	45	He	1999.2971	ug/l	2.2	573493.31	99.96	
Mn	55	72	He	25.4058	ug/l	2.8	42338.80	101.62	
Fe	56	72	He	251.9183	ug/l	2.7	738914.13	100.77	
Co	59	72	He	25.4505	ug/l	2.8	155459.70	101.8	
As	75	72	He	24.6563	ug/l	2.8	9876.53	98.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3225315.79	0.8	3482217.34	92.62	
Sc	45	He	145204.94	2.7	160566.51	90.43	
Ge	72	He	116606.33	4.0	125774.49	92.71	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 024_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:45:01

Sample Type CCB

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0077	ug/l	60.4	346.68	
Al	27	45	No Gas	0.0005	ug/l	1162.4	2193.50	
Na	23	45	He	7.4103	ug/l	20.5	38826.28	
Mg	24	45	He	0.1303	ug/l	28.6	40.00	
Mn	55	72	He	-0.0006	ug/l	N/A	23.33	
Fe	56	72	He	0.0035	ug/l	269.5	596.69	
Co	59	72	He	-0.0001	ug/l	N/A	5.56	
As	75	72	He	0.0045	ug/l	121.4	6.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3187100.58	0.7	3482217.34	91.53	
Sc	45	He	143770.89	2.8	160566.51	89.54	
Ge	72	He	115100.49	2.3	125774.49	91.51	

Sample Report

Sample Name K2210854-008

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:46:43

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

3L
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.0282	ug/l	2.9	28733.42	
Al	27	45	No Gas	249.7646	ug/l	2.7	3271337.14	
Na	23	45	He	22609.7813	ug/l	0.7	13173994.39	
Mg	24	45	He	134.5626	ug/l	1.7	38549.04	
Mn	55	72	He	0.7985	ug/l	8.9	1360.09	
Fe	56	72	He	1.3023	ug/l	1.3	4427.37	
Co	59	72	He	0.0115	ug/l	7.9	76.67	
As	75	72	He	0.0554	ug/l	36.8	26.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3184760.37	2.0	3482217.34	91.46	
Sc	45	He	144958.49	1.0	160566.51	90.28	
Ge	72	He	116982.01	1.2	125774.49	93.01	

Sample Report

Sample Name K2210854-009
File Name 026SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 10:48:25
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.9671	ug/l	1.0	70348.10	
Al	27	45	No Gas	6.2007	ug/l	1.8	83728.63	
Na	23	45	He	6494.6947	ug/l	1.7	3886645.88	
Mg	24	45	He	8150.8249	ug/l	2.3	2382436.94	
Mn	55	72	He	0.2741	ug/l	18.3	490.02	
Fe	56	72	He	0.5159	ug/l	29.1	2143.52	
Co	59	72	He	0.0088	ug/l	2.6	61.11	
As	75	72	He	0.0473	ug/l	22.9	23.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3198691.41	1.1	3482217.34	91.86	
Sc	45	He	147936.32	1.5	160566.51	92.13	
Ge	72	He	118821.99	1.3	125774.49	94.47	

Sample Report

Sample Name K2210854-010

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:50:05

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6697	ug/l	6.5	9909.55	
Al	27	45	No Gas	1.4879	ug/l	2.0	22259.16	
Na	23	45	He	349560.7563	ug/l	1.0	211379103.52	
Mg	24	45	He	793.3002	ug/l	0.9	236445.01	
Mn	55	72	He	120.3769	ug/l	1.1	203092.80	
Fe	56	72	He	270.0030	ug/l	0.8	802088.82	
Co	59	72	He	0.0719	ug/l	2.7	451.12	
As	75	72	He	0.0714	ug/l	20.6	33.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3272773.60	2.6	3482217.34	93.99	
Sc	45	He	150817.00	0.3	160566.51	93.93	
Ge	72	He	118022.33	0.6	125774.49	93.84	

Sample Report

Sample Name	K2210854-011
File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 10:51:46
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

SL 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0639	ug/l	19.3	1203.40	
Al	27	45	No Gas	7.7287	ug/l	1.4	109598.12	
Na	23	45	He	8070.0748	ug/l	0.2	5113384.40	
Mg	24	45	He	8115.9258	ug/l	1.9	2516334.86	
Mn	55	72	He	0.0495	ug/l	83.0	113.34	
Fe	56	72	He	0.3462	ug/l	5.4	1713.46	
Co	59	72	He	0.0017	ug/l	60.8	17.78	
As	75	72	He	0.0126	ug/l	96.5	10.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3376645.16	1.3	3482217.34	96.97	
Sc	45	He	156890.19	0.1	160566.51	97.71	
Ge	72	He	124176.40	1.4	125774.49	98.73	

Sample Report

Sample Name K2210854-012
File Name 029SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 10:53:26
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0394	ug/l	15.4	840.04	
Al	27	45	No Gas	89.4494	ug/l	0.6	1243171.75	
Na	23	45	He	33247.4690	ug/l	0.7	20619562.19	
Mg	24	45	He	347.9612	ug/l	0.5	106196.72	
Mn	55	72	He	3.8819	ug/l	6.8	6901.54	
Fe	56	72	He	0.4984	ug/l	5.5	2186.86	
Co	59	72	He	0.0454	ug/l	20.1	303.34	
As	75	72	He	0.2119	ug/l	14.2	94.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3374044.32	0.9	3482217.34	96.89	
Sc	45	He	154435.55	1.5	160566.51	96.18	
Ge	72	He	124075.52	3.5	125774.49	98.65	

Sample Report

Sample Name K2210854-013

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:55:05

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1536	ug/l	3.8	15240.03	
Al	27	45	No Gas	1.1660	ug/l	3.2	16177.55	
Na	23	45	He	9645.4142	ug/l	1.7	5135071.17	
Mg	24	45	He	6419.8970	ug/l	1.8	1674503.36	
Mn	55	72	He	3105.2484	ug/l	1.2	4843649.41	
Fe	56	72	He	38243.3881	ug/l	2.5	104952995.10	
~~Co~~	59	72	He	54.3127	ug/l	1.0	310712.26	
As	75	72	He	1.3849	ug/l	2.4	523.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2952480.06	3.1	3482217.34	84.79	
Sc	45	He	131995.90	1.0	160566.51	82.21	
Ge	72	He	109147.49	2.1	125774.49	86.78	

Sample Report

Sample Name K2210854-014
File Name 031SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 10:56:45
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	17.7733	ug/l	2.1	232336.17	
Al	27	45	No Gas	1.5083	ug/l	0.8	20383.52	
Na	23	45	He	4178.3784	ug/l	2.7	2305190.38	
Mg	24	45	He	3575.4411	ug/l	2.1	958680.56	
Mn	55	72	He	337.6374	ug/l	1.2	542508.52	
Fe	56	72	He	2063.7475	ug/l	0.7	5835748.04	
Co	59	72	He	1.2060	ug/l	1.1	7113.72	
As	75	72	He	8.9493	ug/l	4.2	3460.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2959744.44	0.8	3482217.34	85	
Sc	45	He	135695.14	1.0	160566.51	84.51	
Ge	72	He	112422.80	1.4	125774.49	89.38	

Sample Report

Sample Name K2210854-015

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 10:58:38

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	54.7044	ug/l	0.7	727853.35	
Al	27	45	No Gas	1.3313	ug/l	3.8	18563.24	
Na	23	45	He	5735.1501	ug/l	1.9	3206997.55	
Mg	24	45	He	3357.9335	ug/l	0.2	916218.90	
Mn	55	72	He	696.9631	ug/l	0.8	1133497.90	
Fe	56	72	He	1547.6445	ug/l	2.1	4429651.71	
Co	59	72	He	4.3349	ug/l	0.9	25860.54	
As	75	72	He	9.8399	ug/l	1.1	3851.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3014247.87	1.1	3482217.34	86.56	
Sc	45	He	138063.49	1.2	160566.51	85.99	
Ge	72	He	113780.44	0.4	125774.49	90.46	

Sample Report

Sample Name K2210854-016

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:00:18

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	128.4244	ug/l	2.6	1692881.43	
Al	27	45	No Gas	1.5387	ug/l	0.1	20944.14	
Na	23	45	He	6722.8866	ug/l	2.1	3700249.74	
Mg	24	45	He	5800.3946	ug/l	2.0	1560484.35	
Mn	55	72	He	1118.7856	ug/l	1.3	1798996.43	
Fe	56	72	He	8810.7788	ug/l	1.2	24930087.13	
Co	59	72	He	7.7554	ug/l	0.9	45741.63	
As	75	72	He	5.0260	ug/l	1.1	1947.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2986781.62	0.9	3482217.34	85.77	
Sc	45	He	136138.85	3.4	160566.51	84.79	
Ge	72	He	112502.30	1.0	125774.49	89.45	

Sample Report

Sample Name K2210854-017
File Name 034SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:01:57
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	129.7241	ug/l	5.7	1673584.19	
Al	27	45	No Gas	1.5931	ug/l	4.7	21161.08	
Na	23	45	He	9418.5379	ug/l	3.3	3717632.86	
Mg	24	45	He	5211.2870	ug/l	1.7	1007749.91	
Mn	55	72	He	315.3688	ug/l	27.0	428276.48	
Fe	56	72	He	3067.4543	ug/l	25.8	7348480.72	
Co	59	72	He	1.4512	ug/l	23.7	7283.81	
As	75	72	He	72.6174	ug/l	26.4	23738.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2926386.21	3.9	3482217.34	84.04	
Sc	45	He	97867.05	1.4	160566.51	60.95	
Ge	72	He	100649.98	31.2	125774.49	80.02	

3C
9/27/22

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	035_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:03:37
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2800	ug/l	0.8	349489.80	101.12	
Al	27	45	No Gas	244.1377	ug/l	1.7	3144364.54	97.66	
Na	23	45	He	2019.6255	ug/l	2.4	1184158.81	100.98	
Mg	24	45	He	1972.7636	ug/l	0.8	553753.52	98.64	
Mn	55	72	He	25.0993	ug/l	3.2	41256.28	100.4	
Fe	56	72	He	252.0251	ug/l	0.6	729045.38	100.81	
Co	59	72	He	25.3380	ug/l	1.1	152635.57	101.35	
As	75	72	He	25.0423	ug/l	1.7	9891.87	100.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130846.72	1.4	3482217.34	89.91	
Sc	45	He	142041.45	0.7	160566.51	88.46	
Ge	72	He	114921.72	0.9	125774.49	91.37	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	036_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:05:18
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0135	ug/l	47.2	423.35	
Al	27	45	No Gas	-0.0070	ug/l	N/A	2073.48	
Na	23	45	He	8.6211	ug/l	34.3	39183.76	
Mg	24	45	He	0.1188	ug/l	95.6	36.67	
Mn	55	72	He	-0.0067	ug/l	N/A	13.33	
Fe	56	72	He	0.0071	ug/l	263.7	606.70	
Co	59	72	He	0.0012	ug/l	93.2	13.33	
As	75	72	He	-0.0015	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3154954.23	1.2	3482217.34	90.6	
Sc	45	He	142501.15	0.8	160566.51	88.75	
Ge	72	He	114965.30	1.0	125774.49	91.41	

Sample Report

Sample Name K2210854-017
File Name 037SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:06:58
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

Si
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	123.9687	ug/l	2.5	1672743.31	
Al	27	45	No Gas	1.5515	ug/l	3.1	21593.32	
Na	23	45	He	9062.5631	ug/l	1.2	5083776.59	
Mg	24	45	He	5098.5353	ug/l	1.0	1400738.00	
Mn	55	72	He	358.5418	ug/l	0.8	592050.54	
Fe	56	72	He	3554.9955	ug/l	1.7	10330082.97	
Co	59	72	He	1.7196	ug/l	2.8	10420.98	
As	75	72	He	82.0109	ug/l	0.6	32558.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3057176.83	2.3	3482217.34	87.79	
Sc	45	He	139020.64	1.3	160566.51	86.58	
Ge	72	He	115528.77	0.8	125774.49	91.85	

Sample Report

Sample Name K2210854-018

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:08:39

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.8579	ug/l	1.6	11630.65	
Al	27	45	No Gas	1.4956	ug/l	2.4	20585.45	
Na	23	45	He	5428.7909	ug/l	1.4	3047446.52	
Mg	24	45	He	3602.2207	ug/l	0.8	985854.99	
Mn	55	72	He	1870.7238	ug/l	0.4	3036671.94	
Fe	56	72	He	0.8864	ug/l	7.9	3110.37	
Co	59	72	He	62.8916	ug/l	0.9	374390.30	
As	75	72	He	0.0764	ug/l	18.2	34.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3012463.18	1.7	3482217.34	86.51	
Sc	45	He	138489.81	0.7	160566.51	86.25	
Ge	72	He	113565.83	0.7	125774.49	90.29	

Sample Report

Sample Name K2210854-002

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:10:19

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2194	ug/l	6.5	3180.33	
Al	27	45	No Gas	1.6685	ug/l	2.9	22991.71	
Na	23	45	He	31377.9394	ug/l	0.9	16948241.41	
Mg	24	45	He	3252.7697	ug/l	0.3	864452.41	
Mn	55	72	He	1393.1445	ug/l	0.2	2206812.94	
Fe	56	72	He	9885.1585	ug/l	1.0	27554010.42	
Co	59	72	He	6.9641	ug/l	2.1	40459.56	
As	75	72	He	0.0173	ug/l	122.8	10.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047824.95	1.6	3482217.34	87.53	
Sc	45	He	134476.48	0.4	160566.51	83.75	
Ge	72	He	110825.23	0.8	125774.49	88.11	

Sample Report

Sample Name K2210854-005

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:12:00

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0920	ug/l	12.0	1516.75	
Al	27	45	No Gas	16.7339	ug/l	0.3	219538.21	
Na	23	45	He	8548.7921	ug/l	0.8	5338546.59	
Mg	24	45	He	9720.9432	ug/l	0.7	2971803.81	
Mn	55	72	He	2.1958	ug/l	2.6	3920.53	
Fe	56	72	He	1.6562	ug/l	4.8	5801.08	
Co	59	72	He	0.0019	ug/l	87.1	18.89	
As	75	72	He	0.0174	ug/l	84.5	12.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3159592.24	2.3	3482217.34	90.74	
Sc	45	He	154698.05	1.0	160566.51	96.35	
Ge	72	He	124081.66	0.2	125774.49	98.65	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:16:30
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.5512	ug/l	1.7	362624.88	102.2	
Al	27	45	No Gas	250.9760	ug/l	3.7	3318085.99	100.39	
Na	23	45	He	1972.2558	ug/l	1.5	1197479.90	98.61	
Mg	24	45	He	1977.3054	ug/l	0.3	574340.90	98.87	
Mn	55	72	He	24.6575	ug/l	3.4	42349.12	98.63	
Fe	56	72	He	248.0087	ug/l	1.4	749855.38	99.2	
Co	59	72	He	25.0417	ug/l	1.2	157675.05	100.17	
As	75	72	He	25.0058	ug/l	3.3	10322.79	100.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3213842.76	0.9	3482217.34	92.29	
Sc	45	He	146977.59	0.6	160566.51	91.54	
Ge	72	He	120124.09	1.3	125774.49	95.51	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:18:11
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0031	ug/l	91.6	280.01	
Al	27	45	No Gas	-0.0074	ug/l	N/A	2073.48	
Na	23	45	He	7.5746	ug/l	19.5	39895.32	
Mg	24	45	He	0.0588	ug/l	102.5	20.00	
Mn	55	72	He	-0.0030	ug/l	N/A	20.00	
Fe	56	72	He	-0.0078	ug/l	N/A	583.36	
Co	59	72	He	-0.0005	ug/l	N/A	3.33	
As	75	72	He	-0.0002	ug/l	N/A	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3162033.39	1.4	3482217.34	90.81	
Sc	45	He	147365.34	2.7	160566.51	91.78	
Ge	72	He	119136.67	0.9	125774.49	94.72	

Prep Blank (PB) Report

Sample Name	KQ2216191-01
File Name	043_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:33:31
Sample Type	PB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

SL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0090	ug/l	32.6	353.34	
Al	27	45	No Gas	5.7282	ug/l	1.9	74760.33	PB Main CR1 Failed
Na	23	45	He	9.3391	ug/l	16.8	38989.97	
Mg	24	45	He	6.2041	ug/l	18.0	1723.46	
Mn	55	72	He	0.0677	ug/l	3.5	133.33	
Fe	56	72	He	0.1100	ug/l	36.6	890.04	
Co	59	72	He	0.0005	ug/l	241.5	8.89	
As	75	72	He	-0.0031	ug/l	N/A	3.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085080.68	1.5	3482217.34	88.6	
Sc	45	He	140213.66	0.8	160566.51	87.32	
Ge	72	He	113142.76	1.7	125774.49	89.96	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216191-03

File Name 044_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:35:12

Sample Type LCS

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.4686	ug/l	2.3	681210.36	50	98.94	
Al	27	45	No Gas	103.9371	ug/l	3.7	1335171.44	100	103.94	
Na	23	45	He	253.6345	ug/l	1.7	175209.87	250	101.45	
Mg	24	45	He	250.6529	ug/l	1.5	69034.82	250	100.26	
Mn	55	72	He	24.4879	ug/l	2.4	40153.87	25	97.95	
Fe	56	72	He	48.4838	ug/l	0.6	140393.59	50	96.97	
Co	59	72	He	24.7677	ug/l	0.6	148855.08	25	99.07	
As	75	72	He	47.1162	ug/l	0.7	18565.07	50	94.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3119811.20	0.8	3482217.34	89.59	
Sc	45	He	139363.09	0.2	160566.51	86.79	
Ge	72	He	114650.28	0.5	125774.49	91.16	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216191-04
File Name	045_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:36:52
Sample Type	LCS
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2158	ug/l	1.3	678761.89	50	98.43	
Al	27	45	No Gas	104.1783	ug/l	1.8	1340289.67	100	104.18	
Na	23	45	He	248.3836	ug/l	3.1	175411.69	250	99.35	
Mg	24	45	He	242.0792	ug/l	2.2	67903.45	250	96.83	
Mn	55	72	He	24.8123	ug/l	1.8	40762.08	25	99.25	
Fe	56	72	He	48.5028	ug/l	2.4	140682.42	50	97.01	
Co	59	72	He	24.8355	ug/l	1.5	149509.65	25	99.34	
As	75	72	He	47.9277	ug/l	0.9	18917.78	50	95.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3124592.25	1.6	3482217.34	89.73	
Sc	45	He	141947.40	2.2	160566.51	88.4	
Ge	72	He	114851.90	1.3	125774.49	91.32	

Sample Report

Sample Name K2210884-001

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:38:33

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1882	ug/l	1.4	15353.51	
Al	27	45	No Gas	1.2960	ug/l	3.1	17362.01	
Na	23	45	He	9645.2160	ug/l	1.7	4844940.97	
Mg	24	45	He	6677.8896	ug/l	1.7	1643434.61	
Mn	55	72	He	3123.0247	ug/l	4.4	4689125.66	
Fe	56	72	He	38026.7784	ug/l	2.3	100502028.50	
Co	59	72	He	55.0062	ug/l	3.0	302959.99	
As	75	72	He	1.1066	ug/l	12.0	403.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2886983.71	2.7	3482217.34	82.91	
Sc	45	He	124549.39	1.6	160566.51	77.57	
Ge	72	He	105112.26	2.1	125774.49	83.57	

Sample Report

Sample Name K2210884-002
File Name 047SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:40:13
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JL9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	18.8689	ug/l	0.6	248236.35	
Al	27	45	No Gas	1.2804	ug/l	2.0	17722.32	
Na	23	45	He	4466.1691	ug/l	1.3	2432306.84	
Mg	24	45	He	3840.6245	ug/l	1.0	1017454.72	
Mn	55	72	He	365.4789	ug/l	0.8	578690.15	
Fe	56	72	He	2011.2069	ug/l	0.4	5604290.34	
Co	59	72	He	1.3284	ug/l	2.7	7718.45	
As	75	72	He	4.9296	ug/l	1.4	1880.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2978557.67	0.3	3482217.34	85.54	
Sc	45	He	134061.54	1.0	160566.51	83.49	
Ge	72	He	110777.68	0.8	125774.49	88.08	

Sample Report

Sample Name K2210884-003

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:41:54

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	59.8604	ug/l	0.7	797209.31	
Al	27	45	No Gas	1.7197	ug/l	0.5	23402.25	
Na	23	45	He	6331.2446	ug/l	0.6	3527929.95	
Mg	24	45	He	3682.1120	ug/l	1.1	1001902.61	
Mn	55	72	He	771.1284	ug/l	1.4	1255611.80	
Fe	56	72	He	1391.9251	ug/l	2.4	3988505.98	
Co	59	72	He	4.6912	ug/l	2.8	28016.09	
As	75	72	He	11.2718	ug/l	3.3	4415.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3017160.16	1.0	3482217.34	86.64	
Sc	45	He	137697.22	1.1	160566.51	85.76	
Ge	72	He	113932.01	1.3	125774.49	90.58	

Sample Report

Sample Name	K2210884-004
File Name	049SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:43:35
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	127.1413	ug/l	1.2	1669812.58	
Al	27	45	No Gas	1.4908	ug/l	1.6	20280.05	
Na	23	45	He	6517.1122	ug/l	2.0	3620428.38	
Mg	24	45	He	5791.6110	ug/l	0.9	1571602.27	
Mn	55	72	He	1134.3622	ug/l	1.5	1801406.90	
Fe	56	72	He	8897.8090	ug/l	3.0	24861362.96	
Co	59	72	He	7.8052	ug/l	2.3	45458.59	
As	75	72	He	3.2145	ug/l	1.1	1231.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2975830.27	0.5	3482217.34	85.46	
Sc	45	He	137313.75	0.4	160566.51	85.52	
Ge	72	He	111110.36	1.1	125774.49	88.34	

Sample Report

Sample Name K2210884-005

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:45:14

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	140.9368	ug/l	1.4	1895580.23	
Al	27	45	No Gas	1.5704	ug/l	3.4	21766.85	
Na	23	45	He	10331.7673	ug/l	2.8	5837642.83	
Mg	24	45	He	5742.6146	ug/l	2.9	1590292.06	
Mn	55	72	He	402.2727	ug/l	1.4	674235.95	
Fe	56	72	He	3911.8724	ug/l	0.9	11538024.00	
Co	59	72	He	1.9347	ug/l	3.9	11896.37	
As	75	72	He	82.8480	ug/l	1.1	33384.80	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047572.56	0.8	3482217.34	87.52	
Sc	45	He	140180.70	2.0	160566.51	87.3	
Ge	72	He	117267.59	1.0	125774.49	93.24	

Sample Report

Sample Name K2210884-006
File Name 051SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:46:55
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.8278	ug/l	4.7	11190.40	
Al	27	45	No Gas	1.3912	ug/l	0.9	19230.59	
Na	23	45	He	5585.5990	ug/l	1.3	3066956.73	
Mg	24	45	He	3739.9319	ug/l	1.1	1001582.31	
Mn	55	72	He	1937.4880	ug/l	1.1	3056940.89	
Fe	56	72	He	0.9215	ug/l	9.9	3120.35	
Co	59	72	He	66.0646	ug/l	0.9	382277.83	
As	75	72	He	0.0674	ug/l	13.4	29.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3002042.25	0.6	3482217.34	86.21	
Sc	45	He	135524.03	1.1	160566.51	84.4	
Ge	72	He	110388.91	0.7	125774.49	87.77	

Sample Report

Sample Name K2210884-007
File Name 052SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:48:35
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2834	ug/l	8.7	4060.54	
Al	27	45	No Gas	1.7641	ug/l	3.8	24346.82	
Na	23	45	He	10496.2898	ug/l	2.6	5649409.29	
Mg	24	45	He	25384.2984	ug/l	1.0	6698024.07	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~6037.1981~~	~~ug/l~~	~~2.7~~	~~3586571.10~~	~~>LDR~~
Fe	56	72	He	108.5514	ug/l	2.0	303904.87	
Co	59	72	He	3.8284	ug/l	0.2	22303.38	
As	75	72	He	0.0215	ug/l	27.8	12.33	

JC
9/27/22

See
Dilution

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3068767.66	2.9	3482217.34	88.13	
Sc	45	He	133518.42	0.9	160566.51	83.15	
Ge	72	He	111106.90	0.8	125774.49	88.34	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 053_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:50:15

Sample Type CCV

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2233	ug/l	1.4	360125.25	100.89	
Al	27	45	No Gas	252.2633	ug/l	0.5	3356077.14	100.91	
Na	23	45	He	1938.6450	ug/l	1.4	1201433.89	96.93	
Mg	24	45	He	1905.2366	ug/l	1.5	564584.46	95.26	
Mn	55	72	He	24.9394	ug/l	3.5	42830.18	99.76	
Fe	56	72	He	250.9608	ug/l	2.0	758596.13	100.38	
Co	59	72	He	25.2878	ug/l	1.0	159201.15	101.15	
As	75	72	He	24.8639	ug/l	2.5	10263.09	99.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3233640.89	1.5	3482217.34	92.86	
Sc	45	He	149970.60	1.6	160566.51	93.4	
Ge	72	He	120106.59	1.5	125774.49	95.49	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:51:56
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0126	ug/l	9.3	420.01	
Al	27	45	No Gas	-0.0002	ug/l	N/A	2205.16	
Na	23	45	He	5.7493	ug/l	17.5	38391.83	
Mg	24	45	He	0.0818	ug/l	48.7	26.67	
Mn	55	72	He	0.0125	ug/l	69.1	46.67	
Fe	56	72	He	0.0168	ug/l	223.7	656.70	
Co	59	72	He	-0.0003	ug/l	N/A	4.44	
As	75	72	He	-0.0026	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3217134.12	1.4	3482217.34	92.39	
Sc	45	He	145691.20	0.4	160566.51	90.74	
Ge	72	He	119241.38	2.1	125774.49	94.81	

Sample Report

Sample Name	K2210884-008
File Name	055SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:53:37
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.1196	ug/l	3.3	13989.05	
Al	27	45	No Gas	1.3214	ug/l	3.3	17066.67	
Na	23	45	He	10061.5876	ug/l	1.9	4989172.22	
Mg	24	45	He	6860.4864	ug/l	0.9	1667190.96	
Mn	55	72	He	3446.7332	ug/l	0.3	4988562.53	>LDR
Fe	56	72	He	40917.0528	ug/l	1.0	104209298.45	
Co	59	72	He	37.3795	ug/l	0.6	198414.85	
As	75	72	He	0.0486	ug/l	28.2	20.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2790064.96	1.4	3482217.34	80.12	
Sc	45	He	122975.08	1.0	160566.51	76.59	
Ge	72	He	101259.44	0.2	125774.49	80.51	

Sample Report

Sample Name	K2210884-009
File Name	056SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 11:55:17
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.9137	ug/l	1.2	50391.11	
Al	27	45	No Gas	3.4992	ug/l	1.9	43787.49	
Na	23	45	He	4630.2380	ug/l	2.3	2652776.99	
Mg	24	45	He	12137.5159	ug/l	2.0	3384204.12	
Mn	55	72	He	0.3541	ug/l	22.6	616.70	
Fe	56	72	He	1.1600	ug/l	17.4	4007.23	
Co	59	72	He	0.0456	ug/l	19.1	285.56	
As	75	72	He	0.0896	ug/l	7.0	40.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2905266.52	1.5	3482217.34	83.43	
Sc	45	He	141091.04	0.2	160566.51	87.87	
Ge	72	He	116922.10	0.4	125774.49	92.96	

Sample Report

Sample Name K2210884-010

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 11:56:58

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	13.5373	ug/l	1.5	186176.58	
Al	27	45	No Gas	2.1855	ug/l	1.8	30104.06	
Na	23	45	He	4743.7199	ug/l	3.5	2709441.94	
Mg	24	45	He	4063.0704	ug/l	1.8	1129783.71	
Mn	55	72	He	362.5999	ug/l	0.7	599133.17	
Fe	56	72	He	116.1536	ug/l	1.1	338296.88	
Co	59	72	He	2.3432	ug/l	2.3	14204.81	
As	75	72	He	0.1308	ug/l	24.4	56.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3113178.29	1.9	3482217.34	89.4	
Sc	45	He	140724.66	1.5	160566.51	87.64	
Ge	72	He	115603.75	1.1	125774.49	91.91	

Sample Report

Sample Name K2210884-011
File Name 058SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 11:58:39
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7001	ug/l	2.5	80821.78	
Al	27	45	No Gas	2.5609	ug/l	1.9	35923.21	
Na	23	45	He	6106.4368	ug/l	1.0	3787674.53	
Mg	24	45	He	13980.8861	ug/l	1.6	4233618.27	
Mn	55	72	He	0.2030	ug/l	13.2	390.01	
Fe	56	72	He	0.5019	ug/l	13.7	2220.20	
Co	59	72	He	0.0107	ug/l	19.9	76.67	
As	75	72	He	0.0278	ug/l	54.5	16.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3202958.01	1.3	3482217.34	91.98	
Sc	45	He	153210.21	1.1	160566.51	95.42	
Ge	72	He	125383.95	1.1	125774.49	99.69	

Sample Report

Sample Name K2210884-012
File Name 059SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:00:19
Sample Type Sample
Comment D 5X
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	52.2152	ug/l	2.4	753835.85	
Al	27	45	No Gas	1.2855	ug/l	3.6	19529.23	
Na	23	45	He	5746.5344	ug/l	1.1	3410812.14	
Mg	24	45	He	3565.7968	ug/l	0.5	1032583.00	
Mn	55	72	He	1015.5354	ug/l	0.7	1741764.82	
Fe	56	72	He	144.0116	ug/l	1.4	435210.19	
Co	59	72	He	0.2424	ug/l	9.2	1530.08	
As	75	72	He	0.0159	ug/l	17.7	11.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3271569.84	2.2	3482217.34	93.95	
Sc	45	He	146531.99	0.3	160566.51	91.26	
Ge	72	He	119999.31	1.5	125774.49	95.41	

Sample Report

Sample Name K2210884-013

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:02:00

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	85.0391	ug/l	0.8	1198155.32	
Al	27	45	No Gas	4.2364	ug/l	0.8	57788.95	
Na	23	45	He	6220.1417	ug/l	1.8	3904318.69	
Mg	24	45	He	19587.1717	ug/l	2.6	6001847.62	
Mn	55	72	He	0.2107	ug/l	9.1	410.01	
Fe	56	72	He	0.4602	ug/l	5.6	2120.18	
Co	59	72	He	0.0055	ug/l	21.3	43.33	
As	75	72	He	0.0298	ug/l	48.6	17.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3192100.48	0.8	3482217.34	91.67	
Sc	45	He	155110.10	2.2	160566.51	96.6	
Ge	72	He	127171.54	2.4	125774.49	101.11	

Sample Report

Sample Name	K2210884-014
File Name	061SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:03:41
Sample Type	Sample
Comment	D 5X
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	127.2657	ug/l	4.5	1805289.24	
Al	27	45	No Gas	1.4692	ug/l	6.4	21615.00	
Na	23	45	He	6574.3701	ug/l	0.5	3851292.96	
Mg	24	45	He	5957.5388	ug/l	2.3	1705019.61	
Mn	55	72	He	1268.5481	ug/l	2.5	2132919.35	
Fe	56	72	He	3338.1349	ug/l	1.3	9878423.40	
Co	59	72	He	1.0519	ug/l	2.0	6492.39	
As	75	72	He	0.0254	ug/l	28.4	14.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3215198.18	1.4	3482217.34	92.33	
Sc	45	He	144807.57	0.9	160566.51	90.19	
Ge	72	He	117647.53	0.9	125774.49	93.54	

Sample Report

Sample Name K2210884-015

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:05:21

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JL
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	108.5931	ug/l	3.6	1586984.40	
Al	27	45	No Gas	4.3764	ug/l	2.9	61841.04	
Na	23	45	He	10138.4284	ug/l	1.0	6419224.28	
Mg	24	45	He	17812.2627	ug/l	2.6	5525797.63	
Mn	55	72	He	0.1170	ug/l	19.6	236.67	
Fe	56	72	He	0.7256	ug/l	5.9	2933.66	
Co	59	72	He	0.0088	ug/l	32.6	64.44	
As	75	72	He	0.0448	ug/l	41.2	24.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3311493.91	1.2	3482217.34	95.1	
Sc	45	He	157018.10	1.5	160566.51	97.79	
Ge	72	He	125649.87	0.2	125774.49	99.9	

Sample Report

Sample Name K2210884-016

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:07:02

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	120.2944	ug/l	1.8	1770942.42	
Al	27	45	No Gas	1.5927	ug/l	4.0	24126.57	
Na	23	45	He	11508.8314	ug/l	3.8	7023488.85	
Mg	24	45	He	5724.2321	ug/l	1.3	1713490.44	
Mn	55	72	He	510.6670	ug/l	1.1	898609.73	
Fe	56	72	He	965.1963	ug/l	0.8	2989368.71	
Co	59	72	He	0.4423	ug/l	4.7	2860.27	
As	75	72	He	0.2242	ug/l	10.4	99.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3335854.22	0.9	3482217.34	95.8	
Sc	45	He	151483.46	1.1	160566.51	94.34	
Ge	72	He	123118.67	1.2	125774.49	97.89	

Sample Report

Sample Name K2210884-017

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:08:42

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

JC
9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0858	ug/l	5.4	1500.10	
Al	27	45	No Gas	3.3969	ug/l	1.7	48483.05	
Na	23	45	He	5222.8801	ug/l	4.3	3302661.72	
Mg	24	45	He	11187.0370	ug/l	0.8	3447929.64	
Mn	55	72	He	0.2114	ug/l	10.0	413.35	
Fe	56	72	He	0.6719	ug/l	22.1	2816.98	
Co	59	72	He	0.0328	ug/l	10.7	226.67	
As	75	72	He	0.0681	ug/l	4.5	34.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3309313.91	1.1	3482217.34	95.03	
Sc	45	He	155961.90	0.7	160566.51	97.13	
Ge	72	He	127932.62	1.1	125774.49	101.72	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:10:23
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4211	ug/l	0.2	384357.44	101.68	
Al	27	45	No Gas	250.6444	ug/l	0.9	3530588.91	100.26	
Na	23	45	He	1965.1301	ug/l	2.0	1260150.60	98.26	
Mg	24	45	He	1945.7783	ug/l	1.9	596852.15	97.29	
Mn	55	72	He	25.1839	ug/l	2.7	45798.19	100.74	
Fe	56	72	He	250.8784	ug/l	1.2	803116.29	100.35	
Co	59	72	He	25.0341	ug/l	1.0	166911.94	100.14	
As	75	72	He	24.5917	ug/l	1.9	10750.72	98.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3423917.87	0.1	3482217.34	98.33	
Sc	45	He	155241.86	1.8	160566.51	96.68	
Ge	72	He	127184.22	1.2	125774.49	101.12	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:12:03
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0231	ug/l	7.4	590.02	
Al	27	45	No Gas	0.0124	ug/l	129.8	2460.20	
Na	23	45	He	7.6208	ug/l	17.2	40770.69	
Mg	24	45	He	0.1006	ug/l	68.5	33.33	
Mn	55	72	He	0.0063	ug/l	345.3	36.67	
Fe	56	72	He	0.0496	ug/l	69.9	773.37	
Co	59	72	He	-0.0008	ug/l	N/A	1.11	
As	75	72	He	-0.0020	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3338379.43	1.3	3482217.34	95.87	
Sc	45	He	150471.41	1.7	160566.51	93.71	
Ge	72	He	121906.73	0.4	125774.49	96.92	

Prep Blank (PB) Report

Sample Name KQ2216191-01

File Name 067_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:23:53

Sample Type PB

Comment —

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0165	ug/l	35.5	463.35	
Al	27	45	No Gas	0.4107	ug/l	3.6	7449.98	
Na	23	45	He	4.8266	ug/l	19.9	37252.85	
Mg	24	45	He	0.2707	ug/l	37.8	80.00	
Mn	55	72	He	0.0134	ug/l	157.2	46.67	
Fe	56	72	He	0.0127	ug/l	205.0	623.36	
Co	59	72	He	0.0005	ug/l	142.5	8.89	
As	75	72	He	-0.0049	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3136284.33	1.6	3482217.34	90.07	
Sc	45	He	143398.72	1.3	160566.51	89.31	
Ge	72	He	115107.20	1.7	125774.49	91.52	

Sample Report

Sample Name K2210884-018

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:25:34

Sample Type Sample

Comment D 5X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6360	ug/l	5.6	8882.37	
Al	27	45	No Gas	1.6078	ug/l	3.9	22489.42	
Na	23	45	He	5653.8521	ug/l	1.0	3213505.79	
Mg	24	45	He	3956.3849	ug/l	0.9	1096834.72	
Mn	55	72	He	1571.7706	ug/l	0.5	2554899.08	
Fe	56	72	He	198.5283	ug/l	1.2	568370.19	
Co	59	72	He	3.4035	ug/l	0.3	20295.33	
As	75	72	He	0.0584	ug/l	27.9	27.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3082092.56	0.6	3482217.34	88.51	
Sc	45	He	140290.14	1.1	160566.51	87.37	
Ge	72	He	113720.41	1.3	125774.49	90.42	

Sample Report

Sample Name K2210884-007

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:30:34

Sample Type Sample

Comment D 50X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0307	ug/l	26.1	666.69	
Al	27	45	No Gas	0.4770	ug/l	2.4	8413.75	
Na	23	45	He	966.5638	ug/l	1.8	594364.19	
Mg	24	45	He	2372.1703	ug/l	0.6	677144.70	
Mn	55	72	He	542.7878	ug/l	0.2	914728.53	
Fe	56	72	He	10.3046	ug/l	4.0	31155.30	
Co	59	72	He	0.3729	ug/l	6.3	2311.28	
As	75	72	He	0.0008	ug/l	1254.2	4.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3177774.01	1.9	3482217.34	91.26	
Sc	45	He	144447.47	1.2	160566.51	89.96	
Ge	72	He	117902.55	0.5	125774.49	93.74	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	070_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:33:08
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.7593	ug/l	0.6	358926.38	103.04	
Al	27	45	No Gas	253.5231	ug/l	0.8	3291433.49	101.41	
Na	23	45	He	1959.1971	ug/l	1.7	1163811.26	97.96	
Mg	24	45	He	1956.5314	ug/l	0.3	555969.69	97.83	
Mn	55	72	He	24.4665	ug/l	3.0	40751.98	97.87	
Fe	56	72	He	249.1891	ug/l	0.5	730560.22	99.68	
Co	59	72	He	24.8552	ug/l	0.2	151750.22	99.42	
As	75	72	He	24.7051	ug/l	0.6	9890.87	98.82	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3155509.85	1.4	3482217.34	90.62	
Sc	45	He	143789.32	0.8	160566.51	89.55	
Ge	72	He	116466.02	0.3	125774.49	92.6	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	071_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:34:48
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0091	ug/l	120.6	360.01	
Al	27	45	No Gas	0.0106	ug/l	150.0	2283.50	
Na	23	45	He	4.5223	ug/l	52.1	36274.10	
Mg	24	45	He	0.0738	ug/l	157.4	23.33	
Mn	55	72	He	0.0034	ug/l	179.8	30.00	
Fe	56	72	He	0.0071	ug/l	581.3	610.02	
Co	59	72	He	0.0010	ug/l	61.6	12.22	
As	75	72	He	0.0010	ug/l	397.6	4.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130644.54	0.8	3482217.34	89.9	
Sc	45	He	140341.26	1.9	160566.51	87.4	
Ge	72	He	115538.95	0.8	125774.49	91.86	

Prep Blank (PB) Report

Sample Name KQ2216203-01
File Name 072_PB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 12:46:33
Sample Type PB
Comment ---
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0045	ug/l	51.2	293.34	
Al	27	45	No Gas	3.2501	ug/l	0.4	43563.55	
Na	23	45	He	3.8230	ug/l	23.8	35753.03	
Mg	24	45	He	5.5115	ug/l	6.3	1526.77	
Mn	55	72	He	0.1367	ug/l	20.4	243.34	
Fe	56	72	He	0.0958	ug/l	36.2	843.38	
Co	59	72	He	0.0005	ug/l	326.9	8.89	
As	75	72	He	0.0039	ug/l	152.9	5.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3100930.89	0.6	3482217.34	89.05	
Sc	45	He	139806.06	2.4	160566.51	87.07	
Ge	72	He	112324.41	0.7	125774.49	89.31	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216203-03
File Name	073_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:48:13
Sample Type	LCS
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.1242	ug/l	1.6	676611.92	50	98.25	
Al	27	45	No Gas	100.9854	ug/l	2.6	1297534.09	100	100.99	
Na	23	45	He	236.2023	ug/l	1.8	169529.26	250	94.48	
Mg	24	45	He	237.9265	ug/l	1.8	67130.58	250	95.17	
Mn	55	72	He	23.8965	ug/l	2.0	38887.51	25	95.59	
Fe	56	72	He	48.5894	ug/l	0.7	139622.77	50	97.18	
Co	59	72	He	24.5649	ug/l	0.5	146507.58	25	98.26	
As	75	72	He	46.8048	ug/l	1.6	18299.79	50	93.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3120088.91	0.3	3482217.34	89.6	
Sc	45	He	142777.87	0.9	160566.51	88.92	
Ge	72	He	113774.01	1.1	125774.49	90.46	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216203-04

File Name 074_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:49:53

Sample Type LCS

Comment ---

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2382	ug/l	0.8	662519.57	50	98.48	
Al	27	45	No Gas	103.5104	ug/l	1.7	1299132.27	100	103.51	
Na	23	45	He	246.1819	ug/l	1.1	171275.19	250	98.47	
Mg	24	45	He	246.9735	ug/l	1.2	68114.56	250	98.79	
Mn	55	72	He	24.3932	ug/l	2.3	39856.41	25	97.57	
Fe	56	72	He	48.8816	ug/l	1.4	141058.29	50	97.76	
Co	59	72	He	24.5056	ug/l	1.9	146768.67	25	98.02	
As	75	72	He	46.7667	ug/l	2.3	18363.18	50	93.53	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3047968.08	0.5	3482217.34	87.53	
Sc	45	He	139551.04	0.5	160566.51	86.91	
Ge	72	He	114271.43	1.6	125774.49	90.85	

Sample Report

Sample Name	K2210887-001
File Name	075SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:51:33
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.5123	ug/l	2.0	27541.46	
Al	27	45	No Gas	4.3597	ug/l	1.4	45922.73	
Na	23	45	He	47923.7033	ug/l	0.8	21183816.35	
Mg	24	45	He	90713.9689	ug/l	2.8	19741620.96	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~68506.9060~~	~~ug/l~~	~~0.5~~	~~88795428.68~~	~~>LDR~~
Fe	56	72	He	2287.6002	ug/l	2.1	5217313.78	
Co	59	72	He	57.3978	ug/l	1.2	272823.07	
As	75	72	He	0.0696	ug/l	41.9	25.00	

SC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2467591.58	0.2	3482217.34	70.86	
Sc	45	He	110133.12	1.2	160566.51	68.59	
Ge	72	He	90680.22	1.0	125774.49	72.1	

Sample Report

Sample Name K2210887-002

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:53:12

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.3512	ug/l	1.0	57957.12	
Al	27	45	No Gas	4.2396	ug/l	0.8	44320.49	
Na	23	45	He	48731.3614	ug/l	0.6	21254684.68	
Mg	24	45	He	31036.2435	ug/l	1.6	6663913.65	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15924.9220~~	~~ug/l~~	~~3.2~~	~~20673671.78~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~192108.6459~~	~~ug/l~~	~~2.7~~	~~438915806.79~~	~~>LDR~~
Co	59	72	He	209.5085	ug/l	2.8	997533.40	
As	75	72	He	0.1757	ug/l	23.3	58.33	

X see Dilutions
X JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2446455.22	0.5	3482217.34	70.26	
Sc	45	He	108663.92	1.5	160566.51	67.68	
Ge	72	He	90881.06	3.1	125774.49	72.26	

Sample Report

Sample Name	K2210887-003
File Name	077SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 12:58:09
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	39.0407	ug/l	0.6	491947.96	
Al	27	45	No Gas	19.8768	ug/l	0.1	235210.00	
Na	23	45	He	20171.1501	ug/l	3.1	10778792.34	
Mg	24	45	He	44324.3872	ug/l	1.8	11643678.58	
Mn	55	72	He	1.9753	ug/l	6.9	3110.35	
Fe	56	72	He	3.0211	ug/l	7.2	8859.09	
Co	59	72	He	0.1745	ug/l	2.3	1005.59	
As	75	72	He	0.4374	ug/l	1.5	168.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2854324.02	1.2	3482217.34	81.97	
Sc	45	He	132946.91	1.9	160566.51	82.8	
Ge	72	He	109305.02	0.9	125774.49	86.91	

Sample Report

Sample Name K2210887-004

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 12:59:49

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.5132	ug/l	1.4	1016634.65	
Al	27	45	No Gas	4.0191	ug/l	1.3	49245.09	
Na	23	45	He	20095.8081	ug/l	0.6	10408515.88	
Mg	24	45	He	17216.0584	ug/l	2.1	4382286.19	
Mn	55	72	He	2171.2807	ug/l	1.9	3276083.91	
Fe	56	72	He	3793.6639	ug/l	1.8	10073014.22	
Co	59	72	He	17.0552	ug/l	0.7	94381.58	
As	75	72	He	0.6170	ug/l	5.7	227.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2861377.77	2.5	3482217.34	82.17	
Sc	45	He	128812.88	1.0	160566.51	80.22	
Ge	72	He	105568.50	1.1	125774.49	83.93	

Sample Report

Sample Name K2210887-005

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:01:28

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	152.2600	ug/l	3.3	2124557.16	
Al	27	45	No Gas	13.7221	ug/l	1.7	180568.85	
Na	23	45	He	26674.1540	ug/l	2.0	15470606.44	
Mg	24	45	He	47985.8102	ug/l	3.2	13687550.21	
Mn	55	72	He	1.5715	ug/l	6.5	2623.58	
Fe	56	72	He	1.8200	ug/l	9.8	5887.80	
Co	59	72	He	0.0373	ug/l	11.9	232.23	
As	75	72	He	0.1116	ug/l	14.6	48.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3162908.70	1.9	3482217.34	90.83	
Sc	45	He	144381.08	1.5	160566.51	89.92	
Ge	72	He	115701.23	0.6	125774.49	91.99	

Sample Report

Sample Name	K2210887-006
File Name	080SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:03:09
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	235.8769	ug/l	2.8	3107445.47	
Al	27	45	No Gas	4.1489	ug/l	3.9	52957.46	
Na	23	45	He	27235.7959	ug/l	2.4	14443696.04	
Mg	24	45	He	15509.0022	ug/l	0.3	4046883.38	
Mn	55	72	He	3813.8192	ug/l	1.6	6020632.20	>LDR
Fe	56	72	He	1673.0101	ug/l	1.0	4648408.79	
Co	59	72	He	0.9827	ug/l	2.6	5695.42	
As	75	72	He	0.0857	ug/l	14.0	36.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2986503.81	2.5	3482217.34	85.76	
Sc	45	He	132043.87	2.2	160566.51	82.24	
Ge	72	He	110466.41	1.8	125774.49	87.83	

Sample Report

Sample Name K2210887-007

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:04:49

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	422.5218	ug/l	1.0	5753338.45	
Al	27	45	No Gas	20.2511	ug/l	1.0	259021.75	
Na	23	45	He	30770.9918	ug/l	0.4	17198751.41	
Mg	24	45	He	83598.7347	ug/l	0.8	22989537.16	
Mn	55	72	He	3.0627	ug/l	6.0	4977.57	
Fe	56	72	He	1.3837	ug/l	1.6	4517.38	
Co	59	72	He	0.0351	ug/l	20.5	214.45	
As	75	72	He	0.1057	ug/l	12.3	45.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085779.23	1.4	3482217.34	88.62	
Sc	45	He	139154.77	0.7	160566.51	86.66	
Ge	72	He	113213.89	1.3	125774.49	90.01	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	082_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:06:28
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.3440	ug/l	1.7	368570.70	101.38	
Al	27	45	No Gas	253.9263	ug/l	1.8	3440292.55	101.57	
Na	23	45	He	1958.3455	ug/l	0.9	1204120.84	97.92	
Mg	24	45	He	1958.4357	ug/l	0.4	575899.17	97.92	
Mn	55	72	He	24.7183	ug/l	3.2	43033.95	98.87	
Fe	56	72	He	248.3634	ug/l	2.4	761094.50	99.35	
Co	59	72	He	25.0407	ug/l	1.2	159830.85	100.16	
As	75	72	He	25.0137	ug/l	4.6	10464.54	100.05	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3293640.47	1.1	3482217.34	94.58	
Sc	45	He	148803.58	1.8	160566.51	92.67	
Ge	72	He	121779.30	2.2	125774.49	96.82	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	083_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:08:09
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0540	ug/l	12.3	1000.05	
Al	27	45	No Gas	0.0112	ug/l	142.3	2338.51	
Na	23	45	He	4.4508	ug/l	36.8	38158.10	
Mg	24	45	He	0.1941	ug/l	29.2	60.00	
Mn	55	72	He	0.0280	ug/l	78.5	73.33	
Fe	56	72	He	0.0856	ug/l	63.8	870.05	
Co	59	72	He	-0.0003	ug/l	N/A	4.44	
As	75	72	He	-0.0051	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3194659.32	0.6	3482217.34	91.74	
Sc	45	He	147772.11	1.9	160566.51	92.03	
Ge	72	He	120003.43	0.6	125774.49	95.41	

Sample Report

Sample Name K2210887-008

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:09:50

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	559.5089	ug/l	2.7	6769361.77	
Al	27	45	No Gas	4.6000	ug/l	1.4	53729.89	
Na	23	45	He	30180.2313	ug/l	2.0	14964966.86	
Mg	24	45	He	26245.2826	ug/l	0.8	6402050.32	
Mn	55	72	He	5115.1188	ug/l	2.4	7403702.60	>LDR
Fe	56	72	He	16846.2333	ug/l	1.7	42909584.36	
Co	59	72	He	8.2059	ug/l	1.2	43568.20	
As	75	72	He	0.2344	ug/l	16.3	85.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2741689.75	1.2	3482217.34	78.73	
Sc	45	He	123434.34	1.1	160566.51	76.87	
Ge	72	He	101283.13	1.3	125774.49	80.53	

Sample Report

Sample Name	K2210887-009
File Name	085SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:11:30
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	530.9231	ug/l	0.7	7335438.02	
Al	27	45	No Gas	23.0373	ug/l	0.7	298700.19	
Na	23	45	He	45018.9904	ug/l	0.8	26466624.60	
Mg	24	45	He	58295.0771	ug/l	0.8	16870839.33	
Mn	55	72	He	1.6227	ug/l	3.9	2763.64	
Fe	56	72	He	1.6055	ug/l	8.0	5367.64	
Co	59	72	He	0.0455	ug/l	15.6	287.78	
As	75	72	He	0.1840	ug/l	9.0	79.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3130922.35	1.0	3482217.34	89.91	
Sc	45	He	146450.34	1.1	160566.51	91.21	
Ge	72	He	118076.92	1.0	125774.49	93.88	

Sample Report

Sample Name	K2210887-010
File Name	086SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:13:10
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	575.1594	ug/l	2.6	7841539.05	
Al	27	45	No Gas	4.1681	ug/l	1.5	55063.81	
Na	23	45	He	44859.4226	ug/l	0.7	25759397.95	
Mg	24	45	He	24055.3229	ug/l	2.1	6798629.06	
Mn	55	72	He	1925.1483	ug/l	1.3	3178718.70	
Fe	56	72	He	2435.7723	ug/l	0.8	7077513.64	
Co	59	72	He	1.6486	ug/l	1.4	9988.51	
As	75	72	He	0.7685	ug/l	0.8	309.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3089870.16	0.9	3482217.34	88.73	
Sc	45	He	143039.71	1.5	160566.51	89.08	
Ge	72	He	115515.81	0.6	125774.49	91.84	

Sample Report

Sample Name K2210887-011

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:14:49

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6368	ug/l	3.9	8675.59	
Al	27	45	No Gas	17.6533	ug/l	1.1	220273.41	
Na	23	45	He	24609.0613	ug/l	2.1	13863768.54	
Mg	24	45	He	42874.3731	ug/l	0.6	11879618.57	
Mn	55	72	He	0.4871	ug/l	10.2	806.70	
Fe	56	72	He	2.2790	ug/l	3.0	7018.22	
Co	59	72	He	0.1356	ug/l	1.8	805.58	
As	75	72	He	0.3221	ug/l	9.5	128.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3006722.45	0.8	3482217.34	86.35	
Sc	45	He	140213.40	1.4	160566.51	87.32	
Ge	72	He	112455.15	0.7	125774.49	89.41	

Sample Report

Sample Name K2210887-012

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:16:29

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.1910	ug/l	0.9	38094.24	
Al	27	45	No Gas	4.0408	ug/l	3.3	46539.59	
Na	23	45	He	24794.6227	ug/l	2.2	12021974.40	
Mg	24	45	He	17077.6217	ug/l	2.3	4072064.84	
Mn	55	72	He	8902.6769	ug/l	2.3	12579341.89	>LDR
Fe	56	72	He	6030.1491	ug/l	2.4	14994206.03	
Co	59	72	He	22.3667	ug/l	2.8	115899.03	
As	75	72	He	0.3558	ug/l	9.3	124.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2691159.65	2.2	3482217.34	77.28	
Sc	45	He	120719.84	3.6	160566.51	75.18	
Ge	72	He	98906.00	3.2	125774.49	78.64	

Sample Report

Sample Name K2210887-013

File Name 089SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:18:08

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.0012	ug/l	0.9	63532.57	
Al	27	45	No Gas	4.4309	ug/l	1.9	45219.34	
Na	23	45	He	48831.8637	ug/l	3.0	20958244.27	
Mg	24	45	He	32470.3091	ug/l	0.6	6864276.57	
Mn	55	72	He	15353.7261	ug/l	2.4	19918491.37	>LDR
Fe	56	72	He	180640.9882	ug/l	2.1	412392513.86	>LDR
Co	59	72	He	267.7029	ug/l	1.9	1273746.86	
As	75	72	He	3.1042	ug/l	3.6	971.36	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2392229.91	0.4	3482217.34	68.7	
Sc	45	He	106983.61	2.7	160566.51	66.63	
Ge	72	He	90784.64	1.5	125774.49	72.18	

Sample Report

Sample Name K2210887-014

File Name 090SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:19:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	88.0488	ug/l	4.8	1022738.24	
Al	27	45	No Gas	3.9713	ug/l	0.7	44788.36	
Na	23	45	He	20070.0105	ug/l	0.8	9785292.35	
Mg	24	45	He	17094.3468	ug/l	2.3	4095733.17	
Mn	55	72	He	1695.4020	ug/l	2.3	2522851.37	
Fe	56	72	He	7867.5177	ug/l	1.7	20602565.94	
Co	59	72	He	5.8500	ug/l	2.9	31927.28	
As	75	72	He	12.6397	ug/l	2.9	4525.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2632565.64	1.3	3482217.34	75.6	
Sc	45	He	121262.62	1.3	160566.51	75.52	
Ge	72	He	104133.24	1.8	125774.49	82.79	

Sample Report

Sample Name K2210887-015

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:21:27

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	256.3533	ug/l	1.8	3148228.91	
Al	27	45	No Gas	3.9834	ug/l	1.6	47481.90	
Na	23	45	He	27293.8289	ug/l	1.3	14102752.29	
Mg	24	45	He	15270.1711	ug/l	1.5	3881024.42	
Mn	55	72	He	3487.6555	ug/l	0.4	5253333.36	>LDR
Fe	56	72	He	5028.5797	ug/l	1.1	13327608.55	
Co	59	72	He	20.3798	ug/l	2.1	112556.12	
As	75	72	He	39.0660	ug/l	1.2	14147.52	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2783297.56	2.0	3482217.34	79.93	
Sc	45	He	128624.95	1.7	160566.51	80.11	
Ge	72	He	105380.47	1.8	125774.49	83.79	

Sample Report

Sample Name	K2210887-016
File Name	092SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:23:06
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	564.1121	ug/l	1.4	6773974.48	
Al	27	45	No Gas	4.0678	ug/l	0.2	47369.93	
Na	23	45	He	30467.2881	ug/l	1.2	15142996.44	
Mg	24	45	He	26069.2980	ug/l	1.2	6374825.94	
Mn	55	72	He	5030.9495	ug/l	2.0	7334195.31	>LDR
Fe	56	72	He	40069.1270	ug/l	2.4	102788891.80	
Co	59	72	He	35.6981	ug/l	2.5	190849.14	
As	75	72	He	18.1139	ug/l	1.1	6353.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2720780.79	1.4	3482217.34	78.13	
Sc	45	He	123746.93	1.4	160566.51	77.07	
Ge	72	He	102027.89	2.5	125774.49	81.12	

Sample Report

Sample Name K2210887-017

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:24:45

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	583.6056	ug/l	1.9	7739524.88	
Al	27	45	No Gas	4.0365	ug/l	2.6	51931.00	
Na	23	45	He	45266.2733	ug/l	1.3	24876916.30	
Mg	24	45	He	24628.2243	ug/l	0.9	6663747.61	
Mn	55	72	He	1879.7120	ug/l	1.7	3114246.31	
Fe	56	72	He	16437.0895	ug/l	1.3	47924329.29	
Co	59	72	He	8.2109	ug/l	1.5	49898.59	
As	75	72	He	306.6741	ug/l	1.2	122154.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3005501.83	1.1	3482217.34	86.31	
Sc	45	He	136921.05	1.2	160566.51	85.27	
Ge	72	He	115934.88	1.7	125774.49	92.18	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	094_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:26:25
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.6554	ug/l	0.8	336800.27	98.62	
Al	27	45	No Gas	245.0861	ug/l	0.9	3119405.47	98.03	
Na	23	45	He	1894.5124	ug/l	2.8	1119225.09	94.73	
Mg	24	45	He	1929.8691	ug/l	1.9	544888.85	96.49	
Mn	55	72	He	25.1667	ug/l	3.9	42138.52	100.67	
Fe	56	72	He	249.9522	ug/l	2.8	736774.16	99.98	
Co	59	72	He	24.9135	ug/l	2.7	152926.05	99.65	
As	75	72	He	24.9406	ug/l	0.6	10041.63	99.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3093531.93	1.0	3482217.34	88.84	
Sc	45	He	142908.77	2.7	160566.51	89	
Ge	72	He	117133.20	1.9	125774.49	93.13	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	095_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:28:05
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

3L 9/27/22

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1114	ug/l	9.8	1723.46	CCB Failed
Al	27	45	No Gas	0.0147	ug/l	92.8	2275.17	
Na	23	45	He	0.7108	ug/l	135.0	33949.67	
Mg	24	45	He	0.1457	ug/l	74.9	43.33	
Mn	55	72	He	0.0358	ug/l	22.8	83.33	
Fe	56	72	He	0.0583	ug/l	100.4	760.03	
Co	59	72	He	-0.0003	ug/l	N/A	4.45	
As	75	72	He	-0.0074	ug/l	N/A	1.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3045998.89	1.9	3482217.34	87.47	
Sc	45	He	139528.04	1.3	160566.51	86.9	
Ge	72	He	115555.42	2.6	125774.49	91.88	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	096_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:35:25
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0576	ug/l	19.4	1013.38	
Al	27	45	No Gas	0.0184	ug/l	76.4	2348.52	
Na	23	45	He	-3.2381	ug/l	N/A	32249.68	
Mg	24	45	He	0.2018	ug/l	44.8	60.00	
Mn	55	72	He	0.0237	ug/l	54.0	63.33	
Fe	56	72	He	0.0627	ug/l	65.7	770.04	
Co	59	72	He	-0.0005	ug/l	N/A	3.33	
As	75	72	He	0.0002	ug/l	3717.6	4.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3082732.35	0.4	3482217.34	88.53	
Sc	45	He	141842.53	3.0	160566.51	88.34	
Ge	72	He	115425.33	0.7	125774.49	91.77	

Sample Report

Sample Name K2210887-018

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:37:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.5577	ug/l	1.3	43790.51	
Al	27	45	No Gas	3.8304	ug/l	1.6	45622.05	
Na	23	45	He	25276.8553	ug/l	2.4	12049716.90	
Mg	24	45	He	16758.7922	ug/l	0.5	3928860.25	
Mn	55	72	He	8567.6162	ug/l	2.5	11895092.74	>LDR
Fe	56	72	He	2.8236	ug/l	2.0	7395.06	
Co	59	72	He	312.1892	ug/l	2.1	1589656.78	
As	75	72	He	0.2568	ug/l	8.8	89.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2775957.25	0.4	3482217.34	79.72	
Sc	45	He	118629.39	0.5	160566.51	73.88	
Ge	72	He	97179.76	3.1	125774.49	77.27	

Sample Report

Sample Name K2210887-001

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:41:30

Sample Type Sample

Comment D 100X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0617	ug/l	12.8	1053.39	
Al	27	45	No Gas	0.1933	ug/l	8.5	4493.95	
Na	23	45	He	485.9400	ug/l	1.6	305438.83	
Mg	24	45	He	921.9633	ug/l	1.6	254284.73	
Mn	55	72	He	672.8928	ug/l	1.6	1101896.21	
Fe	56	72	He	22.3072	ug/l	1.4	64861.96	
Co	59	72	He	0.5972	ug/l	3.3	3592.63	
As	75	72	He	-0.0024	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3034289.64	0.9	3482217.34	87.14	
Sc	45	He	139582.34	1.5	160566.51	86.93	
Ge	72	He	114573.24	1.0	125774.49	91.09	

Sample Report

Sample Name K2210887-002

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:43:11

Sample Type Sample

Comment D 100X

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0712	ug/l	12.7	1180.06	
Al	27	45	No Gas	0.2395	ug/l	10.0	5077.46	
Na	23	45	He	487.4917	ug/l	2.0	299940.88	
Mg	24	45	He	317.3494	ug/l	2.4	85706.65	
Mn	55	72	He	154.1131	ug/l	1.1	245813.81	
Fe	56	72	He	1970.0339	ug/l	0.8	5529530.33	
Co	59	72	He	2.1706	ug/l	1.8	12703.65	
As	75	72	He	-0.0047	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3038910.89	1.8	3482217.34	87.27	
Sc	45	He	136682.51	2.0	160566.51	85.13	
Ge	72	He	111586.70	0.6	125774.49	88.72	

Sample Report

Sample Name K2210854-006
File Name 100SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 13:46:46
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6606	ug/l	1.1	9365.98	
Al	27	45	No Gas	2962.7766	ug/l	2.8	38145597.76	
Na	23	45	He	55949.0511	ug/l	1.6	30650778.71	
Mg	24	45	He	15.6397	ug/l	4.7	4220.61	
Mn	55	72	He	0.4295	ug/l	5.7	706.70	
Fe	56	72	He	16.7346	ug/l	2.6	47382.96	
Co	59	72	He	0.0201	ug/l	24.6	123.34	
As	75	72	He	0.0792	ug/l	15.2	34.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3132353.28	1.7	3482217.34	89.95	
Sc	45	He	136527.97	1.6	160566.51	85.03	
Ge	72	He	111241.20	1.6	125774.49	88.44	

Sample Report

Sample Name	K2210854-007
File Name	101SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:48:25
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.9317	ug/l	3.5	14112.55	
Al	27	45	No Gas	30.4175	ug/l	1.1	423955.25	
Na	23	45	He	26774.5632	ug/l	1.9	18074829.31	
Mg	24	45	He	44526.6946	ug/l	1.6	14785594.36	
Mn	55	72	He	0.2271	ug/l	12.0	466.68	
Fe	56	72	He	2.7215	ug/l	6.4	9936.43	
Co	59	72	He	0.0059	ug/l	51.2	48.89	
As	75	72	He	0.0969	ug/l	9.9	50.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3371897.66	1.9	3482217.34	96.83	
Sc	45	He	168048.81	1.4	160566.51	104.66	
Ge	72	He	135047.61	1.1	125774.49	107.37	

Sample Report

Sample Name	K2210854-008
File Name	102SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:50:06
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	9.5931	ug/l	0.5	153468.97	
Al	27	45	No Gas	1230.0775	ug/l	0.9	18303137.23	
Na	23	45	He	110613.2859	ug/l	1.3	70752755.61	
Mg	24	45	He	642.0580	ug/l	2.1	202325.04	
Mn	55	72	He	2.6080	ug/l	1.9	4814.12	
Fe	56	72	He	5.7594	ug/l	0.8	19251.13	
Co	59	72	He	0.0214	ug/l	17.2	151.11	
As	75	72	He	0.2520	ug/l	8.8	116.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3618782.55	0.4	3482217.34	103.92	
Sc	45	He	159485.03	1.5	160566.51	99.33	
Ge	72	He	128390.33	2.4	125774.49	102.08	

Sample Report

Sample Name	K2210854-009
File Name	103SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:51:45
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	24.0493	ug/l	1.3	384485.92	
Al	27	45	No Gas	26.9005	ug/l	1.2	402877.79	
Na	23	45	He	30760.6968	ug/l	2.3	21180332.60	
Mg	24	45	He	38620.7178	ug/l	1.1	13084571.06	
Mn	55	72	He	0.3700	ug/l	3.4	760.04	
Fe	56	72	He	1.9269	ug/l	7.6	7401.75	
Co	59	72	He	0.0091	ug/l	43.5	73.34	
As	75	72	He	0.1689	ug/l	7.5	85.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3620423.90	0.5	3482217.34	103.97	
Sc	45	He	171433.25	0.4	160566.51	106.77	
Ge	72	He	138192.22	0.2	125774.49	109.87	

Sample Report

Sample Name	K2210854-011
File Name	104SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:53:26
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.3555	ug/l	2.8	6344.62	
Al	27	45	No Gas	36.7029	ug/l	0.9	585212.37	
Na	23	45	He	37465.9682	ug/l	2.5	27426447.09	
Mg	24	45	He	38101.8215	ug/l	1.0	13728493.13	
Mn	55	72	He	0.2270	ug/l	8.1	503.35	
Fe	56	72	He	1.3070	ug/l	7.6	5531.03	
Co	59	72	He	0.0131	ug/l	27.9	107.78	
As	75	72	He	0.0591	ug/l	12.1	35.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3860725.99	0.9	3482217.34	110.87	
Sc	45	He	182320.97	0.4	160566.51	113.55	
Ge	72	He	145671.20	0.4	125774.49	115.82	

Sample Report

Sample Name K2210854-012

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:55:06

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.2386	ug/l	4.4	4067.22	
Al	27	45	No Gas	415.8968	ug/l	2.8	6168586.57	
Na	23	45	He	159303.3907	ug/l	1.2	107666378.40	
Mg	24	45	He	1660.3986	ug/l	0.5	552971.74	
Mn	55	72	He	18.8316	ug/l	1.3	35850.99	
Fe	56	72	He	1.9262	ug/l	3.0	7124.95	
Co	59	72	He	0.1957	ug/l	7.5	1372.29	
As	75	72	He	0.9657	ug/l	4.7	446.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3607292.55	1.9	3482217.34	103.59	
Sc	45	He	168525.18	1.1	160566.51	104.96	
Ge	72	He	133096.07	1.6	125774.49	105.82	

Sample Report

Sample Name K2210854-013

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 13:56:46

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6697	ug/l	0.6	64478.93	
Al	27	45	No Gas	5.0606	ug/l	0.6	55221.00	
Na	23	45	He	46478.5124	ug/l	0.2	21895262.17	
Mg	24	45	He	29918.3983	ug/l	1.6	6939230.73	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15059.5390~~	~~ug/l~~	~~2.2~~	~~20647154.27~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~185495.9050~~	~~ug/l~~	~~2.7~~	~~447498140.00~~	~~>LDR~~
Co	59	72	He	262.4734	ug/l	2.2	1319797.34	
As	75	72	He	7.4223	ug/l	4.6	2448.85	

* See Dilution
* 31
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2569392.57	0.1	3482217.34	73.79	
Sc	45	He	117359.55	0.7	160566.51	73.09	
Ge	72	He	95959.35	2.7	125774.49	76.29	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	107_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 13:58:25
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.3386	ug/l	1.9	299288.90	97.35	
Al	27	45	No Gas	243.5252	ug/l	3.5	2788946.00	97.41	
Na	23	45	He	1925.6592	ug/l	0.6	1018513.37	96.28	
Mg	24	45	He	1946.2633	ug/l	1.9	492100.87	97.31	
Mn	55	72	He	24.2998	ug/l	1.2	37197.07	97.2	
Fe	56	72	He	245.9864	ug/l	0.9	662762.41	98.39	
Co	59	72	He	24.5485	ug/l	0.9	137739.53	98.19	
As	75	72	He	24.4535	ug/l	0.7	8997.37	97.81	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2785738.50	3.2	3482217.34	80	
Sc	45	He	127957.12	1.0	160566.51	79.69	
Ge	72	He	107037.39	0.7	125774.49	85.1	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	108_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:00:06
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0344	ug/l	21.9	636.69	
Al	27	45	No Gas	0.0087	ug/l	34.5	2028.47	
Na	23	45	He	-6.9304	ug/l	N/A	27224.64	
Mg	24	45	He	0.1471	ug/l	80.5	40.00	
Mn	55	72	He	0.0141	ug/l	24.8	43.33	
Fe	56	72	He	0.1504	ug/l	32.7	930.05	
Co	59	72	He	0.0006	ug/l	54.8	8.89	
As	75	72	He	-0.0053	ug/l	N/A	2.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2809307.35	1.0	3482217.34	80.68	
Sc	45	He	128010.66	0.6	160566.51	79.72	
Ge	72	He	104898.09	1.5	125774.49	83.4	

Sample Report

Sample Name	K2210854-014
File Name	109SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:01:46
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	85.7084	ug/l	0.3	1025295.22	
Al	27	45	No Gas	5.5043	ug/l	1.9	63192.47	
Na	23	45	He	19681.1159	ug/l	1.5	9751451.10	
Mg	24	45	He	16795.5754	ug/l	2.4	4089884.10	
Mn	55	72	He	1605.9533	ug/l	2.0	2485575.69	
Fe	56	72	He	9321.6901	ug/l	1.6	25386670.45	
Co	59	72	He	5.6230	ug/l	2.7	31917.31	
As	75	72	He	41.3224	ug/l	1.7	15377.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2710267.36	0.7	3482217.34	77.83	
Sc	45	He	123226.40	0.7	160566.51	76.74	
Ge	72	He	108298.87	2.0	125774.49	86.11	

Sample Report

Sample Name K2210854-015
File Name 110SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:03:26
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	252.5342	ug/l	1.6	3163531.93	
Al	27	45	No Gas	4.4078	ug/l	1.9	53381.89	
Na	23	45	He	26662.5514	ug/l	2.4	13888514.79	
Mg	24	45	He	15149.2184	ug/l	1.6	3881531.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3365.2468~~	~~ug/l~~	~~0.7~~	~~5137371.49~~	~~>LDR~~
Fe	56	72	He	7039.8891	ug/l	2.0	18911355.55	
Co	59	72	He	20.2090	ug/l	1.2	113155.53	
As	75	72	He	45.9736	ug/l	1.6	16875.33	

See
Dilution
SL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2838667.46	1.1	3482217.34	81.52	
Sc	45	He	129669.30	1.4	160566.51	80.76	
Ge	72	He	106809.80	0.9	125774.49	84.92	

Sample Report

Sample Name K2210854-016
File Name 111SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:05:05
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	539.3136	ug/l	0.3	6749798.65	
Al	27	45	No Gas	4.9283	ug/l	1.2	59410.95	
Na	23	45	He	29647.1938	ug/l	1.9	14949371.03	
Mg	24	45	He	25686.0349	ug/l	1.1	6373410.95	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4976.1959~~	~~ug/l~~	~~1.8~~	~~7392962.39~~	~~>LDR~~
Fe	56	72	He	40360.2494	ug/l	1.6	105512951.76	
Co	59	72	He	34.8715	ug/l	2.3	189981.67	
As	75	72	He	23.6573	ug/l	3.5	8450.76	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2835973.92	0.9	3482217.34	81.44	
Sc	45	He	125566.44	2.4	160566.51	78.2	
Ge	72	He	103965.58	2.4	125774.49	82.66	

Sample Report

Sample Name K2210854-017

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:06:45

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	570.2366	ug/l	1.5	7645740.51	
Al	27	45	No Gas	4.5478	ug/l	2.1	58882.53	
Na	23	45	He	43670.0407	ug/l	0.9	24245459.64	
Mg	24	45	He	23844.6142	ug/l	2.3	6515942.40	
Mn	55	72	He	1822.5634	ug/l	2.0	3049627.24	
Fe	56	72	He	16719.7785	ug/l	2.0	49230757.60	
Co	59	72	He	8.0795	ug/l	1.4	49598.88	
As	75	72	He	401.0648	ug/l	1.4	161346.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3038456.31	2.3	3482217.34	87.26	
Sc	45	He	138305.48	1.4	160566.51	86.14	
Ge	72	He	117100.49	2.3	125774.49	93.1	

Sample Report

Sample Name K2210854-018
File Name 113SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:08:25
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.7516	ug/l	0.7	45267.33	
Al	27	45	No Gas	4.6058	ug/l	2.0	53407.16	
Na	23	45	He	24302.2074	ug/l	1.5	12248338.57	
Mg	24	45	He	15790.8280	ug/l	0.4	3913916.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	8206.0454	ug/l	2.2	12090733.57	>LDR
Fe	56	72	He	4.2098	ug/l	6.5	11437.34	
Co	59	72	He	304.0011	ug/l	0.6	1642698.13	
As	75	72	He	0.3342	ug/l	18.3	122.33	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2721832.98	1.3	3482217.34	78.16	
Sc	45	He	125425.19	1.5	160566.51	78.11	
Ge	72	He	103086.62	0.9	125774.49	81.96	

Sample Report

Sample Name K2210884-001

File Name 114SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:13:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.7200	ug/l	2.7	63422.00	
Al	27	45	No Gas	4.3183	ug/l	1.6	46203.52	
Na	23	45	He	47798.5046	ug/l	1.1	20893708.86	
Mg	24	45	He	30387.5599	ug/l	1.3	6539958.24	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15254.8319~~	~~ug/l~~	~~1.3~~	~~20011997.62~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~178925.8421~~	~~ug/l~~	~~0.9~~	~~413057020.51~~	~~>LDR~~
Co	59	72	He	261.6168	ug/l	1.2	1258689.36	
As	75	72	He	5.2155	ug/l	2.9	1648.75	

* see Dilution
* 3(
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2506261.42	2.5	3482217.34	71.97	
Sc	45	He	108909.36	0.9	160566.51	67.83	
Ge	72	He	91790.45	1.2	125774.49	72.98	

Sample Report

Sample Name	K2210884-002
File Name	115SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:15:27
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	86.7099	ug/l	4.3	1011258.50	
Al	27	45	No Gas	4.3621	ug/l	2.4	49196.52	
Na	23	45	He	19750.2214	ug/l	1.6	9646410.06	
Mg	24	45	He	16698.0282	ug/l	2.4	4008051.61	
Mn	55	72	He	1597.9488	ug/l	1.7	2464231.99	
Fe	56	72	He	8382.5652	ug/l	1.2	22749323.83	
Co	59	72	He	5.6103	ug/l	2.5	31734.76	
As	75	72	He	20.5146	ug/l	0.6	7610.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2642237.25	0.3	3482217.34	75.88	
Sc	45	He	121498.63	2.4	160566.51	75.67	
Ge	72	He	107906.20	1.4	125774.49	85.79	

Sample Report

Sample Name	K2210884-003
File Name	116SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:17:07
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	253.9458	ug/l	2.5	3150361.83	
Al	27	45	No Gas	5.8742	ug/l	0.4	69831.92	
Na	23	45	He	26413.4696	ug/l	3.4	13670355.63	
Mg	24	45	He	15223.7263	ug/l	1.9	3876370.88	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3431.4714~~	~~ug/l~~	~~0.1~~	~~5183283.88~~	~~>LDR~~
Fe	56	72	He	5871.8864	ug/l	1.2	15608342.68	
Co	59	72	He	20.3052	ug/l	1.0	112489.11	
As	75	72	He	49.0264	ug/l	0.4	17806.94	

See Dilution
SL
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2811672.67	1.4	3482217.34	80.74	
Sc	45	He	128883.24	2.6	160566.51	80.27	
Ge	72	He	105679.54	1.0	125774.49	84.02	

Sample Report

Sample Name K2210884-004

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:18:47

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	572.2361	ug/l	1.6	6937683.02	
Al	27	45	No Gas	4.9230	ug/l	4.1	57468.09	
Na	23	45	He	29907.8099	ug/l	1.5	15129902.28	
Mg	24	45	He	25708.7172	ug/l	2.1	6397359.28	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4977.9001~~	~~ug/l~~	~~0.7~~	~~7501628.43~~	~~>LDR~~
Fe	56	72	He	39695.5398	ug/l	2.3	105254771.77	
Co	59	72	He	34.8484	ug/l	1.5	192596.27	
As	75	72	He	15.1476	ug/l	3.1	5490.56	

SC 9/27/22
see
Dilution

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2747851.42	2.2	3482217.34	78.91	
Sc	45	He	125945.85	1.8	160566.51	78.44	
Ge	72	He	105437.73	1.1	125774.49	83.83	

Sample Report

Sample Name K2210884-005

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:20:26

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	589.7554	ug/l	1.5	7857114.46	
Al	27	45	No Gas	4.9696	ug/l	1.4	63754.59	
Na	23	45	He	44082.6877	ug/l	1.3	24105779.64	
Mg	24	45	He	24106.4624	ug/l	1.4	6489489.70	
Mn	55	72	He	1836.7750	ug/l	1.7	3054028.18	
Fe	56	72	He	16740.8121	ug/l	1.5	48981704.27	
Co	59	72	He	8.1744	ug/l	2.3	49849.49	
As	75	72	He	364.5893	ug/l	1.3	145735.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3019542.25	2.1	3482217.34	86.71	
Sc	45	He	136231.22	1.1	160566.51	84.84	
Ge	72	He	116348.11	1.9	125774.49	92.51	

Continuing Calibration Verification (CCV) Report

Sample Name CCV
File Name 119_CCV.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:22:06
Sample Type CCV
Comment —
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.3139	ug/l	1.7	334612.98	97.26	
Al	27	45	No Gas	241.6908	ug/l	1.6	3098873.70	96.68	
Na	23	45	He	1941.1791	ug/l	2.4	1139712.87	97.06	
Mg	24	45	He	1939.9174	ug/l	0.9	544679.69	97	
Mn	55	72	He	23.8002	ug/l	1.1	39666.06	95.2	
Fe	56	72	He	247.8949	ug/l	1.1	727134.13	99.16	
Co	59	72	He	25.1791	ug/l	0.8	153809.93	100.72	
As	75	72	He	24.8028	ug/l	1.5	9935.90	99.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3117420.68	2.9	3482217.34	89.52	
Sc	45	He	142074.80	0.6	160566.51	88.48	
Ge	72	He	116532.60	0.8	125774.49	92.65	

Continuing Calibration Blank (CCB) Report

3L
9/27/22

Sample Name	CCB
File Name	120_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:23:46
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1238	ug/l	5.7	1933.49	CCB Failed
Al	27	45	No Gas	0.0053	ug/l	149.4	2203.49	
Na	23	45	He	-2.4156	ug/l	N/A	32820.81	
Mg	24	45	He	0.4059	ug/l	57.0	116.67	
Mn	55	72	He	0.0524	ug/l	77.9	113.33	
Fe	56	72	He	0.2379	ug/l	43.1	1310.09	
Co	59	72	He	0.0022	ug/l	168.4	20.00	
As	75	72	He	0.0048	ug/l	26.5	6.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3112176.72	0.6	3482217.34	89.37	
Sc	45	He	142223.09	1.0	160566.51	88.58	
Ge	72	He	118415.60	1.0	125774.49	94.15	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	121_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:30:17
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0644	ug/l	4.8	1113.39	
Al	27	45	No Gas	0.0036	ug/l	185.9	2175.15	
Na	23	45	He	-2.7836	ug/l	N/A	31501.93	
Mg	24	45	He	0.0508	ug/l	42.9	16.67	
Mn	55	72	He	0.0056	ug/l	334.1	33.33	
Fe	56	72	He	0.0844	ug/l	37.5	820.04	
Co	59	72	He	-0.0006	ug/l	N/A	2.22	
As	75	72	He	0.0028	ug/l	133.9	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3100745.58	3.2	3482217.34	89.05	
Sc	45	He	137471.59	1.6	160566.51	85.62	
Ge	72	He	113710.77	1.6	125774.49	90.41	

Sample Report

Sample Name	K2210884-006
File Name	122SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:31:58
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.6214	ug/l	3.2	43620.02	
Al	27	45	No Gas	4.5596	ug/l	2.2	52801.79	
Na	23	45	He	24877.0388	ug/l	1.4	11972368.99	
Mg	24	45	He	16262.8616	ug/l	1.3	3849086.09	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8366.2400~~	~~ug/l~~	~~1.3~~	~~11887521.90~~	~~>LDR~~
Fe	56	72	He	2.7927	ug/l	5.3	7491.78	
Co	59	72	He	309.5298	ug/l	0.8	1613046.43	
As	75	72	He	0.2718	ug/l	28.6	96.33	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2718179.75	2.5	3482217.34	78.06	
Sc	45	He	119775.95	1.3	160566.51	74.6	
Ge	72	He	99419.07	1.1	125774.49	79.05	

Sample Report

Sample Name	K2210884-007
File Name	123SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:33:38
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.2989	ug/l	5.1	14435.96	
Al	27	45	No Gas	6.4295	ug/l	2.1	67449.43	
Na	23	45	He	46714.2793	ug/l	2.6	20536532.61	
Mg	24	45	He	112149.4391	ug/l	1.3	24277107.97	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~27725.0332~~	~~ug/l~~	~~1.7~~	~~35106647.81~~	~~>LDR~~
Fe	56	72	He	509.5255	ug/l	1.5	1135783.79	
Co	59	72	He	17.3511	ug/l	1.2	80585.86	
As	75	72	He	0.0560	ug/l	32.3	20.33	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2487902.93	2.3	3482217.34	71.45	
Sc	45	He	109546.00	1.3	160566.51	68.22	
Ge	72	He	88602.55	1.4	125774.49	70.45	

Sample Report

Sample Name K2210884-008

File Name 124SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:35:18

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.2006	ug/l	1.9	54639.99	
Al	27	45	No Gas	4.6024	ug/l	0.8	46536.13	
Na	23	45	He	47090.9907	ug/l	2.9	20245320.95	
Mg	24	45	He	30895.1986	ug/l	0.4	6539973.44	
Mn	55	72	He	16198.2653	ug/l	2.1	20718893.86	>LDR
~~Fe~~	~~56~~	~~72~~	~~He~~	~~190282.6493~~	~~ug/l~~	~~2.3~~	~~428284526.95~~	~~>LDR~~
Co	59	72	He	171.5150	ug/l	0.4	804639.34	
As	75	72	He	0.1344	ug/l	21.8	44.67	

3(
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2373560.02	1.8	3482217.34	68.16	
Sc	45	He	107114.88	0.5	160566.51	66.71	
Ge	72	He	89497.52	0.8	125774.49	71.16	

Sample Report

Sample Name K2210884-009

File Name 125SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:36:58

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	16.7880	ug/l	1.1	208157.52	
Al	27	45	No Gas	13.1105	ug/l	1.5	153207.80	
Na	23	45	He	19514.5723	ug/l	2.7	10614422.13	
Mg	24	45	He	50675.0762	ug/l	1.5	13547083.97	
Mn	55	72	He	1.4171	ug/l	5.8	2263.55	
Fe	56	72	He	3.3718	ug/l	1.7	9943.11	
Co	59	72	He	0.1840	ug/l	7.2	1072.26	
As	75	72	He	0.6014	ug/l	13.3	232.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2807160.90	2.0	3482217.34	80.61	
Sc	45	He	135285.26	1.0	160566.51	84.25	
Ge	72	He	110592.94	0.6	125774.49	87.93	

Sample Report

Sample Name	K2210884-010
File Name	126SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:38:38
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	60.8123	ug/l	1.9	774694.73	
Al	27	45	No Gas	7.8189	ug/l	3.7	94737.04	
Na	23	45	He	21126.0840	ug/l	0.7	11083613.17	
Mg	24	45	He	17870.8652	ug/l	0.7	4608927.12	
Mn	55	72	He	1759.3244	ug/l	0.4	2707125.90	
Fe	56	72	He	566.9506	ug/l	0.9	1535636.02	
Co	59	72	He	10.4810	ug/l	1.7	59142.94	
As	75	72	He	0.6197	ug/l	7.1	233.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2886394.65	1.3	3482217.34	82.89	
Sc	45	He	130502.36	0.3	160566.51	81.28	
Ge	72	He	107651.57	1.2	125774.49	85.59	

Sample Report

Sample Name	K2210884-011
File Name	127SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:40:18
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	24.0559	ug/l	0.8	347316.57	
Al	27	45	No Gas	9.4057	ug/l	1.3	128656.84	
Na	23	45	He	27052.4785	ug/l	2.0	14312813.12	
Mg	24	45	He	61220.2214	ug/l	2.1	15933327.26	
Mn	55	72	He	0.8697	ug/l	17.1	1343.41	
Fe	56	72	He	1.9079	ug/l	2.9	5731.12	
Co	59	72	He	0.0297	ug/l	12.4	173.34	
As	75	72	He	0.1312	ug/l	2.7	52.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3269474.12	1.4	3482217.34	93.89	
Sc	45	He	131937.71	14.1	160566.51	82.17	
Ge	72	He	107736.27	13.0	125774.49	85.66	

Sample Report

Sample Name K2210884-012

File Name 128SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:41:59

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	237.3640	ug/l	1.2	3119564.23	
Al	27	45	No Gas	4.6015	ug/l	3.4	58362.53	
Na	23	45	He	27043.3091	ug/l	0.6	14122814.37	
Mg	24	45	He	16427.1275	ug/l	1.3	4219673.27	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4519.5603~~	~~ug/l~~	~~1.6~~	~~7017567.60~~	~~>LDR~~
Fe	56	72	He	718.4086	ug/l	1.8	1963438.10	
Co	59	72	He	1.1416	ug/l	1.1	6506.83	
As	75	72	He	0.1018	ug/l	29.0	42.00	

JC
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2978372.35	2.3	3482217.34	85.53	
Sc	45	He	129985.16	0.8	160566.51	80.95	
Ge	72	He	108637.36	0.5	125774.49	86.37	

Sample Report

Sample Name K2210884-013

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:43:39

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	377.1365	ug/l	0.5	5150027.84	
Al	27	45	No Gas	18.5766	ug/l	0.8	238434.97	
Na	23	45	He	28956.9430	ug/l	1.2	16898374.75	
Mg	24	45	He	90668.2169	ug/l	0.5	26031520.44	
Mn	55	72	He	0.7443	ug/l	13.8	1283.41	
Fe	56	72	He	1.6670	ug/l	7.4	5561.03	
Co	59	72	He	0.0358	ug/l	9.9	227.78	
As	75	72	He	0.1594	ug/l	23.3	69.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3094238.81	0.8	3482217.34	88.86	
Sc	45	He	145284.82	1.3	160566.51	90.48	
Ge	72	He	118194.41	2.2	125774.49	93.97	

Sample Report

Sample Name	K2210884-014
File Name	130SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:45:19
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	550.3235	ug/l	2.0	6697434.48	
Al	27	45	No Gas	4.7984	ug/l	1.1	56296.08	
Na	23	45	He	29496.4012	ug/l	1.0	15028450.61	
Mg	24	45	He	25204.1447	ug/l	1.2	6318326.57	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~5446.9239~~	~~ug/l~~	~~0.6~~	~~8143787.38~~	~~>LDR~~
Fe	56	72	He	15123.1088	ug/l	1.8	39786571.91	
Co	59	72	He	4.7668	ug/l	1.4	26145.37	
As	75	72	He	0.1579	ug/l	12.5	60.67	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2757733.40	0.4	3482217.34	79.19	
Sc	45	He	126844.87	1.1	160566.51	79	
Ge	72	He	104606.25	0.8	125774.49	83.17	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	131_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:46:59
Sample Type	CCV
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.9826	ug/l	3.9	338566.92	99.93	
Al	27	45	No Gas	248.8130	ug/l	0.6	3143993.49	99.53	
Na	23	45	He	1968.8268	ug/l	3.0	1160279.49	98.44	
Mg	24	45	He	1942.1604	ug/l	0.7	547556.22	97.11	
Mn	55	72	He	24.9533	ug/l	2.2	41764.30	99.81	
Fe	56	72	He	250.6991	ug/l	1.6	738587.49	100.28	
Co	59	72	He	25.1318	ug/l	1.5	154200.11	100.53	
As	75	72	He	25.3926	ug/l	0.9	10218.07	101.57	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3071099.33	2.8	3482217.34	88.19	
Sc	45	He	142659.91	0.0	160566.51	88.85	
Ge	72	He	117059.08	1.8	125774.49	93.07	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	132_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:48:39
Sample Type	CCB
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0893	ug/l	5.7	1446.75	
Al	27	45	No Gas	0.0294	ug/l	17.9	2490.21	
Na	23	45	He	-2.6483	ug/l	N/A	32313.20	
Mg	24	45	He	0.1918	ug/l	104.3	56.67	
Mn	55	72	He	0.0317	ug/l	78.6	76.67	
Fe	56	72	He	0.0904	ug/l	44.2	853.38	
Co	59	72	He	0.0006	ug/l	86.5	10.00	
As	75	72	He	-0.0024	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3085661.52	1.7	3482217.34	88.61	
Sc	45	He	140626.19	2.1	160566.51	87.58	
Ge	72	He	115777.06	1.0	125774.49	92.05	

Sample Report

Sample Name K2210884-015

File Name 133SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:50:20

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	457.0016	ug/l	0.9	6666587.40	
Al	27	45	No Gas	17.2505	ug/l	1.1	236702.83	
Na	23	45	He	44310.4769	ug/l	3.0	27428312.92	
Mg	24	45	He	75768.2562	ug/l	2.1	23090928.82	
Mn	55	72	He	0.4025	ug/l	28.5	746.70	
Fe	56	72	He	2.5255	ug/l	5.9	8579.00	
Co	59	72	He	0.0331	ug/l	19.3	223.33	
As	75	72	He	0.2104	ug/l	9.8	95.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3305913.18	1.9	3482217.34	94.94	
Sc	45	He	154252.33	2.1	160566.51	96.07	
Ge	72	He	125056.59	0.9	125774.49	99.43	

Sample Report

Sample Name	K2210884-016
File Name	134SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 14:52:01
Sample Type	Sample
Comment	D
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	518.0769	ug/l	1.7	7163982.60	
Al	27	45	No Gas	4.7490	ug/l	1.4	63324.64	
Na	23	45	He	49656.4135	ug/l	1.1	28715475.40	
Mg	24	45	He	23580.3957	ug/l	2.8	6712604.69	
Mn	55	72	He	2337.8566	ug/l	0.9	3839372.75	
Fe	56	72	He	4132.8453	ug/l	1.6	11942977.32	
Co	59	72	He	1.8834	ug/l	0.9	11350.46	
As	75	72	He	0.8965	ug/l	9.7	357.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3133161.31	1.4	3482217.34	89.98	
Sc	45	He	144097.61	1.9	160566.51	89.74	
Ge	72	He	114915.28	2.6	125774.49	91.37	

Sample Report

Sample Name K2210884-017

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b

Acq Time 2022-09-27 14:53:41

Sample Type Sample

Comment D

ISTD Ref FileName 006CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.5484	ug/l	2.6	7721.81	
Al	27	45	No Gas	13.9958	ug/l	1.2	180171.34	
Na	23	45	He	24465.9283	ug/l	0.9	14156004.37	
Mg	24	45	He	53431.8039	ug/l	0.7	15203033.10	
Mn	55	72	He	1.0136	ug/l	14.7	1736.80	
Fe	56	72	He	2.6896	ug/l	6.6	8602.43	
Co	59	72	He	0.1306	ug/l	6.1	817.80	
As	75	72	He	0.3107	ug/l	18.9	130.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3094491.41	1.1	3482217.34	88.87	
Sc	45	He	143980.50	0.6	160566.51	89.67	
Ge	72	He	118375.96	2.9	125774.49	94.12	

Sample Report

Sample Name K2210884-018
File Name 136SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time 2022-09-27 14:55:22
Sample Type Sample
Comment D
ISTD Ref FileName 006CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.9890	ug/l	2.0	37249.02	
Al	27	45	No Gas	5.5796	ug/l	2.1	66330.28	
Na	23	45	He	25630.7231	ug/l	1.4	12737117.31	
Mg	24	45	He	17981.9655	ug/l	1.5	4394823.89	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~7007.9868~~	~~ug/l~~	~~1.4~~	~~10165047.35~~	~~>LDR~~
Fe	56	72	He	982.5310	ug/l	2.3	2508171.89	
Co	59	72	He	15.3175	ug/l	0.5	81495.63	
As	75	72	He	0.2501	ug/l	12.8	91.00	

3C
9/27/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2807809.02	0.7	3482217.34	80.63	
Sc	45	He	123682.94	1.4	160566.51	77.03	
Ge	72	He	101494.05	1.4	125774.49	80.7	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	137_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 15:28:23
Sample Type	CCV
Comment	—
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.4654	ug/l	2.2	329840.95	97.86	
Al	27	45	No Gas	245.7995	ug/l	4.7	3086196.62	98.32	
Na	23	45	He	1966.9691	ug/l	2.8	1052549.86	98.35	
Mg	24	45	He	1977.1994	ug/l	2.1	506185.51	98.86	
Mn	55	72	He	24.4034	ug/l	3.0	37587.96	97.61	
Fe	56	72	He	247.1790	ug/l	1.9	670215.93	98.87	
Co	59	72	He	24.7055	ug/l	3.0	139474.94	98.82	
As	75	72	He	24.2483	ug/l	4.5	8974.70	96.99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	3053944.43	2.4	3482217.34	87.7	
Sc	45	He	129582.50	2.2	160566.51	80.7	
Ge	72	He	107748.75	2.5	125774.49	85.67	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	138_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092722A.b
Acq Time	2022-09-27 15:30:04
Sample Type	CCB
Comment	---
ISTD Ref FileName	006CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0494	ug/l	6.2	870.05	
Al	27	45	No Gas	0.0194	ug/l	26.0	2275.17	
Na	23	45	He	-8.1784	ug/l	N/A	27204.73	
Mg	24	45	He	0.1949	ug/l	21.5	53.33	
Mn	55	72	He	0.0090	ug/l	232.5	36.67	
Fe	56	72	He	0.0029	ug/l	722.6	560.02	
Co	59	72	He	0.0006	ug/l	163.6	8.89	
As	75	72	He	0.0026	ug/l	9.4	5.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2972286.73	1.9	3482217.34	85.36	
Sc	45	He	130979.19	1.6	160566.51	81.57	
Ge	72	He	108353.07	1.8	125774.49	86.15	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 28, 2022

Analytical Report for Service Request No: K2210892

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.5 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 20, 2022
For your reference, these analyses have been assigned our service request number **K2210892.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2210892
Project: Greene County Treatability
Date Received: 09/20/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Eighteen water samples were received for analysis at ALS Environmental on 09/20/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 09/28/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2210892

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/15/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Dissolved Sodium							Comments/Preservation
1	MW-1-HT-MMO-20220915	9/15/2022	14:56	Water	1	X		X	X	X	X	X	X							HNO3 preserved.
2	MW-1-FB-20220915	9/15/2022	14:57	Water	1	X		X	X											HNO3 preserved.
3	MW-5-HT-MMO-20220915	9/15/2022	14:58	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
4	MW-5-FB-20220915	9/15/2022	14:59	Water	1	X	X		X											HNO3 preserved.
5	MW-10-HT-MMO-20220915	9/15/2022	15:00	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
6	MW-10-FB-20220915	9/15/2022	15:01	Water	1	X	X		X											HNO3 preserved.
7	MW-14-HT-MMO-20220915	9/15/2022	15:02	Water	1	X	X	X	X	X	X	X	X							HNO3 preserved.
8	MW-14-FB-20220915	9/15/2022	15:03	Water	1	X	X	X	X											HNO3 preserved.
9	MW-17-HT-MMO-20220915	9/15/2022	15:04	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
10	MW-17-FB-20220915	9/15/2022	15:05	Water	1	X	X		X											HNO3 preserved.
11	MW-44H-HT-MMO-20220915	9/15/2022	15:06	Water	1			X	X	X	X	X	X							HNO3 preserved.
12	MW-44H-FB-20220915	9/15/2022	15:07	Water	1			X	X											HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	9/19/22 8:30

Received by:
ALS 9/20/22 0940
Signature/Print Name:

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Chain of Custody Record & Laboratory Analysis Request

K2210892

Laboratory Number: 503-972-5019

Date: 9/15/2022
Project Name: Greene County Treatability
Project Number: 221114-01.05 Task 05
Project Manager: Jessica Goin
Phone Number: 503-972-5001 (backup number: 503-798-3456)
Shipment Method: ALS Courier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt												Comments/Preservation
1	MW-1-INF-20220915	9/15/2022	10:30	Water	1	X		X												HNO3 preserved.
2	MW-5-INF-20220915	9/15/2022	10:31	Water	1	X	X													HNO3 preserved.
3	MW-10-INF-20220915	9/15/2022	10:32	Water	1	X	X													HNO3 preserved.
4	MW-14-INF-20220915	9/15/2022	10:33	Water	1	X	X	X												HNO3 preserved.
5	MW-17-INF-20220915	9/15/2022	10:34	Water	1	X	X													HNO3 preserved.
6	MW-44H-INF-20220915	9/15/2022	10:35	Water	1			X												HNO3 preserved.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 9/19/22 8:30

Received by: ALS 9/20/22 0940
Signature/Print Name:

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM 4B

Cooler Receipt and Preservation Form

Client Anchor Service Request **K22** 10892

Received: 9/20/22 Opened: 9/20/22 By: Unloaded: 9/20/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*____ *NA*
3. Were <u>custody seals</u> on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.8		IR01		—	—		
5.2		"					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:____

1/13/22 *Page* *of*

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 14:56
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-HT-MMO-20220915	**Basis:**	NA
Lab Code:	K2210892-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**729**	ug/L	4.0	0.5	1	09/28/22 08:33	09/23/22	
Arsenic	200.8	**0.43 J**	ug/L	0.50	0.09	1	09/28/22 08:33	09/23/22	
Cobalt	200.8	**236**	ug/L	0.020	0.009	1	09/28/22 08:33	09/23/22	
Iron	200.8	**121000**	ug/L	100	20	50	09/28/22 09:19	09/23/22	
Magnesium	200.8	**45600**	ug/L	10	2	1	09/28/22 08:33	09/23/22	
Manganese	200.8	**28900**	ug/L	10	2	50	09/28/22 09:19	09/23/22	
Sodium	200.8	**49300**	ug/L	50	20	1	09/28/22 08:33	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 14:57
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-FB-20220915	**Basis:**	NA
Lab Code:	K2210892-002		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21**	**J**	ug/L	0.50	0.09	1	09/28/22 08:34	09/23/22	
Cobalt	200.8	**245**		ug/L	0.020	0.009	1	09/28/22 08:34	09/23/22	
Iron	200.8	**185000**		ug/L	100	20	50	09/28/22 09:21	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 14:58
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-HT-MMO-20220915	**Basis:**	NA
Lab Code:	K2210892-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**28.3**	ug/L	4.0	0.5	1	09/28/22 08:36	09/23/22	
Arsenic	200.8	**0.47 J**	ug/L	0.50	0.09	1	09/28/22 08:36	09/23/22	
Iron	200.8	**5.7**	ug/L	2.0	0.3	1	09/28/22 08:36	09/23/22	
Lithium	200.8	**58.1**	ug/L	0.10	0.10	1	09/28/22 08:36	09/23/22	
Magnesium	200.8	**39100**	ug/L	10	2	1	09/28/22 08:36	09/23/22	
Manganese	200.8	**12.6**	ug/L	0.20	0.04	1	09/28/22 08:36	09/23/22	
Sodium	200.8	**20200**	ug/L	50	20	1	09/28/22 08:36	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 14:59
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-FB-20220915	**Basis:**	NA
Lab Code:	K2210892-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.40 J**	ug/L	0.50	0.09	1	09/28/22 08:38	09/23/22	
Iron	200.8	**796**	ug/L	2.0	0.3	1	09/28/22 08:38	09/23/22	
Lithium	200.8	**77.6**	ug/L	0.10	0.10	1	09/28/22 08:38	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:00
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-HT-MMO-20220915	**Basis:**	NA
Lab Code:	K2210892-005		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**23.1**		ug/L	4.0	0.5	1	09/28/22 08:39	09/23/22	
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	09/28/22 08:39	09/23/22	
Iron	200.8	**1.4**	**J**	ug/L	2.0	0.3	1	09/28/22 08:39	09/23/22	
Lithium	200.8	**203**		ug/L	0.10	0.10	1	09/28/22 08:39	09/23/22	
Magnesium	200.8	**41100**		ug/L	10	2	1	09/28/22 08:39	09/23/22	
Manganese	200.8	**0.50**		ug/L	0.20	0.04	1	09/28/22 08:39	09/23/22	
Sodium	200.8	**27400**		ug/L	50	20	1	09/28/22 08:39	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:01
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-FB-20220915	**Basis:**	NA
Lab Code:	K2210892-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	09/28/22 08:41	09/23/22	
Iron	200.8	**681**		ug/L	2.0	0.3	1	09/28/22 08:41	09/23/22	
Lithium	200.8	**256**		ug/L	0.10	0.10	1	09/28/22 08:41	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:02
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-HT-MMO-20220915	**Basis:**	NA
Lab Code:	K2210892-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**9.8**		ug/L	4.0	0.5	1	09/28/22 08:43	09/23/22	
Arsenic	200.8	**0.14**	**J**	ug/L	0.50	0.09	1	09/28/22 08:43	09/23/22	
Cobalt	200.8	**0.986**		ug/L	0.020	0.009	1	09/28/22 08:43	09/23/22	
Iron	200.8	**1.8**	**J**	ug/L	2.0	0.3	1	09/28/22 08:43	09/23/22	
Lithium	200.8	**471**		ug/L	0.10	0.10	1	09/28/22 08:43	09/23/22	
Magnesium	200.8	**51500**		ug/L	10	2	1	09/28/22 08:43	09/23/22	
Manganese	200.8	**625**		ug/L	0.20	0.04	1	09/28/22 08:43	09/23/22	
Sodium	200.8	**30000**		ug/L	50	20	1	09/28/22 08:43	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:03
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-FB-20220915	**Basis:**	NA
Lab Code:	K2210892-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21**	**J**	ug/L	0.50	0.09	1	09/28/22 08:48	09/23/22	
Cobalt	200.8	**12.4**		ug/L	0.020	0.009	1	09/28/22 08:48	09/23/22	
Iron	200.8	**9960**		ug/L	2.0	0.3	1	09/28/22 08:48	09/23/22	
Lithium	200.8	**565**		ug/L	0.10	0.10	1	09/28/22 08:48	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:04
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-HT-MMO-20220915	**Basis:**	NA
Lab Code:	K2210892-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**27.0**	ug/L	4.0	0.5	1	09/28/22 08:49	09/23/22	
Arsenic	200.8	**0.19 J**	ug/L	0.50	0.09	1	09/28/22 08:49	09/23/22	
Iron	200.8	**2.2**	ug/L	2.0	0.3	1	09/28/22 08:49	09/23/22	
Lithium	200.8	**540**	ug/L	0.10	0.10	1	09/28/22 08:49	09/23/22	
Magnesium	200.8	**58000**	ug/L	10	2	1	09/28/22 08:49	09/23/22	
Manganese	200.8	**3.68**	ug/L	0.20	0.04	1	09/28/22 08:49	09/23/22	
Sodium	200.8	**47500**	ug/L	50	20	1	09/28/22 08:49	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:05
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-FB-20220915	**Basis:**	NA
Lab Code:	K2210892-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.85**	ug/L	0.50	0.09	1	09/28/22 08:51	09/23/22	
Iron	200.8	**647**	ug/L	2.0	0.3	1	09/28/22 08:51	09/23/22	
Lithium	200.8	**599**	ug/L	0.10	0.10	1	09/28/22 08:51	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:06
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-HT-MMO-20220915	**Basis:**	NA
Lab Code:	K2210892-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**29.6**	ug/L	4.0	0.5	1	09/28/22 08:53	09/23/22	
Cobalt	200.8	**0.135**	ug/L	0.020	0.009	1	09/28/22 08:53	09/23/22	
Iron	200.8	**2.3**	ug/L	2.0	0.3	1	09/28/22 08:53	09/23/22	
Magnesium	200.8	**39000**	ug/L	10	2	1	09/28/22 08:53	09/23/22	
Manganese	200.8	**2.38**	ug/L	0.20	0.04	1	09/28/22 08:53	09/23/22	
Sodium	200.8	**25200**	ug/L	50	20	1	09/28/22 08:53	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 15:07
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-FB-20220915	**Basis:**	NA
Lab Code:	K2210892-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**31.1**	ug/L	0.020	0.009	1	09/28/22 08:54	09/23/22	
Iron	200.8	**7890**	ug/L	2.0	0.3	1	09/28/22 08:54	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 10:30
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-INF-20220915	**Basis:**	NA
Lab Code:	K2210892-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.86**	ug/L	0.50	0.09	1	09/28/22 08:56	09/23/22	
Cobalt	200.8	**264**	ug/L	0.020	0.009	1	09/28/22 08:56	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 10:31
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-INF-20220915	**Basis:**	NA
Lab Code:	K2210892-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.13**	ug/L	0.50	0.09	1	09/28/22 08:58	09/23/22	
Lithium	200.8	**86.9**	ug/L	0.10	0.10	1	09/28/22 08:58	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 10:32
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-INF-20220915	**Basis:**	NA
Lab Code:	K2210892-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**33.4**	ug/L	0.50	0.09	1	09/28/22 08:59	09/23/22	
Lithium	200.8	**265**	ug/L	0.10	0.10	1	09/28/22 08:59	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 10:33
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-INF-20220915	**Basis:**	NA
Lab Code:	K2210892-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**19.1**	ug/L	0.50	0.09	1	09/28/22 09:01	09/23/22	
Cobalt	200.8	**35.7**	ug/L	0.020	0.009	1	09/28/22 09:01	09/23/22	
Lithium	200.8	**585**	ug/L	0.10	0.10	1	09/28/22 09:01	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 10:34
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-INF-20220915	**Basis:**	NA
Lab Code:	K2210892-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**276**	ug/L	0.50	0.09	1	09/28/22 09:03	09/23/22	
Lithium	200.8	**631**	ug/L	0.10	0.10	1	09/28/22 09:03	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	09/15/22 10:35
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-INF-20220915	**Basis:**	NA
Lab Code:	K2210892-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**298**	ug/L	0.020	0.009	1	09/28/22 09:13	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216204-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**3.2**	**J**	ug/L	4.0	0.5	1	09/28/22 08:28	09/23/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/28/22 08:28	09/23/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	09/28/22 08:28	09/23/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	09/28/22 08:28	09/23/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	09/28/22 08:28	09/23/22	
Magnesium	200.8	**5**	**J**	ug/L	10	2	1	09/28/22 08:28	09/23/22	
Manganese	200.8	**0.05**	**J**	ug/L	0.20	0.04	1	09/28/22 08:28	09/23/22	
Sodium	200.8	ND	U	ug/L	50	20	1	09/28/22 08:28	09/23/22	

Printed 9/28/2022 1:13:39 PM

Superset Reference:

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	**Date Analyzed:**	09/28/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216204-03			Duplicate Lab Control Sample KQ2216204-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	108	100	108	104	100	104	85-115	4	20
Arsenic	200.8	49.4	50.0	99	48.1	50.0	96	85-115	3	20
Cobalt	200.8	25.7	25.0	103	24.7	25.0	99	85-115	4	20
Iron	200.8	50.1	50.0	100	49.1	50.0	98	85-115	2	20
Lithium	200.8	52.7	50.0	105	50.4	50.0	101	85-115	4	20
Magnesium	200.8	255	250	102	259	250	103	85-115	2	20
Manganese	200.8	25.7	25.0	103	24.8	25.0	99	85-115	4	20
Sodium	200.8	240	250	96	239	250	96	85-115	<1	20

Prep Summary Report

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0 **Extraction Lot:** 406859
Analytical Method: 200.8 **Extraction Date:** 09/23/22 14:02

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-HT-MMO-20220915	K2210892-001	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-1-FB-20220915	K2210892-002	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-5-HT-MMO-20220915	K2210892-003	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-5-FB-20220915	K2210892-004	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220915	K2210892-005	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-10-FB-20220915	K2210892-006	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220915	K2210892-007	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-14-FB-20220915	K2210892-008	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220915	K2210892-009	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-17-FB-20220915	K2210892-010	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-44H-HT-MMO-20220915	K2210892-011	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-44H-FB-20220915	K2210892-012	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-1-INF-20220915	K2210892-013	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-5-INF-20220915	K2210892-014	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-10-INF-20220915	K2210892-015	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-14-INF-20220915	K2210892-016	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-17-INF-20220915	K2210892-017	9/15/22	9/20/22	10.0000 mL	10 mL	
MW-44H-INF-20220915	K2210892-018	9/15/22	9/20/22	10.0000 mL	10 mL	
Method Blank	KQ2216204-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216204-03LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate Lab Control Sample	KQ2216204-04DLCS	NA	NA	10.0000 mL	10.4 mL	

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
ICV 09/28/22 08:17						
Aluminum	200.8	779129	104	100	104	90-110
Arsenic	200.8	779129	25.0	25.0	100	90-110
Cobalt	200.8	779129	25.3	25.0	101	90-110
Iron	200.8	779129	50.0	50.0	100	90-110
Magnesium	200.8	779129	253	250	101	90-110
Manganese	200.8	779129	25.1	25.0	100	90-110
Sodium	200.8	779129	238	250	95	90-110
Lithium	200.8	779129	26.9	25.0	108	90-110
CCV 09/28/22 08:19						
Aluminum	200.8	779129	250	250	100	90-110
Arsenic	200.8	779129	24.8	25.0	99	90-110
Cobalt	200.8	779129	25.0	25.0	100	90-110
Iron	200.8	779129	252	250	101	90-110
Magnesium	200.8	779129	2010	2000	101	90-110
Manganese	200.8	779129	25.5	25.0	102	90-110
Sodium	200.8	779129	1970	2000	98	90-110
Lithium	200.8	779129	25.3	25.0	101	90-110
CCV 09/28/22 08:44						
Aluminum	200.8	779129	252	250	101	90-110
Arsenic	200.8	779129	24.5	25.0	98	90-110
Cobalt	200.8	779129	25.1	25.0	100	90-110
Iron	200.8	779129	251	250	100	90-110
Magnesium	200.8	779129	1970	2000	98	90-110
Manganese	200.8	779129	25.4	25.0	101	90-110
Sodium	200.8	779129	1940	2000	97	90-110
Lithium	200.8	779129	25.5	25.0	102	90-110
CCV 09/28/22 09:04						
Aluminum	200.8	779129	255	250	102	90-110
Arsenic	200.8	779129	24.1	25.0	96	90-110
Cobalt	200.8	779129	24.4	25.0	97	90-110
Iron	200.8	779129	244	250	98	90-110
Magnesium	200.8	779129	1970	2000	99	90-110
Manganese	200.8	779129	24.1	25.0	96	90-110
Sodium	200.8	779129	1950	2000	98	90-110
Lithium	200.8	779129	25.1	25.0	100	90-110

Client:	Anchor QEA, LLC	**Service Request:**	K2210892
Project:	Greene County Treatability/221114-01.5 Task 05		

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
CCV 09/28/22 09:22						
Aluminum	200.8	779129	255	250	102	90-110
Arsenic	200.8	779129	24.1	25.0	96	90-110
Cobalt	200.8	779129	24.5	25.0	98	90-110
Iron	200.8	779129	245	250	98	90-110
Magnesium	200.8	779129	2030	2000	101	90-110
Manganese	200.8	779129	23.8	25.0	95	90-110
Sodium	200.8	779129	2020	2000	101	90-110
Lithium	200.8	779129	25.5	25.0	102	90-110
CCV 09/28/22 09:45						
Aluminum	200.8	779129	253	250	101	90-110
Arsenic	200.8	779129	24.5	25.0	98	90-110
Cobalt	200.8	779129	24.4	25.0	98	90-110
Iron	200.8	779129	246	250	98	90-110
Magnesium	200.8	779129	2010	2000	100	90-110
Manganese	200.8	779129	24.5	25.0	98	90-110
Sodium	200.8	779129	2000	2000	100	90-110
Lithium	200.8	779129	25.3	25.0	101	90-110
CCV 09/28/22 10:05						
Aluminum	200.8	779129	248	250	99	90-110
Arsenic	200.8	779129	24.6	25.0	98	90-110
Cobalt	200.8	779129	24.7	25.0	99	90-110
Iron	200.8	779129	248	250	99	90-110
Magnesium	200.8	779129	1990	2000	100	90-110
Manganese	200.8	779129	25.1	25.0	100	90-110
Sodium	200.8	779129	1950	2000	98	90-110
Lithium	200.8	779129	24.5	25.0	98	90-110
CCV 09/28/22 10:38						
Aluminum	200.8	779129	251	250	101	90-110
Arsenic	200.8	779129	24.6	25.0	98	90-110
Cobalt	200.8	779129	24.6	25.0	98	90-110
Iron	200.8	779129	246	250	98	90-110
Magnesium	200.8	779129	2000	2000	100	90-110
Manganese	200.8	779129	24.5	25.0	98	90-110
Sodium	200.8	779129	1980	2000	99	90-110
Lithium	200.8	779129	25.4	25.0	102	90-110

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 09/28/22 08:20				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 08:22				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 08:46				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 09:11				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	J
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.05	J
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 09/28/22 09:24				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.4	J
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 09:47				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	J
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.06	J
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 10:26				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 10:40				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Aluminum	200.8	779129	4.3	4.0	107	50-199	09/28/22 08:24
Arsenic	200.8	779129	0.47	0.5	93	50-199	09/28/22 08:24
Cobalt	200.8	779129	0.020	0.02	98	50-199	09/28/22 08:24
Iron	200.8	779129	2.1	2.0	103	50-199	09/28/22 08:24
Magnesium	200.8	779129	9.7	10.0	97	50-199	09/28/22 08:24
Manganese	200.8	779129	0.19	0.2	97	50-199	09/28/22 08:24
Sodium	200.8	779129	37.2	50.0	74	50-199	09/28/22 08:24
Lithium	200.8	779129	0.12	0.1	115	50-199	09/28/22 08:24

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

Detection Limits

Instrument: K-ICP-MS-05 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.1	0.1	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.2	0.04	200.8
Sodium	23	ug/L	50	20	200.8

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	3150	200.8
Cobalt 59	3150	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	3150	200.8
Sodium 23	450000	200.8

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/28/22 08:13								
ZZZZZZ	1	09/28/22 08:15								
ICV	1	09/28/22 08:17	X	X	X	X	X	X	X	X
CCV	1	09/28/22 08:19	X	X	X	X	X	X	X	X
ICB	1	09/28/22 08:20	X	X	X	X	X	X	X	X
CCB	1	09/28/22 08:22	X	X	X	X	X	X	X	X
LLICVW	1	09/28/22 08:24	X	X	X	X	X	X	X	X
KQ2216204-01MB	1	09/28/22 08:28	X	X	X	X	X	X	X	X
KQ2216204-03LCS	1	09/28/22 08:29	X	X	X	X	X	X	X	X
KQ2216204-04DLCS	1	09/28/22 08:31	X	X	X	X	X	X	X	X
K2210892-001	1	09/28/22 08:33	X	X	X			X		X
K2210892-002	1	09/28/22 08:34		X	X					
K2210892-003	1	09/28/22 08:36	X	X		X	X	X	X	X
K2210892-004	1	09/28/22 08:38		X		X	X			
K2210892-005	1	09/28/22 08:39	X	X		X	X	X	X	X
K2210892-006	1	09/28/22 08:41		X		X	X			
K2210892-007	1	09/28/22 08:43	X	X	X	X	X	X	X	X
CCV	1	09/28/22 08:44	X	X	X	X	X	X	X	X
CCB	1	09/28/22 08:46	X	X	X	X	X	X	X	X
K2210892-008	1	09/28/22 08:48		X	X	X	X			
K2210892-009	1	09/28/22 08:49	X	X		X	X	X	X	X
K2210892-010	1	09/28/22 08:51		X		X	X			
K2210892-011	1	09/28/22 08:53	X		X	X		X	X	X
K2210892-012	1	09/28/22 08:54			X	X				
K2210892-013	1	09/28/22 08:56		X	X					
K2210892-014	1	09/28/22 08:58		X			X			
K2210892-015	1	09/28/22 08:59		X			X			
K2210892-016	1	09/28/22 09:01		X	X		X			
K2210892-017	1	09/28/22 09:03		X			X			
CCV	1	09/28/22 09:04	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 09:06								
CCB	1	09/28/22 09:11	X	X	X	X	X	X	X	X
K2210892-018	1	09/28/22 09:13			X					
K2210892-001	50	09/28/22 09:19				X			X	
K2210892-002	50	09/28/22 09:21				X				
CCV	1	09/28/22 09:22	X	X	X	X	X	X	X	X
CCB	1	09/28/22 09:24	X	X	X	X	X	X	X	X

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/28/22 09:29								
ZZZZZZ	1	09/28/22 09:30								
ZZZZZZ	1	09/28/22 09:32								
ZZZZZZ	1	09/28/22 09:34								
ZZZZZZ	1	09/28/22 09:35								
ZZZZZZ	1	09/28/22 09:37								
ZZZZZZ	1	09/28/22 09:39								
ZZZZZZ	1	09/28/22 09:40								
ZZZZZZ	1	09/28/22 09:42								
ZZZZZZ	1	09/28/22 09:44								
CCV	1	09/28/22 09:45	X	X	X	X	X	X	X	X
CCB	1	09/28/22 09:47	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 09:49								
ZZZZZZ	1	09/28/22 09:50								
ZZZZZZ	1	09/28/22 09:52								
ZZZZZZ	1	09/28/22 09:54								
ZZZZZZ	1	09/28/22 09:55								
ZZZZZZ	1	09/28/22 09:57								
ZZZZZZ	1	09/28/22 09:59								
ZZZZZZ	1	09/28/22 10:00								
ZZZZZZ	1	09/28/22 10:02								
ZZZZZZ	1	09/28/22 10:04								
CCV	1	09/28/22 10:05	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 10:07								
CCB	1	09/28/22 10:26	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 10:27								
ZZZZZZ	100	09/28/22 10:34								
ZZZZZZ	100	09/28/22 10:36								
CCV	1	09/28/22 10:38	X	X	X	X	X	X	X	X
CCB	1	09/28/22 10:40	X	X	X	X	X	X	X	X

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:** K2210892
Project:	Greene County Treatability/221114-01.5 Task 05	

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/28/22 08:13			
ZZZZZZ	09/28/22 08:15			
ICV	09/28/22 08:17	98	100	98
CCV	09/28/22 08:19	100	100	98
ICB	09/28/22 08:20	99	101	98
CCB	09/28/22 08:22	99	100	99
LLICVW	09/28/22 08:24	101	99	100
KQ2216204-01MB	09/28/22 08:28	100	101	98
KQ2216204-03LCS	09/28/22 08:29	100	101	98
KQ2216204-04DLCS	09/28/22 08:31	101	100	101
K2210892-001	09/28/22 08:33	77	74	76
K2210892-002	09/28/22 08:34	73	74	75
K2210892-003	09/28/22 08:36	85	88	89
K2210892-004	09/28/22 08:38	64	87	87
K2210892-005	09/28/22 08:39	97	99	99
K2210892-006	09/28/22 08:41	92	93	93
K2210892-007	09/28/22 08:43	95	97	97
CCV	09/28/22 08:44	99	102	100
CCB	09/28/22 08:46	97	98	98
K2210892-008	09/28/22 08:48	88	89	88
K2210892-009	09/28/22 08:49	100	99	98
K2210892-010	09/28/22 08:51	98	100	98
K2210892-011	09/28/22 08:53	84	91	90
K2210892-012	09/28/22 08:54	83	84	81
K2210892-013	09/28/22 08:56	77	75	77
K2210892-014	09/28/22 08:58	83	85	88
K2210892-015	09/28/22 08:59	88	90	91
K2210892-016	09/28/22 09:01	87	87	86
K2210892-017	09/28/22 09:03	70	86	86
CCV	09/28/22 09:04	95	99	99
ZZZZZZ	09/28/22 09:06			
CCB	09/28/22 09:11	98	97	96
K2210892-018	09/28/22 09:13	85	86	84
K2210892-001	09/28/22 09:19	95	96	96
K2210892-002	09/28/22 09:21	97	95	97
CCV	09/28/22 09:22	93	95	97
CCB	09/28/22 09:24	98	98	98

Client: Anchor QEA, LLC **Service Request:** K2210892
Project: Greene County Treatability/221114-01.5 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/28/22 09:29			
ZZZZZZ	09/28/22 09:30			
ZZZZZZ	09/28/22 09:32			
ZZZZZZ	09/28/22 09:34			
ZZZZZZ	09/28/22 09:35			
ZZZZZZ	09/28/22 09:37			
ZZZZZZ	09/28/22 09:39			
ZZZZZZ	09/28/22 09:40			
ZZZZZZ	09/28/22 09:42			
ZZZZZZ	09/28/22 09:44			
CCV	09/28/22 09:45	100	99	100
CCB	09/28/22 09:47	100	97	98
ZZZZZZ	09/28/22 09:49			
ZZZZZZ	09/28/22 09:50			
ZZZZZZ	09/28/22 09:52			
ZZZZZZ	09/28/22 09:54			
ZZZZZZ	09/28/22 09:55			
ZZZZZZ	09/28/22 09:57			
ZZZZZZ	09/28/22 09:59			
ZZZZZZ	09/28/22 10:00			
ZZZZZZ	09/28/22 10:02			
ZZZZZZ	09/28/22 10:04			
CCV	09/28/22 10:05	99	100	101
ZZZZZZ	09/28/22 10:07			
CCB	09/28/22 10:26	99	97	96
ZZZZZZ	09/28/22 10:27			
ZZZZZZ	09/28/22 10:34			
ZZZZZZ	09/28/22 10:36			
CCV	09/28/22 10:38	98	98	98
CCB	09/28/22 10:40	99	97	99

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 406859
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216204-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1% HNO3 0.2% HCl
2	KQ2216204-03	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
3	KQ2216204-04	DLCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
4	K2210892-001	MW-1-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
5	K2210892-002	MW-1-FB-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
6	K2210892-003	MW-5-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
7	K2210892-004	MW-5-FB-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
8	K2210892-005	MW-10-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
9	K2210892-006	MW-10-FB-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
10	K2210892-007	MW-14-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
11	K2210892-008	MW-14-FB-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
12	K2210892-009	MW-17-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
13	K2210892-010	MW-17-FB-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
14	K2210892-011	MW-44H-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
15	K2210892-012	MW-44H-FB-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
16	K2210892-013	MW-1-INF-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
17	K2210892-014	MW-5-INF-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
18	K2210892-015	MW-10-INF-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
19	K2210892-016	MW-14-INF-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
20	K2210892-017	MW-17-INF-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
21	K2210892-018	MW-44H-INF-20220915	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216204-03 0.10mL KQ2216204-04 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216204-03 0.10mL KQ2216204-04 0.10mL

Name: K-MET 10ppm Li Inventory ID 223041 Logbook Ref: MET4-29-F Expires On: 10/31/2023

KQ2216204-03 0.05mL KQ2216204-04 0.05mL

Preparation Information Benchsheet

Prep Run#: 406859
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

Name:	K-MET Mo/U 5ppm	Inventory ID	223460	Logbook Ref:	MET4-30-A	Expires On:	03/31/2023

KQ2216204-03	0.05mL	KQ2216204-04	0.05mL

Name:	k-met Sb 1ug/mL Sb	Inventory ID	225112	Logbook Ref:	MET4-32-E	Expires On:	06/08/2023

KQ2216204-03	0.10mL	KQ2216204-04	0.10mL

Preparation Materials

K-MET 16 mL Tube	P498723 (223738)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 9/23/22 14:02
Finished: 9/23/22 16:02
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-18	Digestion	IR Thermometer ID: IR03		K-BlockDigester-18	Digestion	Temperature	94 deg C
K-BlockDigester-18	Digestion	Temperature Check Location	11	K-CR 20-200B	Digestion		
K-CR100-1000A	Digestion						

Comments: ____________________

Reviewed By: Wr Date: 9.26.22

Printed 9/26/22 6:42

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

9/23/22 14:02-16:02
B28 IR 11 IT94

Preparation Information Benchsheet

* L: 223041

9128

Prep Run#: 406859
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 12:41

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216204-01	MB		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
2	KQ2216204-02	LCS /DLCS		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
3	K2210892-001	MW-1-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
4	KQ2216204-04	K2210892-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
5	~~KQ2216204-03~~	~~K2210892-001 MS~~	~~.01~~	~~200.8/Metals D~~		Liquid	10.0000mL		1% HNO3 0.2% HCl
6	K2210892-002	MW-1-FB-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
7	KQ2216204-06	K2210892-002 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
8	~~KQ2216204-05~~	~~K2210892-002 MS~~	~~.01~~	~~200.8/Metals D~~		Liquid	10.0000mL		1% HNO3 0.2% HCl
9	K2210892-003	MW-5-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
10	K2210892-004	MW-5-FB-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
11	K2210892-005	MW-10-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
12	K2210892-006	MW-10-FB-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
13	K2210892-007	MW-14-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
14	K2210892-008	MW-14-FB-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
15	K2210892-009	MW-17-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
16	K2210892-010	MW-17-FB-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
17	K2210892-011	MW-44H-HT-MMO-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
18	K2210892-012	MW-44H-FB-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
19	K2210892-013	MW-1-INF-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
20	K2210892-014	MW-5-INF-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
21	K2210892-015	MW-10-INF-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
22	K2210892-016	MW-14-INF-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
23	K2210892-017	MW-17-INF-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
24	K2210892-018	MW-44H-INF-20220915	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl

Spiking Solutions

Name:	k-met 1/100 QCP-CICV-3	Inventory ID	221910	Logbook Ref:	MET4-24-I	Expires On:	03/02/2023

KQ2216204-02 0.10mL
KQ2216204-03 0.10mL
KQ2216204-05 0.10mL

Name:	k-met 1/100 QCP CICV-1	Inventory ID	221911	Logbook Ref:	MET4-25-A	Expires On:	12/02/2022

KQ2216204-02 0.10mL
KQ2216204-03 0.10mL
KQ2216204-05 0.10mL

Preparation Information Benchsheet

Prep Run#: 406859
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 12:41

Name: k-met Sb 1ug/mL Sb	Inventory ID 222918	Logbook Ref: MET4-29-E	Expires On: 07/12/2023
KQ2216204-02 0.10mL	KQ2216204-03 0.10mL	KQ2216204-05 0.10mL	

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216204-02 0.05mL	KQ2216204-03 0.05mL	KQ2216204-05 0.05mL	

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ____________________

Reviewed By: ____________________ Date: ____________

Service Request # K2210892, K2210894
Instrument ID # K-ICP-MS-05
Calibration 092822A1ICPMS05
ALS LIMS Run # 779129
Cal Std: MS30-39-J ICSA Std: NA
ICV Std: MS30-39-I ICSAB Std: NA
LLICV Std: MS30-38-H
I.S. Solution: MS29-79-M
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments:

Prep Batch: 406859, 406860

Primary Review by SC Date 9/28/22

Secondary Review by Date 9/28/22

Data Review Form

Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\092822A1.csv**
RUNNO:	**779129**

K2210892

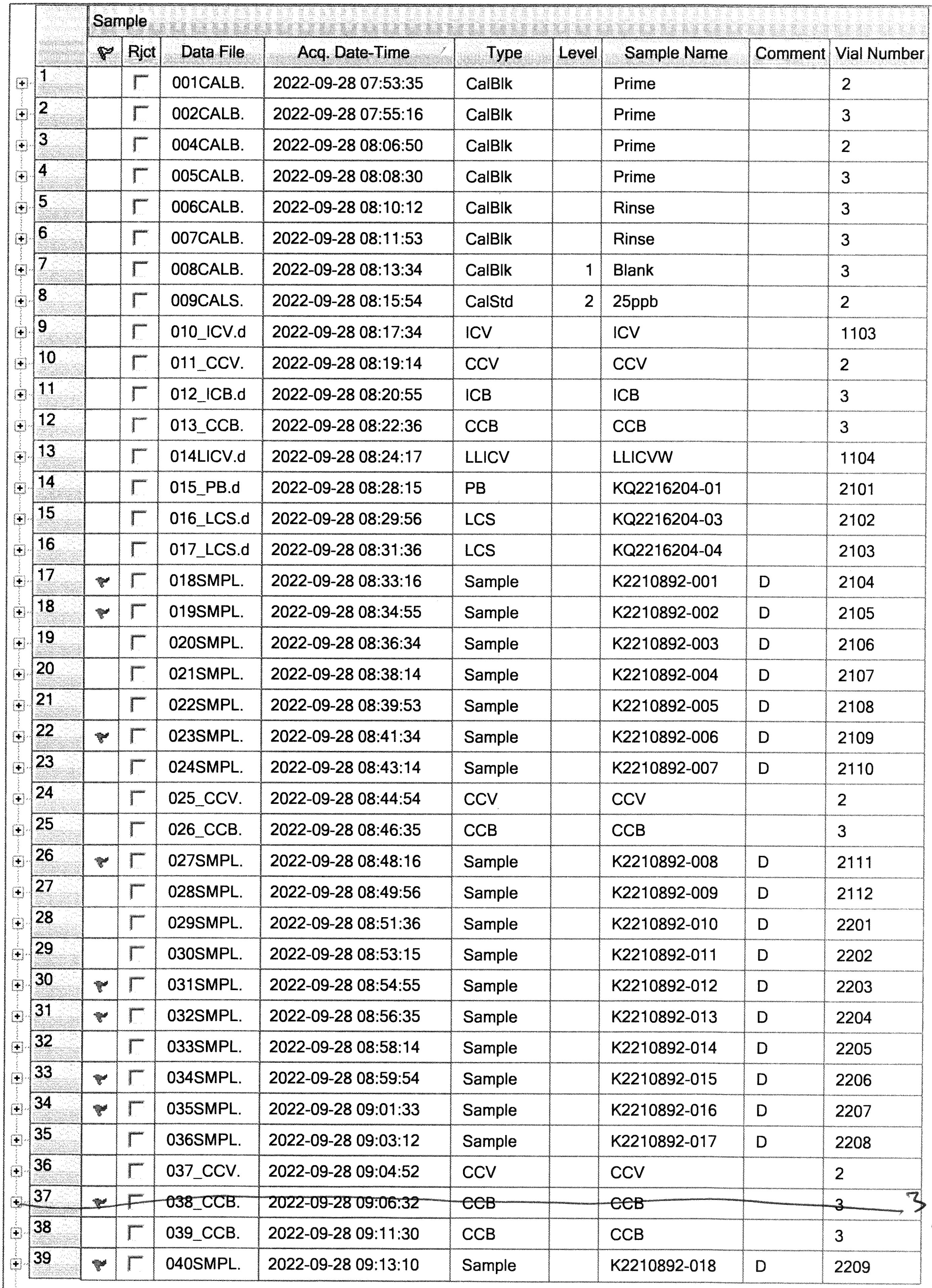
No exceptions to report.

K2210894

No exceptions to report.

Primary Approver: 3L 9/28/22

Secondary Approver: Gue 9/28/22



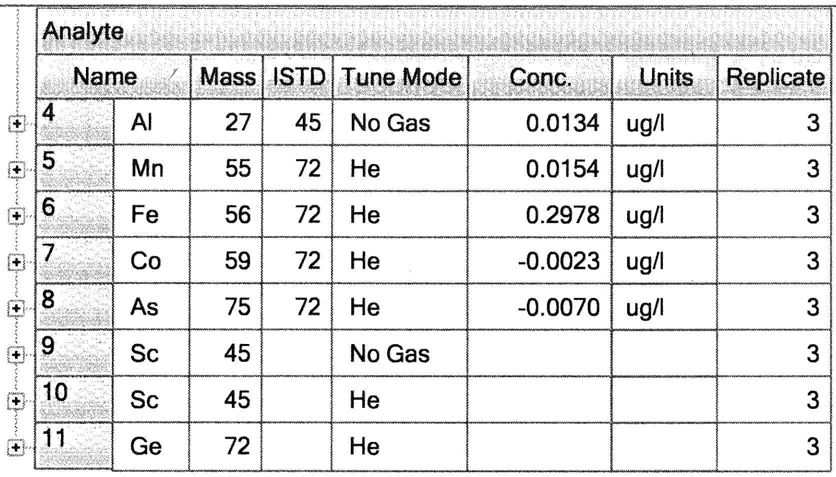
	Sample								
	✓	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	001CALB.	2022-09-28 07:53:35	CalBlk		Prime		2
2		☐	002CALB.	2022-09-28 07:55:16	CalBlk		Prime		3
3		☐	004CALB.	2022-09-28 08:06:50	CalBlk		Prime		2
4		☐	005CALB.	2022-09-28 08:08:30	CalBlk		Prime		3
5		☐	006CALB.	2022-09-28 08:10:12	CalBlk		Rinse		3
6		☐	007CALB.	2022-09-28 08:11:53	CalBlk		Rinse		3
7		☐	008CALB.	2022-09-28 08:13:34	CalBlk	1	Blank		3
8		☐	009CALS.	2022-09-28 08:15:54	CalStd	2	25ppb		2
9		☐	010_ICV.d	2022-09-28 08:17:34	ICV		ICV		1103
10		☐	011_CCV.	2022-09-28 08:19:14	CCV		CCV		2
11		☐	012_ICB.d	2022-09-28 08:20:55	ICB		ICB		3
12		☐	013_CCB.	2022-09-28 08:22:36	CCB		CCB		3
13		☐	014LICV.d	2022-09-28 08:24:17	LLICV		LLICVW		1104
14		☐	015_PB.d	2022-09-28 08:28:15	PB		KQ2216204-01		2101
15		☐	016_LCS.d	2022-09-28 08:29:56	LCS		KQ2216204-03		2102
16		☐	017_LCS.d	2022-09-28 08:31:36	LCS		KQ2216204-04		2103
17	✓	☐	018SMPL.	2022-09-28 08:33:16	Sample		K2210892-001	D	2104
18	✓	☐	019SMPL.	2022-09-28 08:34:55	Sample		K2210892-002	D	2105
19		☐	020SMPL.	2022-09-28 08:36:34	Sample		K2210892-003	D	2106
20		☐	021SMPL.	2022-09-28 08:38:14	Sample		K2210892-004	D	2107
21		☐	022SMPL.	2022-09-28 08:39:53	Sample		K2210892-005	D	2108
22	✓	☐	023SMPL.	2022-09-28 08:41:34	Sample		K2210892-006	D	2109
23		☐	024SMPL.	2022-09-28 08:43:14	Sample		K2210892-007	D	2110
24		☐	025_CCV.	2022-09-28 08:44:54	CCV		CCV		2
25		☐	026_CCB.	2022-09-28 08:46:35	CCB		CCB		3
26	✓	☐	027SMPL.	2022-09-28 08:48:16	Sample		K2210892-008	D	2111
27		☐	028SMPL.	2022-09-28 08:49:56	Sample		K2210892-009	D	2112
28		☐	029SMPL.	2022-09-28 08:51:36	Sample		K2210892-010	D	2201
29		☐	030SMPL.	2022-09-28 08:53:15	Sample		K2210892-011	D	2202
30	✓	☐	031SMPL.	2022-09-28 08:54:55	Sample		K2210892-012	D	2203
31	✓	☐	032SMPL.	2022-09-28 08:56:35	Sample		K2210892-013	D	2204
32		☐	033SMPL.	2022-09-28 08:58:14	Sample		K2210892-014	D	2205
33	✓	☐	034SMPL.	2022-09-28 08:59:54	Sample		K2210892-015	D	2206
34	✓	☐	035SMPL.	2022-09-28 09:01:33	Sample		K2210892-016	D	2207
35		☐	036SMPL.	2022-09-28 09:03:12	Sample		K2210892-017	D	2208
36		☐	037_CCV.	2022-09-28 09:04:52	CCV		CCV		2
37	✓	☐	~~038_CCB.~~	~~2022-09-28 09:06:32~~	~~CCB~~		~~CCB~~		~~3~~
38		☐	039_CCB.	2022-09-28 09:11:30	CCB		CCB		3
39	✓	☐	040SMPL.	2022-09-28 09:13:10	Sample		K2210892-018	D	2209

3(9/28/22

	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
40		☐	041SMPL.	2022-09-28 09:19:21	Sample		K2210892-001	D 50X	2210
41		☐	042SMPL.	2022-09-28 09:21:02	Sample		K2210892-002	D 50X	2211
42		☐	043_CCV.	2022-09-28 09:22:56	CCV		CCV		2
43		☐	044_CCB.	2022-09-28 09:24:37	CCB		CCB		3
44		☐	045_PB.d	2022-09-28 09:29:04	PB		KQ2216206-01		3101
45		☐	046_LCS.d	2022-09-28 09:30:45	LCS		KQ2216206-03		3102
46		☐	047_LCS.d	2022-09-28 09:32:26	LCS		KQ2216206-04		3103
47	⚑	☐	048SMPL.	2022-09-28 09:34:07	Sample		K2210894-001	D	3104
48	⚑	☐	049SMPL.	2022-09-28 09:35:47	Sample		K2210894-002	D	3105
49		☐	050SMPL.	2022-09-28 09:37:27	Sample		K2210894-003	D	3106
50		☐	051SMPL.	2022-09-28 09:39:07	Sample		K2210894-004	D	3107
51		☐	052SMPL.	2022-09-28 09:40:47	Sample		K2210894-005	D	3108
52	⚑	☐	053SMPL.	2022-09-28 09:42:27	Sample		K2210894-006	D	3109
53		☐	054SMPL.	2022-09-28 09:44:08	Sample		K2210894-007	D	3110
54		☐	055_CCV.	2022-09-28 09:45:47	CCV		CCV		2
55		☐	056_CCB.	2022-09-28 09:47:28	CCB		CCB		3
56	⚑	☐	057SMPL.	2022-09-28 09:49:09	Sample		K2210894-008	D	3111
57		☐	058SMPL.	2022-09-28 09:50:49	Sample		K2210894-009	D	3112
58		☐	059SMPL.	2022-09-28 09:52:30	Sample		K2210894-010	D	3201
59		☐	060SMPL.	2022-09-28 09:54:10	Sample		K2210894-011	D	3202
60	⚑	☐	061SMPL.	2022-09-28 09:55:51	Sample		K2210894-012	D	3203
61	⚑	☐	062SMPL.	2022-09-28 09:57:31	Sample		K2210894-013	D	3204
62		☐	063SMPL.	2022-09-28 09:59:11	Sample		K2210894-014	D	3205
63	⚑	☐	064SMPL.	2022-09-28 10:00:50	Sample		K2210894-015	D	3206
64	⚑	☐	065SMPL.	2022-09-28 10:02:30	Sample		K2210894-016	D	3207
65		☐	066SMPL.	2022-09-28 10:04:10	Sample		K2210894-017	D	3208
66		☐	067_CCV.	2022-09-28 10:05:50	CCV		CCV		2
~~67~~	⚑	☐	~~068_CCB.~~	~~2022-09-28 10:07:30~~	~~CCB~~		~~CCB~~		~~3~~
68		☐	069_CCB.	2022-09-28 10:26:17	CCB		CCB		3
69	⚑	☐	070SMPL.	2022-09-28 10:27:59	Sample		K2210894-018	D	3209
70		☐	071SMPL.	2022-09-28 10:34:21	Sample		K2210894-001	D 100X	3210
71		☐	072SMPL.	2022-09-28 10:36:02	Sample		K2210894-002	D 100X	3211
72		☐	073_CCV.	2022-09-28 10:38:42	CCV		CCV		2
73		☐	074_CCB.	2022-09-28 10:40:23	CCB		CCB		3

3C
9/28/22

	Analyte						
	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Li	7	45	No Gas	0.0351	ug/l	3
2	Na	23	45	He	-14.5231	ug/l	3
3	Mg	24	45	He	0.3535	ug/l	3



Analyte							
Name		Mass	ISTD	Tune Mode	Conc.	Units	Replicate
4	Al	27	45	No Gas	0.0134	ug/l	3
5	Mn	55	72	He	0.0154	ug/l	3
6	Fe	56	72	He	0.2978	ug/l	3
7	Co	59	72	He	-0.0023	ug/l	3
8	As	75	72	He	-0.0070	ug/l	3
9	Sc	45		No Gas			3
10	Sc	45		He			3
11	Ge	72		He			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\092822.b
Acq. Date-Time	2022-09-28 07:09:11
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

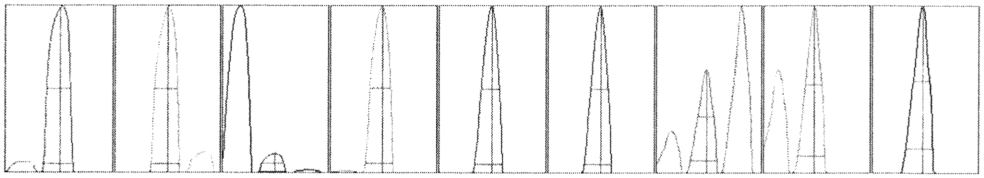
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	68713.11	1.587	5.000	
9	21081.74	1.351	5.000	
24	59890.61	1.672	5.000	
59	88324.62	2.091	5.000	
115	171764.55	1.117	5.000	
140	180964.61	1.038	5.000	
208	149166.64	0.775	5.000	
209	230238.23	0.954	5.000	
238	341047.48	1.166	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	6698	6845	6910	6919	6985
9	2059	2123	2109	2120	2129
24	5812	6021	6047	6048	6018
59	8530	8799	8900	8924	9009
115	16895	17097	17373	17188	17329
140	17813	18099	18223	18045	18302
208	14758	14855	14959	15065	14946
209	22759	22862	23024	23292	23181
238	33651	33847	34229	34104	34692

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	11124.76	7.05	6.90 - 7.10		0.821		0.900
9	3525.45	9.05	8.90 - 9.10		0.786		0.900
24	10454.62	24.00	23.90 - 24.10		0.770		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	15821.58	59.00	58.90 - 59.10		0.779		0.900
115	34418.45	115.00	114.90 - 115.10		0.771		0.900
140	37665.15	140.00	139.90 - 140.10		0.761		0.900
208	30588.07	207.95	207.90 - 208.10		0.750		0.900
209	49164.74	208.95	208.90 - 209.10		0.753		0.900
238	69607.12	237.95	237.90 - 238.10		0.771		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	12.2 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0004	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.5 mV	Analog HV	1790 V	Pulse HV	1436 V

Calibration Blank Report

Sample Name	Blank
File Name	008CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:13:34
Sample Type	CalBlk
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	330.01	10.9
Al	27	45	No Gas	1736.77	6.7
Na	23	45	He	30039.81	34.5
Mg	24	45	He	13.33	114.6
Mn	55	72	He	60.00	16.7
Fe	56	72	He	1330.08	17.2
Co	59	72	He	24.44	63.0
As	75	72	He	5.33	10.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	2686723.50	0.3
Sc	45	He	129904.93	1.1
Ge	72	He	109315.57	1.1

JC
9/28/22

Calibration Standard Report

Sample Name 25ppb

File Name 009CALS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:15:54

Sample Type CalStd

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	264252.04	0.9
Al	27	45	No Gas	2812759.96	2.2
Na	23	45	He	1024445.82	0.8
Mg	24	45	He	504354.71	1.8
Mn	55	72	He	38810.67	2.2
Fe	56	72	He	682478.35	0.9
Co	59	72	He	143629.21	0.6
As	75	72	He	9332.56	1.1

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2758558.50	0.7	2686723.5	102.67	
Sc	45	He	129720.27	1.8	129904.93	99.86	
Ge	72	He	108195.24	2.5	109315.57	98.98	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	010_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:17:34
Sample Type	ICV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	26.8855	ug/l	0.9	271179.81	107.54	
Al	27	45	No Gas	104.1233	ug/l	1.1	1118908.35	104.12	
Na	23	45	He	237.6410	ug/l	1.0	147615.70	95.06	
Mg	24	45	He	252.7769	ug/l	0.4	63544.10	101.11	
Mn	55	72	He	25.0666	ug/l	2.8	38533.25	100.27	
Fe	56	72	He	50.0442	ug/l	2.0	136357.98	100.09	
Co	59	72	He	25.3143	ug/l	0.5	144051.73	101.26	
As	75	72	He	24.9767	ug/l	1.2	9234.50	99.91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2632658.14	1.0	2686723.5	97.99	
Sc	45	He	129280.79	0.4	129904.93	99.52	
Ge	72	He	107131.50	0.1	109315.57	98	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 011_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:19:14

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2598	ug/l	2.5	259131.66	101.04	
Al	27	45	No Gas	250.0257	ug/l	2.7	2729850.69	100.01	
Na	23	45	He	1969.4248	ug/l	1.6	1010655.87	98.47	
Mg	24	45	He	2012.7028	ug/l	1.5	508202.31	100.64	
Mn	55	72	He	25.4663	ug/l	2.8	39027.95	101.87	
Fe	56	72	He	252.3448	ug/l	2.3	680285.38	100.94	
Co	59	72	He	24.9570	ug/l	2.7	141590.61	99.83	
As	75	72	He	24.7978	ug/l	2.9	9140.46	99.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2678432.62	2.9	2686723.5	99.69	
Sc	45	He	129888.08	1.2	129904.93	99.99	
Ge	72	He	106840.55	1.8	109315.57	97.74	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	012_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:20:55
Sample Type	ICB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0084	ug/l	53.3	413.35	
Al	27	45	No Gas	0.0016	ug/l	875.1	1741.77	
Na	23	45	He	-13.8363	ug/l	N/A	23405.83	
Mg	24	45	He	0.0253	ug/l	403.4	20.00	
Mn	55	72	He	0.0338	ug/l	59.6	110.00	
Fe	56	72	He	0.0186	ug/l	214.4	1346.75	
Co	59	72	He	-0.0007	ug/l	N/A	20.00	
As	75	72	He	-0.0096	ug/l	N/A	1.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2665865.32	2.0	2686723.5	99.22	
Sc	45	He	131792.36	1.6	129904.93	101.45	
Ge	72	He	106642.01	1.7	109315.57	97.55	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	013_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:22:36
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0027	ug/l	250.7	353.35	
Al	27	45	No Gas	-0.0084	ug/l	N/A	1628.43	
Na	23	45	He	-13.5501	ug/l	N/A	23115.52	
Mg	24	45	He	0.0667	ug/l	57.7	30.00	
Mn	55	72	He	0.0285	ug/l	71.6	103.33	
Fe	56	72	He	0.0166	ug/l	493.2	1356.75	
Co	59	72	He	-0.0019	ug/l	N/A	13.33	
As	75	72	He	-0.0070	ug/l	N/A	2.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2659484.65	1.4	2686723.5	98.99	
Sc	45	He	129346.41	1.3	129904.93	99.57	
Ge	72	He	107849.04	0.5	109315.57	98.66	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	014LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:24:17
Sample Type	LLICV
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.1152	ug/l	12.7	1526.76	115.2	
Al	27	45	No Gas	4.2695	ug/l	5.3	48910.89	106.74	
Na	23	45	He	37.1757	ug/l	13.5	48152.39	74.35	
Mg	24	45	He	9.6707	ug/l	2.1	2440.23	96.71	
Mn	55	72	He	0.1935	ug/l	8.9	363.34	96.75	
Fe	56	72	He	2.0619	ug/l	7.4	7014.97	103.1	
Co	59	72	He	0.0195	ug/l	11.9	137.78	97.5	
As	75	72	He	0.4671	ug/l	3.7	181.67	93.42	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2712649.44	2.8	2686723.5	100.96	
Sc	45	He	129099.33	1.7	129904.93	99.38	
Ge	72	He	109429.85	0.5	109315.57	100.1	

Prep Blank (PB) Report

Sample Name KQ2216204-01

File Name 015_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:28:15

Sample Type PB

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0010	ug/l	414.7	340.01	
Al	27	45	No Gas	3.2477	ug/l	1.0	37260.89	
Na	23	45	He	-12.4584	ug/l	N/A	23916.46	
Mg	24	45	He	5.0473	ug/l	8.7	1296.74	
Mn	55	72	He	0.0483	ug/l	92.7	133.34	
Fe	56	72	He	0.1933	ug/l	32.2	1823.48	
Co	59	72	He	0.0005	ug/l	320.5	26.67	
As	75	72	He	-0.0033	ug/l	N/A	4.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2684030.17	1.5	2686723.5	99.9	
Sc	45	He	130980.02	3.0	129904.93	100.83	
Ge	72	He	107057.73	1.3	109315.57	97.93	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216204-03
File Name	016_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:29:56
Sample Type	LCS
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	50.7005	ug/l	3.1	521237.74	50	101.4	
Al	27	45	No Gas	103.7759	ug/l	2.3	1137441.08	100	103.78	
Na	23	45	He	231.1552	ug/l	4.1	146130.20	250	92.46	
Mg	24	45	He	245.2772	ug/l	3.5	62397.08	250	98.11	
Mn	55	72	He	24.6713	ug/l	2.5	38049.18	25	98.69	
Fe	56	72	He	48.1275	ug/l	1.6	131605.08	50	96.26	
Co	59	72	He	24.7215	ug/l	1.5	141128.14	25	98.89	
As	75	72	He	47.5166	ug/l	1.6	17619.40	50	95.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2686092.36	2.5	2686723.5	99.98	
Sc	45	He	130886.56	2.0	129904.93	100.76	
Ge	72	He	107480.12	0.7	109315.57	98.32	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216204-04
File Name	017_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:31:36
Sample Type	LCS
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.5016	ug/l	1.1	505937.13	50	97	
Al	27	45	No Gas	100.0320	ug/l	1.3	1112342.48	100	100.03	
Na	23	45	He	230.1031	ug/l	2.4	145277.40	250	92.04	
Mg	24	45	He	248.6379	ug/l	2.8	63119.21	250	99.46	
Mn	55	72	He	23.8234	ug/l	0.7	37764.92	25	95.29	
Fe	56	72	He	47.2474	ug/l	1.3	132814.10	50	94.49	
Co	59	72	He	23.7628	ug/l	2.4	139407.62	25	95.05	
As	75	72	He	46.2478	ug/l	2.7	17622.74	50	92.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2724257.04	1.4	2686723.5	101.4	
Sc	45	He	130543.69	0.6	129904.93	100.49	
Ge	72	He	110469.58	1.4	109315.57	101.06	

Sample Report

Sample Name K2210892-001

File Name 018SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:33:16

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6043	ug/l	1.2	44896.44	
Al	27	45	No Gas	729.2470	ug/l	1.0	6187771.99	
Na	23	45	He	49308.4520	ug/l	2.8	18312294.73	
Mg	24	45	He	45590.1835	ug/l	1.1	8576565.91	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~27661.9625~~	~~ug/l~~	~~2.8~~	~~32898954.51~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~115698.3254~~	~~ug/l~~	~~1.0~~	~~241962023.06~~	~~>LDR~~
Co	59	72	He	236.4021	ug/l	1.4	1042269.54	
As	75	72	He	0.4319	ug/l	10.2	127.67	

* See Dilution
* 3L
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2081524.08	1.2	2686723.5	77.47	
Sc	45	He	96774.60	1.8	129904.93	74.5	
Ge	72	He	83025.53	1.3	109315.57	75.95	

Sample Report

Sample Name K2210892-002

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:34:55

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6613	ug/l	1.1	42728.03	
Al	27	45	No Gas	4.3326	ug/l	1.3	35898.21	
Na	23	45	He	49331.8348	ug/l	2.5	18256589.73	
Mg	24	45	He	31353.7074	ug/l	1.2	5876968.87	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15390.6963~~	~~ug/l~~	~~3.6~~	~~18071876.81~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~178619.9043~~	~~ug/l~~	~~3.2~~	~~368774501.17~~	~~>LDR~~
Co	59	72	He	244.6228	ug/l	2.3	1064910.17	
As	75	72	He	0.2082	ug/l	13.2	63.00	

✓ ✓ See Dilution
JC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1961053.15	0.4	2686723.5	72.99	
Sc	45	He	96412.49	0.4	129904.93	74.22	
Ge	72	He	81993.76	2.1	109315.57	75.01	

Sample Report

Sample Name K2210892-003

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:36:34

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	58.1194	ug/l	1.4	505454.30	
Al	27	45	No Gas	28.3146	ug/l	1.1	263592.54	
Na	23	45	He	20182.5396	ug/l	1.7	8907871.12	
Mg	24	45	He	39149.7598	ug/l	1.5	8736818.00	
Mn	55	72	He	12.6385	ug/l	3.3	17595.93	
Fe	56	72	He	5.6872	ug/l	3.7	15060.40	
Co	59	72	He	0.1692	ug/l	2.1	892.25	
As	75	72	He	0.4733	ug/l	10.7	163.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2271691.74	2.4	2686723.5	84.55	
Sc	45	He	114782.63	0.7	129904.93	88.36	
Ge	72	He	96901.18	1.0	109315.57	88.64	

Sample Report

Sample Name	K2210892-004
File Name	021SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:38:14
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	77.5766	ug/l	1.3	509006.06	
Al	27	45	No Gas	5.9269	ug/l	2.2	42506.25	
Na	23	45	He	19892.4485	ug/l	1.2	8642310.50	
Mg	24	45	He	16695.9841	ug/l	0.7	3667200.99	
Mn	55	72	He	1798.7979	ug/l	1.1	2453932.25	
Fe	56	72	He	796.1668	ug/l	1.1	1910741.84	
Co	59	72	He	13.2070	ug/l	1.8	66806.37	
As	75	72	He	0.3990	ug/l	14.8	135.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1713841.02	0.6	2686723.5	63.79	
Sc	45	He	112977.50	1.0	129904.93	86.97	
Ge	72	He	95211.84	0.5	109315.57	87.1	

Sample Report

Sample Name	K2210892-005
File Name	022SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:39:53
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	203.0066	ug/l	2.5	2017033.88	
Al	27	45	No Gas	23.0627	ug/l	0.8	245709.23	
Na	23	45	He	27424.6107	ug/l	0.5	13527170.22	
Mg	24	45	He	41050.5423	ug/l	1.1	10243970.26	
Mn	55	72	He	0.4959	ug/l	17.6	830.05	
Fe	56	72	He	1.3983	ug/l	11.0	5130.91	
Co	59	72	He	0.0420	ug/l	31.2	264.45	
As	75	72	He	0.1037	ug/l	16.9	44.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2596219.07	1.0	2686723.5	96.63	
Sc	45	He	128366.71	0.8	129904.93	98.82	
Ge	72	He	108325.18	2.2	109315.57	99.09	

Sample Report

Sample Name K2210892-006
File Name 023SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time 2022-09-28 08:41:34
Sample Type Sample
Comment D
ISTD Ref FileName 008CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	255.6944	ug/l	4.5	2420051.11	
Al	27	45	No Gas	4.5416	ug/l	2.3	47391.69	
Na	23	45	He	27652.8516	ug/l	2.9	12819645.23	
Mg	24	45	He	15826.9149	ug/l	2.8	3712660.99	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3371.7220~~	~~ug/l~~	~~3.3~~	~~4892685.76~~	~~>LDR~~
Fe	56	72	He	681.1258	ug/l	1.9	1739608.36	
Co	59	72	He	0.7334	ug/l	4.1	3967.15	
As	75	72	He	0.1028	ug/l	31.3	40.67	

not needed
JL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2474754.91	2.6	2686723.5	92.11	
Sc	45	He	120723.01	3.2	129904.93	92.93	
Ge	72	He	101340.54	3.0	109315.57	92.7	

Sample Report

Sample Name K2210892-007

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:43:14

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	470.6820	ug/l	1.9	4606469.52	
Al	27	45	No Gas	9.8355	ug/l	1.2	104159.20	
Na	23	45	He	30006.5400	ug/l	2.4	14546335.20	
Mg	24	45	He	51499.3703	ug/l	0.3	12637560.65	
Mn	55	72	He	624.6504	ug/l	3.0	946837.98	
Fe	56	72	He	1.8141	ug/l	4.4	6121.24	
Co	59	72	He	0.9857	ug/l	3.9	5562.06	
As	75	72	He	0.1350	ug/l	23.7	54.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2556993.56	0.9	2686723.5	95.17	
Sc	45	He	126221.71	2.2	129904.93	97.16	
Ge	72	He	105847.48	3.0	109315.57	96.83	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 025_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:44:54

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.5018	ug/l	0.7	260088.13	102.01	
Al	27	45	No Gas	252.3910	ug/l	2.3	2739487.77	100.96	
Na	23	45	He	1942.0266	ug/l	1.2	1016675.58	97.1	
Mg	24	45	He	1965.0180	ug/l	1.2	505948.75	98.25	
Mn	55	72	He	25.3576	ug/l	0.5	39813.22	101.43	
Fe	56	72	He	250.8895	ug/l	1.7	692882.02	100.36	
Co	59	72	He	25.0560	ug/l	1.3	145628.68	100.22	
As	75	72	He	24.4724	ug/l	0.7	9241.51	97.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2661706.94	0.8	2686723.5	99.07	
Sc	45	He	132443.76	1.1	129904.93	101.95	
Ge	72	He	109420.31	0.2	109315.57	100.1	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 026_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:46:35

Sample Type CCB

Comment ---

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0566	ug/l	8.1	883.37	
Al	27	45	No Gas	0.0151	ug/l	81.7	1845.12	
Na	23	45	He	-5.7326	ug/l	N/A	26607.03	
Mg	24	45	He	0.3228	ug/l	36.5	93.33	
Mn	55	72	He	0.0381	ug/l	52.1	116.67	
Fe	56	72	He	0.1387	ug/l	16.1	1670.12	
Co	59	72	He	-0.0005	ug/l	N/A	21.11	
As	75	72	He	0.0049	ug/l	98.5	7.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2604830.06	1.9	2686723.5	96.95	
Sc	45	He	127504.02	1.8	129904.93	98.15	
Ge	72	He	106639.38	2.0	109315.57	97.55	

Sample Report

Sample Name	K2210892-008
File Name	027SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:48:16
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	564.9335	ug/l	1.6	5098856.59	
Al	27	45	No Gas	4.2254	ug/l	1.4	42138.46	
Na	23	45	He	31444.7859	ug/l	3.8	13891539.38	
Mg	24	45	He	26291.7385	ug/l	2.2	5878807.62	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4900.9753~~	~~ug/l~~	~~0.9~~	~~6787582.61~~	~~>LDR~~
Fe	56	72	He	9961.0653	ug/l	2.9	24252302.14	
Co	59	72	He	12.3744	ug/l	0.9	63555.43	
As	75	72	He	0.2134	ug/l	23.4	75.67	

not needed
3C
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2358307.46	0.3	2686723.5	87.78	
Sc	45	He	115045.26	2.1	129904.93	88.56	
Ge	72	He	96670.70	2.0	109315.57	88.43	

Sample Report

Sample Name	K2210892-009
File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:49:56
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	540.3472	ug/l	0.9	5578790.96	
Al	27	45	No Gas	27.0268	ug/l	0.7	298903.49	
Na	23	45	He	47478.2409	ug/l	0.7	23360999.65	
Mg	24	45	He	58019.5747	ug/l	1.1	14456773.12	
Mn	55	72	He	3.6791	ug/l	12.9	5684.38	
Fe	56	72	He	2.1926	ug/l	3.0	7198.32	
Co	59	72	He	0.0662	ug/l	17.6	398.90	
As	75	72	He	0.1895	ug/l	22.3	75.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2697674.86	0.8	2686723.5	100.41	
Sc	45	He	128168.84	0.6	129904.93	98.66	
Ge	72	He	106829.47	1.2	109315.57	97.73	

Sample Report

Sample Name	K2210892-010
File Name	029SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:51:36
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	598.9765	ug/l	0.7	6038463.66	
Al	27	45	No Gas	4.7619	ug/l	2.1	52820.22	
Na	23	45	He	45172.3457	ug/l	2.0	22600674.66	
Mg	24	45	He	24445.1296	ug/l	2.4	6192918.24	
Mn	55	72	He	1820.1679	ug/l	2.0	2805042.46	
Fe	56	72	He	647.1969	ug/l	2.0	1754943.00	
Co	59	72	He	2.1864	ug/l	1.8	12513.51	
As	75	72	He	0.8475	ug/l	4.8	319.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2634198.66	1.2	2686723.5	98.05	
Sc	45	He	130336.77	1.2	129904.93	100.33	
Ge	72	He	107571.25	0.8	109315.57	98.4	

Sample Report

Sample Name K2210892-011

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:53:15

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6669	ug/l	2.1	6027.80	
Al	27	45	No Gas	29.6473	ug/l	2.0	273724.00	
Na	23	45	He	25152.8086	ug/l	3.3	11447317.75	
Mg	24	45	He	38971.8748	ug/l	1.3	8974484.03	
Mn	55	72	He	2.3784	ug/l	4.9	3397.10	
Fe	56	72	He	2.2992	ug/l	7.3	6874.85	
Co	59	72	He	0.1351	ug/l	13.8	726.69	
As	75	72	He	0.2725	ug/l	7.5	97.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2253610.85	1.6	2686723.5	83.88	
Sc	45	He	118470.51	2.0	129904.93	91.2	
Ge	72	He	98145.37	1.2	109315.57	89.78	

Sample Report

Sample Name	K2210892-012
File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:54:55
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.5632	ug/l	3.4	30579.59	
Al	27	45	No Gas	4.5631	ug/l	3.7	42766.59	
Na	23	45	He	25030.9426	ug/l	2.3	10454114.43	
Mg	24	45	He	16601.8125	ug/l	1.0	3508295.68	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8935.6136~~	~~ug/l~~	~~1.0~~	~~11401238.16~~	~~>LDR~~
Fe	56	72	He	7894.7080	ug/l	0.7	17711143.07	
Co	59	72	He	31.1023	ug/l	1.9	147103.78	
As	75	72	He	0.3457	ug/l	18.0	110.67	

not needed
JL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2224149.76	3.6	2686723.5	82.78	
Sc	45	He	108690.91	1.3	129904.93	83.67	
Ge	72	He	89055.42	0.9	109315.57	81.47	

Sample Report

Sample Name K2210892-013

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:56:35

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.9366	ug/l	1.1	46951.62	
Al	27	45	No Gas	4.3545	ug/l	1.3	37809.08	
Na	23	45	He	49288.4194	ug/l	1.4	18393797.64	
Mg	24	45	He	31567.0947	ug/l	1.8	5965944.08	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~14829.8014~~	~~ug/l~~	~~1.9~~	~~17894842.65~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~168876.7757~~	~~ug/l~~	~~2.1~~	~~358282114.66~~	~~>LDR~~
Co	59	72	He	263.9374	ug/l	2.6	1180482.11	
As	75	72	He	3.8561	ug/l	11.0	1123.04	

* not needed
SL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2055477.36	0.5	2686723.5	76.5	
Sc	45	He	97224.32	0.9	129904.93	74.84	
Ge	72	He	84241.17	1.9	109315.57	77.06	

Sample Report

Sample Name K2210892-014

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:58:14

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	86.9386	ug/l	2.7	740731.08	
Al	27	45	No Gas	4.4656	ug/l	3.3	41943.03	
Na	23	45	He	20274.6857	ug/l	1.2	8578459.04	
Mg	24	45	He	17073.9290	ug/l	2.3	3652499.11	
Mn	55	72	He	1667.1714	ug/l	4.1	2295485.02	
Fe	56	72	He	6587.8313	ug/l	1.5	15952503.09	
Co	59	72	He	5.7347	ug/l	3.1	29290.40	
As	75	72	He	7.1258	ug/l	3.3	2368.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2226321.42	2.0	2686723.5	82.86	
Sc	45	He	110036.74	0.9	129904.93	84.71	
Ge	72	He	96137.24	2.0	109315.57	87.94	

Sample Report

Sample Name K2210892-015

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:59:54

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	265.4984	ug/l	2.4	2398385.74	
Al	27	45	No Gas	4.1886	ug/l	3.5	41806.11	
Na	23	45	He	27824.7696	ug/l	1.3	12539887.73	
Mg	24	45	He	15767.1576	ug/l	0.7	3595591.09	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3349.8326~~	~~ug/l~~	~~1.8~~	~~4787473.99~~	~~>LDR~~
Fe	56	72	He	4162.2651	ug/l	1.2	10460324.01	
Co	59	72	He	19.8027	ug/l	0.7	104933.21	
As	75	72	He	33.4398	ug/l	2.2	11509.89	

not needed
3L 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2360967.41	2.8	2686723.5	87.88	
Sc	45	He	117303.75	1.3	129904.93	90.3	
Ge	72	He	99757.33	0.7	109315.57	91.26	

Sample Report

Sample Name K2210892-016

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:01:33

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	584.5005	ug/l	1.6	5218504.82	
Al	27	45	No Gas	4.1121	ug/l	1.2	40609.93	
Na	23	45	He	31154.2657	ug/l	1.2	13518083.13	
Mg	24	45	He	26657.5250	ug/l	0.7	5853989.08	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~5005.6425~~	~~ug/l~~	~~1.5~~	~~6768839.69~~	~~>LDR~~
Fe	56	72	He	38969.1327	ug/l	0.4	92647158.62	
Co	59	72	He	35.7038	ug/l	1.5	178952.99	
As	75	72	He	19.0692	ug/l	3.2	6210.47	

not needed
SC 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2333442.25	2.4	2686723.5	86.85	
Sc	45	He	112961.87	1.0	129904.93	86.96	
Ge	72	He	94373.83	1.0	109315.57	86.33	

Sample Report

Sample Name K2210892-017

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:03:12

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	631.2972	ug/l	1.6	4535500.66	
Al	27	45	No Gas	3.9768	ug/l	0.9	31650.02	
Na	23	45	He	46625.9678	ug/l	1.9	20063448.45	
Mg	24	45	He	25324.7926	ug/l	2.4	5521181.79	
Mn	55	72	He	1866.9207	ug/l	4.3	2526048.81	
Fe	56	72	He	16187.2093	ug/l	2.6	38510610.26	
Co	59	72	He	8.4042	ug/l	2.9	42175.89	
As	75	72	He	276.4367	ug/l	2.5	90052.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1877586.17	1.8	2686723.5	69.88	
Sc	45	He	112133.49	3.8	129904.93	86.32	
Ge	72	He	94457.79	1.1	109315.57	86.41	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	037_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:04:52
Sample Type	CCV
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.0639	ug/l	2.7	246046.21	100.26	
Al	27	45	No Gas	254.5632	ug/l	2.2	2660255.69	101.83	
Na	23	45	He	1952.3108	ug/l	0.7	987532.17	97.62	
Mg	24	45	He	1974.4199	ug/l	0.4	491273.95	98.72	
Mn	55	72	He	24.0903	ug/l	1.1	37497.96	96.36	
Fe	56	72	He	244.1662	ug/l	1.0	668462.62	97.67	
Co	59	72	He	24.3504	ug/l	1.0	140292.37	97.4	
As	75	72	He	24.0683	ug/l	2.4	9008.05	96.27	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2562995.22	2.4	2686723.5	95.39	
Sc	45	He	127980.89	0.9	129904.93	98.52	
Ge	72	He	108476.80	1.8	109315.57	99.23	

Continuing Calibration Blank (CCB) Report

9/28/22

Sample Name	CCB
File Name	038_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:06:32
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1077	ug/l	21.0	1373.42	CCB Failed
Al	27	45	No Gas	0.0121	ug/l	94.1	1785.11	
Na	23	45	He	-3.7416	ug/l	N/A	27224.60	
Mg	24	45	He	0.2066	ug/l	41.5	63.33	
Mn	55	72	He	0.0794	ug/l	52.3	180.01	
Fe	56	72	He	0.3680	ug/l	11.6	2280.20	
Co	59	72	He	0.0001	ug/l	2757.0	24.45	
As	75	72	He	-0.0032	ug/l	N/A	4.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2567826.73	1.6	2686723.5	95.57	
Sc	45	He	125856.03	0.3	129904.93	96.88	
Ge	72	He	106437.30	1.4	109315.57	97.37	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	039_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:11:30
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0560	ug/l	6.4	886.70	
Al	27	45	No Gas	-0.0117	ug/l	N/A	1575.09	
Na	23	45	He	-4.3590	ug/l	N/A	27051.05	
Mg	24	45	He	0.5988	ug/l	76.0	160.00	
Mn	55	72	He	0.0524	ug/l	71.2	136.67	
Fe	56	72	He	0.3203	ug/l	10.4	2116.85	
Co	59	72	He	-0.0008	ug/l	N/A	18.89	
As	75	72	He	0.0005	ug/l	2046.4	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2631042.05	0.2	2686723.5	97.93	
Sc	45	He	126413.40	0.6	129904.93	97.31	
Ge	72	He	104683.02	1.7	109315.57	95.76	

Sample Report

Sample Name K2210892-018

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:13:10

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.7113	ug/l	0.6	32867.06	
Al	27	45	No Gas	3.9631	ug/l	1.3	38541.96	
Na	23	45	He	25157.2212	ug/l	0.8	10797156.92	
Mg	24	45	He	16604.1515	ug/l	1.3	3605291.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8329.0191~~	~~ug/l~~	~~2.1~~	~~10963585.67~~	~~>LDR~~
Fe	56	72	He	2.5820	ug/l	6.2	7098.32	
Co	59	72	He	297.9734	ug/l	2.5	1453955.64	
As	75	72	He	0.1742	ug/l	18.3	59.67	

not needed
JC 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2294301.01	1.5	2686723.5	85.39	
Sc	45	He	111679.61	1.5	129904.93	85.97	
Ge	72	He	91910.41	3.3	109315.57	84.08	

Sample Report

Sample Name K2210892-001

File Name 041SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:19:21

Sample Type Sample

Comment D 50X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1506	ug/l	4.7	1790.13	
Al	27	45	No Gas	15.5989	ug/l	0.8	164430.19	
Na	23	45	He	1011.9779	ug/l	0.9	512289.65	
Mg	24	45	He	954.4644	ug/l	2.1	231241.10	
Mn	55	72	He	578.4960	ug/l	2.3	865174.15	
Fe	56	72	He	2416.7869	ug/l	2.8	6355428.03	
~~Co~~	59	72	He	4.9548	ug/l	2.1	27490.78	
As	75	72	He	0.0041	ug/l	397.4	6.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2560293.19	0.5	2686723.5	95.29	
Sc	45	He	124633.12	1.6	129904.93	95.94	
Ge	72	He	104418.74	2.6	109315.57	95.52	

Sample Report

Sample Name K2210892-002

File Name 042SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:21:02

Sample Type Sample

Comment D 50X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1489	ug/l	8.2	1796.80	
Al	27	45	No Gas	0.3395	ug/l	6.1	5265.84	
Na	23	45	He	1025.6593	ug/l	1.5	515461.02	
Mg	24	45	He	669.1880	ug/l	2.2	161103.69	
Mn	55	72	He	315.5058	ug/l	1.1	477932.69	
Fe	56	72	He	3705.5144	ug/l	2.0	9869287.56	
Co	59	72	He	5.0848	ug/l	4.1	28570.35	
As	75	72	He	-0.0041	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2593946.21	0.5	2686723.5	96.55	
Sc	45	He	123824.61	1.1	129904.93	95.32	
Ge	72	He	105723.14	1.1	109315.57	96.71	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 043_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:22:56

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4696	ug/l	1.1	244726.21	101.88	
Al	27	45	No Gas	254.5931	ug/l	0.4	2603934.49	101.84	
Na	23	45	He	2021.6441	ug/l	1.5	981499.23	101.08	
Mg	24	45	He	2025.9727	ug/l	1.7	484328.34	101.3	
Mn	55	72	He	23.8160	ug/l	4.8	36208.51	95.26	
Fe	56	72	He	245.1806	ug/l	2.4	655772.44	98.07	
Co	59	72	He	24.5200	ug/l	1.4	138029.96	98.08	
As	75	72	He	24.1152	ug/l	3.8	8818.29	96.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2507776.58	0.9	2686723.5	93.34	
Sc	45	He	122982.30	1.3	129904.93	94.67	
Ge	72	He	105992.04	1.5	109315.57	96.96	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	044_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:24:37
Sample Type	CCB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0310	ug/l	14.7	636.69	
Al	27	45	No Gas	0.0158	ug/l	84.3	1873.45	
Na	23	45	He	-4.2279	ug/l	N/A	27358.13	
Mg	24	45	He	0.3928	ug/l	68.5	110.00	
Mn	55	72	He	0.0329	ug/l	95.6	110.00	
Fe	56	72	He	0.3553	ug/l	32.7	2266.88	
Co	59	72	He	-0.0019	ug/l	N/A	13.33	
As	75	72	He	-0.0042	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2635983.19	1.8	2686723.5	98.11	
Sc	45	He	127566.86	0.9	129904.93	98.2	
Ge	72	He	107514.67	1.8	109315.57	98.35	

Prep Blank (PB) Report

Sample Name	KQ2216206-01
File Name	045_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:29:04
Sample Type	PB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0227	ug/l	44.1	556.69	
Al	27	45	No Gas	3.1772	ug/l	1.6	36150.32	
Na	23	45	He	1.0606	ug/l	664.3	29662.58	
Mg	24	45	He	5.6864	ug/l	6.9	1410.10	
Mn	55	72	He	0.0910	ug/l	16.0	196.67	
Fe	56	72	He	0.7611	ug/l	85.0	3328.16	
Co	59	72	He	-0.0018	ug/l	N/A	13.34	
As	75	72	He	-0.0078	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2659274.39	2.1	2686723.5	98.98	
Sc	45	He	126493.44	1.9	129904.93	97.37	
Ge	72	He	106252.54	1.0	109315.57	97.2	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216206-03
File Name	046_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:30:45
Sample Type	LCS
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2358	ug/l	2.4	498820.72	50	98.47	
Al	27	45	No Gas	100.9115	ug/l	3.0	1089701.42	100	100.91	
Na	23	45	He	237.2323	ug/l	2.0	144204.08	250	94.89	
Mg	24	45	He	250.1936	ug/l	4.5	61507.30	250	100.08	
Mn	55	72	He	22.6944	ug/l	4.0	35350.17	25	90.78	
Fe	56	72	He	46.8498	ug/l	0.6	129401.24	50	93.7	
Co	59	72	He	23.4896	ug/l	0.7	135411.57	25	93.96	
As	75	72	He	46.2569	ug/l	0.5	17320.77	50	92.51	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2647237.30	3.8	2686723.5	98.53	
Sc	45	He	126503.61	2.6	129904.93	97.38	
Ge	72	He	108527.37	0.4	109315.57	99.28	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216206-04
File Name	047_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:32:26
Sample Type	LCS
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.8328	ug/l	0.8	494468.26	50	97.67	
Al	27	45	No Gas	104.8235	ug/l	1.1	1131376.55	100	104.82	
Na	23	45	He	241.8534	ug/l	3.2	148372.06	250	96.74	
Mg	24	45	He	249.9266	ug/l	4.1	62253.22	250	99.97	
Mn	55	72	He	24.6742	ug/l	5.4	38396.53	25	98.7	
Fe	56	72	He	47.9103	ug/l	1.4	132239.79	50	95.82	
Co	59	72	He	24.2710	ug/l	1.6	139846.28	25	97.08	
As	75	72	He	46.6198	ug/l	1.0	17449.23	50	93.24	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2644164.86	0.7	2686723.5	98.42	
Sc	45	He	128196.38	3.0	129904.93	98.68	
Ge	72	He	108484.07	1.2	109315.57	99.24	

Sample Report

Sample Name K2210894-001
File Name 048SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time 2022-09-28 09:34:07
Sample Type Sample
Comment D
ISTD Ref FileName 008CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.2744	ug/l	2.5	49959.89	
Al	27	45	No Gas	1520.1780	ug/l	2.2	12827112.73	
Na	23	45	He	49343.5142	ug/l	3.0	18641818.47	
Mg	24	45	He	42774.7690	ug/l	3.2	8184890.92	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~34672.7321~~	~~ug/l~~	~~2.5~~	~~40545763.56~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~106993.0255~~	~~ug/l~~	~~4.1~~	~~219901623.39~~	>LDR
Co	59	72	He	264.8796	ug/l	2.6	1148147.56	
As	75	72	He	0.4696	ug/l	19.4	135.67	

* See Dilution
SC
* 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2070556.11	1.9	2686723.5	77.07	
Sc	45	He	98413.22	0.7	129904.93	75.76	
Ge	72	He	81665.63	3.5	109315.57	74.71	

Sample Report

Sample Name K2210894-002

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:35:47

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.3774	ug/l	3.1	41658.77	
Al	27	45	No Gas	81.4851	ug/l	2.0	669815.17	
Na	23	45	He	49427.8943	ug/l	1.9	18382808.89	
Mg	24	45	He	31791.0592	ug/l	1.7	5988129.29	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15005.2625~~	~~ug/l~~	~~2.1~~	~~18163435.15~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~166472.4266~~	~~ug/l~~	~~1.3~~	~~354333861.39~~	~~>LDR~~
Co	59	72	He	246.2237	ug/l	0.8	1104969.92	
As	75	72	He	0.5525	ug/l	11.0	165.00	

* See Diluti
* 31
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2013486.01	2.8	2686723.5	74.94	
Sc	45	He	96899.05	1.3	129904.93	74.59	
Ge	72	He	84505.76	1.6	109315.57	77.3	

Sample Report

Sample Name K2210894-003

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:37:27

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	59.7534	ug/l	1.7	546667.69	
Al	27	45	No Gas	23.3745	ug/l	1.3	229183.58	
Na	23	45	He	20770.0639	ug/l	3.9	9205745.90	
Mg	24	45	He	36040.8092	ug/l	1.7	8079685.50	
Mn	55	72	He	17.9237	ug/l	3.3	25576.00	
Fe	56	72	He	4.7924	ug/l	7.7	13202.07	
Co	59	72	He	0.1791	ug/l	12.1	968.93	
As	75	72	He	0.4539	ug/l	10.1	160.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2389443.66	0.6	2686723.5	88.94	
Sc	45	He	115343.52	2.6	129904.93	88.79	
Ge	72	He	99415.77	1.8	109315.57	90.94	

Sample Report

Sample Name K2210894-004

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:39:07

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	76.6593	ug/l	2.7	719735.33	
Al	27	45	No Gas	4.4751	ug/l	2.3	46320.60	
Na	23	45	He	20273.7938	ug/l	2.8	9260947.78	
Mg	24	45	He	17175.6034	ug/l	2.2	3966693.07	
Mn	55	72	He	1731.1608	ug/l	5.4	2458425.07	
Fe	56	72	He	1739.5156	ug/l	3.7	4346154.83	
Co	59	72	He	10.7405	ug/l	4.5	56572.30	
As	75	72	He	0.8143	ug/l	8.1	283.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2453795.28	3.3	2686723.5	91.33	
Sc	45	He	118826.56	2.1	129904.93	91.47	
Ge	72	He	99221.37	3.0	109315.57	90.77	

Sample Report

Sample Name	K2210894-005
File Name	052SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:40:47
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	218.2167	ug/l	3.9	2197121.37	
Al	27	45	No Gas	28.6698	ug/l	2.7	309130.84	
Na	23	45	He	27265.9077	ug/l	1.7	13254090.64	
Mg	24	45	He	36196.5469	ug/l	2.5	8900928.83	
Mn	55	72	He	0.5683	ug/l	13.8	930.05	
Fe	56	72	He	1.9307	ug/l	6.6	6508.05	
Co	59	72	He	0.0476	ug/l	11.8	294.45	
As	75	72	He	0.1295	ug/l	16.1	53.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2631925.90	2.2	2686723.5	97.96	
Sc	45	He	126544.28	2.7	129904.93	97.41	
Ge	72	He	107082.22	1.3	109315.57	97.96	

Sample Report

Sample Name K2210894-006

File Name 053SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:42:27

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	245.5964	ug/l	0.9	2356192.52	
Al	27	45	No Gas	4.0907	ug/l	3.3	43409.83	
Na	23	45	He	27628.7199	ug/l	0.7	12622995.64	
Mg	24	45	He	15749.8824	ug/l	1.4	3640566.61	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3426.7795~~	~~ug/l~~	~~1.5~~	~~4961788.78~~	~~>LDR~~
Fe	56	72	He	1355.9368	ug/l	0.6	3453510.68	
Co	59	72	He	0.8102	ug/l	4.0	4372.81	
As	75	72	He	0.0844	ug/l	24.0	34.33	

not needed
3C 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2506656.94	0.6	2686723.5	93.3	
Sc	45	He	118914.20	2.0	129904.93	91.54	
Ge	72	He	101078.84	2.0	109315.57	92.47	

Sample Report

Sample Name K2210894-007

File Name 054SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:44:08

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	482.7404	ug/l	2.8	4744518.78	
Al	27	45	No Gas	8.3198	ug/l	2.7	88749.66	
Na	23	45	He	31232.6593	ug/l	2.7	14782668.95	
Mg	24	45	He	50141.1590	ug/l	1.3	12011609.40	
Mn	55	72	He	862.6316	ug/l	1.1	1271018.42	
Fe	56	72	He	1.6464	ug/l	13.2	5514.38	
Co	59	72	He	0.5166	ug/l	2.5	2844.70	
As	75	72	He	0.0799	ug/l	22.2	33.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2569055.79	2.2	2686723.5	95.62	
Sc	45	He	123232.97	1.1	129904.93	94.86	
Ge	72	He	102838.86	0.5	109315.57	94.08	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	055_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:45:47
Sample Type	CCV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2945	ug/l	2.8	259127.28	101.18	
Al	27	45	No Gas	252.5119	ug/l	2.5	2753422.67	101	
Na	23	45	He	2002.3216	ug/l	3.0	1019420.04	100.12	
Mg	24	45	He	2005.0635	ug/l	2.5	502564.56	100.25	
Mn	55	72	He	24.4765	ug/l	1.1	38410.13	97.91	
Fe	56	72	He	245.6678	ug/l	1.8	678025.56	98.27	
Co	59	72	He	24.4082	ug/l	0.8	141780.30	97.63	
As	75	72	He	24.5375	ug/l	0.8	9261.18	98.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2674383.50	1.7	2686723.5	99.54	
Sc	45	He	128981.63	2.8	129904.93	99.29	
Ge	72	He	109358.98	1.1	109315.57	100.04	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	056_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:47:28
Sample Type	CCB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0850	ug/l	16.2	1200.07	
Al	27	45	No Gas	0.0103	ug/l	83.9	1843.45	
Na	23	45	He	-0.2043	ug/l	N/A	28833.84	
Mg	24	45	He	0.5645	ug/l	60.7	150.00	
Mn	55	72	He	0.0569	ug/l	91.7	146.67	
Fe	56	72	He	0.3406	ug/l	20.1	2223.53	
Co	59	72	He	-0.0028	ug/l	N/A	7.78	
As	75	72	He	-0.0051	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2678912.25	0.4	2686723.5	99.71	
Sc	45	He	125431.79	1.2	129904.93	96.56	
Ge	72	He	107182.58	1.9	109315.57	98.05	

Sample Report

Sample Name K2210894-008

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:49:09

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	556.2909	ug/l	0.5	5015156.69	
Al	27	45	No Gas	5.5101	ug/l	0.4	54425.23	
Na	23	45	He	31246.5674	ug/l	3.1	13371618.96	
Mg	24	45	He	26396.3732	ug/l	2.4	5716406.37	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4957.3224~~	~~ug/l~~	~~0.6~~	~~6639095.32~~	~~>LDR~~
Fe	56	72	He	11610.4542	ug/l	2.4	27335852.93	
Co	59	72	He	11.4993	ug/l	1.4	57108.48	
As	75	72	He	0.2100	ug/l	12.3	72.33	

not needed
31
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2355655.96	1.0	2686723.5	87.68	
Sc	45	He	111415.06	1.2	129904.93	85.77	
Ge	72	He	93475.30	1.2	109315.57	85.51	

Sample Report

Sample Name K2210894-009

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:50:49

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	520.5590	ug/l	1.5	5260908.26	
Al	27	45	No Gas	21.9424	ug/l	1.3	237875.33	
Na	23	45	He	46140.0947	ug/l	1.9	22505808.83	
Mg	24	45	He	50879.4553	ug/l	2.2	12567479.81	
Mn	55	72	He	3.2680	ug/l	3.7	5040.84	
Fe	56	72	He	2.7539	ug/l	8.2	8675.73	
Co	59	72	He	0.0512	ug/l	3.9	313.34	
As	75	72	He	0.1747	ug/l	17.1	69.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2640924.28	1.3	2686723.5	98.3	
Sc	45	He	127057.68	0.2	129904.93	97.81	
Ge	72	He	106427.99	1.0	109315.57	97.36	

Sample Report

Sample Name	K2210894-010
File Name	059SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:52:30
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	600.0578	ug/l	1.1	5884678.87	
Al	27	45	No Gas	5.0118	ug/l	3.5	53987.11	
Na	23	45	He	47100.2879	ug/l	0.4	22702282.16	
Mg	24	45	He	24903.4877	ug/l	2.7	6076771.58	
Mn	55	72	He	1906.4467	ug/l	0.8	2872969.33	
Fe	56	72	He	960.5634	ug/l	2.4	2546226.73	
Co	59	72	He	2.2887	ug/l	1.6	12807.06	
As	75	72	He	0.8075	ug/l	6.2	298.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2562481.73	1.2	2686723.5	95.38	
Sc	45	He	125549.16	1.5	129904.93	96.65	
Ge	72	He	105179.70	0.9	109315.57	96.22	

Sample Report

Sample Name K2210894-011

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:54:10

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6375	ug/l	1.6	6564.69	
Al	27	45	No Gas	26.0037	ug/l	0.5	273159.22	
Na	23	45	He	24818.4206	ug/l	3.0	11783280.66	
Mg	24	45	He	37030.6073	ug/l	1.6	8894981.74	
Mn	55	72	He	1.0209	ug/l	12.8	1516.77	
Fe	56	72	He	2.1666	ug/l	5.0	6681.45	
Co	59	72	He	0.1732	ug/l	10.6	942.26	
As	75	72	He	0.2542	ug/l	9.3	92.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2561690.48	0.5	2686723.5	95.35	
Sc	45	He	123575.60	1.9	129904.93	95.13	
Ge	72	He	100123.75	2.1	109315.57	91.59	

Sample Report

Sample Name K2210894-012

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:55:51

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.3950	ug/l	3.7	29484.59	
Al	27	45	No Gas	4.0207	ug/l	1.0	38283.10	
Na	23	45	He	25891.3477	ug/l	1.8	10665504.01	
Mg	24	45	He	17020.9291	ug/l	0.3	3547694.85	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8473.1723~~	~~ug/l~~	~~0.7~~	~~11034774.42~~	~~>LDR~~
Fe	56	72	He	7860.5343	ug/l	1.3	17995239.31	
Co	59	72	He	48.0903	ug/l	1.6	232097.83	
As	75	72	He	0.3769	ug/l	19.2	122.33	

not needed
SC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2247844.91	2.9	2686723.5	83.66	
Sc	45	He	107215.41	2.3	129904.93	82.53	
Ge	72	He	90888.05	2.2	109315.57	83.14	

Sample Report

Sample Name K2210894-013

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:57:31

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.0405	ug/l	2.1	48957.15	
Al	27	45	No Gas	4.3634	ug/l	2.9	38824.36	
Na	23	45	He	49871.7771	ug/l	2.1	18986140.55	
Mg	24	45	He	31715.3487	ug/l	2.1	6115254.91	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15219.7275~~	~~ug/l~~	~~0.8~~	~~18439800.97~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	171560.6400	ug/l	0.9	365458461.22	>LDR
Co	59	72	He	270.2142	ug/l	0.4	1213558.36	
As	75	72	He	1.6794	ug/l	6.9	494.01	

X not needed
X JL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2107012.26	2.0	2686723.5	78.42	
Sc	45	He	99194.88	1.6	129904.93	76.36	
Ge	72	He	84562.81	0.2	109315.57	77.36	

Sample Report

Sample Name K2210894-014

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:59:11

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	88.0118	ug/l	0.9	763174.62	
Al	27	45	No Gas	3.8818	ug/l	0.7	37300.94	
Na	23	45	He	21082.8139	ug/l	1.7	8963560.49	
Mg	24	45	He	17481.7744	ug/l	0.9	3758090.46	
Mn	55	72	He	1674.5909	ug/l	1.8	2357007.88	
Fe	56	72	He	5853.0553	ug/l	1.5	14484526.45	
Co	59	72	He	5.6759	ug/l	0.4	29633.22	
As	75	72	He	4.6912	ug/l	2.9	1594.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2265041.89	0.5	2686723.5	84.3	
Sc	45	He	110579.03	1.1	129904.93	85.12	
Ge	72	He	98235.65	0.8	109315.57	89.86	

Sample Report

Sample Name K2210894-015

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:00:50

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	260.1640	ug/l	3.2	2451275.48	
Al	27	45	No Gas	4.6190	ug/l	2.6	47946.56	
Na	23	45	He	28086.1582	ug/l	1.2	12804799.39	
Mg	24	45	He	15891.4508	ug/l	2.1	3664757.03	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3400.8678~~	~~ug/l~~	~~2.3~~	~~4850770.13~~	~~>LDR~~
Fe	56	72	He	3756.4712	ug/l	1.8	9421972.15	
Co	59	72	He	19.7595	ug/l	1.6	104492.48	
As	75	72	He	33.3255	ug/l	1.8	11448.17	

not needed
31
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2463054.49	2.5	2686723.5	91.68	
Sc	45	He	118658.80	2.3	129904.93	91.34	
Ge	72	He	99563.36	1.0	109315.57	91.08	

Sample Report

Sample Name K2210894-016

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:02:30

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	580.5031	ug/l	1.3	5289467.74	
Al	27	45	No Gas	4.0574	ug/l	3.2	40904.13	
Na	23	45	He	31089.8083	ug/l	1.4	13546227.72	
Mg	24	45	He	26812.0082	ug/l	1.9	5912123.45	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4962.0105~~	~~ug/l~~	~~0.6~~	~~6814007.19~~	~~>LDR~~
Fe	56	72	He	38806.8943	ug/l	0.5	93699488.60	
Co	59	72	He	35.4079	ug/l	0.7	180256.50	
As	75	72	He	23.1771	ug/l	2.6	7666.73	

JC 9/28/22
not needed

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2381320.90	2.5	2686723.5	88.63	
Sc	45	He	113434.18	1.1	129904.93	87.32	
Ge	72	He	95847.98	0.4	109315.57	87.68	

Sample Report

Sample Name K2210894-017

File Name 066SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:04:10

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	604.6211	ug/l	1.0	6000326.99	
Al	27	45	No Gas	4.2868	ug/l	0.8	46983.87	
Na	23	45	He	46846.2156	ug/l	0.9	22623918.00	
Mg	24	45	He	24885.3642	ug/l	0.9	6086033.24	
Mn	55	72	He	1849.1031	ug/l	1.4	2831081.21	
Fe	56	72	He	15596.0272	ug/l	1.4	41979076.04	
Co	59	72	He	8.4072	ug/l	1.2	47731.35	
As	75	72	He	259.8035	ug/l	1.1	95754.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2593087.62	0.4	2686723.5	96.51	
Sc	45	He	125798.22	0.4	129904.93	96.84	
Ge	72	He	106860.49	1.3	109315.57	97.75	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 067_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:05:50

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.5359	ug/l	0.3	249574.12	98.14	
Al	27	45	No Gas	248.4466	ug/l	2.5	2689843.81	99.38	
Na	23	45	He	1952.8530	ug/l	2.0	1007445.92	97.64	
Mg	24	45	He	1992.6694	ug/l	1.5	505686.36	99.63	
Mn	55	72	He	25.0995	ug/l	1.3	39753.11	100.4	
Fe	56	72	He	248.3849	ug/l	0.5	691996.27	99.35	
Co	59	72	He	24.7159	ug/l	0.6	144912.13	98.86	
As	75	72	He	24.5966	ug/l	2.0	9368.25	98.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2654501.63	0.4	2686723.5	98.8	
Sc	45	He	130545.28	1.1	129904.93	100.49	
Ge	72	He	110385.51	1.6	109315.57	100.98	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	068_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:07:30
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1244	ug/l	14.2	1590.11	CCB Failed
Al	27	45	No Gas	0.0145	ug/l	71.7	1873.45	
Na	23	45	He	-5.6743	ug/l	N/A	26673.92	
Mg	24	45	He	0.4999	ug/l	26.9	136.67	
Mn	55	72	He	0.0790	ug/l	57.3	180.00	
Fe	56	72	He	0.3487	ug/l	19.6	2243.53	
Co	59	72	He	-0.0011	ug/l	N/A	17.78	
As	75	72	He	-0.0042	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2656083.92	1.3	2686723.5	98.86	
Sc	45	He	127738.44	2.8	129904.93	98.33	
Ge	72	He	107121.61	0.2	109315.57	97.99	

3C
9/28/22

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 069_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:26:17

Sample Type CCB

Comment ---

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0531	ug/l	19.8	870.04	
Al	27	45	No Gas	0.0129	ug/l	154.3	1860.12	
Na	23	45	He	-11.2172	ug/l	N/A	23562.73	
Mg	24	45	He	0.3145	ug/l	44.8	90.00	
Mn	55	72	He	0.0263	ug/l	44.4	96.67	
Fe	56	72	He	0.2804	ug/l	14.7	2016.83	
Co	59	72	He	-0.0020	ug/l	N/A	12.22	
As	75	72	He	-0.0094	ug/l	N/A	1.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2666664.80	2.9	2686723.5	99.25	
Sc	45	He	125542.83	2.2	129904.93	96.64	
Ge	72	He	104803.57	2.9	109315.57	95.87	

Sample Report

Sample Name K2210894-018

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:27:59

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.8065	ug/l	3.7	34503.46	
Al	27	45	No Gas	3.7109	ug/l	0.3	37043.83	
Na	23	45	He	25470.2572	ug/l	0.6	10615580.67	
Mg	24	45	He	16829.0825	ug/l	1.4	3548254.74	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8437.3338~~	~~ug/l~~	~~1.5~~	~~10830782.34~~	~~>LDR~~
Fe	56	72	He	2.6619	ug/l	1.2	7098.31	
Co	59	72	He	307.4695	ug/l	2.4	1463280.39	
As	75	72	He	0.1435	ug/l	27.0	48.67	

not needed
SC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2348837.83	1.8	2686723.5	87.42	
Sc	45	He	108449.29	0.5	129904.93	83.48	
Ge	72	He	89601.35	0.6	109315.57	81.97	

Sample Report

Sample Name K2210894-001

File Name 071SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:34:21

Sample Type Sample

Comment D 100X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0918	ug/l	11.0	1256.74	
Al	27	45	No Gas	15.1278	ug/l	0.7	164976.01	
Na	23	45	He	478.6273	ug/l	0.7	257686.25	
Mg	24	45	He	424.4850	ug/l	1.4	102950.92	
Mn	55	72	He	336.1772	ug/l	1.3	501215.93	
Fe	56	72	He	1072.5390	ug/l	1.4	2812602.56	
Co	59	72	He	2.5353	ug/l	2.5	14035.78	
As	75	72	He	0.0044	ug/l	190.5	6.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2647936.00	1.5	2686723.5	98.56	
Sc	45	He	124740.73	0.3	129904.93	96.02	
Ge	72	He	104056.44	0.7	109315.57	95.19	

Sample Report

Sample Name	K2210894-002
File Name	072SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:36:02
Sample Type	Sample
Comment	D 100X
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0726	ug/l	3.1	1033.39	
Al	27	45	No Gas	1.0329	ug/l	4.8	12524.54	
Na	23	45	He	500.2965	ug/l	1.6	268001.83	
Mg	24	45	He	333.5028	ug/l	1.3	80874.83	
Mn	55	72	He	158.2944	ug/l	2.2	239876.14	
Fe	56	72	He	1814.4558	ug/l	2.0	4834548.37	
Co	59	72	He	2.6341	ug/l	2.2	14816.43	
As	75	72	He	0.0005	ug/l	2580.7	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2579383.97	0.6	2686723.5	96	
Sc	45	He	124733.69	1.5	129904.93	96.02	
Ge	72	He	105753.20	0.7	109315.57	96.74	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 073_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:38:42

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4399	ug/l	2.1	257352.98	101.76	
Al	27	45	No Gas	251.2762	ug/l	2.3	2705770.79	100.51	
Na	23	45	He	1983.8233	ug/l	2.8	993926.60	99.19	
Mg	24	45	He	1995.5589	ug/l	3.3	492001.79	99.78	
Mn	55	72	He	24.4624	ug/l	2.3	37788.47	97.85	
Fe	56	72	He	245.5064	ug/l	0.8	667052.83	98.2	
Co	59	72	He	24.5846	ug/l	0.4	140573.37	98.34	
As	75	72	He	24.5929	ug/l	1.3	9136.46	98.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2640511.63	1.3	2686723.5	98.28	
Sc	45	He	126906.09	3.5	129904.93	97.69	
Ge	72	He	107647.69	0.3	109315.57	98.47	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	074_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:40:23
Sample Type	CCB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0351	ug/l	40.5	680.03	
Al	27	45	No Gas	0.0134	ug/l	156.8	1855.12	
Na	23	45	He	-14.5231	ug/l	N/A	22094.17	
Mg	24	45	He	0.3535	ug/l	32.9	100.00	
Mn	55	72	He	0.0154	ug/l	202.7	83.33	
Fe	56	72	He	0.2978	ug/l	4.6	2123.52	
Co	59	72	He	-0.0023	ug/l	N/A	11.11	
As	75	72	He	-0.0070	ug/l	N/A	2.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2648777.93	2.0	2686723.5	98.59	
Sc	45	He	126345.80	1.9	129904.93	97.26	
Ge	72	He	107990.10	1.2	109315.57	98.79	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 28, 2022

Analytical Report for Service Request No: K2210894

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 20, 2022
For your reference, these analyses have been assigned our service request number **K2210894.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability	**Date Received:**	09/20/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Eighteen water samples were received for analysis at ALS Environmental on 09/20/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 09/28/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2210894

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	9/16/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Dissolved Sodium							Comments/Preservation
1	MW-1-HT-MMO-20220916	9/16/2022	10:43	Water	1	X		X	X	X	X	X	X							HNO3 preserved.
2	MW-1-FB-20220916	9/16/2022	10:44	Water	1	X		X	X											HNO3 preserved.
3	MW-5-HT-MMO-20220916	9/16/2022	10:45	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
4	MW-5-FB-20220916	9/16/2022	10:46	Water	1	X	X		X											HNO3 preserved.
5	MW-10-HT-MMO-20220916	9/16/2022	10:47	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
6	MW-10-FB-20220916	9/16/2022	10:48	Water	1	X	X		X											HNO3 preserved.
7	MW-14-HT-MMO-20220916	9/16/2022	10:49	Water	1	X	X	X	X	X	X	X	X							HNO3 preserved.
8	MW-14-FB-20220916	9/16/2022	10:50	Water	1	X	X	X	X											HNO3 preserved.
9	MW-17-HT-MMO-20220916	9/16/2022	10:51	Water	1	X	X		X	X	X	X	X							HNO3 preserved.
10	MW-17-FB-20220916	9/16/2022	10:52	Water	1	X	X		X											HNO3 preserved.
11	MW-44H-HT-MMO-20220916	9/16/2022	10:53	Water	1			X	X	X	X	X	X							HNO3 preserved.
12	MW-44H-FB-20220916	9/16/2022	10:54	Water	1			X	X											HNO3 preserved.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 9/19/22 8:30

Received by: ALS 9/20/22 0940
Signature/Print Name:

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2210894

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/16/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt												Comments/Preservation
1	MW-1-INF-20220916	9/16/2022	8:20	Water	1	X		X												HNO3 preserved.
2	MW-5-INF-20220916	9/16/2022	8:21	Water	1	X	X													HNO3 preserved.
3	MW-10-INF-20220916	9/16/2022	8:22	Water	1	X	X													HNO3 preserved.
4	MW-14-INF-20220916	9/16/2022	8:23	Water	1	X	X	X												HNO3 preserved.
5	MW-17-INF-20220916	9/16/2022	8:24	Water	1	X	X													HNO3 preserved.
6	MW-44H-INF-20220916	9/16/2022	8:25	Water	1			X												HNO3 preserved.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	9/19/22 8:30

Received by:
ALS 9/20/22 0940
Signature/Print Name:

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM________

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 10894

Received: 9/20/22 Opened: 9/20/22 By:________ Unloaded: 9/20/22 By:________

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other________ NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front
   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.8		IR01		—	—		
5.2		11					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts Baggies Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

____

1/13/22 Page of

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:43
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-HT-MMO-20220916	**Basis:**	NA
Lab Code:	K2210894-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1520**		ug/L	4.0	0.5	1	09/28/22 09:34	09/23/22	
Arsenic	200.8	**0.47**	**J**	ug/L	0.50	0.09	1	09/28/22 09:34	09/23/22	
Cobalt	200.8	**265**		ug/L	0.020	0.009	1	09/28/22 09:34	09/23/22	
Iron	200.8	**107000**		ug/L	200	30	100	09/28/22 10:34	09/23/22	
Magnesium	200.8	**42800**		ug/L	10	2	1	09/28/22 09:34	09/23/22	
Manganese	200.8	**33600**		ug/L	20	4	100	09/28/22 10:34	09/23/22	
Sodium	200.8	**49300**		ug/L	50	20	1	09/28/22 09:34	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:44
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-FB-20220916	**Basis:**	NA
Lab Code:	K2210894-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.55**	ug/L	0.50	0.09	1	09/28/22 09:35	09/23/22	
Cobalt	200.8	**246**	ug/L	0.020	0.009	1	09/28/22 09:35	09/23/22	
Iron	200.8	**181000**	ug/L	200	30	100	09/28/22 10:36	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:45
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-HT-MMO-20220916	**Basis:**	NA
Lab Code:	K2210894-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**23.4**		ug/L	4.0	0.5	1	09/28/22 09:37	09/23/22	
Arsenic	200.8	**0.45**	**J**	ug/L	0.50	0.09	1	09/28/22 09:37	09/23/22	
Iron	200.8	**4.8**		ug/L	2.0	0.3	1	09/28/22 09:37	09/23/22	
Lithium	200.8	**59.8**		ug/L	0.10	0.10	1	09/28/22 09:37	09/23/22	
Magnesium	200.8	**36000**		ug/L	10	2	1	09/28/22 09:37	09/23/22	
Manganese	200.8	**17.9**		ug/L	0.20	0.04	1	09/28/22 09:37	09/23/22	
Sodium	200.8	**20800**		ug/L	50	20	1	09/28/22 09:37	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:46
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-FB-20220916	**Basis:**	NA
Lab Code:	K2210894-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.81**	ug/L	0.50	0.09	1	09/28/22 09:39	09/23/22	
Iron	200.8	**1740**	ug/L	2.0	0.3	1	09/28/22 09:39	09/23/22	
Lithium	200.8	**76.7**	ug/L	0.10	0.10	1	09/28/22 09:39	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:47
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-HT-MMO-20220916	**Basis:**	NA
Lab Code:	K2210894-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**28.7**	ug/L	4.0	0.5	1	09/28/22 09:40	09/23/22	
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	09/28/22 09:40	09/23/22	
Iron	200.8	**1.9 J**	ug/L	2.0	0.3	1	09/28/22 09:40	09/23/22	
Lithium	200.8	**218**	ug/L	0.10	0.10	1	09/28/22 09:40	09/23/22	
Magnesium	200.8	**36200**	ug/L	10	2	1	09/28/22 09:40	09/23/22	
Manganese	200.8	**0.57**	ug/L	0.20	0.04	1	09/28/22 09:40	09/23/22	
Sodium	200.8	**27300**	ug/L	50	20	1	09/28/22 09:40	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:48
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-FB-20220916	**Basis:**	NA
Lab Code:	K2210894-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/28/22 09:42	09/23/22	
Iron	200.8	**1360**		ug/L	2.0	0.3	1	09/28/22 09:42	09/23/22	
Lithium	200.8	**246**		ug/L	0.10	0.10	1	09/28/22 09:42	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:49
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-HT-MMO-20220916	**Basis:**	NA
Lab Code:	K2210894-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**8.3**	ug/L	4.0	0.5	1	09/28/22 09:44	09/23/22	
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	09/28/22 09:44	09/23/22	
Cobalt	200.8	**0.517**	ug/L	0.020	0.009	1	09/28/22 09:44	09/23/22	
Iron	200.8	**1.6 J**	ug/L	2.0	0.3	1	09/28/22 09:44	09/23/22	
Lithium	200.8	**483**	ug/L	0.10	0.10	1	09/28/22 09:44	09/23/22	
Magnesium	200.8	**50100**	ug/L	10	2	1	09/28/22 09:44	09/23/22	
Manganese	200.8	**863**	ug/L	0.20	0.04	1	09/28/22 09:44	09/23/22	
Sodium	200.8	**31200**	ug/L	50	20	1	09/28/22 09:44	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:50
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-FB-20220916	**Basis:**	NA
Lab Code:	K2210894-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21 J**	ug/L	0.50	0.09	1	09/28/22 09:49	09/23/22	
Cobalt	200.8	**11.5**	ug/L	0.020	0.009	1	09/28/22 09:49	09/23/22	
Iron	200.8	**11600**	ug/L	2.0	0.3	1	09/28/22 09:49	09/23/22	
Lithium	200.8	**556**	ug/L	0.10	0.10	1	09/28/22 09:49	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:51
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-HT-MMO-20220916	**Basis:**	NA
Lab Code:	K2210894-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**21.9**		ug/L	4.0	0.5	1	09/28/22 09:50	09/23/22	
Arsenic	200.8	**0.17**	**J**	ug/L	0.50	0.09	1	09/28/22 09:50	09/23/22	
Iron	200.8	**2.8**		ug/L	2.0	0.3	1	09/28/22 09:50	09/23/22	
Lithium	200.8	**521**		ug/L	0.10	0.10	1	09/28/22 09:50	09/23/22	
Magnesium	200.8	**50900**		ug/L	10	2	1	09/28/22 09:50	09/23/22	
Manganese	200.8	**3.27**		ug/L	0.20	0.04	1	09/28/22 09:50	09/23/22	
Sodium	200.8	**46100**		ug/L	50	20	1	09/28/22 09:50	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:52
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-FB-20220916	**Basis:**	NA
Lab Code:	K2210894-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.81**	ug/L	0.50	0.09	1	09/28/22 09:52	09/23/22	
Iron	200.8	**961**	ug/L	2.0	0.3	1	09/28/22 09:52	09/23/22	
Lithium	200.8	**600**	ug/L	0.10	0.10	1	09/28/22 09:52	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:53
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-HT-MMO-20220916	**Basis:**	NA
Lab Code:	K2210894-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**26.0**	ug/L	4.0	0.5	1	09/28/22 09:54	09/23/22	
Cobalt	200.8	**0.173**	ug/L	0.020	0.009	1	09/28/22 09:54	09/23/22	
Iron	200.8	**2.2**	ug/L	2.0	0.3	1	09/28/22 09:54	09/23/22	
Magnesium	200.8	**37000**	ug/L	10	2	1	09/28/22 09:54	09/23/22	
Manganese	200.8	**1.02**	ug/L	0.20	0.04	1	09/28/22 09:54	09/23/22	
Sodium	200.8	**24800**	ug/L	50	20	1	09/28/22 09:54	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 10:54
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-FB-20220916	**Basis:**	NA
Lab Code:	K2210894-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**48.1**	ug/L	0.020	0.009	1	09/28/22 09:55	09/23/22	
Iron	200.8	**7860**	ug/L	2.0	0.3	1	09/28/22 09:55	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 08:20
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-1-INF-20220916	**Basis:**	NA
Lab Code:	K2210894-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.68**	ug/L	0.50	0.09	1	09/28/22 09:57	09/23/22	
Cobalt	200.8	**270**	ug/L	0.020	0.009	1	09/28/22 09:57	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 08:21
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-5-INF-20220916	**Basis:**	NA
Lab Code:	K2210894-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.69**	ug/L	0.50	0.09	1	09/28/22 09:59	09/23/22	
Lithium	200.8	**88.0**	ug/L	0.10	0.10	1	09/28/22 09:59	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 08:22
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-10-INF-20220916	**Basis:**	NA
Lab Code:	K2210894-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**33.3**	ug/L	0.50	0.09	1	09/28/22 10:00	09/23/22	
Lithium	200.8	**260**	ug/L	0.10	0.10	1	09/28/22 10:00	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 08:23
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-14-INF-20220916	**Basis:**	NA
Lab Code:	K2210894-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**23.2**	ug/L	0.50	0.09	1	09/28/22 10:02	09/23/22	
Cobalt	200.8	**35.4**	ug/L	0.020	0.009	1	09/28/22 10:02	09/23/22	
Lithium	200.8	**581**	ug/L	0.10	0.10	1	09/28/22 10:02	09/23/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 08:24
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-17-INF-20220916	**Basis:**	NA
Lab Code:	K2210894-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**260**	ug/L	0.50	0.09	1	09/28/22 10:04	09/23/22	
Lithium	200.8	**605**	ug/L	0.10	0.10	1	09/28/22 10:04	09/23/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/16/22 08:25
Sample Matrix:	Water	**Date Received:**	09/20/22 09:40
Sample Name:	MW-44H-INF-20220916	**Basis:**	NA
Lab Code:	K2210894-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**307**	ug/L	0.020	0.009	1	09/28/22 10:27	09/23/22	

Printed 9/28/2022 12:22:02 PM

Superset Reference:

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216206-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**3.2**	**J**	ug/L	4.0	0.5	1	09/28/22 09:29	09/23/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	09/28/22 09:29	09/23/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	09/28/22 09:29	09/23/22	
Iron	200.8	**0.8**	**J**	ug/L	2.0	0.3	1	09/28/22 09:29	09/23/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	09/28/22 09:29	09/23/22	
Magnesium	200.8	**6**	**J**	ug/L	10	2	1	09/28/22 09:29	09/23/22	
Manganese	200.8	**0.09**	**J**	ug/L	0.20	0.04	1	09/28/22 09:29	09/23/22	
Sodium	200.8	ND	U	ug/L	50	20	1	09/28/22 09:29	09/23/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	09/28/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216206-03			Duplicate Lab Control Sample KQ2216206-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	105	100	105	109	100	109	85-115	4	20
Arsenic	200.8	48.1	50.0	96	48.5	50.0	97	85-115	<1	20
Cobalt	200.8	24.4	25.0	98	25.2	25.0	101	85-115	3	20
Iron	200.8	48.7	50.0	97	49.8	50.0	100	85-115	2	20
Lithium	200.8	51.2	50.0	102	50.8	50.0	102	85-115	<1	20
Magnesium	200.8	260	250	104	260	250	104	85-115	<1	20
Manganese	200.8	23.6	25.0	94	25.7	25.0	103	85-115	9	20
Sodium	200.8	247	250	99	252	250	101	85-115	2	20

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: Anchor QEA, LLC
Service Request: K2210894
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0
Extraction Lot: 406860
Analytical Method: 200.8
Extraction Date: 09/23/22 14:02

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-HT-MMO-20220916	K2210894-001	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-1-FB-20220916	K2210894-002	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-5-HT-MMO-20220916	K2210894-003	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-5-FB-20220916	K2210894-004	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220916	K2210894-005	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-10-FB-20220916	K2210894-006	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220916	K2210894-007	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-14-FB-20220916	K2210894-008	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220916	K2210894-009	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-17-FB-20220916	K2210894-010	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-44H-HT-MMO-20220916	K2210894-011	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-44H-FB-20220916	K2210894-012	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-1-INF-20220916	K2210894-013	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-5-INF-20220916	K2210894-014	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-10-INF-20220916	K2210894-015	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-14-INF-20220916	K2210894-016	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-17-INF-20220916	K2210894-017	9/16/22	9/20/22	10.0000 mL	10 mL	
MW-44H-INF-20220916	K2210894-018	9/16/22	9/20/22	10.0000 mL	10 mL	
Method Blank	KQ2216206-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216206-03LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate Lab Control Sample	KQ2216206-04DLCS	NA	NA	10.0000 mL	10.4 mL	

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 09/28/22 08:17						
Aluminum	200.8	779129	104	100	104	90-110
Arsenic	200.8	779129	25.0	25.0	100	90-110
Cobalt	200.8	779129	25.3	25.0	101	90-110
Iron	200.8	779129	50.0	50.0	100	90-110
Magnesium	200.8	779129	253	250	101	90-110
Manganese	200.8	779129	25.1	25.0	100	90-110
Sodium	200.8	779129	238	250	95	90-110
Lithium	200.8	779129	26.9	25.0	108	90-110
CCV 09/28/22 08:19						
Aluminum	200.8	779129	250	250	100	90-110
Arsenic	200.8	779129	24.8	25.0	99	90-110
Cobalt	200.8	779129	25.0	25.0	100	90-110
Iron	200.8	779129	252	250	101	90-110
Magnesium	200.8	779129	2010	2000	101	90-110
Manganese	200.8	779129	25.5	25.0	102	90-110
Sodium	200.8	779129	1970	2000	98	90-110
Lithium	200.8	779129	25.3	25.0	101	90-110
CCV 09/28/22 08:44						
Aluminum	200.8	779129	252	250	101	90-110
Arsenic	200.8	779129	24.5	25.0	98	90-110
Cobalt	200.8	779129	25.1	25.0	100	90-110
Iron	200.8	779129	251	250	100	90-110
Magnesium	200.8	779129	1970	2000	98	90-110
Manganese	200.8	779129	25.4	25.0	101	90-110
Sodium	200.8	779129	1940	2000	97	90-110
Lithium	200.8	779129	25.5	25.0	102	90-110
CCV 09/28/22 09:04						
Aluminum	200.8	779129	255	250	102	90-110
Arsenic	200.8	779129	24.1	25.0	96	90-110
Cobalt	200.8	779129	24.4	25.0	97	90-110
Iron	200.8	779129	244	250	98	90-110
Magnesium	200.8	779129	1970	2000	99	90-110
Manganese	200.8	779129	24.1	25.0	96	90-110
Sodium	200.8	779129	1950	2000	98	90-110
Lithium	200.8	779129	25.1	25.0	100	90-110

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID	Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 09/28/22 09:22							
	Aluminum	200.8	779129	255	250	102	90-110
	Arsenic	200.8	779129	24.1	25.0	96	90-110
	Cobalt	200.8	779129	24.5	25.0	98	90-110
	Iron	200.8	779129	245	250	98	90-110
	Magnesium	200.8	779129	2030	2000	101	90-110
	Manganese	200.8	779129	23.8	25.0	95	90-110
	Sodium	200.8	779129	2020	2000	101	90-110
	Lithium	200.8	779129	25.5	25.0	102	90-110
CCV 09/28/22 09:45							
	Aluminum	200.8	779129	253	250	101	90-110
	Arsenic	200.8	779129	24.5	25.0	98	90-110
	Cobalt	200.8	779129	24.4	25.0	98	90-110
	Iron	200.8	779129	246	250	98	90-110
	Magnesium	200.8	779129	2010	2000	100	90-110
	Manganese	200.8	779129	24.5	25.0	98	90-110
	Sodium	200.8	779129	2000	2000	100	90-110
	Lithium	200.8	779129	25.3	25.0	101	90-110
CCV 09/28/22 10:05							
	Aluminum	200.8	779129	248	250	99	90-110
	Arsenic	200.8	779129	24.6	25.0	98	90-110
	Cobalt	200.8	779129	24.7	25.0	99	90-110
	Iron	200.8	779129	248	250	99	90-110
	Magnesium	200.8	779129	1990	2000	100	90-110
	Manganese	200.8	779129	25.1	25.0	100	90-110
	Sodium	200.8	779129	1950	2000	98	90-110
	Lithium	200.8	779129	24.5	25.0	98	90-110
CCV 09/28/22 10:38							
	Aluminum	200.8	779129	251	250	101	90-110
	Arsenic	200.8	779129	24.6	25.0	98	90-110
	Cobalt	200.8	779129	24.6	25.0	98	90-110
	Iron	200.8	779129	246	250	98	90-110
	Magnesium	200.8	779129	2000	2000	100	90-110
	Manganese	200.8	779129	24.5	25.0	98	90-110
	Sodium	200.8	779129	1980	2000	99	90-110
	Lithium	200.8	779129	25.4	25.0	102	90-110

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
ICB 09/28/22 08:20				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 08:22				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 08:46				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 09:11				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	J
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.05	J
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U

Client:	Anchor QEA, LLC	**Service Request:**	K2210894
Project:	Greene County Treatability/221114-01.05 Task 05		

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
CCB 09/28/22 09:24				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.4	J
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 09:47				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	J
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.06	J
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 10:26				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U
CCB 09/28/22 10:40				
Aluminum	200.8	779129	0.5	U
Arsenic	200.8	779129	0.09	U
Cobalt	200.8	779129	0.009	U
Iron	200.8	779129	0.3	U
Magnesium	200.8	779129	2	U
Manganese	200.8	779129	0.04	U
Sodium	200.8	779129	20	U
Lithium	200.8	779129	0.10	U

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Aluminum	200.8	779129	4.3	4.0	107	50-199	09/28/22 08:24
Arsenic	200.8	779129	0.47	0.5	93	50-199	09/28/22 08:24
Cobalt	200.8	779129	0.020	0.02	98	50-199	09/28/22 08:24
Iron	200.8	779129	2.1	2.0	103	50-199	09/28/22 08:24
Magnesium	200.8	779129	9.7	10.0	97	50-199	09/28/22 08:24
Manganese	200.8	779129	0.19	0.2	97	50-199	09/28/22 08:24
Sodium	200.8	779129	37.2	50.0	74	50-199	09/28/22 08:24
Lithium	200.8	779129	0.12	0.1	115	50-199	09/28/22 08:24

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-05 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.1	0.1	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.2	0.04	200.8
Sodium	23	ug/L	50	20	200.8

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	3150	200.8
Cobalt 59	3150	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	3150	200.8
Sodium 23	450000	200.8

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
ZZZZZZ	1	09/28/22 08:13								
ZZZZZZ	1	09/28/22 08:15								
ICV	1	09/28/22 08:17	X	X	X	X	X	X	X	X
CCV	1	09/28/22 08:19	X	X	X	X	X	X	X	X
ICB	1	09/28/22 08:20	X	X	X	X	X	X	X	X
CCB	1	09/28/22 08:22	X	X	X	X	X	X	X	X
LLICVW	1	09/28/22 08:24	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 08:28								
ZZZZZZ	1	09/28/22 08:29								
ZZZZZZ	1	09/28/22 08:31								
ZZZZZZ	1	09/28/22 08:33								
ZZZZZZ	1	09/28/22 08:34								
ZZZZZZ	1	09/28/22 08:36								
ZZZZZZ	1	09/28/22 08:38								
ZZZZZZ	1	09/28/22 08:39								
ZZZZZZ	1	09/28/22 08:41								
ZZZZZZ	1	09/28/22 08:43								
CCV	1	09/28/22 08:44	X	X	X	X	X	X	X	X
CCB	1	09/28/22 08:46	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 08:48								
ZZZZZZ	1	09/28/22 08:49								
ZZZZZZ	1	09/28/22 08:51								
ZZZZZZ	1	09/28/22 08:53								
ZZZZZZ	1	09/28/22 08:54								
ZZZZZZ	1	09/28/22 08:56								
ZZZZZZ	1	09/28/22 08:58								
ZZZZZZ	1	09/28/22 08:59								
ZZZZZZ	1	09/28/22 09:01								
ZZZZZZ	1	09/28/22 09:03								
CCV	1	09/28/22 09:04	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 09:06								
CCB	1	09/28/22 09:11	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 09:13								
ZZZZZZ	50	09/28/22 09:19								
ZZZZZZ	50	09/28/22 09:21								
CCV	1	09/28/22 09:22	X	X	X	X	X	X	X	X
CCB	1	09/28/22 09:24	X	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn	Na
KQ2216206-01MB	1	09/28/22 09:29	X	X	X	X	X	X	X	X
KQ2216206-03LCS	1	09/28/22 09:30	X	X	X	X	X	X	X	X
KQ2216206-04DLCS	1	09/28/22 09:32	X	X	X	X	X	X	X	X
K2210894-001	1	09/28/22 09:34	X	X	X			X		X
K2210894-002	1	09/28/22 09:35		X	X					
K2210894-003	1	09/28/22 09:37	X	X		X	X	X	X	X
K2210894-004	1	09/28/22 09:39		X		X	X			
K2210894-005	1	09/28/22 09:40	X	X		X	X	X	X	X
K2210894-006	1	09/28/22 09:42		X		X	X			
K2210894-007	1	09/28/22 09:44	X	X	X	X	X	X	X	X
CCV	1	09/28/22 09:45	X	X	X	X	X	X	X	X
CCB	1	09/28/22 09:47	X	X	X	X	X	X	X	X
K2210894-008	1	09/28/22 09:49		X	X	X	X			
K2210894-009	1	09/28/22 09:50	X	X		X	X	X	X	X
K2210894-010	1	09/28/22 09:52		X		X	X			
K2210894-011	1	09/28/22 09:54	X		X	X		X	X	X
K2210894-012	1	09/28/22 09:55			X	X				
K2210894-013	1	09/28/22 09:57		X	X					
K2210894-014	1	09/28/22 09:59		X			X			
K2210894-015	1	09/28/22 10:00		X			X			
K2210894-016	1	09/28/22 10:02		X	X		X			
K2210894-017	1	09/28/22 10:04		X			X			
CCV	1	09/28/22 10:05	X	X	X	X	X	X	X	X
ZZZZZZ	1	09/28/22 10:07								
CCB	1	09/28/22 10:26	X	X	X	X	X	X	X	X
K2210894-018	1	09/28/22 10:27			X					
K2210894-001	100	09/28/22 10:34				X			X	
K2210894-002	100	09/28/22 10:36				X				
CCV	1	09/28/22 10:38	X	X	X	X	X	X	X	X
CCB	1	09/28/22 10:40	X	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	09/28/22 08:13			
ZZZZZZ	09/28/22 08:15			
ICV	09/28/22 08:17	98	100	98
CCV	09/28/22 08:19	100	100	98
ICB	09/28/22 08:20	99	101	98
CCB	09/28/22 08:22	99	100	99
LLICVW	09/28/22 08:24	101	99	100
ZZZZZZ	09/28/22 08:28			
ZZZZZZ	09/28/22 08:29			
ZZZZZZ	09/28/22 08:31			
ZZZZZZ	09/28/22 08:33			
ZZZZZZ	09/28/22 08:34			
ZZZZZZ	09/28/22 08:36			
ZZZZZZ	09/28/22 08:38			
ZZZZZZ	09/28/22 08:39			
ZZZZZZ	09/28/22 08:41			
ZZZZZZ	09/28/22 08:43			
CCV	09/28/22 08:44	99	102	100
CCB	09/28/22 08:46	97	98	98
ZZZZZZ	09/28/22 08:48			
ZZZZZZ	09/28/22 08:49			
ZZZZZZ	09/28/22 08:51			
ZZZZZZ	09/28/22 08:53			
ZZZZZZ	09/28/22 08:54			
ZZZZZZ	09/28/22 08:56			
ZZZZZZ	09/28/22 08:58			
ZZZZZZ	09/28/22 08:59			
ZZZZZZ	09/28/22 09:01			
ZZZZZZ	09/28/22 09:03			
CCV	09/28/22 09:04	95	99	99
ZZZZZZ	09/28/22 09:06			
CCB	09/28/22 09:11	98	97	96
ZZZZZZ	09/28/22 09:13			
ZZZZZZ	09/28/22 09:19			
ZZZZZZ	09/28/22 09:21			
CCV	09/28/22 09:22	93	95	97
CCB	09/28/22 09:24	98	98	98

Client: Anchor QEA, LLC **Service Request:** K2210894
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **779129**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
KQ2216206-01MB	09/28/22 09:29	99	97	97
KQ2216206-03LCS	09/28/22 09:30	99	97	99
KQ2216206-04DLCS	09/28/22 09:32	98	99	99
K2210894-001	09/28/22 09:34	77	76	75
K2210894-002	09/28/22 09:35	75	75	77
K2210894-003	09/28/22 09:37	89	89	91
K2210894-004	09/28/22 09:39	91	91	91
K2210894-005	09/28/22 09:40	98	97	98
K2210894-006	09/28/22 09:42	93	92	92
K2210894-007	09/28/22 09:44	96	95	94
CCV	09/28/22 09:45	100	99	100
CCB	09/28/22 09:47	100	97	98
K2210894-008	09/28/22 09:49	88	86	86
K2210894-009	09/28/22 09:50	98	98	97
K2210894-010	09/28/22 09:52	95	97	96
K2210894-011	09/28/22 09:54	95	95	92
K2210894-012	09/28/22 09:55	84	83	83
K2210894-013	09/28/22 09:57	78	76	77
K2210894-014	09/28/22 09:59	84	85	90
K2210894-015	09/28/22 10:00	92	91	91
K2210894-016	09/28/22 10:02	89	87	88
K2210894-017	09/28/22 10:04	97	97	98
CCV	09/28/22 10:05	99	100	101
ZZZZZZ	09/28/22 10:07			
CCB	09/28/22 10:26	99	97	96
K2210894-018	09/28/22 10:27	87	83	82
K2210894-001	09/28/22 10:34	99	96	95
K2210894-002	09/28/22 10:36	96	96	97
CCV	09/28/22 10:38	98	98	98
CCB	09/28/22 10:40	99	97	99

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 406860
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216206-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1% HNO3 0.2% HCl
2	KQ2216206-03	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
3	KQ2216206-04	DLCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1% HNO3 0.2% HCl
4	K2210894-001	MW-1-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
5	K2210894-002	MW-1-FB-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
6	K2210894-003	MW-5-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
7	K2210894-004	MW-5-FB-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
8	K2210894-005	MW-10-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
9	K2210894-006	MW-10-FB-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
10	K2210894-007	MW-14-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
11	K2210894-008	MW-14-FB-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
12	K2210894-009	MW-17-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
13	K2210894-010	MW-17-FB-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
14	K2210894-011	MW-44H-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
15	K2210894-012	MW-44H-FB-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
16	K2210894-013	MW-1-INF-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
17	K2210894-014	MW-5-INF-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
18	K2210894-015	MW-10-INF-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
19	K2210894-016	MW-14-INF-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
20	K2210894-017	MW-17-INF-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl
21	K2210894-018	MW-44H-INF-20220916	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1% HNO3 0.2% HCl

Spiking Solutions

Name:	k-met 1/100 QCP-CICV-3	Inventory ID	221910	Logbook Ref:	MET4-24-I	Expires On:	03/02/2023

KQ2216206-03 0.10mL KQ2216206-04 0.10mL

Name:	k-met 1/100 QCP CICV-1	Inventory ID	221911	Logbook Ref:	MET4-25-A	Expires On:	12/02/2022

KQ2216206-03 0.10mL KQ2216206-04 0.10mL

Name:	K-MET 10ppm Li	Inventory ID	223041	Logbook Ref:	MET4-29-F	Expires On:	10/31/2023

KQ2216206-03 0.05mL KQ2216206-04 0.05mL

Preparation Information Benchsheet

Prep Run#: 406860
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 9/23/22 14:02

Name:	K-MET Mo/U 5ppm	Inventory ID	223460	Logbook Ref:	MET4-30-A	Expires On:	03/31/2023

KQ2216206-03	0.05mL	KQ2216206-04	0.05mL

Name:	k-met Sb 1ug/mL Sb	Inventory ID	225112	Logbook Ref:	MET4-32-E	Expires On:	06/08/2023

KQ2216206-03	0.10mL	KQ2216206-04	0.10mL

Preparation Materials

K-MET 16 mL Tube	P498723 (223738)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 9/23/22 14:02
Finished: 9/23/22 16:02
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-18	Digestion	IR Thermometer ID: IR03		K-BlockDigester-18	Digestion	Temperature	94 deg C
K-BlockDigester-18	Digestion	Temperature Check Location	11	K-CR100-1000A	Digestion		
K-CR 20-200B	Digestion						

Comments: ____________________

Reviewed By: ____________________ Date: 9.26.22

Printed 9/26/22 6:49

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

9/23/22 14:02-18:02
B18 TL11 / T94

Preparation Information Benchsheet

* Li: 223041

9/128

Prep Run#: 406860
Team: Metals/SSOLADEY
Number of Copies to make: 1

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 12:44

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216206-01	MB		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
2	KQ2216206-02	LCS IDLCS		200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
3	K2210894-001	MW-1-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
4	KQ2216206-04	K2210894-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
5	~~KQ2216206-03~~	~~K2210894-001 MS~~	~~.01~~	~~200.8/Metals D~~		Liquid	10.0000mL		1% HNO3 0.2% HCl
6	K2210894-002	MW-1-FB-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
7	KQ2216206-06	K2210894-002 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
8	~~KQ2216206-05~~	~~K2210894-002 MS~~	.01	200.8/Metals D		Liquid	10.0000mL		1% HNO3 0.2% HCl
9	K2210894-003	MW-5-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
10	K2210894-004	MW-5-FB-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
11	K2210894-005	MW-10-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
12	K2210894-006	MW-10-FB-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
13	K2210894-007	MW-14-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
14	K2210894-008	MW-14-FB-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
15	K2210894-009	MW-17-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
16	K2210894-010	MW-17-FB-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
17	K2210894-011	MW-44H-HT-MMO-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
18	K2210894-012	MW-44H-FB-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
19	K2210894-013	MW-1-INF-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
20	K2210894-014	MW-5-INF-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
21	K2210894-015	MW-10-INF-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
22	K2210894-016	MW-14-INF-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
23	K2210894-017	MW-17-INF-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl
24	K2210894-018	MW-44H-INF-20220916	.01	200.8/Metals D		Water	10.0000mL		1% HNO3 0.2% HCl

Spiking Solutions

Name:	k-met 1/100 QCP-CICV-3	Inventory ID	221910	Logbook Ref:	MET4-24-I	Expires On:	03/02/2023

KQ2216206-02 0.10mL KQ2216206-03 0.10mL KQ2216206-05 0.10mL

Name:	k-met 1/100 QCP CICV-1	Inventory ID	221911	Logbook Ref:	MET4-25-A	Expires On:	12/02/2022

KQ2216206-02 0.10mL KQ2216206-03 0.10mL KQ2216206-05 0.10mL

Preparation Information Benchsheet

Prep Run#: 406860
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/22/22 12:44

Name: k-met Sb 1ug/mL Sb	Inventory ID 222918	Logbook Ref: MET4-29-E	Expires On: 07/12/2023
KQ2216206-02 0.10mL	KQ2216206-03 0.10mL	KQ2216206-05 0.10mL	
Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216206-02 0.05mL	KQ2216206-03 0.05mL	KQ2216206-05 0.05mL	

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ____________________

Reviewed By: ________________ Date: ____________

Service Request # K2210892, K2210894
Instrument ID # K-ICP-MS-05
Calibration 092822A1ICPMS05
ALS LIMS Run # 779129
Cal Std: MS30-39-J ICSA Std: NA
ICV Std: MS30-39-I ICSAB Std: NA
LLICV Std: MS30-38-H
I.S. Solution: MS29-79-M
EPA Tune Solution: MS29-86-C
Pipette IDs: 41785872, 38480473, 41684999

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments:

Prep Batch: 406859, 406860

Primary Review by SC Date 9/28/22

Secondary Review by Date 9/28/22

Data Review Form

Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\092822A1.csv**
RUNNO: **779129**

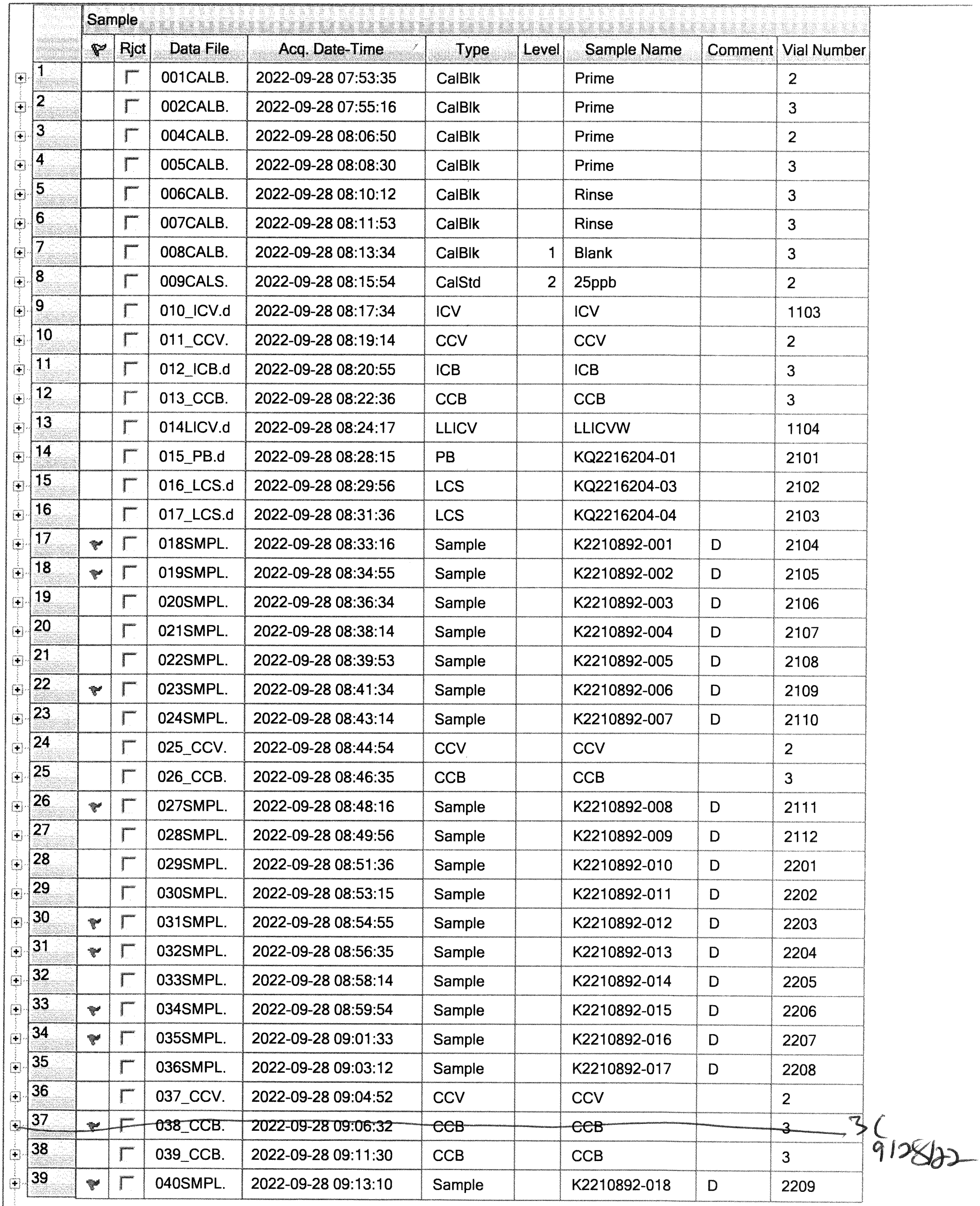
K2210892

No exceptions to report.

K2210894

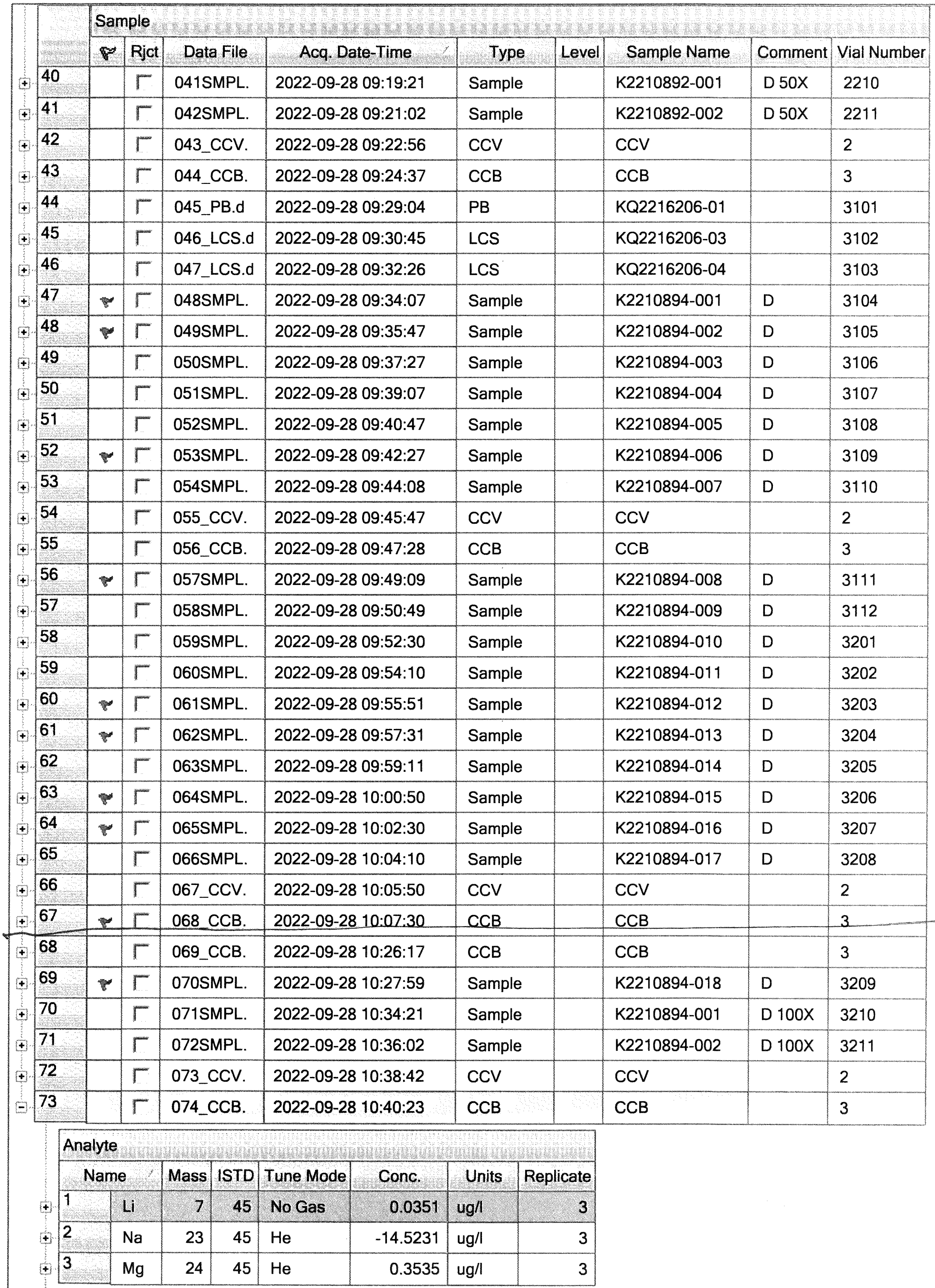
No exceptions to report.

Primary Approver: JL 9/28/22
Secondary Approver: Gw 9/28/22



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		☐	001CALB.	2022-09-28 07:53:35	CalBlk		Prime		2
2		☐	002CALB.	2022-09-28 07:55:16	CalBlk		Prime		3
3		☐	004CALB.	2022-09-28 08:06:50	CalBlk		Prime		2
4		☐	005CALB.	2022-09-28 08:08:30	CalBlk		Prime		3
5		☐	006CALB.	2022-09-28 08:10:12	CalBlk		Rinse		3
6		☐	007CALB.	2022-09-28 08:11:53	CalBlk		Rinse		3
7		☐	008CALB.	2022-09-28 08:13:34	CalBlk	1	Blank		3
8		☐	009CALS.	2022-09-28 08:15:54	CalStd	2	25ppb		2
9		☐	010_ICV.d	2022-09-28 08:17:34	ICV		ICV		1103
10		☐	011_CCV.	2022-09-28 08:19:14	CCV		CCV		2
11		☐	012_ICB.d	2022-09-28 08:20:55	ICB		ICB		3
12		☐	013_CCB.	2022-09-28 08:22:36	CCB		CCB		3
13		☐	014LICV.d	2022-09-28 08:24:17	LLICV		LLICVW		1104
14		☐	015_PB.d	2022-09-28 08:28:15	PB		KQ2216204-01		2101
15		☐	016_LCS.d	2022-09-28 08:29:56	LCS		KQ2216204-03		2102
16		☐	017_LCS.d	2022-09-28 08:31:36	LCS		KQ2216204-04		2103
17	⚑	☐	018SMPL.	2022-09-28 08:33:16	Sample		K2210892-001	D	2104
18	⚑	☐	019SMPL.	2022-09-28 08:34:55	Sample		K2210892-002	D	2105
19		☐	020SMPL.	2022-09-28 08:36:34	Sample		K2210892-003	D	2106
20		☐	021SMPL.	2022-09-28 08:38:14	Sample		K2210892-004	D	2107
21		☐	022SMPL.	2022-09-28 08:39:53	Sample		K2210892-005	D	2108
22	⚑	☐	023SMPL.	2022-09-28 08:41:34	Sample		K2210892-006	D	2109
23		☐	024SMPL.	2022-09-28 08:43:14	Sample		K2210892-007	D	2110
24		☐	025_CCV.	2022-09-28 08:44:54	CCV		CCV		2
25		☐	026_CCB.	2022-09-28 08:46:35	CCB		CCB		3
26	⚑	☐	027SMPL.	2022-09-28 08:48:16	Sample		K2210892-008	D	2111
27		☐	028SMPL.	2022-09-28 08:49:56	Sample		K2210892-009	D	2112
28		☐	029SMPL.	2022-09-28 08:51:36	Sample		K2210892-010	D	2201
29		☐	030SMPL.	2022-09-28 08:53:15	Sample		K2210892-011	D	2202
30	⚑	☐	031SMPL.	2022-09-28 08:54:55	Sample		K2210892-012	D	2203
31	⚑	☐	032SMPL.	2022-09-28 08:56:35	Sample		K2210892-013	D	2204
32		☐	033SMPL.	2022-09-28 08:58:14	Sample		K2210892-014	D	2205
33	⚑	☐	034SMPL.	2022-09-28 08:59:54	Sample		K2210892-015	D	2206
34	⚑	☐	035SMPL.	2022-09-28 09:01:33	Sample		K2210892-016	D	2207
35		☐	036SMPL.	2022-09-28 09:03:12	Sample		K2210892-017	D	2208
36		☐	037_CCV.	2022-09-28 09:04:52	CCV		CCV		2
37	⚑	☐	~~038_CCB.~~	~~2022-09-28 09:06:32~~	~~CCB~~		~~CCB~~		~~3~~
38		☐	039_CCB.	2022-09-28 09:11:30	CCB		CCB		3
39	⚑	☐	040SMPL.	2022-09-28 09:13:10	Sample		K2210892-018	D	2209

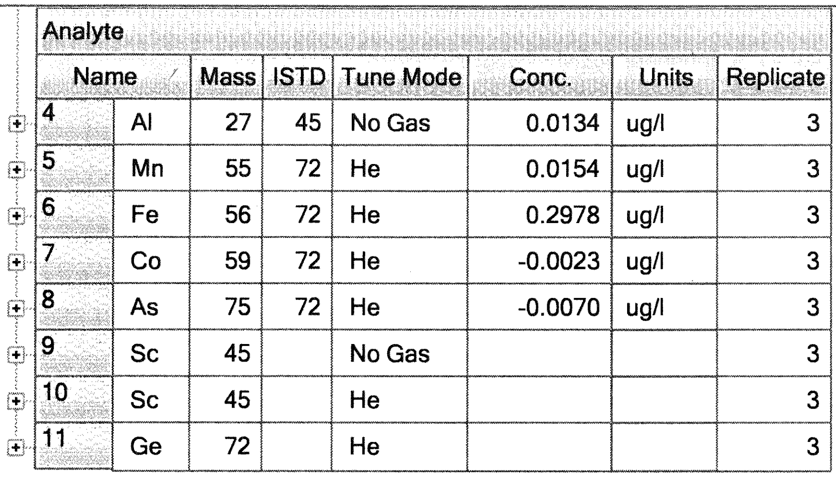
3(9/28/22



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
40		☐	041SMPL.	2022-09-28 09:19:21	Sample		K2210892-001	D 50X	2210
41		☐	042SMPL.	2022-09-28 09:21:02	Sample		K2210892-002	D 50X	2211
42		☐	043_CCV.	2022-09-28 09:22:56	CCV		CCV		2
43		☐	044_CCB.	2022-09-28 09:24:37	CCB		CCB		3
44		☐	045_PB.d	2022-09-28 09:29:04	PB		KQ2216206-01		3101
45		☐	046_LCS.d	2022-09-28 09:30:45	LCS		KQ2216206-03		3102
46		☐	047_LCS.d	2022-09-28 09:32:26	LCS		KQ2216206-04		3103
47	⚑	☐	048SMPL.	2022-09-28 09:34:07	Sample		K2210894-001	D	3104
48	⚑	☐	049SMPL.	2022-09-28 09:35:47	Sample		K2210894-002	D	3105
49		☐	050SMPL.	2022-09-28 09:37:27	Sample		K2210894-003	D	3106
50		☐	051SMPL.	2022-09-28 09:39:07	Sample		K2210894-004	D	3107
51		☐	052SMPL.	2022-09-28 09:40:47	Sample		K2210894-005	D	3108
52	⚑	☐	053SMPL.	2022-09-28 09:42:27	Sample		K2210894-006	D	3109
53		☐	054SMPL.	2022-09-28 09:44:08	Sample		K2210894-007	D	3110
54		☐	055_CCV.	2022-09-28 09:45:47	CCV		CCV		2
55		☐	056_CCB.	2022-09-28 09:47:28	CCB		CCB		3
56	⚑	☐	057SMPL.	2022-09-28 09:49:09	Sample		K2210894-008	D	3111
57		☐	058SMPL.	2022-09-28 09:50:49	Sample		K2210894-009	D	3112
58		☐	059SMPL.	2022-09-28 09:52:30	Sample		K2210894-010	D	3201
59		☐	060SMPL.	2022-09-28 09:54:10	Sample		K2210894-011	D	3202
60	⚑	☐	061SMPL.	2022-09-28 09:55:51	Sample		K2210894-012	D	3203
61	⚑	☐	062SMPL.	2022-09-28 09:57:31	Sample		K2210894-013	D	3204
62		☐	063SMPL.	2022-09-28 09:59:11	Sample		K2210894-014	D	3205
63	⚑	☐	064SMPL.	2022-09-28 10:00:50	Sample		K2210894-015	D	3206
64	⚑	☐	065SMPL.	2022-09-28 10:02:30	Sample		K2210894-016	D	3207
65		☐	066SMPL.	2022-09-28 10:04:10	Sample		K2210894-017	D	3208
66		☐	067_CCV.	2022-09-28 10:05:50	CCV		CCV		2
67	⚑	☐	~~068_CCB.~~	~~2022-09-28 10:07:30~~	~~CCB~~		~~CCB~~		~~3~~
68		☐	069_CCB.	2022-09-28 10:26:17	CCB		CCB		3
69	⚑	☐	070SMPL.	2022-09-28 10:27:59	Sample		K2210894-018	D	3209
70		☐	071SMPL.	2022-09-28 10:34:21	Sample		K2210894-001	D 100X	3210
71		☐	072SMPL.	2022-09-28 10:36:02	Sample		K2210894-002	D 100X	3211
72		☐	073_CCV.	2022-09-28 10:38:42	CCV		CCV		2
73		☐	074_CCB.	2022-09-28 10:40:23	CCB		CCB		3

ZC
9/28/22

	Analyte						
	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Li	7	45	No Gas	0.0351	ug/l	3
2	Na	23	45	He	-14.5231	ug/l	3
3	Mg	24	45	He	0.3535	ug/l	3



Analyte							
Name		Mass	ISTD	Tune Mode	Conc.	Units	Replicate
4	Al	27	45	No Gas	0.0134	ug/l	3
5	Mn	55	72	He	0.0154	ug/l	3
6	Fe	56	72	He	0.2978	ug/l	3
7	Co	59	72	He	-0.0023	ug/l	3
8	As	75	72	He	-0.0070	ug/l	3
9	Sc	45		No Gas			3
10	Sc	45		He			3
11	Ge	72		He			3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\092822.b
Acq. Date-Time	2022-09-28 07:09:11
Report Comment	ALS Tune
Instrument Name	G3281A JP13482848

[No Gas]

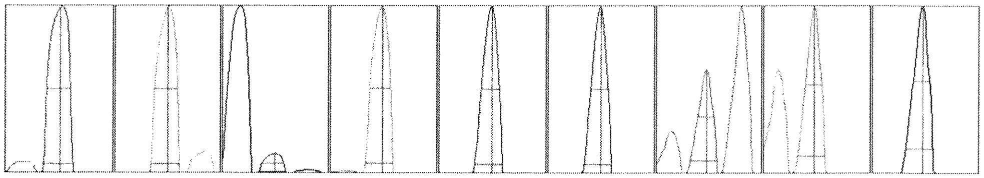
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	68713.11	1.587	5.000	
9	21081.74	1.351	5.000	
24	59890.61	1.672	5.000	
59	88324.62	2.091	5.000	
115	171764.55	1.117	5.000	
140	180964.61	1.038	5.000	
208	149166.64	0.775	5.000	
209	230238.23	0.954	5.000	
238	341047.48	1.166	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	6698	6845	6910	6919	6985
9	2059	2123	2109	2120	2129
24	5812	6021	6047	6048	6018
59	8530	8799	8900	8924	9009
115	16895	17097	17373	17188	17329
140	17813	18099	18223	18045	18302
208	14758	14855	14959	15065	14946
209	22759	22862	23024	23292	23181
238	33651	33847	34229	34104	34692

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	11124.76	7.05	6.90 - 7.10		0.821		0.900
9	3525.45	9.05	8.90 - 9.10		0.786		0.900
24	10454.62	24.00	23.90 - 24.10		0.770		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	15821.58	59.00	58.90 - 59.10		0.779		0.900
115	34418.45	115.00	114.90 - 115.10		0.771		0.900
140	37665.15	140.00	139.90 - 140.10		0.761		0.900
208	30588.07	207.95	207.90 - 208.10		0.750		0.900
209	49164.74	208.95	208.90 - 209.10		0.753		0.900
238	69607.12	237.95	237.90 - 238.10		0.771		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	12.2 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	128	Axis Gain	1.0004	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.9 mm

EM

Discriminator	4.5 mV	Analog HV	1790 V	Pulse HV	1436 V

Calibration Blank Report

Sample Name	Blank
File Name	008CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:13:34
Sample Type	CalBlk
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	330.01	10.9
Al	27	45	No Gas	1736.77	6.7
Na	23	45	He	30039.81	34.5
Mg	24	45	He	13.33	114.6
Mn	55	72	He	60.00	16.7
Fe	56	72	He	1330.08	17.2
Co	59	72	He	24.44	63.0
As	75	72	He	5.33	10.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	2686723.50	0.3
Sc	45	He	129904.93	1.1
Ge	72	He	109315.57	1.1

JC
9/28/22

Calibration Standard Report

Sample Name 25ppb

File Name 009CALS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:15:54

Sample Type CalStd

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	264252.04	0.9
Al	27	45	No Gas	2812759.96	2.2
Na	23	45	He	1024445.82	0.8
Mg	24	45	He	504354.71	1.8
Mn	55	72	He	38810.67	2.2
Fe	56	72	He	682478.35	0.9
Co	59	72	He	143629.21	0.6
As	75	72	He	9332.56	1.1

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2758558.50	0.7	2686723.5	102.67	
Sc	45	He	129720.27	1.8	129904.93	99.86	
Ge	72	He	108195.24	2.5	109315.57	98.98	

Initial Calibration Verification (ICV) Report

Sample Name ICV

File Name 010_ICV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:17:34

Sample Type ICV

Comment ---

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	26.8855	ug/l	0.9	271179.81	107.54	
Al	27	45	No Gas	104.1233	ug/l	1.1	1118908.35	104.12	
Na	23	45	He	237.6410	ug/l	1.0	147615.70	95.06	
Mg	24	45	He	252.7769	ug/l	0.4	63544.10	101.11	
Mn	55	72	He	25.0666	ug/l	2.8	38533.25	100.27	
Fe	56	72	He	50.0442	ug/l	2.0	136357.98	100.09	
Co	59	72	He	25.3143	ug/l	0.5	144051.73	101.26	
As	75	72	He	24.9767	ug/l	1.2	9234.50	99.91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2632658.14	1.0	2686723.5	97.99	
Sc	45	He	129280.79	0.4	129904.93	99.52	
Ge	72	He	107131.50	0.1	109315.57	98	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	011_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:19:14
Sample Type	CCV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2598	ug/l	2.5	259131.66	101.04	
Al	27	45	No Gas	250.0257	ug/l	2.7	2729850.69	100.01	
Na	23	45	He	1969.4248	ug/l	1.6	1010655.87	98.47	
Mg	24	45	He	2012.7028	ug/l	1.5	508202.31	100.64	
Mn	55	72	He	25.4663	ug/l	2.8	39027.95	101.87	
Fe	56	72	He	252.3448	ug/l	2.3	680285.38	100.94	
Co	59	72	He	24.9570	ug/l	2.7	141590.61	99.83	
As	75	72	He	24.7978	ug/l	2.9	9140.46	99.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2678432.62	2.9	2686723.5	99.69	
Sc	45	He	129888.08	1.2	129904.93	99.99	
Ge	72	He	106840.55	1.8	109315.57	97.74	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	012_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:20:55
Sample Type	ICB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0084	ug/l	53.3	413.35	
Al	27	45	No Gas	0.0016	ug/l	875.1	1741.77	
Na	23	45	He	-13.8363	ug/l	N/A	23405.83	
Mg	24	45	He	0.0253	ug/l	403.4	20.00	
Mn	55	72	He	0.0338	ug/l	59.6	110.00	
Fe	56	72	He	0.0186	ug/l	214.4	1346.75	
Co	59	72	He	-0.0007	ug/l	N/A	20.00	
As	75	72	He	-0.0096	ug/l	N/A	1.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2665865.32	2.0	2686723.5	99.22	
Sc	45	He	131792.36	1.6	129904.93	101.45	
Ge	72	He	106642.01	1.7	109315.57	97.55	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	013_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:22:36
Sample Type	CCB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0027	ug/l	250.7	353.35	
Al	27	45	No Gas	-0.0084	ug/l	N/A	1628.43	
Na	23	45	He	-13.5501	ug/l	N/A	23115.52	
Mg	24	45	He	0.0667	ug/l	57.7	30.00	
Mn	55	72	He	0.0285	ug/l	71.6	103.33	
Fe	56	72	He	0.0166	ug/l	493.2	1356.75	
Co	59	72	He	-0.0019	ug/l	N/A	13.33	
As	75	72	He	-0.0070	ug/l	N/A	2.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2659484.65	1.4	2686723.5	98.99	
Sc	45	He	129346.41	1.3	129904.93	99.57	
Ge	72	He	107849.04	0.5	109315.57	98.66	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	014LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:24:17
Sample Type	LLICV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.1152	ug/l	12.7	1526.76	115.2	
Al	27	45	No Gas	4.2695	ug/l	5.3	48910.89	106.74	
Na	23	45	He	37.1757	ug/l	13.5	48152.39	74.35	
Mg	24	45	He	9.6707	ug/l	2.1	2440.23	96.71	
Mn	55	72	He	0.1935	ug/l	8.9	363.34	96.75	
Fe	56	72	He	2.0619	ug/l	7.4	7014.97	103.1	
Co	59	72	He	0.0195	ug/l	11.9	137.78	97.5	
As	75	72	He	0.4671	ug/l	3.7	181.67	93.42	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2712649.44	2.8	2686723.5	100.96	
Sc	45	He	129099.33	1.7	129904.93	99.38	
Ge	72	He	109429.85	0.5	109315.57	100.1	

Prep Blank (PB) Report

Sample Name KQ2216204-01

File Name 015_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:28:15

Sample Type PB

Comment ---

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0010	ug/l	414.7	340.01	
Al	27	45	No Gas	3.2477	ug/l	1.0	37260.89	
Na	23	45	He	-12.4584	ug/l	N/A	23916.46	
Mg	24	45	He	5.0473	ug/l	8.7	1296.74	
Mn	55	72	He	0.0483	ug/l	92.7	133.34	
Fe	56	72	He	0.1933	ug/l	32.2	1823.48	
Co	59	72	He	0.0005	ug/l	320.5	26.67	
As	75	72	He	-0.0033	ug/l	N/A	4.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2684030.17	1.5	2686723.5	99.9	
Sc	45	He	130980.02	3.0	129904.93	100.83	
Ge	72	He	107057.73	1.3	109315.57	97.93	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216204-03

File Name 016_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:29:56

Sample Type LCS

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	50.7005	ug/l	3.1	521237.74	50	101.4	
Al	27	45	No Gas	103.7759	ug/l	2.3	1137441.08	100	103.78	
Na	23	45	He	231.1552	ug/l	4.1	146130.20	250	92.46	
Mg	24	45	He	245.2772	ug/l	3.5	62397.08	250	98.11	
Mn	55	72	He	24.6713	ug/l	2.5	38049.18	25	98.69	
Fe	56	72	He	48.1275	ug/l	1.6	131605.08	50	96.26	
Co	59	72	He	24.7215	ug/l	1.5	141128.14	25	98.89	
As	75	72	He	47.5166	ug/l	1.6	17619.40	50	95.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2686092.36	2.5	2686723.5	99.98	
Sc	45	He	130886.56	2.0	129904.93	100.76	
Ge	72	He	107480.12	0.7	109315.57	98.32	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216204-04
File Name	017_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:31:36
Sample Type	LCS
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.5016	ug/l	1.1	505937.13	50	97	
Al	27	45	No Gas	100.0320	ug/l	1.3	1112342.48	100	100.03	
Na	23	45	He	230.1031	ug/l	2.4	145277.40	250	92.04	
Mg	24	45	He	248.6379	ug/l	2.8	63119.21	250	99.46	
Mn	55	72	He	23.8234	ug/l	0.7	37764.92	25	95.29	
Fe	56	72	He	47.2474	ug/l	1.3	132814.10	50	94.49	
Co	59	72	He	23.7628	ug/l	2.4	139407.62	25	95.05	
As	75	72	He	46.2478	ug/l	2.7	17622.74	50	92.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2724257.04	1.4	2686723.5	101.4	
Sc	45	He	130543.69	0.6	129904.93	100.49	
Ge	72	He	110469.58	1.4	109315.57	101.06	

Sample Report

Sample Name K2210892-001
File Name 018SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time 2022-09-28 08:33:16
Sample Type Sample
Comment D
ISTD Ref FileName 008CALB.d
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6043	ug/l	1.2	44896.44	
Al	27	45	No Gas	729.2470	ug/l	1.0	6187771.99	
Na	23	45	He	49308.4520	ug/l	2.8	18312294.73	
Mg	24	45	He	45590.1835	ug/l	1.1	8576565.91	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~27661.9625~~	~~ug/l~~	~~2.8~~	~~32898954.51~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~115698.3254~~	~~ug/l~~	~~1.0~~	~~241962023.06~~	~~>LDR~~
Co	59	72	He	236.4021	ug/l	1.4	1042269.54	
As	75	72	He	0.4319	ug/l	10.2	127.67	

* See Dilution

* 3L
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2081524.08	1.2	2686723.5	77.47	
Sc	45	He	96774.60	1.8	129904.93	74.5	
Ge	72	He	83025.53	1.3	109315.57	75.95	

Sample Report

Sample Name K2210892-002

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:34:55

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.6613	ug/l	1.1	42728.03	
Al	27	45	No Gas	4.3326	ug/l	1.3	35898.21	
Na	23	45	He	49331.8348	ug/l	2.5	18256589.73	
Mg	24	45	He	31353.7074	ug/l	1.2	5876968.87	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15390.6963~~	~~ug/l~~	~~3.6~~	~~18071876.81~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~178619.9043~~	~~ug/l~~	~~3.2~~	~~368774501.17~~	~~>LDR~~
Co	59	72	He	244.6228	ug/l	2.3	1064910.17	
As	75	72	He	0.2082	ug/l	13.2	63.00	

See
Dilution
JC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1961053.15	0.4	2686723.5	72.99	
Sc	45	He	96412.49	0.4	129904.93	74.22	
Ge	72	He	81993.76	2.1	109315.57	75.01	

Sample Report

Sample Name K2210892-003

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:36:34

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	58.1194	ug/l	1.4	505454.30	
Al	27	45	No Gas	28.3146	ug/l	1.1	263592.54	
Na	23	45	He	20182.5396	ug/l	1.7	8907871.12	
Mg	24	45	He	39149.7598	ug/l	1.5	8736818.00	
Mn	55	72	He	12.6385	ug/l	3.3	17595.93	
Fe	56	72	He	5.6872	ug/l	3.7	15060.40	
Co	59	72	He	0.1692	ug/l	2.1	892.25	
As	75	72	He	0.4733	ug/l	10.7	163.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2271691.74	2.4	2686723.5	84.55	
Sc	45	He	114782.63	0.7	129904.93	88.36	
Ge	72	He	96901.18	1.0	109315.57	88.64	

Sample Report

Sample Name K2210892-004

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:38:14

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	77.5766	ug/l	1.3	509006.06	
Al	27	45	No Gas	5.9269	ug/l	2.2	42506.25	
Na	23	45	He	19892.4485	ug/l	1.2	8642310.50	
Mg	24	45	He	16695.9841	ug/l	0.7	3667200.99	
Mn	55	72	He	1798.7979	ug/l	1.1	2453932.25	
Fe	56	72	He	796.1668	ug/l	1.1	1910741.84	
Co	59	72	He	13.2070	ug/l	1.8	66806.37	
As	75	72	He	0.3990	ug/l	14.8	135.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1713841.02	0.6	2686723.5	63.79	
Sc	45	He	112977.50	1.0	129904.93	86.97	
Ge	72	He	95211.84	0.5	109315.57	87.1	

Sample Report

Sample Name	K2210892-005
File Name	022SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:39:53
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	203.0066	ug/l	2.5	2017033.88	
Al	27	45	No Gas	23.0627	ug/l	0.8	245709.23	
Na	23	45	He	27424.6107	ug/l	0.5	13527170.22	
Mg	24	45	He	41050.5423	ug/l	1.1	10243970.26	
Mn	55	72	He	0.4959	ug/l	17.6	830.05	
Fe	56	72	He	1.3983	ug/l	11.0	5130.91	
Co	59	72	He	0.0420	ug/l	31.2	264.45	
As	75	72	He	0.1037	ug/l	16.9	44.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2596219.07	1.0	2686723.5	96.63	
Sc	45	He	128366.71	0.8	129904.93	98.82	
Ge	72	He	108325.18	2.2	109315.57	99.09	

Sample Report

Sample Name	K2210892-006
File Name	023SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:41:34
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	255.6944	ug/l	4.5	2420051.11	
Al	27	45	No Gas	4.5416	ug/l	2.3	47391.69	
Na	23	45	He	27652.8516	ug/l	2.9	12819645.23	
Mg	24	45	He	15826.9149	ug/l	2.8	3712660.99	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3371.7220~~	~~ug/l~~	~~3.3~~	~~4892685.76~~	~~>LDR~~
Fe	56	72	He	681.1258	ug/l	1.9	1739608.36	
Co	59	72	He	0.7334	ug/l	4.1	3967.15	
As	75	72	He	0.1028	ug/l	31.3	40.67	

not needed
SC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2474754.91	2.6	2686723.5	92.11	
Sc	45	He	120723.01	3.2	129904.93	92.93	
Ge	72	He	101340.54	3.0	109315.57	92.7	

Sample Report

Sample Name	K2210892-007
File Name	024SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:43:14
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	470.6820	ug/l	1.9	4606469.52	
Al	27	45	No Gas	9.8355	ug/l	1.2	104159.20	
Na	23	45	He	30006.5400	ug/l	2.4	14546335.20	
Mg	24	45	He	51499.3703	ug/l	0.3	12637560.65	
Mn	55	72	He	624.6504	ug/l	3.0	946837.98	
Fe	56	72	He	1.8141	ug/l	4.4	6121.24	
Co	59	72	He	0.9857	ug/l	3.9	5562.06	
As	75	72	He	0.1350	ug/l	23.7	54.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2556993.56	0.9	2686723.5	95.17	
Sc	45	He	126221.71	2.2	129904.93	97.16	
Ge	72	He	105847.48	3.0	109315.57	96.83	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	025_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:44:54
Sample Type	CCV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.5018	ug/l	0.7	260088.13	102.01	
Al	27	45	No Gas	252.3910	ug/l	2.3	2739487.77	100.96	
Na	23	45	He	1942.0266	ug/l	1.2	1016675.58	97.1	
Mg	24	45	He	1965.0180	ug/l	1.2	505948.75	98.25	
Mn	55	72	He	25.3576	ug/l	0.5	39813.22	101.43	
Fe	56	72	He	250.8895	ug/l	1.7	692882.02	100.36	
Co	59	72	He	25.0560	ug/l	1.3	145628.68	100.22	
As	75	72	He	24.4724	ug/l	0.7	9241.51	97.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2661706.94	0.8	2686723.5	99.07	
Sc	45	He	132443.76	1.1	129904.93	101.95	
Ge	72	He	109420.31	0.2	109315.57	100.1	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	026_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 08:46:35
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0566	ug/l	8.1	883.37	
Al	27	45	No Gas	0.0151	ug/l	81.7	1845.12	
Na	23	45	He	-5.7326	ug/l	N/A	26607.03	
Mg	24	45	He	0.3228	ug/l	36.5	93.33	
Mn	55	72	He	0.0381	ug/l	52.1	116.67	
Fe	56	72	He	0.1387	ug/l	16.1	1670.12	
Co	59	72	He	-0.0005	ug/l	N/A	21.11	
As	75	72	He	0.0049	ug/l	98.5	7.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2604830.06	1.9	2686723.5	96.95	
Sc	45	He	127504.02	1.8	129904.93	98.15	
Ge	72	He	106639.38	2.0	109315.57	97.55	

Sample Report

Sample Name K2210892-008

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:48:16

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	564.9335	ug/l	1.6	5098856.59	
Al	27	45	No Gas	4.2254	ug/l	1.4	42138.46	
Na	23	45	He	31444.7859	ug/l	3.8	13891539.38	
Mg	24	45	He	26291.7385	ug/l	2.2	5878807.62	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4900.9753~~	~~ug/l~~	~~0.9~~	~~6787582.61~~	~~>LDR~~
Fe	56	72	He	9961.0653	ug/l	2.9	24252302.14	
Co	59	72	He	12.3744	ug/l	0.9	63555.43	
As	75	72	He	0.2134	ug/l	23.4	75.67	

not needed
JC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2358307.46	0.3	2686723.5	87.78	
Sc	45	He	115045.26	2.1	129904.93	88.56	
Ge	72	He	96670.70	2.0	109315.57	88.43	

Sample Report

Sample Name K2210892-009

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:49:56

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	540.3472	ug/l	0.9	5578790.96	
Al	27	45	No Gas	27.0268	ug/l	0.7	298903.49	
Na	23	45	He	47478.2409	ug/l	0.7	23360999.65	
Mg	24	45	He	58019.5747	ug/l	1.1	14456773.12	
Mn	55	72	He	3.6791	ug/l	12.9	5684.38	
Fe	56	72	He	2.1926	ug/l	3.0	7198.32	
Co	59	72	He	0.0662	ug/l	17.6	398.90	
As	75	72	He	0.1895	ug/l	22.3	75.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2697674.86	0.8	2686723.5	100.41	
Sc	45	He	128168.84	0.6	129904.93	98.66	
Ge	72	He	106829.47	1.2	109315.57	97.73	

Sample Report

Sample Name K2210892-010

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:51:36

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	598.9765	ug/l	0.7	6038463.66	
Al	27	45	No Gas	4.7619	ug/l	2.1	52820.22	
Na	23	45	He	45172.3457	ug/l	2.0	22600674.66	
Mg	24	45	He	24445.1296	ug/l	2.4	6192918.24	
Mn	55	72	He	1820.1679	ug/l	2.0	2805042.46	
Fe	56	72	He	647.1969	ug/l	2.0	1754943.00	
Co	59	72	He	2.1864	ug/l	1.8	12513.51	
As	75	72	He	0.8475	ug/l	4.8	319.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2634198.66	1.2	2686723.5	98.05	
Sc	45	He	130336.77	1.2	129904.93	100.33	
Ge	72	He	107571.25	0.8	109315.57	98.4	

Sample Report

Sample Name K2210892-011

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:53:15

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6669	ug/l	2.1	6027.80	
Al	27	45	No Gas	29.6473	ug/l	2.0	273724.00	
Na	23	45	He	25152.8086	ug/l	3.3	11447317.75	
Mg	24	45	He	38971.8748	ug/l	1.3	8974484.03	
Mn	55	72	He	2.3784	ug/l	4.9	3397.10	
Fe	56	72	He	2.2992	ug/l	7.3	6874.85	
Co	59	72	He	0.1351	ug/l	13.8	726.69	
As	75	72	He	0.2725	ug/l	7.5	97.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2253610.85	1.6	2686723.5	83.88	
Sc	45	He	118470.51	2.0	129904.93	91.2	
Ge	72	He	98145.37	1.2	109315.57	89.78	

Sample Report

Sample Name K2210892-012

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:54:55

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.5632	ug/l	3.4	30579.59	
Al	27	45	No Gas	4.5631	ug/l	3.7	42766.59	
Na	23	45	He	25030.9426	ug/l	2.3	10454114.43	
Mg	24	45	He	16601.8125	ug/l	1.0	3508295.68	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8935.6136~~	~~ug/l~~	~~1.0~~	~~11401238.16~~	~~>LDR~~
Fe	56	72	He	7894.7080	ug/l	0.7	17711143.07	
Co	59	72	He	31.1023	ug/l	1.9	147103.78	
As	75	72	He	0.3457	ug/l	18.0	110.67	

not needed
JL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2224149.76	3.6	2686723.5	82.78	
Sc	45	He	108690.91	1.3	129904.93	83.67	
Ge	72	He	89055.42	0.9	109315.57	81.47	

Sample Report

Sample Name K2210892-013

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:56:35

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.9366	ug/l	1.1	46951.62	
Al	27	45	No Gas	4.3545	ug/l	1.3	37809.08	
Na	23	45	He	49288.4194	ug/l	1.4	18393797.64	
Mg	24	45	He	31567.0947	ug/l	1.8	5965944.08	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~14829.8014~~	~~ug/l~~	~~1.9~~	~~17894842.65~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~168876.7757~~	~~ug/l~~	~~2.1~~	~~358282114.66~~	~~>LDR~~
Co	59	72	He	263.9374	ug/l	2.6	1180482.11	
As	75	72	He	3.8561	ug/l	11.0	1123.04	

* not needed
JL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2055477.36	0.5	2686723.5	76.5	
Sc	45	He	97224.32	0.9	129904.93	74.84	
Ge	72	He	84241.17	1.9	109315.57	77.06	

Sample Report

Sample Name K2210892-014

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:58:14

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	86.9386	ug/l	2.7	740731.08	
Al	27	45	No Gas	4.4656	ug/l	3.3	41943.03	
Na	23	45	He	20274.6857	ug/l	1.2	8578459.04	
Mg	24	45	He	17073.9290	ug/l	2.3	3652499.11	
Mn	55	72	He	1667.1714	ug/l	4.1	2295485.02	
Fe	56	72	He	6587.8313	ug/l	1.5	15952503.09	
Co	59	72	He	5.7347	ug/l	3.1	29290.40	
As	75	72	He	7.1258	ug/l	3.3	2368.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2226321.42	2.0	2686723.5	82.86	
Sc	45	He	110036.74	0.9	129904.93	84.71	
Ge	72	He	96137.24	2.0	109315.57	87.94	

Sample Report

Sample Name K2210892-015

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 08:59:54

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	265.4984	ug/l	2.4	2398385.74	
Al	27	45	No Gas	4.1886	ug/l	3.5	41806.11	
Na	23	45	He	27824.7696	ug/l	1.3	12539887.73	
Mg	24	45	He	15767.1576	ug/l	0.7	3595591.09	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3349.8326~~	~~ug/l~~	~~1.8~~	~~4787473.99~~	~~>LDR~~
Fe	56	72	He	4162.2651	ug/l	1.2	10460324.01	
Co	59	72	He	19.8027	ug/l	0.7	104933.21	
As	75	72	He	33.4398	ug/l	2.2	11509.89	

not needed
JL 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2360967.41	2.8	2686723.5	87.88	
Sc	45	He	117303.75	1.3	129904.93	90.3	
Ge	72	He	99757.33	0.7	109315.57	91.26	

Sample Report

Sample Name K2210892-016

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:01:33

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	584.5005	ug/l	1.6	5218504.82	
Al	27	45	No Gas	4.1121	ug/l	1.2	40609.93	
Na	23	45	He	31154.2657	ug/l	1.2	13518083.13	
Mg	24	45	He	26657.5250	ug/l	0.7	5853989.08	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~5005.6425~~	~~ug/l~~	~~1.5~~	~~6768839.69~~	>LDR
Fe	56	72	He	38969.1327	ug/l	0.4	92647158.62	
Co	59	72	He	35.7038	ug/l	1.5	178952.99	
As	75	72	He	19.0692	ug/l	3.2	6210.47	

not needed
SC 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2333442.25	2.4	2686723.5	86.85	
Sc	45	He	112961.87	1.0	129904.93	86.96	
Ge	72	He	94373.83	1.0	109315.57	86.33	

Sample Report

Sample Name K2210892-017

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:03:12

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	631.2972	ug/l	1.6	4535500.66	
Al	27	45	No Gas	3.9768	ug/l	0.9	31650.02	
Na	23	45	He	46625.9678	ug/l	1.9	20063448.45	
Mg	24	45	He	25324.7926	ug/l	2.4	5521181.79	
Mn	55	72	He	1866.9207	ug/l	4.3	2526048.81	
Fe	56	72	He	16187.2093	ug/l	2.6	38510610.26	
Co	59	72	He	8.4042	ug/l	2.9	42175.89	
As	75	72	He	276.4367	ug/l	2.5	90052.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1877586.17	1.8	2686723.5	69.88	
Sc	45	He	112133.49	3.8	129904.93	86.32	
Ge	72	He	94457.79	1.1	109315.57	86.41	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 037_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:04:52

Sample Type CCV

Comment ---

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.0639	ug/l	2.7	246046.21	100.26	
Al	27	45	No Gas	254.5632	ug/l	2.2	2660255.69	101.83	
Na	23	45	He	1952.3108	ug/l	0.7	987532.17	97.62	
Mg	24	45	He	1974.4199	ug/l	0.4	491273.95	98.72	
Mn	55	72	He	24.0903	ug/l	1.1	37497.96	96.36	
Fe	56	72	He	244.1662	ug/l	1.0	668462.62	97.67	
Co	59	72	He	24.3504	ug/l	1.0	140292.37	97.4	
As	75	72	He	24.0683	ug/l	2.4	9008.05	96.27	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2562995.22	2.4	2686723.5	95.39	
Sc	45	He	127980.89	0.9	129904.93	98.52	
Ge	72	He	108476.80	1.8	109315.57	99.23	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	038_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:06:32
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

sc
9/28/22

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1077	ug/l	21.0	1373.42	CCB Failed
Al	27	45	No Gas	0.0121	ug/l	94.1	1785.11	
Na	23	45	He	-3.7416	ug/l	N/A	27224.60	
Mg	24	45	He	0.2066	ug/l	41.5	63.33	
Mn	55	72	He	0.0794	ug/l	52.3	180.01	
Fe	56	72	He	0.3680	ug/l	11.6	2280.20	
Co	59	72	He	0.0001	ug/l	2757.0	24.45	
As	75	72	He	-0.0032	ug/l	N/A	4.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2567826.73	1.6	2686723.5	95.57	
Sc	45	He	125856.03	0.3	129904.93	96.88	
Ge	72	He	106437.30	1.4	109315.57	97.37	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	039_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:11:30
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0560	ug/l	6.4	886.70	
Al	27	45	No Gas	-0.0117	ug/l	N/A	1575.09	
Na	23	45	He	-4.3590	ug/l	N/A	27051.05	
Mg	24	45	He	0.5988	ug/l	76.0	160.00	
Mn	55	72	He	0.0524	ug/l	71.2	136.67	
Fe	56	72	He	0.3203	ug/l	10.4	2116.85	
Co	59	72	He	-0.0008	ug/l	N/A	18.89	
As	75	72	He	0.0005	ug/l	2046.4	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2631042.05	0.2	2686723.5	97.93	
Sc	45	He	126413.40	0.6	129904.93	97.31	
Ge	72	He	104683.02	1.7	109315.57	95.76	

Sample Report

Sample Name	K2210892-018
File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:13:10
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.7113	ug/l	0.6	32867.06	
Al	27	45	No Gas	3.9631	ug/l	1.3	38541.96	
Na	23	45	He	25157.2212	ug/l	0.8	10797156.92	
Mg	24	45	He	16604.1515	ug/l	1.3	3605291.30	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8329.0191~~	~~ug/l~~	~~2.1~~	~~10963585.67~~	~~>LDR~~
Fe	56	72	He	2.5820	ug/l	6.2	7098.32	
Co	59	72	He	297.9734	ug/l	2.5	1453955.64	
As	75	72	He	0.1742	ug/l	18.3	59.67	

not needed
JC 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2294301.01	1.5	2686723.5	85.39	
Sc	45	He	111679.61	1.5	129904.93	85.97	
Ge	72	He	91910.41	3.3	109315.57	84.08	

Sample Report

Sample Name K2210892-001

File Name 041SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:19:21

Sample Type Sample

Comment D 50X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1506	ug/l	4.7	1790.13	
Al	27	45	No Gas	15.5989	ug/l	0.8	164430.19	
Na	23	45	He	1011.9779	ug/l	0.9	512289.65	
Mg	24	45	He	954.4644	ug/l	2.1	231241.10	
Mn	55	72	He	578.4960	ug/l	2.3	865174.15	
Fe	56	72	He	2416.7869	ug/l	2.8	6355428.03	
~~Co~~	59	72	He	4.9548	ug/l	2.1	27490.78	
As	75	72	He	0.0041	ug/l	397.4	6.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2560293.19	0.5	2686723.5	95.29	
Sc	45	He	124633.12	1.6	129904.93	95.94	
Ge	72	He	104418.74	2.6	109315.57	95.52	

Sample Report

Sample Name K2210892-002

File Name 042SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:21:02

Sample Type Sample

Comment D 50X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1489	ug/l	8.2	1796.80	
Al	27	45	No Gas	0.3395	ug/l	6.1	5265.84	
Na	23	45	He	1025.6593	ug/l	1.5	515461.02	
Mg	24	45	He	669.1880	ug/l	2.2	161103.69	
Mn	55	72	He	315.5058	ug/l	1.1	477932.69	
Fe	56	72	He	3705.5144	ug/l	2.0	9869287.56	
Co	59	72	He	5.0848	ug/l	4.1	28570.35	
As	75	72	He	-0.0041	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2593946.21	0.5	2686723.5	96.55	
Sc	45	He	123824.61	1.1	129904.93	95.32	
Ge	72	He	105723.14	1.1	109315.57	96.71	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 043_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:22:56

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4696	ug/l	1.1	244726.21	101.88	
Al	27	45	No Gas	254.5931	ug/l	0.4	2603934.49	101.84	
Na	23	45	He	2021.6441	ug/l	1.5	981499.23	101.08	
Mg	24	45	He	2025.9727	ug/l	1.7	484328.34	101.3	
Mn	55	72	He	23.8160	ug/l	4.8	36208.51	95.26	
Fe	56	72	He	245.1806	ug/l	2.4	655772.44	98.07	
Co	59	72	He	24.5200	ug/l	1.4	138029.96	98.08	
As	75	72	He	24.1152	ug/l	3.8	8818.29	96.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2507776.58	0.9	2686723.5	93.34	
Sc	45	He	122982.30	1.3	129904.93	94.67	
Ge	72	He	105992.04	1.5	109315.57	96.96	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	044_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:24:37
Sample Type	CCB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0310	ug/l	14.7	636.69	
Al	27	45	No Gas	0.0158	ug/l	84.3	1873.45	
Na	23	45	He	-4.2279	ug/l	N/A	27358.13	
Mg	24	45	He	0.3928	ug/l	68.5	110.00	
Mn	55	72	He	0.0329	ug/l	95.6	110.00	
Fe	56	72	He	0.3553	ug/l	32.7	2266.88	
Co	59	72	He	-0.0019	ug/l	N/A	13.33	
As	75	72	He	-0.0042	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2635983.19	1.8	2686723.5	98.11	
Sc	45	He	127566.86	0.9	129904.93	98.2	
Ge	72	He	107514.67	1.8	109315.57	98.35	

Prep Blank (PB) Report

Sample Name	KQ2216206-01
File Name	045_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:29:04
Sample Type	PB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0227	ug/l	44.1	556.69	
Al	27	45	No Gas	3.1772	ug/l	1.6	36150.32	
Na	23	45	He	1.0606	ug/l	664.3	29662.58	
Mg	24	45	He	5.6864	ug/l	6.9	1410.10	
Mn	55	72	He	0.0910	ug/l	16.0	196.67	
Fe	56	72	He	0.7611	ug/l	85.0	3328.16	
Co	59	72	He	-0.0018	ug/l	N/A	13.34	
As	75	72	He	-0.0078	ug/l	N/A	2.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2659274.39	2.1	2686723.5	98.98	
Sc	45	He	126493.44	1.9	129904.93	97.37	
Ge	72	He	106252.54	1.0	109315.57	97.2	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216206-03
File Name	046_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:30:45
Sample Type	LCS
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	49.2358	ug/l	2.4	498820.72	50	98.47	
Al	27	45	No Gas	100.9115	ug/l	3.0	1089701.42	100	100.91	
Na	23	45	He	237.2323	ug/l	2.0	144204.08	250	94.89	
Mg	24	45	He	250.1936	ug/l	4.5	61507.30	250	100.08	
Mn	55	72	He	22.6944	ug/l	4.0	35350.17	25	90.78	
Fe	56	72	He	46.8498	ug/l	0.6	129401.24	50	93.7	
Co	59	72	He	23.4896	ug/l	0.7	135411.57	25	93.96	
As	75	72	He	46.2569	ug/l	0.5	17320.77	50	92.51	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2647237.30	3.8	2686723.5	98.53	
Sc	45	He	126503.61	2.6	129904.93	97.38	
Ge	72	He	108527.37	0.4	109315.57	99.28	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216206-04
File Name	047_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:32:26
Sample Type	LCS
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	48.8328	ug/l	0.8	494468.26	50	97.67	
Al	27	45	No Gas	104.8235	ug/l	1.1	1131376.55	100	104.82	
Na	23	45	He	241.8534	ug/l	3.2	148372.06	250	96.74	
Mg	24	45	He	249.9266	ug/l	4.1	62253.22	250	99.97	
Mn	55	72	He	24.6742	ug/l	5.4	38396.53	25	98.7	
Fe	56	72	He	47.9103	ug/l	1.4	132239.79	50	95.82	
Co	59	72	He	24.2710	ug/l	1.6	139846.28	25	97.08	
As	75	72	He	46.6198	ug/l	1.0	17449.23	50	93.24	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2644164.86	0.7	2686723.5	98.42	
Sc	45	He	128196.38	3.0	129904.93	98.68	
Ge	72	He	108484.07	1.2	109315.57	99.24	

Sample Report

Sample Name	K2210894-001
File Name	048SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:34:07
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.2744	ug/l	2.5	49959.89	
Al	27	45	No Gas	1520.1780	ug/l	2.2	12827112.73	
Na	23	45	He	49343.5142	ug/l	3.0	18641818.47	
Mg	24	45	He	42774.7690	ug/l	3.2	8184890.92	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~34672.7321~~	~~ug/l~~	~~2.5~~	~~40545763.58~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~106993.0255~~	~~ug/l~~	~~4.1~~	~~219901623.39~~	~~>LDR~~
Co	59	72	He	264.8796	ug/l	2.6	1148147.56	
As	75	72	He	0.4696	ug/l	19.4	135.67	

* See Dilution
3(
* 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2070556.11	1.9	2686723.5	77.07	
Sc	45	He	98413.22	0.7	129904.93	75.76	
Ge	72	He	81665.63	3.5	109315.57	74.71	

Sample Report

Sample Name	K2210894-002
File Name	049SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:35:47
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.3774	ug/l	3.1	41658.77	
Al	27	45	No Gas	81.4851	ug/l	2.0	669815.17	
Na	23	45	He	49427.8943	ug/l	1.9	18382808.89	
Mg	24	45	He	31791.0592	ug/l	1.7	5988129.29	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15005.2625~~	~~ug/l~~	~~2.1~~	~~18163435.15~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	~~166472.4266~~	~~ug/l~~	~~1.3~~	~~354333861.39~~	~~>LDR~~
Co	59	72	He	246.2237	ug/l	0.8	1104969.92	
As	75	72	He	0.5525	ug/l	11.0	165.00	

* See Diluti
* 31
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2013486.01	2.8	2686723.5	74.94	
Sc	45	He	96899.05	1.3	129904.93	74.59	
Ge	72	He	84505.76	1.6	109315.57	77.3	

Sample Report

Sample Name	K2210894-003
File Name	050SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:37:27
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	59.7534	ug/l	1.7	546667.69	
Al	27	45	No Gas	23.3745	ug/l	1.3	229183.58	
Na	23	45	He	20770.0639	ug/l	3.9	9205745.90	
Mg	24	45	He	36040.8092	ug/l	1.7	8079685.50	
Mn	55	72	He	17.9237	ug/l	3.3	25576.00	
Fe	56	72	He	4.7924	ug/l	7.7	13202.07	
Co	59	72	He	0.1791	ug/l	12.1	968.93	
As	75	72	He	0.4539	ug/l	10.1	160.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2389443.66	0.6	2686723.5	88.94	
Sc	45	He	115343.52	2.6	129904.93	88.79	
Ge	72	He	99415.77	1.8	109315.57	90.94	

Sample Report

Sample Name K2210894-004

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:39:07

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	76.6593	ug/l	2.7	719735.33	
Al	27	45	No Gas	4.4751	ug/l	2.3	46320.60	
Na	23	45	He	20273.7938	ug/l	2.8	9260947.78	
Mg	24	45	He	17175.6034	ug/l	2.2	3966693.07	
Mn	55	72	He	1731.1608	ug/l	5.4	2458425.07	
Fe	56	72	He	1739.5156	ug/l	3.7	4346154.83	
Co	59	72	He	10.7405	ug/l	4.5	56572.30	
As	75	72	He	0.8143	ug/l	8.1	283.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2453795.28	3.3	2686723.5	91.33	
Sc	45	He	118826.56	2.1	129904.93	91.47	
Ge	72	He	99221.37	3.0	109315.57	90.77	

Sample Report

Sample Name	K2210894-005
File Name	052SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:40:47
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	218.2167	ug/l	3.9	2197121.37	
Al	27	45	No Gas	28.6698	ug/l	2.7	309130.84	
Na	23	45	He	27265.9077	ug/l	1.7	13254090.64	
Mg	24	45	He	36196.5469	ug/l	2.5	8900928.83	
Mn	55	72	He	0.5683	ug/l	13.8	930.05	
Fe	56	72	He	1.9307	ug/l	6.6	6508.05	
Co	59	72	He	0.0476	ug/l	11.8	294.45	
As	75	72	He	0.1295	ug/l	16.1	53.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2631925.90	2.2	2686723.5	97.96	
Sc	45	He	126544.28	2.7	129904.93	97.41	
Ge	72	He	107082.22	1.3	109315.57	97.96	

Sample Report

Sample Name	K2210894-006
File Name	053SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:42:27
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	245.5964	ug/l	0.9	2356192.52	
Al	27	45	No Gas	4.0907	ug/l	3.3	43409.83	
Na	23	45	He	27628.7199	ug/l	0.7	12622995.64	
Mg	24	45	He	15749.8824	ug/l	1.4	3640566.61	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3426.7795~~	~~ug/l~~	~~1.5~~	~~4961788.78~~	~~>LDR~~
Fe	56	72	He	1355.9368	ug/l	0.6	3453510.68	
Co	59	72	He	0.8102	ug/l	4.0	4372.81	
As	75	72	He	0.0844	ug/l	24.0	34.33	

not needed
3C 9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2506656.94	0.6	2686723.5	93.3	
Sc	45	He	118914.20	2.0	129904.93	91.54	
Ge	72	He	101078.84	2.0	109315.57	92.47	

Sample Report

Sample Name K2210894-007

File Name 054SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:44:08

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	482.7404	ug/l	2.8	4744518.78	
Al	27	45	No Gas	8.3198	ug/l	2.7	88749.66	
Na	23	45	He	31232.6593	ug/l	2.7	14782668.95	
Mg	24	45	He	50141.1590	ug/l	1.3	12011609.40	
Mn	55	72	He	862.6316	ug/l	1.1	1271018.42	
Fe	56	72	He	1.6464	ug/l	13.2	5514.38	
Co	59	72	He	0.5166	ug/l	2.5	2844.70	
As	75	72	He	0.0799	ug/l	22.2	33.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2569055.79	2.2	2686723.5	95.62	
Sc	45	He	123232.97	1.1	129904.93	94.86	
Ge	72	He	102838.86	0.5	109315.57	94.08	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	055_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:45:47
Sample Type	CCV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.2945	ug/l	2.8	259127.28	101.18	
Al	27	45	No Gas	252.5119	ug/l	2.5	2753422.67	101	
Na	23	45	He	2002.3216	ug/l	3.0	1019420.04	100.12	
Mg	24	45	He	2005.0635	ug/l	2.5	502564.56	100.25	
Mn	55	72	He	24.4765	ug/l	1.1	38410.13	97.91	
Fe	56	72	He	245.6678	ug/l	1.8	678025.56	98.27	
Co	59	72	He	24.4082	ug/l	0.8	141780.30	97.63	
As	75	72	He	24.5375	ug/l	0.8	9261.18	98.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2674383.50	1.7	2686723.5	99.54	
Sc	45	He	128981.63	2.8	129904.93	99.29	
Ge	72	He	109358.98	1.1	109315.57	100.04	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 056_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:47:28

Sample Type CCB

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0850	ug/l	16.2	1200.07	
Al	27	45	No Gas	0.0103	ug/l	83.9	1843.45	
Na	23	45	He	-0.2043	ug/l	N/A	28833.84	
Mg	24	45	He	0.5645	ug/l	60.7	150.00	
Mn	55	72	He	0.0569	ug/l	91.7	146.67	
Fe	56	72	He	0.3406	ug/l	20.1	2223.53	
Co	59	72	He	-0.0028	ug/l	N/A	7.78	
As	75	72	He	-0.0051	ug/l	N/A	3.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2678912.25	0.4	2686723.5	99.71	
Sc	45	He	125431.79	1.2	129904.93	96.56	
Ge	72	He	107182.58	1.9	109315.57	98.05	

Sample Report

Sample Name K2210894-008

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:49:09

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	556.2909	ug/l	0.5	5015156.69	
Al	27	45	No Gas	5.5101	ug/l	0.4	54425.23	
Na	23	45	He	31246.5674	ug/l	3.1	13371618.96	
Mg	24	45	He	26396.3732	ug/l	2.4	5716406.37	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4957.3224~~	~~ug/l~~	~~0.6~~	~~6639095.32~~	~~>LDR~~
Fe	56	72	He	11610.4542	ug/l	2.4	27335852.93	
Co	59	72	He	11.4993	ug/l	1.4	57108.48	
As	75	72	He	0.2100	ug/l	12.3	72.33	

not needed
31
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2355655.96	1.0	2686723.5	87.68	
Sc	45	He	111415.06	1.2	129904.93	85.77	
Ge	72	He	93475.30	1.2	109315.57	85.51	

Sample Report

Sample Name K2210894-009

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:50:49

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	520.5590	ug/l	1.5	5260908.26	
Al	27	45	No Gas	21.9424	ug/l	1.3	237875.33	
Na	23	45	He	46140.0947	ug/l	1.9	22505808.83	
Mg	24	45	He	50879.4553	ug/l	2.2	12567479.81	
Mn	55	72	He	3.2680	ug/l	3.7	5040.84	
Fe	56	72	He	2.7539	ug/l	8.2	8675.73	
Co	59	72	He	0.0512	ug/l	3.9	313.34	
As	75	72	He	0.1747	ug/l	17.1	69.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2640924.28	1.3	2686723.5	98.3	
Sc	45	He	127057.68	0.2	129904.93	97.81	
Ge	72	He	106427.99	1.0	109315.57	97.36	

Sample Report

Sample Name	K2210894-010
File Name	059SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:52:30
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	600.0578	ug/l	1.1	5884678.87	
Al	27	45	No Gas	5.0118	ug/l	3.5	53987.11	
Na	23	45	He	47100.2879	ug/l	0.4	22702282.16	
Mg	24	45	He	24903.4877	ug/l	2.7	6076771.58	
Mn	55	72	He	1906.4467	ug/l	0.8	2872969.33	
Fe	56	72	He	960.5634	ug/l	2.4	2546226.73	
Co	59	72	He	2.2887	ug/l	1.6	12807.06	
As	75	72	He	0.8075	ug/l	6.2	298.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2562481.73	1.2	2686723.5	95.38	
Sc	45	He	125549.16	1.5	129904.93	96.65	
Ge	72	He	105179.70	0.9	109315.57	96.22	

Sample Report

Sample Name	K2210894-011
File Name	060SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:54:10
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.6375	ug/l	1.6	6564.69	
Al	27	45	No Gas	26.0037	ug/l	0.5	273159.22	
Na	23	45	He	24818.4206	ug/l	3.0	11783280.66	
Mg	24	45	He	37030.6073	ug/l	1.6	8894981.74	
Mn	55	72	He	1.0209	ug/l	12.8	1516.77	
Fe	56	72	He	2.1666	ug/l	5.0	6681.45	
Co	59	72	He	0.1732	ug/l	10.6	942.26	
As	75	72	He	0.2542	ug/l	9.3	92.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2561690.48	0.5	2686723.5	95.35	
Sc	45	He	123575.60	1.9	129904.93	95.13	
Ge	72	He	100123.75	2.1	109315.57	91.59	

Sample Report

Sample Name K2210894-012

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:55:51

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.3950	ug/l	3.7	29484.59	
Al	27	45	No Gas	4.0207	ug/l	1.0	38283.10	
Na	23	45	He	25891.3477	ug/l	1.8	10665504.01	
Mg	24	45	He	17020.9291	ug/l	0.3	3547694.85	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8473.1723~~	~~ug/l~~	~~0.7~~	~~11034774.42~~	~~>LDR~~
Fe	56	72	He	7860.5343	ug/l	1.3	17995239.31	
Co	59	72	He	48.0903	ug/l	1.6	232097.83	
As	75	72	He	0.3769	ug/l	19.2	122.33	

not needed
SC
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2247844.91	2.9	2686723.5	83.66	
Sc	45	He	107215.41	2.3	129904.93	82.53	
Ge	72	He	90888.05	2.2	109315.57	83.14	

Sample Report

Sample Name K2210894-013

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 09:57:31

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	6.0405	ug/l	2.1	48957.15	
Al	27	45	No Gas	4.3634	ug/l	2.9	38824.36	
Na	23	45	He	49871.7771	ug/l	2.1	18986140.55	
Mg	24	45	He	31715.3487	ug/l	2.1	6115254.91	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~15219.7275~~	~~ug/l~~	~~0.8~~	~~18439800.97~~	~~>LDR~~
~~Fe~~	~~56~~	~~72~~	~~He~~	171560.6400	ug/l	0.9	~~365458461.22~~	~~>LDR~~
Co	59	72	He	270.2142	ug/l	0.4	1213558.36	
As	75	72	He	1.6794	ug/l	6.9	494.01	

not needed
JL
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2107012.26	2.0	2686723.5	78.42	
Sc	45	He	99194.88	1.6	129904.93	76.36	
Ge	72	He	84562.81	0.2	109315.57	77.36	

Sample Report

Sample Name	K2210894-014
File Name	063SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 09:59:11
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	88.0118	ug/l	0.9	763174.62	
Al	27	45	No Gas	3.8818	ug/l	0.7	37300.94	
Na	23	45	He	21082.8139	ug/l	1.7	8963560.49	
Mg	24	45	He	17481.7744	ug/l	0.9	3758090.46	
Mn	55	72	He	1674.5909	ug/l	1.8	2357007.88	
Fe	56	72	He	5853.0553	ug/l	1.5	14484526.45	
Co	59	72	He	5.6759	ug/l	0.4	29633.22	
As	75	72	He	4.6912	ug/l	2.9	1594.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2265041.89	0.5	2686723.5	84.3	
Sc	45	He	110579.03	1.1	129904.93	85.12	
Ge	72	He	98235.65	0.8	109315.57	89.86	

Sample Report

Sample Name K2210894-015

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:00:50

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	260.1640	ug/l	3.2	2451275.48	
Al	27	45	No Gas	4.6190	ug/l	2.6	47946.56	
Na	23	45	He	28086.1582	ug/l	1.2	12804799.39	
Mg	24	45	He	15891.4508	ug/l	2.1	3664757.03	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~3400.8678~~	~~ug/l~~	~~2.3~~	~~4850770.13~~	~~>LDR~~
Fe	56	72	He	3756.4712	ug/l	1.8	9421972.15	
Co	59	72	He	19.7595	ug/l	1.6	104492.48	
As	75	72	He	33.3255	ug/l	1.8	11448.17	

not needed
JT
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2463054.49	2.5	2686723.5	91.68	
Sc	45	He	118658.80	2.3	129904.93	91.34	
Ge	72	He	99563.36	1.0	109315.57	91.08	

Sample Report

Sample Name K2210894-016

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:02:30

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	580.5031	ug/l	1.3	5289467.74	
Al	27	45	No Gas	4.0574	ug/l	3.2	40904.13	
Na	23	45	He	31089.8083	ug/l	1.4	13546227.72	
Mg	24	45	He	26812.0082	ug/l	1.9	5912123.45	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~4962.0105~~	~~ug/l~~	~~0.6~~	~~6814007.19~~	~~>LDR~~
Fe	56	72	He	38806.8943	ug/l	0.5	93699488.60	
Co	59	72	He	35.4079	ug/l	0.7	180256.50	
As	75	72	He	23.1771	ug/l	2.6	7666.73	

JC 9/28/22
not needed

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2381320.90	2.5	2686723.5	88.63	
Sc	45	He	113434.18	1.1	129904.93	87.32	
Ge	72	He	95847.98	0.4	109315.57	87.68	

Sample Report

Sample Name K2210894-017

File Name 066SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:04:10

Sample Type Sample

Comment D

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	604.6211	ug/l	1.0	6000326.99	
Al	27	45	No Gas	4.2868	ug/l	0.8	46983.87	
Na	23	45	He	46846.2156	ug/l	0.9	22623918.00	
Mg	24	45	He	24885.3642	ug/l	0.9	6086033.24	
Mn	55	72	He	1849.1031	ug/l	1.4	2831081.21	
Fe	56	72	He	15596.0272	ug/l	1.4	41979076.04	
Co	59	72	He	8.4072	ug/l	1.2	47731.35	
As	75	72	He	259.8035	ug/l	1.1	95754.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2593087.62	0.4	2686723.5	96.51	
Sc	45	He	125798.22	0.4	129904.93	96.84	
Ge	72	He	106860.49	1.3	109315.57	97.75	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 067_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:05:50

Sample Type CCV

Comment —

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.5359	ug/l	0.3	249574.12	98.14	
Al	27	45	No Gas	248.4466	ug/l	2.5	2689843.81	99.38	
Na	23	45	He	1952.8530	ug/l	2.0	1007445.92	97.64	
Mg	24	45	He	1992.6694	ug/l	1.5	505686.36	99.63	
Mn	55	72	He	25.0995	ug/l	1.3	39753.11	100.4	
Fe	56	72	He	248.3849	ug/l	0.5	691996.27	99.35	
Co	59	72	He	24.7159	ug/l	0.6	144912.13	98.86	
As	75	72	He	24.5966	ug/l	2.0	9368.25	98.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2654501.63	0.4	2686723.5	98.8	
Sc	45	He	130545.28	1.1	129904.93	100.49	
Ge	72	He	110385.51	1.6	109315.57	100.98	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	068_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:07:30
Sample Type	CCB
Comment	---
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

3C
9/28/22

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.1244	ug/l	14.2	1590.11	CCB Failed
Al	27	45	No Gas	0.0145	ug/l	71.7	1873.45	
Na	23	45	He	-5.6743	ug/l	N/A	26673.92	
Mg	24	45	He	0.4999	ug/l	26.9	136.67	
Mn	55	72	He	0.0790	ug/l	57.3	180.00	
Fe	56	72	He	0.3487	ug/l	19.6	2243.53	
Co	59	72	He	-0.0011	ug/l	N/A	17.78	
As	75	72	He	-0.0042	ug/l	N/A	3.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2656083.92	1.3	2686723.5	98.86	
Sc	45	He	127738.44	2.8	129904.93	98.33	
Ge	72	He	107121.61	0.2	109315.57	97.99	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 069_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:26:17

Sample Type CCB

Comment ---

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0531	ug/l	19.8	870.04	
Al	27	45	No Gas	0.0129	ug/l	154.3	1860.12	
Na	23	45	He	-11.2172	ug/l	N/A	23562.73	
Mg	24	45	He	0.3145	ug/l	44.8	90.00	
Mn	55	72	He	0.0263	ug/l	44.4	96.67	
Fe	56	72	He	0.2804	ug/l	14.7	2016.83	
Co	59	72	He	-0.0020	ug/l	N/A	12.22	
As	75	72	He	-0.0094	ug/l	N/A	1.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2666664.80	2.9	2686723.5	99.25	
Sc	45	He	125542.83	2.2	129904.93	96.64	
Ge	72	He	104803.57	2.9	109315.57	95.87	

Sample Report

Sample Name	K2210894-018
File Name	070SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:27:59
Sample Type	Sample
Comment	D
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.8065	ug/l	3.7	34503.46	
Al	27	45	No Gas	3.7109	ug/l	0.3	37043.83	
Na	23	45	He	25470.2572	ug/l	0.6	10615580.67	
Mg	24	45	He	16829.0825	ug/l	1.4	3548254.74	
~~Mn~~	~~55~~	~~72~~	~~He~~	~~8437.3338~~	~~ug/l~~	~~1.5~~	~~10830782.34~~	~~>LDR~~
Fe	56	72	He	2.6619	ug/l	1.2	7098.31	
Co	59	72	He	307.4695	ug/l	2.4	1463280.39	
As	75	72	He	0.1435	ug/l	27.0	48.67	

not needed
3C
9/28/22

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2348837.83	1.8	2686723.5	87.42	
Sc	45	He	108449.29	0.5	129904.93	83.48	
Ge	72	He	89601.35	0.6	109315.57	81.97	

Sample Report

Sample Name K2210894-001

File Name 071SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:34:21

Sample Type Sample

Comment D 100X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0918	ug/l	11.0	1256.74	
Al	27	45	No Gas	15.1278	ug/l	0.7	164976.01	
Na	23	45	He	478.6273	ug/l	0.7	257686.25	
Mg	24	45	He	424.4850	ug/l	1.4	102950.92	
Mn	55	72	He	336.1772	ug/l	1.3	501215.93	
Fe	56	72	He	1072.5390	ug/l	1.4	2812602.56	
Co	59	72	He	2.5353	ug/l	2.5	14035.78	
As	75	72	He	0.0044	ug/l	190.5	6.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2647936.00	1.5	2686723.5	98.56	
Sc	45	He	124740.73	0.3	129904.93	96.02	
Ge	72	He	104056.44	0.7	109315.57	95.19	

Sample Report

Sample Name K2210894-002

File Name 072SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\092822A1.b

Acq Time 2022-09-28 10:36:02

Sample Type Sample

Comment D 100X

ISTD Ref FileName 008CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0726	ug/l	3.1	1033.39	
Al	27	45	No Gas	1.0329	ug/l	4.8	12524.54	
Na	23	45	He	500.2965	ug/l	1.6	268001.83	
Mg	24	45	He	333.5028	ug/l	1.3	80874.83	
Mn	55	72	He	158.2944	ug/l	2.2	239876.14	
Fe	56	72	He	1814.4558	ug/l	2.0	4834548.37	
Co	59	72	He	2.6341	ug/l	2.2	14816.43	
As	75	72	He	0.0005	ug/l	2580.7	5.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2579383.97	0.6	2686723.5	96	
Sc	45	He	124733.69	1.5	129904.93	96.02	
Ge	72	He	105753.20	0.7	109315.57	96.74	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	073_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:38:42
Sample Type	CCV
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.4399	ug/l	2.1	257352.98	101.76	
Al	27	45	No Gas	251.2762	ug/l	2.3	2705770.79	100.51	
Na	23	45	He	1983.8233	ug/l	2.8	993926.60	99.19	
Mg	24	45	He	1995.5589	ug/l	3.3	492001.79	99.78	
Mn	55	72	He	24.4624	ug/l	2.3	37788.47	97.85	
Fe	56	72	He	245.5064	ug/l	0.8	667052.83	98.2	
Co	59	72	He	24.5846	ug/l	0.4	140573.37	98.34	
As	75	72	He	24.5929	ug/l	1.3	9136.46	98.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2640511.63	1.3	2686723.5	98.28	
Sc	45	He	126906.09	3.5	129904.93	97.69	
Ge	72	He	107647.69	0.3	109315.57	98.47	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	074_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\092822A1.b
Acq Time	2022-09-28 10:40:23
Sample Type	CCB
Comment	—
ISTD Ref FileName	008CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.0351	ug/l	40.5	680.03	
Al	27	45	No Gas	0.0134	ug/l	156.8	1855.12	
Na	23	45	He	-14.5231	ug/l	N/A	22094.17	
Mg	24	45	He	0.3535	ug/l	32.9	100.00	
Mn	55	72	He	0.0154	ug/l	202.7	83.33	
Fe	56	72	He	0.2978	ug/l	4.6	2123.52	
Co	59	72	He	-0.0023	ug/l	N/A	11.11	
As	75	72	He	-0.0070	ug/l	N/A	2.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	2648777.93	2.0	2686723.5	98.59	
Sc	45	He	126345.80	1.9	129904.93	97.26	
Ge	72	He	107990.10	1.2	109315.57	98.79	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 05, 2022

Analytical Report for Service Request No: K2211193

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 27, 2022
For your reference, these analyses have been assigned our service request number **K2211193.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso

State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211193
Project: Greene County Treatability
Date Received: 09/27/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 09/27/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/05/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

K2211193

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	9/19/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt												
1	MW-1-INF-20220919	9/19/2022	9:02	Water	1	X		X												HNO3 preserved.
2	MW-5-INF-20220919	9/19/2022	9:03	Water	1	X	X													HNO3 preserved.
3	MW-10-INF-20220919	9/19/2022	9:04	Water	1	X	X													HNO3 preserved.
4	MW-14-INF-20220919	9/19/2022	9:05	Water	1	X	X	X												HNO3 preserved.
5	MW-17-INF-20220919	9/19/2022	9:06	Water	1	X	X													HNO3 preserved.
6	MW-44H-INF-20220919	9/19/2022	9:07	Water	1			X												HNO3 preserved.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	9/27/22 08:30

Received by:
ALS 9/27/22 1020
Signature/Print Name:

Relinquished by:	Company:
ALS	9/27/22 1210
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

Chain of Custody Record & Laboratory Analysis Request

K2211193

Laboratory Number: 503-972-5019	
Date:	9/21/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Comments/Preservation
1	MW-1-INF-20220921	9/21/2022	11:40	Water	1	X		X	HNO3 preserved.
2	MW-5-INF-20220921	9/21/2022	11:41	Water	1	X	X		HNO3 preserved.
3	MW-10-INF-20220921	9/21/2022	11:42	Water	1	X	X		HNO3 preserved.
4	MW-14-INF-20220921	9/21/2022	11:43	Water	1	X	X	X	HNO3 preserved.
5	MW-17-INF-20220921	9/21/2022	11:44	Water	1	X	X		HNO3 preserved.
6	MW-44H-INF-20220921	9/21/2022	11:45	Water	1			X	HNO3 preserved.
7									
8									
9									
10									
11									
12									
13									
14									
15									

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 9/27/22 08:30

Received by: ALS 9/27/22 1020

Signature/Print Name:

Relinquished by:	Company: ALS 9/27/22 1210
Signature/Print Name:	Date/Time:

Received by:

Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11193

Received: 9/27/22 Opened: 9/27/22 By: PDP Unloaded: 9/27/22 By: PDP

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
7.7	3.9	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA [✓ Y] N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank was on top of samples which were surrounded by ice

1/13/22 *Page* *of*

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:02
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-1-INF-20220919	**Basis:**	NA
Lab Code:	K2211193-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.92**	ug/L	0.50	0.09	1	10/04/22 11:19	10/03/22	
Cobalt	200.8	**269**	ug/L	0.020	0.009	1	10/04/22 11:19	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:03
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-5-INF-20220919	**Basis:**	NA
Lab Code:	K2211193-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.46**	ug/L	0.50	0.09	1	10/04/22 11:24	10/03/22	
Lithium	200.8	**84.7**	ug/L	0.20	0.20	1	10/04/22 11:24	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:04
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-10-INF-20220919	**Basis:**	NA
Lab Code:	K2211193-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**29.3**	ug/L	0.50	0.09	1	10/04/22 11:29	10/03/22	
Lithium	200.8	**251**	ug/L	0.20	0.20	1	10/04/22 11:29	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:05
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-14-INF-20220919	**Basis:**	NA
Lab Code:	K2211193-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**20.4**	ug/L	0.50	0.09	1	10/04/22 11:30	10/03/22	
Cobalt	200.8	**34.8**	ug/L	0.020	0.009	1	10/04/22 11:30	10/03/22	
Lithium	200.8	**556**	ug/L	0.20	0.20	1	10/04/22 11:30	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:06
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-17-INF-20220919	**Basis:**	NA
Lab Code:	K2211193-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**188**	ug/L	0.50	0.09	1	10/04/22 11:39	10/03/22	
Lithium	200.8	**578**	ug/L	0.20	0.20	1	10/04/22 11:39	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:07
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-44H-INF-20220919	**Basis:**	NA
Lab Code:	K2211193-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**285**	ug/L	0.020	0.009	1	10/04/22 11:41	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 11:40
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-1-INF-20220921	**Basis:**	NA
Lab Code:	K2211193-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.87**	ug/L	0.50	0.09	1	10/04/22 11:42	10/03/22	
Cobalt	200.8	**274**	ug/L	0.020	0.009	1	10/04/22 11:42	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 11:41
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-5-INF-20220921	**Basis:**	NA
Lab Code:	K2211193-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.30**	ug/L	0.50	0.09	1	10/04/22 11:44	10/03/22	
Lithium	200.8	**82.8**	ug/L	0.20	0.20	1	10/04/22 11:44	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 11:42
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-10-INF-20220921	**Basis:**	NA
Lab Code:	K2211193-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**27.6**	ug/L	0.50	0.09	1	10/04/22 11:46	10/03/22	
Lithium	200.8	**242**	ug/L	0.20	0.20	1	10/04/22 11:46	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 11:43
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-14-INF-20220921	**Basis:**	NA
Lab Code:	K2211193-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**18.6**	ug/L	0.50	0.09	1	10/04/22 11:47	10/03/22	
Cobalt	200.8	**34.7**	ug/L	0.020	0.009	1	10/04/22 11:47	10/03/22	
Lithium	200.8	**545**	ug/L	0.20	0.20	1	10/04/22 11:47	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 11:44
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-17-INF-20220921	**Basis:**	NA
Lab Code:	K2211193-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**155**	ug/L	0.50	0.09	1	10/04/22 11:49	10/03/22	
Lithium	200.8	**568**	ug/L	0.20	0.20	1	10/04/22 11:49	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 11:45
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-44H-INF-20220921	**Basis:**	NA
Lab Code:	K2211193-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**290**	ug/L	0.020	0.009	1	10/04/22 11:50	10/03/22	

Printed 10/4/2022 4:28:52 PM

Superset Reference:

Analytical Report

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2211193
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2216908-01

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/04/22 11:16	10/03/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/04/22 11:16	10/03/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/04/22 11:16	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/04/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220919	**Units:**	ug/L
Lab Code:	K2211193-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2216908-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	1.92	2.02	1.97	5	20
Cobalt	200.8	0.020	0.009	269	274	272	2	20
Lithium	200.8	0.20	0.20	5.97	5.93	5.95	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/4/2022 4:28:52 PM Superset Reference:

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/04/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-5-INF-20220919	**Units:**	ug/L
Lab Code:	K2211193-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2216908-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	4.46	4.33	4.40	3	20
Cobalt	200.8	0.020	0.009	5.55	5.54	5.55	<1	20
Lithium	200.8	0.20	0.20	84.7	84.2	84.5	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/4/2022 4:28:52 PM Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/4/22
		Date Extracted:	10/3/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220919	**Units:**	ug/L
Lab Code:	K2211193-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2216908-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.92	49.3	50.0	95	70-130
Cobalt	269	294	25.0	100 #	70-130
Lithium	5.97	53.8	50.0	96	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/4/22
		Date Extracted:	10/3/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-5-INF-20220919	**Units:**	ug/L
Lab Code:	K2211193-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2216908-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	4.46	51.2	50.0	94	70-130
Cobalt	5.55	28.3	25.0	91	70-130
Lithium	84.7	133	50.0	97	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Printed 10/4/2022 4:28:52 PM Superset Reference:

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2211193
Date Analyzed: 10/04/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2216908-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.7	50.0	101	85-115
Cobalt	200.8	25.7	25.0	103	85-115
Lithium	200.8	52.9	50.0	106	85-115

Prep Summary Report

Client: Anchor QEA, LLC
Service Request: K2211193
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0
Extraction Lot: 407408
Analytical Method: 200.8
Extraction Date: 10/03/22 10:28

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-INF-20220919	K2211193-001	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-5-INF-20220919	K2211193-002	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-10-INF-20220919	K2211193-003	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-14-INF-20220919	K2211193-004	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-17-INF-20220919	K2211193-005	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-44H-INF-20220919	K2211193-006	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-1-INF-20220921	K2211193-007	9/21/22	9/27/22	10.0000 mL	10 mL	
MW-5-INF-20220921	K2211193-008	9/21/22	9/27/22	10.0000 mL	10 mL	
MW-10-INF-20220921	K2211193-009	9/21/22	9/27/22	10.0000 mL	10 mL	
MW-14-INF-20220921	K2211193-010	9/21/22	9/27/22	10.0000 mL	10 mL	
MW-17-INF-20220921	K2211193-011	9/21/22	9/27/22	10.0000 mL	10 mL	
MW-44H-INF-20220921	K2211193-012	9/21/22	9/27/22	10.0000 mL	10 mL	
Method Blank	KQ2216908-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216908-02LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate	KQ2216908-03DUP	9/19/22	9/27/22	10.0000 mL	10 mL	
Matrix Spike	KQ2216908-04MS	9/19/22	9/27/22	10.0000 mL	10.4 mL	
Duplicate	KQ2216908-05DUP	9/19/22	9/27/22	10.0000 mL	10 mL	
Matrix Spike	KQ2216908-06MS	9/19/22	9/27/22	10.0000 mL	10.4 mL	

Printed 10/4/2022 4:28:53 PM

Superset Reference:

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 10/04/22 11:07						
Arsenic	200.8	779974	23.7	25.0	95	90-110
Cobalt	200.8	779974	24.5	25.0	98	90-110
Lithium	200.8	779974	25.7	25.0	103	90-110
CCV 10/04/22 11:09						
Arsenic	200.8	779974	25.1	25.0	100	90-110
Cobalt	200.8	779974	24.9	25.0	100	90-110
Lithium	200.8	779974	25.6	25.0	102	90-110
CCV 10/04/22 11:32						
Arsenic	200.8	779974	24.8	25.0	99	90-110
Cobalt	200.8	779974	25.1	25.0	100	90-110
Lithium	200.8	779974	24.2	25.0	97	90-110
CCV 10/04/22 11:56						
Arsenic	200.8	779974	25.1	25.0	100	90-110
Cobalt	200.8	779974	25.1	25.0	100	90-110
Lithium	200.8	779974	23.9	25.0	95	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Service Request: K2211193
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 10/04/22 11:11				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 11:12				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 11:37				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 12:04				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Arsenic	200.8	779974	0.40	0.5	81	50-199	10/04/22 11:14
Cobalt	200.8	779974	0.015	0.02	75	50-199	10/04/22 11:14
Lithium	200.8	779974	0.085	0.1	85	50-199	10/04/22 11:14

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-06 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Lithium	7	ug/L	0.2	0.2	200.8

Client:	Anchor QEA, LLC	**Service Request:**	K2211193
Project:	Greene County Treatability/221114-01.05 Task 05		

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-06

Analyte	Concentration (ug/L)	Method
Arsenic 75	4500	200.8
Cobalt 59	9000	200.8

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	Dilution Factor	Date/Time	As	Co	Li
ZZZZZZ	1	10/04/22 11:04			
ZZZZZZ	1	10/04/22 11:06			
ICV	1	10/04/22 11:07	X	X	X
CCV	1	10/04/22 11:09	X	X	X
ICB	1	10/04/22 11:11	X	X	X
CCB	1	10/04/22 11:12	X	X	X
LLICVW	1	10/04/22 11:14	X	X	X
KQ2216908-01MB	1	10/04/22 11:16	X	X	X
KQ2216908-02LCS	1	10/04/22 11:17	X	X	X
K2211193-001	1	10/04/22 11:19	X	X	
K2211193-001DUP	1	10/04/22 11:21	X	X	X
K2211193-001MS	1	10/04/22 11:22	X	X	X
K2211193-002	1	10/04/22 11:24	X		X
K2211193-002DUP	1	10/04/22 11:26	X	X	X
K2211193-002MS	1	10/04/22 11:27	X	X	X
K2211193-003	1	10/04/22 11:29	X		X
K2211193-004	1	10/04/22 11:30	X	X	X
CCV	1	10/04/22 11:32	X	X	X
ZZZZZZ	1	10/04/22 11:34			
CCB	1	10/04/22 11:37	X	X	X
K2211193-005	1	10/04/22 11:39	X		X
K2211193-006	1	10/04/22 11:41		X	
K2211193-007	1	10/04/22 11:42	X	X	
K2211193-008	1	10/04/22 11:44	X		X
K2211193-009	1	10/04/22 11:46	X		X
K2211193-010	1	10/04/22 11:47	X	X	X
K2211193-011	1	10/04/22 11:49	X		X
K2211193-012	1	10/04/22 11:50		X	
ZZZZZZ	1	10/04/22 11:52			
ZZZZZZ	1	10/04/22 11:54			
CCV	1	10/04/22 11:56	X	X	X
ZZZZZZ	1	10/04/22 11:57			
CCB	1	10/04/22 12:04	X	X	X
ZZZZZZ	1	10/04/22 12:09			
ZZZZZZ	1	10/04/22 12:11			
ZZZZZZ	1	10/04/22 12:13			
ZZZZZZ	1	10/04/22 12:15			

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	Dilution Factor	Date/Time	As	Co	Li
ZZZZZZ	1	10/04/22 12:17			
ZZZZZZ	1	10/04/22 12:19			
ZZZZZZ	1	10/04/22 12:21			
ZZZZZZ	1	10/04/22 12:23			
ZZZZZZ	1	10/04/22 12:24			
ZZZZZZ	1	10/04/22 12:26			
ZZZZZZ	1	10/04/22 12:28			
ZZZZZZ	1	10/04/22 12:30			
ZZZZZZ	1	10/04/22 12:32			
ZZZZZZ	1	10/04/22 12:34			
ZZZZZZ	1	10/04/22 12:36			
ZZZZZZ	1	10/04/22 12:38			
ZZZZZZ	1	10/04/22 12:40			
ZZZZZZ	1	10/04/22 12:42			
ZZZZZZ	1	10/04/22 12:44			
ZZZZZZ	1	10/04/22 12:45			
ZZZZZZ	1	10/04/22 13:13			
ZZZZZZ	1	10/04/22 13:15			
ZZZZZZ	1	10/04/22 13:17			
ZZZZZZ	1	10/04/22 13:18			
ZZZZZZ	1	10/04/22 13:20			
ZZZZZZ	1	10/04/22 13:22			
ZZZZZZ	1	10/04/22 13:24			
ZZZZZZ	1	10/04/22 13:26			
ZZZZZZ	1	10/04/22 13:28			
ZZZZZZ	1	10/04/22 13:30			
ZZZZZZ	1	10/04/22 13:32			
ZZZZZZ	1	10/04/22 13:34			
ZZZZZZ	1	10/04/22 13:36			
ZZZZZZ	1	10/04/22 13:42			
ZZZZZZ	1	10/04/22 13:44			
ZZZZZZ	1	10/04/22 13:46			
ZZZZZZ	1	10/04/22 13:48			
ZZZZZZ	1	10/04/22 13:50			
ZZZZZZ	1	10/04/22 13:52			
ZZZZZZ	1	10/04/22 13:54			
ZZZZZZ	1	10/04/22 13:56			

Client: Anchor QEA, LLC

Service Request: K2211193

Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06**

Analytical BatchID: **779974**

Sample	Dilution Factor	Date/Time	As	Co	Li
ZZZZZZ	1	10/04/22 13:58			
ZZZZZZ	1	10/04/22 14:05			

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	Date/Time	Sc45NG	Ge72He	Lu175He
ZZZZZZ	10/04/22 11:04			
ZZZZZZ	10/04/22 11:06			
ICV	10/04/22 11:07	99	95	98
CCV	10/04/22 11:09	97	96	98
ICB	10/04/22 11:11	96	96	98
CCB	10/04/22 11:12	97	97	98
LLICVW	10/04/22 11:14	97	96	98
KQ2216908-01MB	10/04/22 11:16	99	95	97
KQ2216908-02LCS	10/04/22 11:17	94	93	98
K2211193-001	10/04/22 11:19	81	77	86
K2211193-001DUP	10/04/22 11:21	79	74	86
K2211193-001MS	10/04/22 11:22	81	75	85
K2211193-002	10/04/22 11:24	83	86	90
K2211193-002DUP	10/04/22 11:26	86	88	92
K2211193-002MS	10/04/22 11:27	86	89	93
K2211193-003	10/04/22 11:29	92	89	94
K2211193-004	10/04/22 11:30	88	85	93
CCV	10/04/22 11:32	94	95	99
ZZZZZZ	10/04/22 11:34			
CCB	10/04/22 11:37	97	96	99
K2211193-005	10/04/22 11:39	96	93	97
K2211193-006	10/04/22 11:41	90	87	94
K2211193-007	10/04/22 11:42	84	79	90
K2211193-008	10/04/22 11:44	92	94	97
K2211193-009	10/04/22 11:46	95	91	99
K2211193-010	10/04/22 11:47	90	86	96
K2211193-011	10/04/22 11:49	97	96	99
K2211193-012	10/04/22 11:50	91	88	97
ZZZZZZ	10/04/22 11:52			
ZZZZZZ	10/04/22 11:54			
CCV	10/04/22 11:56	99	97	100
ZZZZZZ	10/04/22 11:57			
CCB	10/04/22 12:04	100	96	101
ZZZZZZ	10/04/22 12:09			
ZZZZZZ	10/04/22 12:11			
ZZZZZZ	10/04/22 12:13			
ZZZZZZ	10/04/22 12:15			

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	**Date/Time**	Sc45NG	Ge72He	Lu175He
ZZZZZZ	10/04/22 12:17			
ZZZZZZ	10/04/22 12:19			
ZZZZZZ	10/04/22 12:21			
ZZZZZZ	10/04/22 12:23			
ZZZZZZ	10/04/22 12:24			
ZZZZZZ	10/04/22 12:26			
ZZZZZZ	10/04/22 12:28			
ZZZZZZ	10/04/22 12:30			
ZZZZZZ	10/04/22 12:32			
ZZZZZZ	10/04/22 12:34			
ZZZZZZ	10/04/22 12:36			
ZZZZZZ	10/04/22 12:38			
ZZZZZZ	10/04/22 12:40			
ZZZZZZ	10/04/22 12:42			
ZZZZZZ	10/04/22 12:44			
ZZZZZZ	10/04/22 12:45			
ZZZZZZ	10/04/22 13:13			
ZZZZZZ	10/04/22 13:15			
ZZZZZZ	10/04/22 13:17			
ZZZZZZ	10/04/22 13:18			
ZZZZZZ	10/04/22 13:20			
ZZZZZZ	10/04/22 13:22			
ZZZZZZ	10/04/22 13:24			
ZZZZZZ	10/04/22 13:26			
ZZZZZZ	10/04/22 13:28			
ZZZZZZ	10/04/22 13:30			
ZZZZZZ	10/04/22 13:32			
ZZZZZZ	10/04/22 13:34			
ZZZZZZ	10/04/22 13:36			
ZZZZZZ	10/04/22 13:42			
ZZZZZZ	10/04/22 13:44			
ZZZZZZ	10/04/22 13:46			
ZZZZZZ	10/04/22 13:48			
ZZZZZZ	10/04/22 13:50			
ZZZZZZ	10/04/22 13:52			
ZZZZZZ	10/04/22 13:54			
ZZZZZZ	10/04/22 13:56			

Client: Anchor QEA, LLC **Service Request:** K2211193
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	**Date/Time**	Sc45NG	Ge72He	Lu175He
ZZZZZZ	10/04/22 13:58			
ZZZZZZ	10/04/22 14:05			

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Preparation Information Benchsheet

Prep Run#: 407408
Team: Metals/SSOLADEY
Number of Copies to make: 4

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 10/3/22 10:28

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216908-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1%HNO3,0.2%HCl
2	KQ2216908-02	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1%HNO3,0.2%HCl
3	K2211193-001	MW-1-INF-20220919	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
4	KQ2216908-03	K2211193-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL	10.00mL	1%HNO3,0.2%HCl
5	KQ2216908-04	K2211193-001 MS	.01	200.8/Metals D		Liquid	10.0000mL	10.40mL	1%HNO3,0.2%HCl
6	K2211193-002	MW-5-INF-20220919	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
7	KQ2216908-05	K2211193-002 DUP	.01	200.8/Metals D		Liquid	10.0000mL	10.00mL	1%HNO3,0.2%HCl
8	KQ2216908-06	K2211193-002 MS	.01	200.8/Metals D		Liquid	10.0000mL	10.40mL	1%HNO3,0.2%HCl
9	K2211193-003	MW-10-INF-20220919	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
10	K2211193-004	MW-14-INF-20220919	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
11	K2211193-005	MW-17-INF-20220919	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
12	K2211193-006	MW-44H-INF-20220919	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
13	K2211193-007	MW-1-INF-20220921	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
14	K2211193-008	MW-5-INF-20220921	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
15	K2211193-009	MW-10-INF-20220921	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
16	K2211193-010	MW-14-INF-20220921	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
17	K2211193-011	MW-17-INF-20220921	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
18	K2211193-012	MW-44H-INF-20220921	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
19	K2211300-001	SpPro-1	.01	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
20	K2211300-001	SpPro-1	.03	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
21	K2211300-002	SpPro-2	.01	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
22	K2211300-002	SpPro-2	.03	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
23	K2211300-003	SpPro-3	.01	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
24	K2211300-003	SpPro-3	.03	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
25	K2211358-001	River As	.01	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
26	K2211365-001	LG Stormwater Outfall 003	.02	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3	Inventory ID 221910	Logbook Ref: MET4-24-I	Expires On: 03/02/2023

KQ2216908-02 0.10mL KQ2216908-04 0.10mL KQ2216908-06 0.10mL

Name: k-met 1/100 QCP CICV-1	Inventory ID 221911	Logbook Ref: MET4-25-A	Expires On: 12/02/2022

KQ2216908-02 0.10mL KQ2216908-04 0.10mL KQ2216908-06 0.10mL

Preparation Information Benchsheet

Prep Run#: 407408
Team: Metals/SSOLADEY

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 10/3/22 10:28

Name: K-MET 10ppm Li	Inventory ID 223041	Logbook Ref: MET4-29-F	Expires On: 10/31/2023
KQ2216908-02 0.05mL	KQ2216908-04 0.05mL	KQ2216908-06 0.05mL	
Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216908-02 0.05mL	KQ2216908-04 0.05mL	KQ2216908-06 0.05mL	
Name: k-met Sb 1ug/mL Sb	Inventory ID 225175	Logbook Ref: MET4-32-F	Expires On: 07/12/2023
KQ2216908-02 0.10mL	KQ2216908-04 0.10mL	KQ2216908-06 0.10mL	

Preparation Materials

K-MET 16 mL Tube	P7569838 (225191)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 10/3/22 10:28
Finished: 10/3/22 12:28
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-20	Digestion	IR Thermometer ID: IR03		K-BlockDigester-20	Digestion	Temperature	93 deg C
K-BlockDigester-20	Digestion	Temperature Check Location	17	K-CR100-1000A	Digestion		
K-CR 20-200B	Digestion						

Comments: ____

Reviewed By: ____ Date: 10.4.22 Spike Witness: ABOYER Date: ____

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

10/3/22 10:28-12:21
B2117127193

Preparation Information Benchsheet *Li

Prep Run#: 407408
Team: Metals/ABOYER
Number of Copies to make: 4

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/30/22 15:17

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216908-01	MB		200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
2	KQ2216908-02	LCS		200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
3	K2211193-001	MW-1-INF-20220919	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
4	KQ2216908-03	K2211193-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
5	KQ2216908-04	K2211193-001 MS	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
6	K2211193-002	MW-5-INF-20220919	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
7	KQ2216908-05	K2211193-002 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
8	KQ2216908-06	K2211193-002 MS	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
9	K2211193-003	MW-10-INF-20220919	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
10	K2211193-004	MW-14-INF-20220919	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
11	K2211193-005	MW-17-INF-20220919	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
12	K2211193-006	MW-44H-INF-20220919	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
13	K2211193-007	MW-1-INF-20220921	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
14	K2211193-008	MW-5-INF-20220921	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
15	K2211193-009	MW-10-INF-20220921	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
16	K2211193-010	MW-14-INF-20220921	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
17	K2211193-011	MW-17-INF-20220921	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
18	K2211193-012	MW-44H-INF-20220921	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
19	K2211300-001	SpPro-1	.01	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
20	K2211300-001	SpPro-1	.03	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
21	K2211300-002	SpPro-2	.01	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
22	K2211300-002	SpPro-2	.03	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
23	K2211300-003	SpPro-3	.01	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
24	K2211300-003	SpPro-3	.03	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
25	K2211358-001	River As	.01	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
26	K2211365-001	LG Stormwater Outfall 003	.02	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216908-02 0.10mL KQ2216908-04 0.10mL KQ2216908-06 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216908-02 0.10mL KQ2216908-04 0.10mL KQ2216908-06 0.10mL

Preparation Information Benchsheet

Prep Run#: 407408	**Prep WorkFlow:** MetDigAqMS	**Status:** Draft
Team: Metals/ABOYER	**Prep Method:** EPA CLP ILM04.0	**Prep Date/Time:** 9/30/22 15:17

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216908-02 0.05mL	KQ2216908-04 0.05mL	KQ2216908-06 0.05mL	

Name: k-met Sb 1ug/mL Sb	Inventory ID 225175	Logbook Ref: MET4-32-F	Expires On: 07/12/2023
KQ2216908-02 0.10mL	KQ2216908-04 0.10mL	KQ2216908-06 0.10mL	

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ______________________________

Reviewed By: ____________________ Date: ____________

Service Request # K2211193, K2211300, K2211358, K2211365; K2211194, K2211230, K2211299, K2211301, K2211313; Li LRSTD
Calibration: 100422AICPMS06
ALS LIMS Run# 779974
Pipette IDs: 18010244, 19070685, 16006318
Pipette Check Due: 11/23/22
Cal Std: MS30-43-E
ICV Std: MS30-43-F
LLICV Std: MS30-44-A
I.S. Solution: MS30-16-K
Tune Std: MS29-86-E

ICSA: N/A
ICSAB: N/A

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments: MRL=2X for Li.

Prep Batches: 407408, 407400

Primary Review by ________ Date 10/4/22

Secondary Review by ________ Date 10/4/22

Data Review Form

Instrument ID#:	**K-ICP-MS-06**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-06 (Agilent 7800)\100422a.csv**
RUNNO:	**779974**

K2211193

No exceptions to report.

K2211194

No exceptions to report.

K2211230

No exceptions to report.

K2211299

No exceptions to report.

K2211300

No exceptions to report.

K2211301

No exceptions to report.

K2211313

No exceptions to report.

K2211358

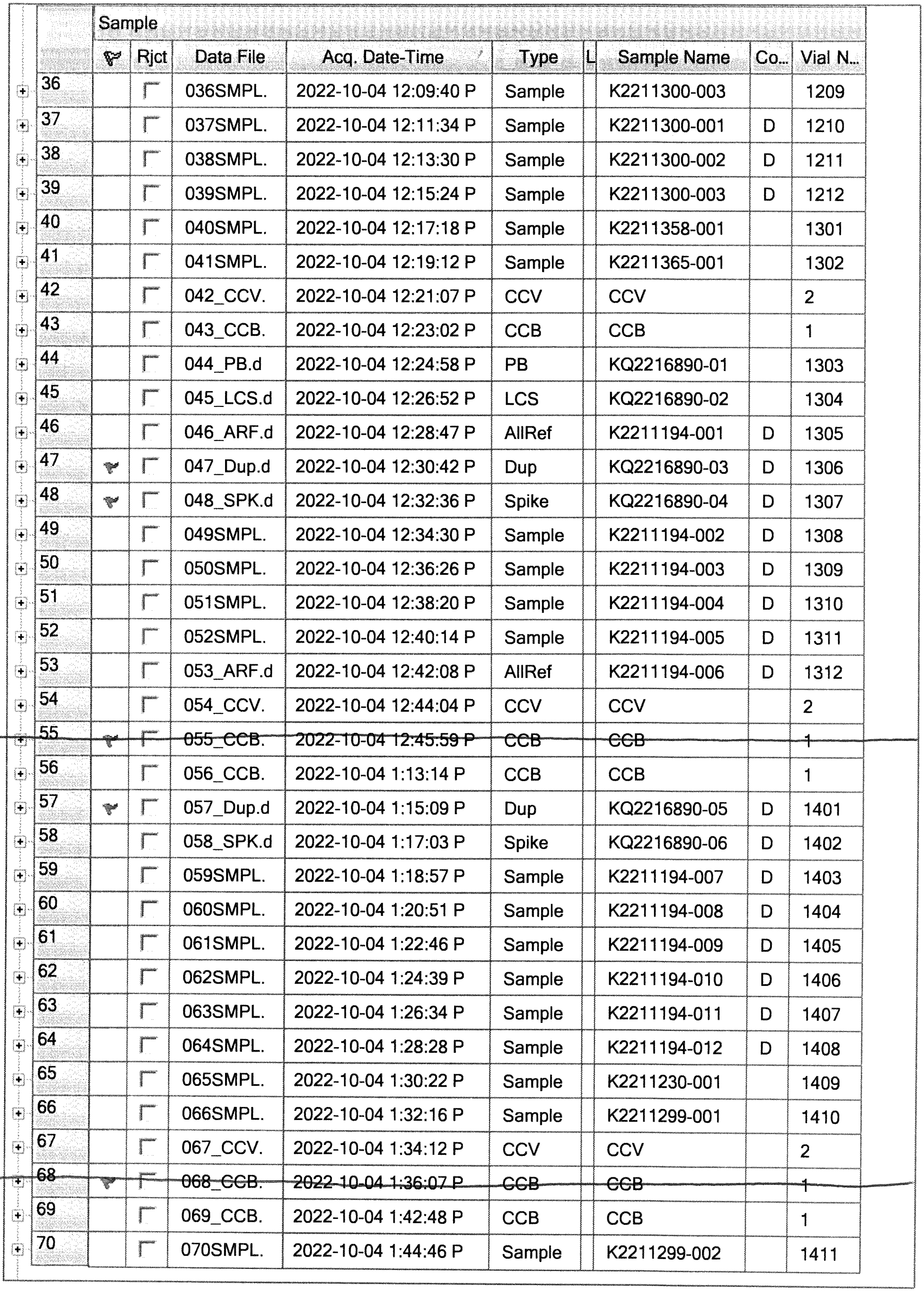
No exceptions to report.

K2211365

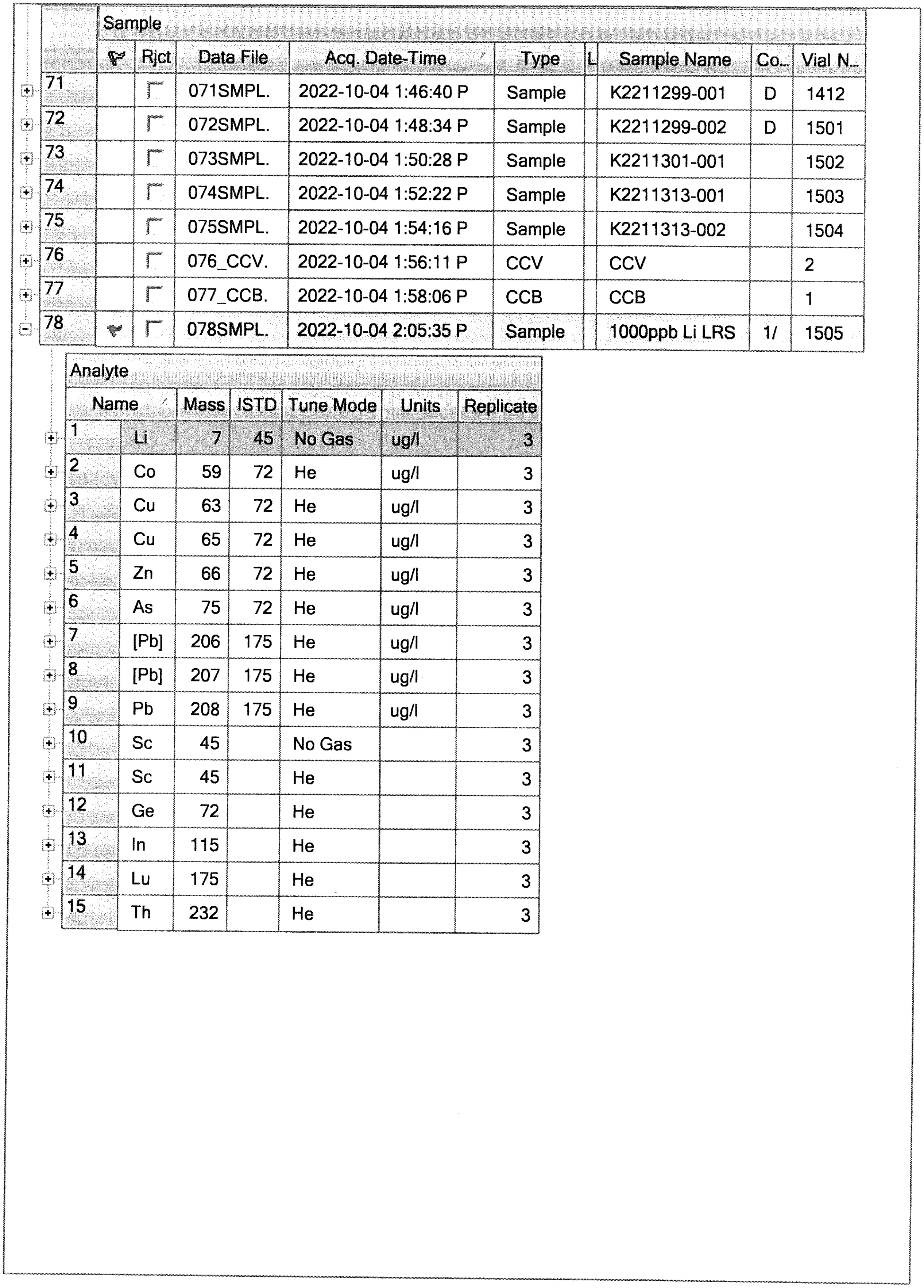
No exceptions to report.

Primary Approver: GMM 10/4/22
Secondary Approver: SL 10/4/22

		Sample								
		⚑	Rjct	Data File	Acq. Date-Time	Type	L	Sample Name	Co...	Vial N...
	1		☐	001SMPL.	2022-10-04 11:01:02 A	Sample		PRIMER		2
	2		☐	002SMPL.	2022-10-04 11:02:42 A	Sample		RINSE		1
	3		☐	003CALB.	2022-10-04 11:04:23 A	CalBlk		Blank		1
	4		☐	004CALS.	2022-10-04 11:06:02 A	CalStd		25ppb		2
	5		☐	005_ICV.d	2022-10-04 11:07:43 A	ICV		ICV		2101
	6		☐	006_CCV.	2022-10-04 11:09:24 A	CCV		CCV		2
	7		☐	007_ICB.d	2022-10-04 11:11:04 A	ICB		ICB		1
	8		☐	008_CCB.	2022-10-04 11:12:44 A	CCB		CCB		1
	9		☐	009LICV.d	2022-10-04 11:14:26 A	LLICV		LLICVW		2102
	10		☐	010_PB.d	2022-10-04 11:16:07 A	PB		KQ2216908-01		1101
	11		☐	011_LCS.d	2022-10-04 11:17:46 A	LCS		KQ2216908-02		1102
	12		☐	012_ARF.d	2022-10-04 11:19:25 A	AllRef		K2211193-001	D	1103
	13	⚑	☐	013_Dup.d	2022-10-04 11:21:04 A	Dup		KQ2216908-03	D	1104
	14	⚑	☐	014_SPK.d	2022-10-04 11:22:43 A	Spike		KQ2216908-04	D	1105
	15		☐	015_ARF.d	2022-10-04 11:24:22 A	AllRef		K2211193-002	D	1106
	16	⚑	☐	016_Dup.d	2022-10-04 11:26:01 A	Dup		KQ2216908-05	D	1107
	17		☐	017_SPK.d	2022-10-04 11:27:40 A	Spike		KQ2216908-06	D	1108
	18		☐	018SMPL.	2022-10-04 11:29:19 A	Sample		K2211193-003	D	1109
	19		☐	019SMPL.	2022-10-04 11:30:57 A	Sample		K2211193-004	D	1110
	20		☐	020_CCV.	2022-10-04 11:32:38 A	CCV		CCV		2
10/4/22	~~21~~		☐	~~021_CCB.~~	~~2022-10-04 11:34:18 A~~	~~CCB~~		~~CCB~~		~~1~~
	22		☐	022_CCB.	2022-10-04 11:37:41 A	CCB		CCB		1
	23		☐	023SMPL.	2022-10-04 11:39:23 A	Sample		K2211193-005	D	1111
	24		☐	024SMPL.	2022-10-04 11:41:02 A	Sample		K2211193-006	D	1112
	25		☐	025SMPL.	2022-10-04 11:42:42 A	Sample		K2211193-007	D	1201
	26		☐	026SMPL.	2022-10-04 11:44:22 A	Sample		K2211193-008	D	1202
	27		☐	027SMPL.	2022-10-04 11:46:01 A	Sample		K2211193-009	D	1203
	28		☐	028SMPL.	2022-10-04 11:47:41 A	Sample		K2211193-010	D	1204
	29		☐	029SMPL.	2022-10-04 11:49:19 A	Sample		K2211193-011	D	1205
	30		☐	030SMPL.	2022-10-04 11:50:59 A	Sample		K2211193-012	D	1206
	31		☐	031SMPL.	2022-10-04 11:52:41 A	Sample		K2211300-001		1207
	32		☐	032SMPL.	2022-10-04 11:54:20 A	Sample		K2211300-002		1208
	33		☐	033_CCV.	2022-10-04 11:56:01 A	CCV		CCV		2
10/4/22	~~34~~	⚑	☐	~~034_CCB.~~	~~2022-10-04 11:57:41 A~~	~~CCB~~		~~CCB~~		~~1~~
	35		☐	035_CCB.	2022-10-04 12:04:31 P	CCB		CCB		1



	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	L	Sample Name	Co...	Vial N...
36		☐	036SMPL.	2022-10-04 12:09:40 P	Sample		K2211300-003		1209
37		☐	037SMPL.	2022-10-04 12:11:34 P	Sample		K2211300-001	D	1210
38		☐	038SMPL.	2022-10-04 12:13:30 P	Sample		K2211300-002	D	1211
39		☐	039SMPL.	2022-10-04 12:15:24 P	Sample		K2211300-003	D	1212
40		☐	040SMPL.	2022-10-04 12:17:18 P	Sample		K2211358-001		1301
41		☐	041SMPL.	2022-10-04 12:19:12 P	Sample		K2211365-001		1302
42		☐	042_CCV.	2022-10-04 12:21:07 P	CCV		CCV		2
43		☐	043_CCB.	2022-10-04 12:23:02 P	CCB		CCB		1
44		☐	044_PB.d	2022-10-04 12:24:58 P	PB		KQ2216890-01		1303
45		☐	045_LCS.d	2022-10-04 12:26:52 P	LCS		KQ2216890-02		1304
46		☐	046_ARF.d	2022-10-04 12:28:47 P	AllRef		K2211194-001	D	1305
47	⚑	☐	047_Dup.d	2022-10-04 12:30:42 P	Dup		KQ2216890-03	D	1306
48	⚑	☐	048_SPK.d	2022-10-04 12:32:36 P	Spike		KQ2216890-04	D	1307
49		☐	049SMPL.	2022-10-04 12:34:30 P	Sample		K2211194-002	D	1308
50		☐	050SMPL.	2022-10-04 12:36:26 P	Sample		K2211194-003	D	1309
51		☐	051SMPL.	2022-10-04 12:38:20 P	Sample		K2211194-004	D	1310
52		☐	052SMPL.	2022-10-04 12:40:14 P	Sample		K2211194-005	D	1311
53		☐	053_ARF.d	2022-10-04 12:42:08 P	AllRef		K2211194-006	D	1312
54		☐	054_CCV.	2022-10-04 12:44:04 P	CCV		CCV		2
m 10/4/22 ~~55~~	⚑	☐	~~055_CCB.~~	~~2022-10-04 12:45:59 P~~	~~CCB~~		~~CCB~~		~~1~~
56		☐	056_CCB.	2022-10-04 1:13:14 P	CCB		CCB		1
57	⚑	☐	057_Dup.d	2022-10-04 1:15:09 P	Dup		KQ2216890-05	D	1401
58		☐	058_SPK.d	2022-10-04 1:17:03 P	Spike		KQ2216890-06	D	1402
59		☐	059SMPL.	2022-10-04 1:18:57 P	Sample		K2211194-007	D	1403
60		☐	060SMPL.	2022-10-04 1:20:51 P	Sample		K2211194-008	D	1404
61		☐	061SMPL.	2022-10-04 1:22:46 P	Sample		K2211194-009	D	1405
62		☐	062SMPL.	2022-10-04 1:24:39 P	Sample		K2211194-010	D	1406
63		☐	063SMPL.	2022-10-04 1:26:34 P	Sample		K2211194-011	D	1407
64		☐	064SMPL.	2022-10-04 1:28:28 P	Sample		K2211194-012	D	1408
65		☐	065SMPL.	2022-10-04 1:30:22 P	Sample		K2211230-001		1409
66		☐	066SMPL.	2022-10-04 1:32:16 P	Sample		K2211299-001		1410
67		☐	067_CCV.	2022-10-04 1:34:12 P	CCV		CCV		2
m 10/4/22 ~~68~~	⚑	☐	~~068_CCB.~~	~~2022-10-04 1:36:07 P~~	~~CCB~~		~~CCB~~		~~1~~
69		☐	069_CCB.	2022-10-04 1:42:48 P	CCB		CCB		1
70		☐	070SMPL.	2022-10-04 1:44:46 P	Sample		K2211299-002		1411



Sample

		Rjct	Data File	Acq. Date-Time	Type	L	Sample Name	Co...	Vial N...
71		☐	071SMPL.	2022-10-04 1:46:40 P	Sample		K2211299-001	D	1412
72		☐	072SMPL.	2022-10-04 1:48:34 P	Sample		K2211299-002	D	1501
73		☐	073SMPL.	2022-10-04 1:50:28 P	Sample		K2211301-001		1502
74		☐	074SMPL.	2022-10-04 1:52:22 P	Sample		K2211313-001		1503
75		☐	075SMPL.	2022-10-04 1:54:16 P	Sample		K2211313-002		1504
76		☐	076_CCV.	2022-10-04 1:56:11 P	CCV		CCV		2
77		☐	077_CCB.	2022-10-04 1:58:06 P	CCB		CCB		1
78		☐	078SMPL.	2022-10-04 2:05:35 P	Sample		1000ppb Li LRS	1/	1505

Analyte

	Name	Mass	ISTD	Tune Mode	Units	Replicate
1	Li	7	45	No Gas	ug/l	3
2	Co	59	72	He	ug/l	3
3	Cu	63	72	He	ug/l	3
4	Cu	65	72	He	ug/l	3
5	Zn	66	72	He	ug/l	3
6	As	75	72	He	ug/l	3
7	[Pb]	206	175	He	ug/l	3
8	[Pb]	207	175	He	ug/l	3
9	Pb	208	175	He	ug/l	3
10	Sc	45		No Gas		3
11	Sc	45		He		3
12	Ge	72		He		3
13	In	115		He		3
14	Lu	175		He		3
15	Th	232		He		3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422.b
Acq. Date-Time	2022-10-04 10:40:48 AM
Report Comment	---
Instrument Name	G8421A JP16310358

[No Gas]

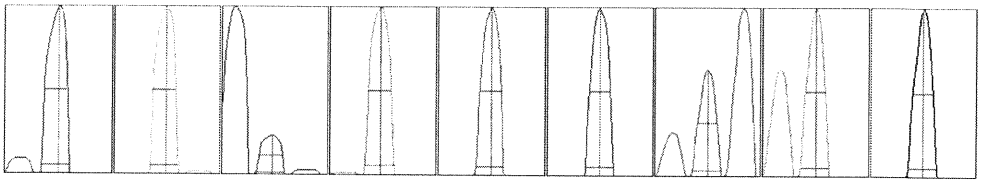
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	56140.05	0.955	5.000	
9	12161.93	1.215	5.000	
24	39581.11	1.407	5.000	
59	62768.07	1.006	5.000	
115	150226.81	0.572	5.000	
140	164866.65	0.353	5.000	
208	111182.24	0.617	5.000	
209	175706.74	0.334	5.000	
238	230228.34	0.652	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	5624	5675	5654	5565	5553
9	1235	1213	1226	1197	1210
24	4052	3949	3956	3923	3910
59	6352	6300	6306	6232	6194
115	14964	15093	14950	15136	14970
140	16536	16415	16511	16537	16434
208	11219	11129	11086	11125	11032
209	17650	17569	17546	17597	17492
238	23119	23046	23076	23113	22760

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	9259.15	7.05	6.90 - 7.10		0.787		0.900
9	1987.36	9.00	8.90 - 9.10		0.787		0.900
24	6215.36	23.95	23.90 - 24.10		0.788		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	10334.29	58.95	58.90 - 59.10		0.823		0.900
115	25908.32	115.00	114.90 - 115.10		0.779		0.900
140	29266.02	140.00	139.90 - 140.10		0.783		0.900
208	20679.51	208.05	207.90 - 208.10		0.815		0.900
209	32887.40	209.05	208.90 - 209.10		0.806		0.900
238	42108.02	238.00	237.90 - 238.10		0.823		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.59 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.60 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.3 V	Deflect	15.0 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	126	Axis Gain	1.0004	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	-0.4 mm

EM

Discriminator	4.2 mV	Analog HV	2273 V	Pulse HV	1489 V

Calibration Blank Report

Sample Name Blank

File Name 003CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:04:23 AM

Sample Type CalBlk

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	340	8.8
Co	59	72	He	3	173.2
Cu	63	72	He	30	66.7
Cu	65	72	He	10	50.0
Zn	66	72	He	10	100.0
As	75	72	He	2	65.5
[Pb]	206	175	He	22	31.2
[Pb]	207	175	He	22	60.6
Pb	208	175	He	97	13.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	1645686	1.9
Sc	45	He	30058	1.0
Ge	72	He	28963	2.3
In	115	He	330804	1.8
Lu	175	He	1155618	1.4
Th	232	He	2230925	1.6

10/4/22

Calibration Standard Report

Sample Name 25ppb

File Name 004CALS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:06:02 AM

Sample Type CalStd

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	207817	1.9
Co	59	72	He	43172	0.2
Cu	63	72	He	35307	2.0
Cu	65	72	He	18097	1.1
Zn	66	72	He	4898	11.0
As	75	72	He	2271	2.8
[Pb]	206	175	He	86151	0.6
[Pb]	207	175	He	74741	0.8
Pb	208	175	He	346997	1.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1631410	0.2	1645686.17	99.13	
Sc	45	He	29865	0.4	30058.35	99.36	
Ge	72	He	27978	1.6	28963.31	96.6	
In	115	He	324585	0.1	330803.53	98.12	
Lu	175	He	1143539	0.5	1155617.88	98.95	
Th	232	He	2250022	1.1	2230925.07	100.86	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	005_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:07:43 AM
Sample Type	ICV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.67359	ug/l	1.3	212045	102.69	
Co	59	72	He	24.51232	ug/l	1.0	41766	98.05	
Cu	63	72	He	12.14546	ug/l	2.4	16937	97.16	
Cu	65	72	He	12.38615	ug/l	1.2	8851	99.09	
Zn	66	72	He	24.04808	ug/l	8.0	4644	96.19	
As	75	72	He	23.72004	ug/l	3.7	2125	94.88	
Pb	208	175	He	24.29149	ug/l	0.7	332834	97.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1621206	1.7	1645686.17	98.51	
Sc	45	He	29220	4.3	30058.35	97.21	
Ge	72	He	27601	1.2	28963.31	95.29	
In	115	He	322412	1.1	330803.53	97.46	
Lu	175	He	1128856	1.0	1155617.88	97.68	
Th	232	He	2228340	1.3	2230925.07	99.88	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 006_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:09:24 AM

Sample Type CCV

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.60575	ug/l	1.6	207969	102.42	
Co	59	72	He	24.94012	ug/l	4.0	42811	99.76	
Cu	63	72	He	24.99466	ug/l	5.2	35077	99.98	
Cu	65	72	He	25.09462	ug/l	4.0	18055	100.38	
Zn	66	72	He	24.34379	ug/l	1.6	4741	97.38	
As	75	72	He	25.08899	ug/l	1.3	2266	100.36	
Pb	208	175	He	24.89680	ug/l	1.2	343397	99.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1594155	0.8	1645686.17	96.87	
Sc	45	He	28599	3.5	30058.35	95.14	
Ge	72	He	27828	3.0	28963.31	96.08	
In	115	He	319279	0.2	330803.53	96.52	
Lu	175	He	1136415	1.3	1155617.88	98.34	
Th	232	He	2221193	0.5	2230925.07	99.56	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	007_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:11:04 AM
Sample Type	ICB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.01519	ug/l	21.7	447	
Co	59	72	He	0.00796	ug/l	111.5	17	
Cu	63	72	He	0.00321	ug/l	265.6	33	
Cu	65	72	He	0.01915	ug/l	161.1	23	
Zn	66	72	He	0.05219	ug/l	167.9	20	
As	75	72	He	-0.01039	ug/l	N/A	1	
Pb	208	175	He	0.00808	ug/l	46.6	207	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1573144	2.9	1645686.17	95.59	
Sc	45	He	28756	2.0	30058.35	95.67	
Ge	72	He	27841	2.9	28963.31	96.13	
In	115	He	319669	0.7	330803.53	96.63	
Lu	175	He	1136244	1.0	1155617.88	98.32	
Th	232	He	2223169	1.4	2230925.07	99.65	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	008_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:12:44 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.00080	ug/l	1312.3	337	
Co	59	72	He	0.00258	ug/l	188.2	8	
Cu	63	72	He	0.00277	ug/l	814.1	33	
Cu	65	72	He	-0.00188	ug/l	N/A	8	
Zn	66	72	He	0.00178	ug/l	16.9	10	
As	75	72	He	0.00045	ug/l	2817.1	2	
Pb	208	175	He	0.00043	ug/l	368.1	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1593316	3.6	1645686.17	96.82	
Sc	45	He	28789	2.2	30058.35	95.78	
Ge	72	He	28215	0.6	28963.31	97.42	
In	115	He	324052	0.7	330803.53	97.96	
Lu	175	He	1136324	0.9	1155617.88	98.33	
Th	232	He	2237325	1.1	2230925.07	100.29	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	009LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:14:26 AM
Sample Type	LLICV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.08508	ug/l	3.7	1020	85.08	
Co	59	72	He	0.01490	ug/l	27.6	29	74.5	
Cu	63	72	He	0.08362	ug/l	25.4	147	83.62	
Cu	65	72	He	0.11848	ug/l	21.2	95	118.48	
Zn	66	72	He	2.04006	ug/l	6.5	407	102	
As	75	72	He	0.40303	ug/l	37.0	39	80.61	
[Pb]	206	175	He	0.01764	ug/l	8.7	82	88.2	
[Pb]	207	175	He	0.02074	ug/l	35.2	83	103.7	
Pb	208	175	He	0.01825	ug/l	13.3	347	91.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1594028	2.0	1645686.17	96.86	
Sc	45	He	28776	1.4	30058.35	95.73	
Ge	72	He	27878	0.5	28963.31	96.25	
In	115	He	324558	0.8	330803.53	98.11	
Lu	175	He	1135437	0.9	1155617.88	98.25	
Th	232	He	2229925	1.2	2230925.07	99.96	

Prep Blank (PB) Report

Sample Name	KQ2216908-01
File Name	010_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:16:07 AM
Sample Type	PB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.00193	ug/l	379.9	353	
Co	59	72	He	0.00203	ug/l	96.1	7	
Cu	63	72	He	0.01068	ug/l	216.9	43	
Cu	65	72	He	0.01487	ug/l	163.8	20	
Zn	66	72	He	0.47224	ug/l	32.7	100	
As	75	72	He	-0.01753	ug/l	N/A	1	
[Pb]	206	175	He	0.00179	ug/l	204.7	28	
[Pb]	207	175	He	0.00293	ug/l	71.3	30	
Pb	208	175	He	0.00079	ug/l	75.0	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1627992	2.1	1645686.17	98.92	
Sc	45	He	28559	1.1	30058.35	95.01	
Ge	72	He	27447	0.8	28963.31	94.76	
In	115	He	320093	0.1	330803.53	96.76	
Lu	175	He	1121197	1.6	1155617.88	97.02	
Th	232	He	2206462	1.0	2230925.07	98.9	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216908-02
File Name	011_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:17:46 AM
Sample Type	LCS
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	50.90663	ug/l	1.4	398657	50	101.81	
Co	59	72	He	24.75643	ug/l	1.7	41347	25	99.03	
Cu	63	72	He	12.78285	ug/l	3.5	17474	12.5	102.26	
Cu	65	72	He	12.41281	ug/l	1.0	8694	12.5	99.3	
Zn	66	72	He	23.91528	ug/l	2.2	4527	25	95.66	
As	75	72	He	48.72660	ug/l	1.4	4277	50	97.45	
[Pb]	206	175	He	48.82928	ug/l	0.6	165790	50	97.66	
[Pb]	207	175	He	49.15608	ug/l	0.9	144795	50	98.31	
Pb	208	175	He	49.01743	ug/l	0.5	670351	50	98.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1538799	4.6	1645686.17	93.51	
Sc	45	He	29150	1.1	30058.35	96.98	
Ge	72	He	27056	0.8	28963.31	93.42	
In	115	He	317747	0.6	330803.53	96.05	
Lu	175	He	1126819	0.3	1155617.88	97.51	
Th	232	He	2197476	0.9	2230925.07	98.5	

Reference Sample Report

Sample Name K2211193-001
File Name 012_ARF.d
Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time 2022-10-04 11:19:25 AM
Sample Type AllRef
Comment D
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fial Pass
ISTD QC Pass/Fail Pass
Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.96502	ug/l	2.5	40860	
Co	59	72	He	269.45939	ug/l	3.5	368906	
Cu	63	72	He	0.41175	ug/l	11.3	483	
Cu	65	72	He	0.40914	ug/l	28.9	242	
Zn	66	72	He	59.42053	ug/l	5.7	9206	
As	75	72	He	1.92214	ug/l	7.2	140	
Pb	208	175	He	0.01820	ug/l	1.8	301	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1337580	1.0	1645686.17	81.28	
Sc	45	He	23409	1.8	30058.35	77.88	
Ge	72	He	22194	3.2	28963.31	76.63	
In	115	He	261370	1.5	330803.53	79.01	
Lu	175	He	988956	0.7	1155617.88	85.58	
Th	232	He	1986007	1.0	2230925.07	89.02	

Duplicate Sample Report

Sample Name	KQ2216908-03
File Name	013_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:21:04 AM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	012_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	5.92560	ug/l	2.8	39580	0.66	
Co	59	72	He	274.08035	ug/l	1.6	363100	1.7	
Cu	63	72	He	0.43203	ug/l	22.6	490		<5x MRL
Cu	65	72	He	0.38598	ug/l	12.5	222		<5x MRL
Zn	66	72	He	59.21489	ug/l	1.0	8883	0.35	
As	75	72	He	2.01535	ug/l	8.7	142		<5x MRL
[Pb]	206	175	He	0.00961	ug/l	45.6	48		<5x MRL
[Pb]	207	175	He	0.00729	ug/l	19.9	38		<5x MRL
Pb	208	175	He	0.00819	ug/l	19.4	181		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1304232	0.8	1645686.17	79.25	
Sc	45	He	23239	2.7	30058.35	77.31	
Ge	72	He	21463	0.8	28963.31	74.1	
In	115	He	262580	0.4	330803.53	79.38	
Lu	175	He	988770	0.8	1155617.88	85.56	
Th	232	He	2028268	1.4	2230925.07	90.92	

Matrix Spike Sample (MS) Report

Sample Name KQ2216908-04

File Name 014_SPK.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:22:43 AM

Sample Type Spike

Comment D

ISTD Ref FileName 003CALB.d

QC Ref File Name 012_
ARF.

Default Text **ALKLS**
NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	51.71208	ug/l	2.6	349535	50	91.49	
Co	59	He	283.07180	ug/l	1.1	381941	25	54.45	Spike Failed
Cu	63	He	11.67164	ug/l	2.3	12893	12.5	90.08	
Cu	65	He	11.41942	ug/l	1.4	6463	12.5	88.08	
Zn	66	He	77.45632	ug/l	3.5	11828	25	72.14	
As	75	He	47.36012	ug/l	2.0	3358	50	90.88	
[Pb]	206	He	46.44938	ug/l	0.7	138236	50	92.87	
[Pb]	207	He	47.43302	ug/l	0.9	122468	50	94.84	
Pb	208	He	47.05475	ug/l	0.6	564046	50	94.07	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1328381	3.2	1645686.17	80.72	
Sc	45	He	22919	3.5	30058.35	76.25	
Ge	72	He	21861	1.6	28963.31	75.48	
In	115	He	259225	0.5	330803.53	78.36	
Lu	175	He	987692	0.5	1155617.88	85.47	
Th	232	He	2041264	1.5	2230925.07	91.5	

Reference Sample Report

Sample Name	K2211193-002
File Name	015_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:24:22 AM
Sample Type	AllRef
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	84.72985	ug/l	1.7	592147	
Co	59	72	He	5.54580	ug/l	1.5	8531	
Cu	63	72	He	0.01909	ug/l	148.9	50	
Cu	65	72	He	0.06962	ug/l	35.3	53	
Zn	66	72	He	2.40454	ug/l	8.3	427	
As	75	72	He	4.46407	ug/l	9.3	363	
Pb	208	175	He	0.01828	ug/l	20.8	319	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1373391	1.7	1645686.17	83.45	
Sc	45	He	24348	1.7	30058.35	81	
Ge	72	He	24916	1.3	28963.31	86.02	
In	115	He	278505	1.4	330803.53	84.19	
Lu	175	He	1044504	0.6	1155617.88	90.38	
Th	232	He	2129660	1.5	2230925.07	95.46	

Duplicate Sample Report

Sample Name	KQ2216908-05
File Name	016_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:26:01 AM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	015_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	84.15526	ug/l	1.0	606795	0.68	
Co	59	72	He	5.53900	ug/l	3.7	8674	0.12	
Cu	63	72	He	0.02366	ug/l	37.6	57		<5x MRL
Cu	65	72	He	0.04014	ug/l	39.0	35		<5x MRL
Zn	66	72	He	2.95963	ug/l	15.4	533		<5x MRL
As	75	72	He	4.32569	ug/l	6.3	358	3.15	
[Pb]	206	175	He	0.01345	ug/l	40.2	63		<5x MRL
[Pb]	207	175	He	0.00909	ug/l	61.5	46		<5x MRL
Pb	208	175	He	0.00985	ug/l	23.8	216		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1416827	1.4	1645686.17	86.09	
Sc	45	He	25503	1.2	30058.35	84.84	
Ge	72	He	25363	0.9	28963.31	87.57	
In	115	He	287525	0.4	330803.53	86.92	
Lu	175	He	1060775	1.0	1155617.88	91.79	
Th	232	He	2126063	1.6	2230925.07	95.3	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216908-06
File Name	017_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:27:40 AM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	015_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	128.34445	ug/l	2.1	926978	50	87.23	
Co	59	He	27.16869	ug/l	1.2	43289	25	86.49	
Cu	63	He	10.81131	ug/l	3.7	14104	12.5	86.34	
Cu	65	He	10.86335	ug/l	3.8	7260	12.5	86.35	
Zn	66	He	22.85109	ug/l	1.8	4127	25	81.79	
As	75	He	49.27138	ug/l	2.0	4125	50	89.61	
[Pb]	206	He	46.10488	ug/l	1.1	149187	50	92.17	
[Pb]	207	He	46.40968	ug/l	1.7	130274	50	92.79	
Pb	208	He	46.26227	ug/l	1.0	602944	50	92.49	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1419518	1.0	1645686.17	86.26	
Sc	45	He	26127	3.9	30058.35	86.92	
Ge	72	He	25810	0.7	28963.31	89.11	
In	115	He	288579	0.6	330803.53	87.24	
Lu	175	He	1073992	1.6	1155617.88	92.94	
Th	232	He	2152717	1.4	2230925.07	96.49	

Sample Report

Sample Name	K2211193-003
File Name	018SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:29:19 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	250.57808	ug/l	1.1	1936837	
Co	59	72	He	19.56194	ug/l	2.0	31022	
Cu	63	72	He	0.02826	ug/l	41.4	63	
Cu	65	72	He	0.05465	ug/l	38.7	45	
Zn	66	72	He	2.73521	ug/l	9.9	500	
As	75	72	He	29.27494	ug/l	3.9	2440	
Pb	208	175	He	0.01902	ug/l	13.6	342	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1519132	0.3	1645686.17	92.31	
Sc	45	He	26869	2.2	30058.35	89.39	
Ge	72	He	25694	1.7	28963.31	88.71	
In	115	He	297328	0.6	330803.53	89.88	
Lu	175	He	1088496	0.4	1155617.88	94.19	
Th	232	He	2191180	0.1	2230925.07	98.22	

Sample Report

Sample Name K2211193-004

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:30:57 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	556.40551	ug/l	1.0	4108750	
Co	59	72	He	34.75721	ug/l	2.1	52828	
Cu	63	72	He	0.03837	ug/l	31.1	73	
Cu	65	72	He	0.06549	ug/l	50.0	50	
Zn	66	72	He	6.86055	ug/l	9.7	1190	
As	75	72	He	20.42522	ug/l	2.8	1632	
Pb	208	175	He	0.00978	ug/l	20.2	218	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1451614	1.3	1645686.17	88.21	
Sc	45	He	25603	3.6	30058.35	85.18	
Ge	72	He	24628	2.3	28963.31	85.03	
In	115	He	286737	0.9	330803.53	86.68	
Lu	175	He	1076894	0.8	1155617.88	93.19	
Th	232	He	2169635	0.2	2230925.07	97.25	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 020_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:32:38 AM

Sample Type CCV

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.21548	ug/l	2.5	191692	96.86	
Co	59	72	He	25.07376	ug/l	2.8	42420	100.3	
Cu	63	72	He	25.35521	ug/l	0.8	35090	101.42	
Cu	65	72	He	25.35395	ug/l	2.9	17980	101.42	
Zn	66	72	He	23.62785	ug/l	11.1	4527	94.51	
As	75	72	He	24.82531	ug/l	4.1	2208	99.3	
Pb	208	175	He	25.38971	ug/l	0.7	351155	101.56	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1553643	0.6	1645686.17	94.41	
Sc	45	He	28579	2.9	30058.35	95.08	
Ge	72	He	27414	1.6	28963.31	94.65	
In	115	He	322997	0.7	330803.53	97.64	
Lu	175	He	1139464	0.7	1155617.88	98.6	
Th	232	He	2285344	2.2	2230925.07	102.44	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	021_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:34:18 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.18320	ug/l	7.3	1833	CCB Failed
Co	59	72	He	0.01791	ug/l	52.0	33	
Cu	63	72	He	-0.01089	ug/l	N/A	13	
Cu	65	72	He	0.01266	ug/l	86.2	18	
Zn	66	72	He	0.00280	ug/l	1842.6	10	
As	75	72	He	-0.00249	ug/l	N/A	2	
Pb	208	175	He	0.00640	ug/l	27.7	186	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1611672	2.9	1645686.17	97.93	
Sc	45	He	28469	1.6	30058.35	94.71	
Ge	72	He	27384	1.5	28963.31	94.55	
In	115	He	324240	1.2	330803.53	98.02	
Lu	175	He	1150617	0.5	1155617.88	99.57	
Th	232	He	2290181	0.7	2230925.07	102.66	

see
rerun
am 10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	022_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:37:41 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.09303	ug/l	21.2	1090	
Co	59	72	He	0.00778	ug/l	65.8	17	
Cu	63	72	He	-0.00647	ug/l	N/A	20	
Cu	65	72	He	-0.00871	ug/l	N/A	3	
Zn	66	72	He	-0.01421	ug/l	N/A	7	
As	75	72	He	-0.01037	ug/l	N/A	1	
Pb	208	175	He	0.00109	ug/l	63.6	111	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1598973	3.2	1645686.17	97.16	
Sc	45	He	28185	3.2	30058.35	93.77	
Ge	72	He	27908	1.4	28963.31	96.36	
In	115	He	325774	1.3	330803.53	98.48	
Lu	175	He	1146538	0.7	1155617.88	99.21	
Th	232	He	2295329	0.2	2230925.07	102.89	

Sample Report

Sample Name K2211193-005

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:39:23 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	578.10916	ug/l	0.3	4643604	
Co	59	72	He	8.15404	ug/l	4.4	13511	
Cu	63	72	He	0.00409	ug/l	125.1	33	
Cu	65	72	He	0.04892	ug/l	80.2	43	
Zn	66	72	He	2.37519	ug/l	14.6	453	
As	75	72	He	187.70191	ug/l	3.5	16339	
Pb	208	175	He	0.00276	ug/l	22.2	131	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1578828	1.1	1645686.17	95.94	
Sc	45	He	27497	1.4	30058.35	91.48	
Ge	72	He	26862	3.3	28963.31	92.75	
In	115	He	301836	0.4	330803.53	91.24	
Lu	175	He	1118905	0.1	1155617.88	96.82	
Th	232	He	2222399	0.7	2230925.07	99.62	

Sample Report

Sample Name	K2211193-006
File Name	024SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:41:02 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.96458	ug/l	1.8	30088	
Co	59	72	He	284.77788	ug/l	1.6	441635	
Cu	63	72	He	0.09771	ug/l	21.1	150	
Cu	65	72	He	0.20737	ug/l	11.7	143	
Zn	66	72	He	27.74744	ug/l	7.7	4874	
As	75	72	He	0.16313	ug/l	4.5	15	
Pb	208	175	He	0.00312	ug/l	47.9	132	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1476648	1.6	1645686.17	89.73	
Sc	45	He	25927	2.4	30058.35	86.26	
Ge	72	He	25126	1.2	28963.31	86.75	
In	115	He	292405	0.2	330803.53	88.39	
Lu	175	He	1087481	0.5	1155617.88	94.1	
Th	232	He	2186572	0.6	2230925.07	98.01	

Sample Report

Sample Name	K2211193-007
File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:42:42 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.83786	ug/l	1.0	41328	
Co	59	72	He	273.70607	ug/l	1.6	388095	
Cu	63	72	He	0.50575	ug/l	3.5	610	
Cu	65	72	He	0.50861	ug/l	21.8	310	
Zn	66	72	He	56.70435	ug/l	4.0	9106	
As	75	72	He	1.87294	ug/l	8.0	141	
Pb	208	175	He	0.00812	ug/l	31.0	190	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1382004	1.5	1645686.17	83.98	
Sc	45	He	24131	1.0	30058.35	80.28	
Ge	72	He	22972	1.2	28963.31	79.32	
In	115	He	273761	0.9	330803.53	82.76	
Lu	175	He	1042537	0.5	1155617.88	90.21	
Th	232	He	2142460	0.5	2230925.07	96.03	

Sample Report

Sample Name K2211193-008

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:44:22 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	82.75717	ug/l	2.5	636604	
Co	59	72	He	5.36367	ug/l	2.3	8981	
Cu	63	72	He	0.05006	ug/l	45.0	97	
Cu	65	72	He	0.04845	ug/l	33.5	43	
Zn	66	72	He	3.57695	ug/l	11.9	687	
As	75	72	He	3.30274	ug/l	6.4	293	
Pb	208	175	He	0.00232	ug/l	35.1	126	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1511776	1.7	1645686.17	91.86	
Sc	45	He	26595	2.3	30058.35	88.48	
Ge	72	He	27120	1.3	28963.31	93.63	
In	115	He	303536	0.4	330803.53	91.76	
Lu	175	He	1123475	1.0	1155617.88	97.22	
Th	232	He	2322217	0.8	2230925.07	104.09	

Sample Report

Sample Name	K2211193-009
File Name	027SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:46:01 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	241.74068	ug/l	0.6	1932974	
Co	59	72	He	19.01688	ug/l	1.9	30867	
Cu	63	72	He	0.03472	ug/l	34.3	73	
Cu	65	72	He	0.06511	ug/l	36.0	53	
Zn	66	72	He	2.67528	ug/l	26.3	500	
As	75	72	He	27.64108	ug/l	0.7	2359	
Pb	208	175	He	0.00107	ug/l	122.0	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1571490	1.1	1645686.17	95.49	
Sc	45	He	26862	3.2	30058.35	89.37	
Ge	72	He	26295	1.0	28963.31	90.79	
In	115	He	306706	1.3	330803.53	92.72	
Lu	175	He	1138496	0.4	1155617.88	98.52	
Th	232	He	2264259	1.0	2230925.07	101.49	

Sample Report

Sample Name	K2211193-010
File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:47:41 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	545.06840	ug/l	1.0	4112667	
Co	59	72	He	34.65975	ug/l	2.8	53468	
Cu	63	72	He	0.04560	ug/l	44.5	83	
Cu	65	72	He	0.04620	ug/l	43.4	38	
Zn	66	72	He	6.31559	ug/l	6.9	1110	
As	75	72	He	18.59164	ug/l	5.9	1508	
Pb	208	175	He	-0.00051	ug/l	N/A	86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1483146	3.0	1645686.17	90.12	
Sc	45	He	26231	2.1	30058.35	87.27	
Ge	72	He	25002	2.7	28963.31	86.32	
In	115	He	293365	1.1	330803.53	88.68	
Lu	175	He	1104494	0.6	1155617.88	95.58	
Th	232	He	2212368	2.2	2230925.07	99.17	

Sample Report

Sample Name K2211193-011

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:49:19 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	568.17895	ug/l	3.0	4614060	
Co	59	72	He	7.98914	ug/l	2.1	13655	
Cu	63	72	He	0.00808	ug/l	91.8	40	
Cu	65	72	He	0.04015	ug/l	42.4	38	
Zn	66	72	He	2.22658	ug/l	0.8	440	
As	75	72	He	155.19576	ug/l	2.0	13932	
Pb	208	175	He	0.00111	ug/l	124.4	111	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1596463	0.9	1645686.17	97.01	
Sc	45	He	28008	2.6	30058.35	93.18	
Ge	72	He	27687	1.6	28963.31	95.59	
In	115	He	307874	1.4	330803.53	93.07	
Lu	175	He	1143456	0.7	1155617.88	98.95	
Th	232	He	2323458	0.4	2230925.07	104.15	

Sample Report

Sample Name	K2211193-012
File Name	030SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:50:59 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.12232	ug/l	1.4	31875	
Co	59	72	He	289.59010	ug/l	4.4	457058	
Cu	63	72	He	0.10840	ug/l	4.4	167	
Cu	65	72	He	0.13082	ug/l	43.9	95	
Zn	66	72	He	26.16089	ug/l	6.1	4678	
As	75	72	He	0.17279	ug/l	22.5	16	
Pb	208	175	He	0.00181	ug/l	47.4	119	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1505658	4.0	1645686.17	91.49	
Sc	45	He	26308	2.5	30058.35	87.52	
Ge	72	He	25600	4.3	28963.31	88.39	
In	115	He	303836	1.2	330803.53	91.85	
Lu	175	He	1126146	0.9	1155617.88	97.45	
Th	232	He	2294054	2.5	2230925.07	102.83	

Sample Report

Sample Name	K2211300-001
File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:52:41 AM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.55125	ug/l	2.0	38113	
Co	59	72	He	2.37904	ug/l	4.0	3928	
Cu	63	72	He	37.78908	ug/l	3.9	50978	
Cu	65	72	He	37.43529	ug/l	1.7	25894	
Zn	66	72	He	412.33992	ug/l	2.0	76995	
As	75	72	He	2.75088	ug/l	3.6	241	
Pb	208	175	He	5.86881	ug/l	1.3	82033	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1631970	2.1	1645686.17	99.17	
Sc	45	He	27981	2.9	30058.35	93.09	
Ge	72	He	26742	2.0	28963.31	92.33	
In	115	He	312938	1.6	330803.53	94.6	
Lu	175	He	1150672	1.5	1155617.88	99.57	
Th	232	He	2329203	0.8	2230925.07	104.41	

Sample Report

Sample Name K2211300-002

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:54:20 AM

Sample Type Sample

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.05544	ug/l	3.0	33956	
Co	59	72	He	1.82264	ug/l	5.0	3063	
Cu	63	72	He	30.18756	ug/l	4.1	41437	
Cu	65	72	He	30.01061	ug/l	3.5	21119	
Zn	66	72	He	305.24938	ug/l	2.1	58012	
As	75	72	He	3.62509	ug/l	5.2	322	
Pb	208	175	He	3.26382	ug/l	0.5	46655	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1630180	2.6	1645686.17	99.06	
Sc	45	He	28886	3.1	30058.35	96.1	
Ge	72	He	27216	2.8	28963.31	93.97	
In	115	He	319106	1.3	330803.53	96.46	
Lu	175	He	1175509	0.8	1155617.88	101.72	
Th	232	He	2399088	1.6	2230925.07	107.54	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 033_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:56:01 AM

Sample Type CCV

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.87212	ug/l	1.9	197356	95.49	
Co	59	72	He	25.09008	ug/l	1.7	43393	100.36	
Cu	63	72	He	25.23812	ug/l	2.1	35692	100.95	
Cu	65	72	He	25.06122	ug/l	1.9	18167	100.24	
Zn	66	72	He	24.73237	ug/l	7.3	4848	98.93	
As	75	72	He	25.10861	ug/l	5.3	2283	100.43	
Pb	208	175	He	25.63526	ug/l	2.1	361037	102.54	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1622801	2.3	1645686.17	98.61	
Sc	45	He	28856	3.0	30058.35	96	
Ge	72	He	28018	0.9	28963.31	96.74	
In	115	He	328265	1.2	330803.53	99.23	
Lu	175	He	1160621	2.1	1155617.88	100.43	
Th	232	He	2361939	1.1	2230925.07	105.87	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	034_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:57:41 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.16742	ug/l	14.3	1753	CCB Failed
Co	59	72	He	0.02148	ug/l	13.7	41	CCB Failed
Cu	63	72	He	-0.00233	ug/l	N/A	27	
Cu	65	72	He	0.00689	ug/l	191.6	15	
Zn	66	72	He	-0.01586	ug/l	N/A	7	
As	75	72	He	-0.00339	ug/l	N/A	2	
Pb	208	175	He	0.00209	ug/l	108.6	126	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1655611	1.2	1645686.17	100.6	
Sc	45	He	28635	1.5	30058.35	95.27	
Ge	72	He	28492	2.1	28963.31	98.37	
In	115	He	330701	1.2	330803.53	99.97	
Lu	175	He	1154218	1.3	1155617.88	99.88	
Th	232	He	2346898	1.4	2230925.07	105.2	

see
rerun
Gm 10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	035_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:04:31 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.10038	ug/l	4.1	1177	CCB Failed
Co	59	72	He	0.00843	ug/l	51.8	18	
Cu	63	72	He	-0.01345	ug/l	N/A	10	
Cu	65	72	He	0.00288	ug/l	362.9	12	
Zn	66	72	He	-0.01440	ug/l	N/A	7	
As	75	72	He	-0.00674	ug/l	N/A	2	
Pb	208	175	He	-0.00209	ug/l	N/A	68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1639723	1.6	1645686.17	99.64	
Sc	45	He	28889	1.7	30058.35	96.11	
Ge	72	He	27794	1.0	28963.31	95.96	
In	115	He	329444	1.0	330803.53	99.59	
Lu	175	He	1163036	1.5	1155617.88	100.64	
Th	232	He	2357159	1.2	2230925.07	105.66	

Sample Report

Sample Name K2211300-003

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:09:40 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.43395	ug/l	2.2	37675	
Co	59	72	He	1.76041	ug/l	1.9	2999	
Cu	63	72	He	34.57904	ug/l	2.3	48125	
Cu	65	72	He	34.18169	ug/l	2.1	24379	
Zn	66	72	He	300.38585	ug/l	1.7	57851	
As	75	72	He	4.25286	ug/l	4.9	382	
Pb	208	175	He	3.26409	ug/l	0.2	45421	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1655857	3.3	1645686.17	100.62	
Sc	45	He	28522	1.5	30058.35	94.89	
Ge	72	He	27574	1.6	28963.31	95.2	
In	115	He	313736	1.0	330803.53	94.84	
Lu	175	He	1144319	1.2	1155617.88	99.02	
Th	232	He	2338993	1.5	2230925.07	104.84	

Sample Report

Sample Name K2211300-001

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:11:34 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.67325	ug/l	3.4	22491	
Co	59	72	He	0.24852	ug/l	4.5	424	
Cu	63	72	He	13.31126	ug/l	3.5	18452	
Cu	65	72	He	13.53921	ug/l	1.3	9620	
Zn	66	72	He	34.55043	ug/l	8.9	6628	
As	75	72	He	1.86358	ug/l	8.8	168	
Pb	208	175	He	0.12270	ug/l	1.7	1839	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1629374	1.2	1645686.17	99.01	
Sc	45	He	28812	2.8	30058.35	95.86	
Ge	72	He	27450	1.6	28963.31	94.78	
In	115	He	323456	1.0	330803.53	97.78	
Lu	175	He	1169210	1.3	1155617.88	101.18	
Th	232	He	2374923	0.7	2230925.07	106.45	

Sample Report

Sample Name	K2211300-002
File Name	038SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:13:30 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.49693	ug/l	2.1	20862	
Co	59	72	He	0.35232	ug/l	6.3	613	
Cu	63	72	He	17.26771	ug/l	1.7	24455	
Cu	65	72	He	16.89853	ug/l	3.1	12264	
Zn	66	72	He	58.64624	ug/l	5.9	11488	
As	75	72	He	2.79989	ug/l	3.8	257	
Pb	208	175	He	0.06365	ug/l	11.6	994	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1616405	1.7	1645686.17	98.22	
Sc	45	He	29694	1.3	30058.35	98.79	
Ge	72	He	28052	2.4	28963.31	96.85	
In	115	He	321809	0.3	330803.53	97.28	
Lu	175	He	1161077	1.1	1155617.88	100.47	
Th	232	He	2329467	0.8	2230925.07	104.42	

Sample Report

Sample Name K2211300-003

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:15:24 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.29231	ug/l	1.7	27880	
Co	59	72	He	0.46557	ug/l	6.9	811	
Cu	63	72	He	18.15201	ug/l	3.2	25754	
Cu	65	72	He	17.83781	ug/l	2.1	12973	
Zn	66	72	He	46.62874	ug/l	6.5	9153	
As	75	72	He	3.50440	ug/l	8.3	322	
Pb	208	175	He	0.05502	ug/l	7.0	898	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1644380	0.9	1645686.17	99.92	
Sc	45	He	29557	2.0	30058.35	98.33	
Ge	72	He	28112	3.0	28963.31	97.06	
In	115	He	326804	1.4	330803.53	98.79	
Lu	175	He	1195739	1.5	1155617.88	103.47	
Th	232	He	2382426	0.5	2230925.07	106.79	

Sample Report

Sample Name K2211358-001

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:17:18 PM

Sample Type Sample

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.52974	ug/l	1.1	21099	
Co	59	72	He	0.07528	ug/l	17.8	131	
Cu	63	72	He	15.00498	ug/l	1.4	20819	
Cu	65	72	He	14.61618	ug/l	1.9	10391	
Zn	66	72	He	15.38897	ug/l	5.6	2964	
As	75	72	He	0.70456	ug/l	7.8	65	
Pb	208	175	He	0.45029	ug/l	1.1	6467	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1613640	3.4	1645686.17	98.05	
Sc	45	He	28358	1.9	30058.35	94.34	
Ge	72	He	27470	2.1	28963.31	94.85	
In	115	He	324183	1.5	330803.53	98	
Lu	175	He	1165588	1.8	1155617.88	100.86	
Th	232	He	2363846	1.0	2230925.07	105.96	

Sample Report

Sample Name	K2211365-001
File Name	041SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:19:12 PM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.28641	ug/l	1.8	43009	
Co	59	72	He	0.53208	ug/l	6.8	901	
Cu	63	72	He	0.69203	ug/l	5.4	983	
Cu	65	72	He	0.71241	ug/l	8.8	513	
Zn	66	72	He	43.25032	ug/l	3.5	8269	
As	75	72	He	0.20011	ug/l	21.4	20	
Pb	208	175	He	0.01177	ug/l	17.3	261	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1587200	1.6	1645686.17	96.45	
Sc	45	He	27864	4.0	30058.35	92.7	
Ge	72	He	27353	1.3	28963.31	94.44	
In	115	He	320745	1.6	330803.53	96.96	
Lu	175	He	1151521	2.3	1155617.88	99.65	
Th	232	He	2337418	0.6	2230925.07	104.77	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 042_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:21:07 PM

Sample Type CCV

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.12501	ug/l	2.3	194468	96.5	
Co	59	72	He	25.54936	ug/l	1.9	43369	102.2	
Cu	63	72	He	25.77877	ug/l	3.0	35779	103.12	
Cu	65	72	He	25.54560	ug/l	2.5	18183	102.18	
Zn	66	72	He	24.17171	ug/l	1.9	4651	96.69	
As	75	72	He	25.27875	ug/l	4.3	2255	101.12	
Pb	208	175	He	25.25869	ug/l	1.3	359461	101.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1582171	1.7	1645686.17	96.14	
Sc	45	He	28361	2.7	30058.35	94.35	
Ge	72	He	27504	2.2	28963.31	94.96	
In	115	He	325851	0.4	330803.53	98.5	
Lu	175	He	1172592	1.7	1155617.88	101.47	
Th	232	He	2351058	0.8	2230925.07	105.38	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	043_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:23:02 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.07574	ug/l	8.1	943	
Co	59	72	He	0.00465	ug/l	64.9	11	
Cu	63	72	He	0.00586	ug/l	312.2	37	
Cu	65	72	He	-0.00156	ug/l	N/A	8	
Zn	66	72	He	0.02051	ug/l	147.2	13	
As	75	72	He	-0.01006	ug/l	N/A	1	
Pb	208	175	He	0.00249	ug/l	43.5	132	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1593095	1.0	1645686.17	96.8	
Sc	45	He	29407	3.3	30058.35	97.83	
Ge	72	He	27487	0.8	28963.31	94.9	
In	115	He	324478	0.4	330803.53	98.09	
Lu	175	He	1160653	1.1	1155617.88	100.44	
Th	232	He	2340165	1.7	2230925.07	104.9	

Prep Blank (PB) Report

Sample Name	KQ2216890-01
File Name	044_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:24:58 PM
Sample Type	PB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.08038	ug/l	16.6	997	
Co	59	72	He	0.00519	ug/l	142.1	12	
Cu	63	72	He	0.01698	ug/l	93.9	53	
Cu	65	72	He	0.02354	ug/l	62.1	27	
Zn	66	72	He	0.20622	ug/l	43.0	50	
As	75	72	He	-0.00667	ug/l	N/A	2	
[Pb]	206	175	He	-0.00134	ug/l	N/A	18	
[Pb]	207	175	He	0.00032	ug/l	725.7	23	
Pb	208	175	He	-0.00046	ug/l	N/A	91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1618576	0.4	1645686.17	98.35	
Sc	45	He	29030	1.5	30058.35	96.58	
Ge	72	He	28062	0.9	28963.31	96.89	
In	115	He	329632	1.0	330803.53	99.65	
Lu	175	He	1171977	2.6	1155617.88	101.42	
Th	232	He	2339981	0.6	2230925.07	104.89	

Laboratory Control Sample (LCS) Report

Sample Name	KQ2216890-02
File Name	045_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:26:52 PM
Sample Type	LCS
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	46.59116	ug/l	1.7	391325	50	93.18	
Co	59	72	He	23.92361	ug/l	3.6	42100	25	95.69	
Cu	63	72	He	12.35376	ug/l	2.6	17795	12.5	98.83	
Cu	65	72	He	12.08811	ug/l	3.0	8923	12.5	96.7	
Zn	66	72	He	22.31746	ug/l	6.7	4451	25	89.27	
As	75	72	He	47.42933	ug/l	2.1	4387	50	94.86	
[Pb]	206	175	He	49.08227	ug/l	0.2	172813	50	98.16	
[Pb]	207	175	He	49.48905	ug/l	1.0	151160	50	98.98	
Pb	208	175	He	49.41686	ug/l	0.3	700790	50	98.83	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1649859	1.4	1645686.17	100.25	
Sc	45	He	28963	0.9	30058.35	96.35	
Ge	72	He	28519	2.0	28963.31	98.47	
In	115	He	326966	1.0	330803.53	98.84	
Lu	175	He	1168489	0.6	1155617.88	101.11	
Th	232	He	2345083	2.3	2230925.07	105.12	

Reference Sample Report

Sample Name	K2211194-001
File Name	046_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:28:47 PM
Sample Type	AllRef
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.71419	ug/l	0.6	40275	
Co	59	72	He	271.21155	ug/l	2.2	380872	
Cu	63	72	He	0.51611	ug/l	10.4	617	
Cu	65	72	He	0.59358	ug/l	8.7	357	
Zn	66	72	He	50.65762	ug/l	1.4	8059	
As	75	72	He	1.71427	ug/l	5.1	128	
Pb	208	175	He	0.01829	ug/l	8.9	316	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1375690	1.3	1645686.17	83.59	
Sc	45	He	23813	3.8	30058.35	79.22	
Ge	72	He	22758	2.6	28963.31	78.58	
In	115	He	271870	0.7	330803.53	82.18	
Lu	175	He	1032106	1.0	1155617.88	89.31	
Th	232	He	2120456	0.5	2230925.07	95.05	

Duplicate Sample Report

Sample Name	KQ2216890-03
File Name	047_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:30:42 PM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	046_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	5.75821	ug/l	4.9	39530	0.77	
Co	59	72	He	271.82774	ug/l	1.6	373364	0.23	
Cu	63	72	He	0.52569	ug/l	11.0	613	1.84	
Cu	65	72	He	0.55776	ug/l	9.3	328	6.22	
Zn	66	72	He	51.78631	ug/l	4.3	8052	2.2	
As	75	72	He	1.60039	ug/l	3.8	117		<5x MRL
[Pb]	206	175	He	0.00984	ug/l	51.2	50		<5x MRL
[Pb]	207	175	He	0.01099	ug/l	25.3	49		<5x MRL
Pb	208	175	He	0.00940	ug/l	48.9	202		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1340180	1.3	1645686.17	81.44	
Sc	45	He	23439	1.2	30058.35	77.98	
Ge	72	He	22255	1.6	28963.31	76.84	
In	115	He	265581	0.9	330803.53	80.28	
Lu	175	He	1022505	1.4	1155617.88	88.48	
Th	232	He	2136129	1.4	2230925.07	95.75	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216890-04
File Name	048_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:32:36 PM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	046_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	50.25341	ug/l	1.3	342244	50	89.08	
Co	59	He	282.49989	ug/l	2.7	395760	25	45.15	Spike Failed
Cu	63	He	11.43463	ug/l	1.0	13116	12.5	87.35	
Cu	65	He	11.46538	ug/l	2.0	6740	12.5	86.97	
Zn	66	He	69.84257	ug/l	2.8	11081	25	76.74	
As	75	He	46.10974	ug/l	1.6	3396	50	88.79	
[Pb]	206	He	47.50697	ug/l	0.7	146428	50	94.98	
[Pb]	207	He	47.96423	ug/l	0.7	128258	50	95.89	
Pb	208	He	47.89017	ug/l	0.5	594549	50	95.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1337620	1.7	1645686.17	81.28	
Sc	45	He	23109	1.9	30058.35	76.88	
Ge	72	He	22702	1.8	28963.31	78.38	
In	115	He	268416	0.7	330803.53	81.14	
Lu	175	He	1022945	0.7	1155617.88	88.52	
Th	232	He	2142644	1.2	2230925.07	96.04	

Sample Report

Sample Name	K2211194-002
File Name	049SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:34:30 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.78608	ug/l	2.7	608852	
Co	59	72	He	4.86086	ug/l	3.9	7887	
Cu	63	72	He	0.10289	ug/l	29.5	163	
Cu	65	72	He	0.13617	ug/l	6.5	102	
Zn	66	72	He	2.25768	ug/l	8.5	423	
As	75	72	He	1.43486	ug/l	7.0	124	
Pb	208	175	He	0.01276	ug/l	17.6	263	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1481992	4.7	1645686.17	90.05	
Sc	45	He	24782	2.2	30058.35	82.45	
Ge	72	He	26288	2.4	28963.31	90.76	
In	115	He	295176	0.3	330803.53	89.23	
Lu	175	He	1103797	0.9	1155617.88	95.52	
Th	232	He	2276542	1.2	2230925.07	102.04	

Sample Report

Sample Name K2211194-003

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:36:26 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	245.65074	ug/l	0.7	1889305	
Co	59	72	He	18.53928	ug/l	2.6	29858	
Cu	63	72	He	0.01460	ug/l	127.7	47	
Cu	65	72	He	0.04822	ug/l	29.3	42	
Zn	66	72	He	2.19939	ug/l	4.5	410	
As	75	72	He	25.29805	ug/l	1.2	2143	
Pb	208	175	He	0.00726	ug/l	51.1	197	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1511528	1.5	1645686.17	91.85	
Sc	45	He	26762	1.7	30058.35	89.03	
Ge	72	He	26098	2.3	28963.31	90.11	
In	115	He	307447	0.3	330803.53	92.94	
Lu	175	He	1143951	0.5	1155617.88	98.99	
Th	232	He	2333684	0.4	2230925.07	104.61	

Sample Report

Sample Name	K2211194-004
File Name	051SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:38:20 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	545.90216	ug/l	1.4	4212321	
Co	59	72	He	34.52661	ug/l	2.3	54192	
Cu	63	72	He	0.14854	ug/l	15.1	217	
Cu	65	72	He	0.24763	ug/l	17.2	172	
Zn	66	72	He	4.86798	ug/l	5.1	873	
As	75	72	He	15.56648	ug/l	3.8	1285	
Pb	208	175	He	0.00385	ug/l	29.4	144	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1516923	1.6	1645686.17	92.18	
Sc	45	He	25787	2.3	30058.35	85.79	
Ge	72	He	25433	2.3	28963.31	87.81	
In	115	He	298394	0.5	330803.53	90.2	
Lu	175	He	1106867	0.8	1155617.88	95.78	
Th	232	He	2279633	2.1	2230925.07	102.18	

Sample Report

Sample Name K2211194-005

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:40:14 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	561.52215	ug/l	1.3	4577931	
Co	59	72	He	8.07425	ug/l	2.2	13544	
Cu	63	72	He	0.00621	ug/l	77.8	37	
Cu	65	72	He	0.06053	ug/l	27.7	52	
Zn	66	72	He	2.15189	ug/l	16.4	417	
As	75	72	He	133.71441	ug/l	1.5	11783	
Pb	208	175	He	0.00625	ug/l	28.0	183	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1602460	1.2	1645686.17	97.37	
Sc	45	He	27256	0.4	30058.35	90.68	
Ge	72	He	27180	3.0	28963.31	93.84	
In	115	He	307702	0.3	330803.53	93.02	
Lu	175	He	1148583	1.2	1155617.88	99.39	
Th	232	He	2354068	1.8	2230925.07	105.52	

Reference Sample Report

Sample Name K2211194-006

File Name 053_ARF.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:42:08 PM

Sample Type AllRef

Comment D

ISTD Ref FileName 003CALB.d

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.91606	ug/l	5.6	30899	
Co	59	72	He	280.58385	ug/l	4.3	453551	
Cu	63	72	He	0.07492	ug/l	57.7	127	
Cu	65	72	He	0.16935	ug/l	23.8	123	
Zn	66	72	He	24.68822	ug/l	8.2	4521	
As	75	72	He	0.22638	ug/l	30.9	21	
Pb	208	175	He	0.00472	ug/l	23.9	159	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1535423	0.7	1645686.17	93.3	
Sc	45	He	25970	1.7	30058.35	86.4	
Ge	72	He	26215	3.8	28963.31	90.51	
In	115	He	300181	0.7	330803.53	90.74	
Lu	175	He	1126510	0.9	1155617.88	97.48	
Th	232	He	2306027	1.5	2230925.07	103.37	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 054_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:44:04 PM

Sample Type CCV

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.21048	ug/l	2.0	191973	92.84	
Co	59	72	He	25.32882	ug/l	1.4	43337	101.32	
Cu	63	72	He	25.06460	ug/l	1.3	35067	100.26	
Cu	65	72	He	25.27301	ug/l	3.6	18120	101.09	
Zn	66	72	He	24.00051	ug/l	6.0	4654	96	
As	75	72	He	25.36778	ug/l	1.6	2283	101.47	
Pb	208	175	He	25.87003	ug/l	2.4	366540	103.48	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1623403	2.3	1645686.17	98.65	
Sc	45	He	28251	2.5	30058.35	93.99	
Ge	72	He	27717	1.6	28963.31	95.7	
In	115	He	327422	0.7	330803.53	98.98	
Lu	175	He	1167660	2.0	1155617.88	101.04	
Th	232	He	2443785	1.2	2230925.07	109.54	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	055_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:45:59 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.19819	ug/l	1.7	1973	
Co	59	72	He	0.03692	ug/l	18.5	67	CCB Failed
Cu	63	72	He	-0.00872	ug/l	N/A	17	
Cu	65	72	He	0.00530	ug/l	155.0	13	
Zn	66	72	He	0.01943	ug/l	403.6	13	
As	75	72	He	0.01565	ug/l	84.2	4	
Pb	208	175	He	0.00168	ug/l	60.6	120	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1624090	1.2	1645686.17	98.69	
Sc	45	He	27911	2.5	30058.35	92.85	
Ge	72	He	27801	0.8	28963.31	95.99	
In	115	He	328006	1.0	330803.53	99.15	
Lu	175	He	1153537	1.4	1155617.88	99.82	
Th	232	He	2372510	2.3	2230925.07	106.35	

see
rerun
10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	056_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:13:14 PM
Sample Type	CCB
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.04599	ug/l	22.9	703	
Co	59	72	He	0.00262	ug/l	171.5	8	
Cu	63	72	He	-0.00879	ug/l	N/A	17	
Cu	65	72	He	-0.00405	ug/l	N/A	7	
Zn	66	72	He	0.07028	ug/l	167.1	23	
As	75	72	He	0.00799	ug/l	274.4	3	
Pb	208	175	He	-0.00209	ug/l	N/A	69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1598193	2.3	1645686.17	97.11	
Sc	45	He	28275	4.1	30058.35	94.07	
Ge	72	He	27921	0.5	28963.31	96.4	
In	115	He	326576	1.7	330803.53	98.72	
Lu	175	He	1180818	0.9	1155617.88	102.18	
Th	232	He	2366822	0.7	2230925.07	106.09	

Duplicate Sample Report

Sample Name	KQ2216890-05
File Name	057_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:15:09 PM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	053_ ARF. d
Default Text	**ALRLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	3.55646	ug/l	1.5	26621	9.62	
Co	59	72	He	285.45244	ug/l	2.0	440356	1.72	
Cu	63	72	He	0.10640	ug/l	20.5	160		<5x MRL
Cu	65	72	He	0.14693	ug/l	37.8	103		<5x MRL
Zn	66	72	He	26.23221	ug/l	0.1	4587	6.06	
As	75	72	He	0.17634	ug/l	32.1	16		<5x MRL
[Pb]	206	175	He	0.00120	ug/l	126.9	26		<5x MRL
[Pb]	207	175	He	-0.00048	ug/l	N/A	20		<5x MRL
Pb	208	175	He	0.00140	ug/l	28.4	112		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1454984	1.8	1645686.17	88.41	
Sc	45	He	26224	3.1	30058.35	87.24	
Ge	72	He	24996	1.5	28963.31	86.3	
In	115	He	297116	1.0	330803.53	89.82	
Lu	175	He	1115557	0.6	1155617.88	96.53	
Th	232	He	2253791	1.3	2230925.07	101.02	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216890-06
File Name	058_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:17:03 PM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	053_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	47.47448	ug/l	1.1	354724	50	87.12	
Co	59	He	300.78935	ug/l	1.5	452045	25	80.82	
Cu	63	He	11.43217	ug/l	0.2	14067	12.5	90.86	
Cu	65	He	11.60458	ug/l	3.0	7314	12.5	91.48	
Zn	66	He	48.03201	ug/l	4.1	8176	25	93.38	
As	75	He	46.79762	ug/l	1.8	3696	50	93.14	
[Pb]	206	He	46.72479	ug/l	1.0	153951	50	93.44	
[Pb]	207	He	47.29893	ug/l	1.0	135202	50	94.59	
Pb	208	He	47.11156	ug/l	1.2	625211	50	94.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1467684	2.7	1645686.17	89.18	
Sc	45	He	25476	1.8	30058.35	84.76	
Ge	72	He	24351	2.1	28963.31	84.08	
In	115	He	292943	0.4	330803.53	88.56	
Lu	175	He	1093544	1.0	1155617.88	94.63	
Th	232	He	2257882	1.0	2230925.07	101.21	

Sample Report

Sample Name K2211194-007

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:18:57 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.46738	ug/l	1.1	38798	
Co	59	72	He	273.35826	ug/l	4.2	380402	
Cu	63	72	He	0.56914	ug/l	12.5	673	
Cu	65	72	He	0.54637	ug/l	11.4	327	
Zn	66	72	He	57.50386	ug/l	1.9	9066	
As	75	72	He	1.23790	ug/l	19.0	92	
Pb	208	175	He	0.08002	ug/l	12.2	1107	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1384723	1.2	1645686.17	84.14	
Sc	45	He	23526	1.2	30058.35	78.27	
Ge	72	He	22568	4.0	28963.31	77.92	
In	115	He	272960	1.3	330803.53	82.51	
Lu	175	He	1050011	1.0	1155617.88	90.86	
Th	232	He	2202831	1.7	2230925.07	98.74	

Sample Report

Sample Name K2211194-008

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:20:51 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.07222	ug/l	2.1	609685	
Co	59	72	He	4.56254	ug/l	1.3	7241	
Cu	63	72	He	0.19543	ug/l	12.1	280	
Cu	65	72	He	0.23506	ug/l	10.2	165	
Zn	66	72	He	2.75573	ug/l	6.3	503	
As	75	72	He	3.82324	ug/l	2.6	321	
Pb	208	175	He	0.00479	ug/l	19.2	158	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1496718	3.6	1645686.17	90.95	
Sc	45	He	25950	0.6	30058.35	86.33	
Ge	72	He	25700	0.8	28963.31	88.73	
In	115	He	296034	0.8	330803.53	89.49	
Lu	175	He	1112372	0.9	1155617.88	96.26	
Th	232	He	2313553	1.5	2230925.07	103.7	

Sample Report

Sample Name K2211194-009

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:22:46 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	250.37568	ug/l	2.0	1916509	
Co	59	72	He	16.30157	ug/l	0.7	25891	
Cu	63	72	He	0.01017	ug/l	272.3	40	
Cu	65	72	He	0.06936	ug/l	10.6	55	
Zn	66	72	He	2.12133	ug/l	21.3	390	
As	75	72	He	8.61001	ug/l	3.4	720	
Pb	208	175	He	0.00149	ug/l	56.2	116	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1504420	1.0	1645686.17	91.42	
Sc	45	He	26548	1.5	30058.35	88.32	
Ge	72	He	25727	0.2	28963.31	88.83	
In	115	He	306457	1.4	330803.53	92.64	
Lu	175	He	1136268	1.5	1155617.88	98.33	
Th	232	He	2308095	0.5	2230925.07	103.46	

Sample Report

Sample Name K2211194-010

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:24:39 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	533.62808	ug/l	2.1	3956763	
Co	59	72	He	34.33444	ug/l	5.4	51478	
Cu	63	72	He	0.00873	ug/l	174.4	37	
Cu	65	72	He	0.04426	ug/l	46.5	37	
Zn	66	72	He	4.41474	ug/l	8.8	757	
As	75	72	He	13.94683	ug/l	6.2	1103	
Pb	208	175	He	0.00239	ug/l	22.4	124	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1457776	2.0	1645686.17	88.58	
Sc	45	He	26011	3.4	30058.35	86.53	
Ge	72	He	24338	5.7	28963.31	84.03	
In	115	He	292800	1.2	330803.53	88.51	
Lu	175	He	1103896	0.7	1155617.88	95.52	
Th	232	He	2260053	0.4	2230925.07	101.31	

Sample Report

Sample Name	K2211194-011
File Name	063SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:26:34 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	555.00046	ug/l	0.7	4478604	
Co	59	72	He	7.86192	ug/l	3.5	13230	
Cu	63	72	He	0.01115	ug/l	140.1	43	
Cu	65	72	He	0.05496	ug/l	72.6	48	
Zn	66	72	He	1.73542	ug/l	7.7	340	
As	75	72	He	73.80238	ug/l	3.6	6524	
Pb	208	175	He	0.00097	ug/l	241.5	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1586105	1.5	1645686.17	96.38	
Sc	45	He	27490	0.5	30058.35	91.45	
Ge	72	He	27276	3.6	28963.31	94.18	
In	115	He	313865	0.3	330803.53	94.88	
Lu	175	He	1156474	2.1	1155617.88	100.07	
Th	232	He	2369373	0.3	2230925.07	106.21	

Sample Report

Sample Name K2211194-012

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:28:28 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.90827	ug/l	3.0	30214	
Co	59	72	He	285.23487	ug/l	2.0	433848	
Cu	63	72	He	0.07015	ug/l	56.1	113	
Cu	65	72	He	0.07563	ug/l	25.9	57	
Zn	66	72	He	23.32692	ug/l	3.8	4024	
As	75	72	He	0.12957	ug/l	26.2	12	
Pb	208	175	He	0.00342	ug/l	69.0	137	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1504208	1.1	1645686.17	91.4	
Sc	45	He	24942	2.0	30058.35	82.98	
Ge	72	He	24645	1.6	28963.31	85.09	
In	115	He	290271	1.3	330803.53	87.75	
Lu	175	He	1091068	0.3	1155617.88	94.41	
Th	232	He	2240117	0.8	2230925.07	100.41	

Sample Report

Sample Name	K2211230-001
File Name	065SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:30:22 PM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.70357	ug/l	5.0	13757	
Co	59	72	He	0.37115	ug/l	3.8	602	
Cu	63	72	He	11.72193	ug/l	4.0	15475	
Cu	65	72	He	11.49089	ug/l	2.9	7781	
Zn	66	72	He	102.90495	ug/l	2.1	18796	
As	75	72	He	0.29398	ug/l	16.4	27	
Pb	208	175	He	0.34218	ug/l	2.4	4824	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1550768	1.2	1645686.17	94.23	
Sc	45	He	27340	1.3	30058.35	90.96	
Ge	72	He	26141	2.3	28963.31	90.26	
In	115	He	306630	0.4	330803.53	92.69	
Lu	175	He	1138817	0.4	1155617.88	98.55	
Th	232	He	2333408	1.0	2230925.07	104.59	

Sample Report

Sample Name	K2211299-001
File Name	066SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:32:16 PM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.32259	ug/l	0.7	43487	
Co	59	72	He	2.18532	ug/l	2.9	3459	
Cu	63	72	He	20.31317	ug/l	0.7	26271	
Cu	65	72	He	20.00406	ug/l	2.7	13258	
Zn	66	72	He	170.44213	ug/l	1.3	30496	
As	75	72	He	5.67371	ug/l	0.7	473	
Pb	208	175	He	2.11117	ug/l	0.3	29236	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1593850	0.7	1645686.17	96.85	
Sc	45	He	27643	1.2	30058.35	91.97	
Ge	72	He	25617	1.5	28963.31	88.45	
In	115	He	305634	1.1	330803.53	92.39	
Lu	175	He	1137522	1.1	1155617.88	98.43	
Th	232	He	2339073	1.8	2230925.07	104.85	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	067_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:34:12 PM
Sample Type	CCV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.33475	ug/l	0.3	193824	93.34	
Co	59	72	He	24.83798	ug/l	3.6	43672	99.35	
Cu	63	72	He	25.20302	ug/l	1.6	36246	100.81	
Cu	65	72	He	25.15400	ug/l	0.7	18544	100.62	
Zn	66	72	He	23.47589	ug/l	2.4	4681	93.9	
As	75	72	He	24.83041	ug/l	5.9	2295	99.32	
Pb	208	175	He	25.84108	ug/l	1.2	368383	103.36	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1629888	2.2	1645686.17	99.04	
Sc	45	He	28271	1.7	30058.35	94.05	
Ge	72	He	28492	1.6	28963.31	98.37	
In	115	He	330420	0.3	330803.53	99.88	
Lu	175	He	1174665	2.3	1155617.88	101.65	
Th	232	He	2399099	0.9	2230925.07	107.54	

Continuing Calibration Blank (CCB) Report

Sample Name CCB
File Name 068_CCB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time 2022-10-04 1:36:07 PM
Sample Type CCB
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.18083	ug/l	6.1	1887	
Co	59	72	He	0.02494	ug/l	19.8	47	CCB Failed
Cu	63	72	He	0.00287	ug/l	284.5	33	
Cu	65	72	He	-0.00183	ug/l	N/A	8	
Zn	66	72	He	-0.01503	ug/l	N/A	7	
As	75	72	He	-0.01414	ug/l	N/A	1	
Pb	208	175	He	0.00297	ug/l	61.5	140	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1674306	0.4	1645686.17	101.74	
Sc	45	He	28739	3.2	30058.35	95.61	
Ge	72	He	28148	0.6	28963.31	97.19	
In	115	He	326581	1.1	330803.53	98.72	
Lu	175	He	1169818	0.8	1155617.88	101.23	
Th	232	He	2400386	1.0	2230925.07	107.6	

See
rerun
am 10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	069_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:42:48 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.09367	ug/l	9.4	1120	
Co	59	72	He	0.00327	ug/l	31.4	9	
Cu	63	72	He	-0.01103	ug/l	N/A	13	
Cu	65	72	He	-0.00166	ug/l	N/A	8	
Zn	66	72	He	0.00162	ug/l	5395.6	10	
As	75	72	He	-0.01012	ug/l	N/A	1	
Pb	208	175	He	-0.00238	ug/l	N/A	63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1640181	2.0	1645686.17	99.67	
Sc	45	He	28271	1.1	30058.35	94.05	
Ge	72	He	27748	2.2	28963.31	95.8	
In	115	He	325332	0.9	330803.53	98.35	
Lu	175	He	1156236	2.4	1155617.88	100.05	
Th	232	He	2389953	1.4	2230925.07	107.13	

Sample Report

Sample Name K2211299-002

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:44:46 PM

Sample Type Sample

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.61650	ug/l	5.5	13787	
Co	59	72	He	0.68860	ug/l	5.6	1166	
Cu	63	72	He	13.79434	ug/l	1.5	19063	
Cu	65	72	He	13.69247	ug/l	1.7	9697	
Zn	66	72	He	155.96643	ug/l	2.0	29812	
As	75	72	He	3.04102	ug/l	6.1	272	
Pb	208	175	He	0.22679	ug/l	4.0	3330	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1635923	1.1	1645686.17	99.41	
Sc	45	He	29390	2.6	30058.35	97.78	
Ge	72	He	27363	2.2	28963.31	94.48	
In	115	He	318362	1.1	330803.53	96.24	
Lu	175	He	1174416	2.5	1155617.88	101.63	
Th	232	He	2374280	0.8	2230925.07	106.43	

Sample Report

Sample Name	K2211299-001
File Name	071SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:46:40 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.79448	ug/l	3.5	32977	
Co	59	72	He	0.35124	ug/l	3.9	621	
Cu	63	72	He	13.56365	ug/l	2.9	19510	
Cu	65	72	He	13.41980	ug/l	3.5	9892	
Zn	66	72	He	17.16321	ug/l	4.6	3424	
As	75	72	He	4.57220	ug/l	3.4	425	
Pb	208	175	He	0.02975	ug/l	4.0	523	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1690872	2.0	1645686.17	102.75	
Sc	45	He	29344	1.7	30058.35	97.62	
Ge	72	He	28482	1.7	28963.31	98.34	
In	115	He	320420	0.8	330803.53	96.86	
Lu	175	He	1176576	1.5	1155617.88	101.81	
Th	232	He	2369810	1.1	2230925.07	106.23	

Sample Report

Sample Name K2211299-002

File Name 072SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:48:34 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.52648	ug/l	2.9	13513	
Co	59	72	He	0.62145	ug/l	1.7	1086	
Cu	63	72	He	13.56376	ug/l	4.9	19330	
Cu	65	72	He	13.49905	ug/l	1.3	9858	
Zn	66	72	He	141.72770	ug/l	1.6	27931	
As	75	72	He	2.88252	ug/l	4.7	266	
Pb	208	175	He	0.07134	ug/l	5.1	1124	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1695413	2.2	1645686.17	103.02	
Sc	45	He	29795	2.3	30058.35	99.12	
Ge	72	He	28212	0.4	28963.31	97.4	
In	115	He	326585	0.1	330803.53	98.72	
Lu	175	He	1184332	0.5	1155617.88	102.48	
Th	232	He	2403983	0.8	2230925.07	107.76	

Sample Report

Sample Name K2211301-001

File Name 073SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:50:28 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	9.74336	ug/l	1.0	79567	
Co	59	72	He	5.16500	ug/l	2.6	8414	
Cu	63	72	He	95.91913	ug/l	3.0	127594	
Cu	65	72	He	95.06627	ug/l	3.9	64827	
Zn	66	72	He	776.54086	ug/l	2.0	143024	
As	75	72	He	6.48835	ug/l	2.0	557	
Pb	208	175	He	10.24072	ug/l	0.7	140185	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1598693	2.3	1645686.17	97.14	
Sc	45	He	27697	3.2	30058.35	92.14	
Ge	72	He	26382	2.7	28963.31	91.09	
In	115	He	299911	1.3	330803.53	90.66	
Lu	175	He	1127337	0.5	1155617.88	97.55	
Th	232	He	2312990	1.2	2230925.07	103.68	

Sample Report

Sample Name K2211313-001

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:52:22 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.23798	ug/l	3.0	10104	
Co	59	72	He	0.18465	ug/l	6.2	311	
Cu	63	72	He	3.41085	ug/l	4.7	4678	
Cu	65	72	He	3.37856	ug/l	3.3	2370	
Zn	66	72	He	77.91106	ug/l	3.9	14708	
As	75	72	He	0.53396	ug/l	10.4	49	
Pb	208	175	He	0.43106	ug/l	4.6	6029	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1554279	3.4	1645686.17	94.45	
Sc	45	He	26992	2.1	30058.35	89.8	
Ge	72	He	27019	0.7	28963.31	93.29	
In	115	He	311280	0.4	330803.53	94.1	
Lu	175	He	1134852	1.2	1155617.88	98.2	
Th	232	He	2322458	0.7	2230925.07	104.1	

Sample Report

Sample Name	K2211313-002
File Name	075SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:54:16 PM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.45782	ug/l	4.4	3867	
Co	59	72	He	0.10154	ug/l	37.8	164	
Cu	63	72	He	3.61521	ug/l	5.0	4731	
Cu	65	72	He	3.75918	ug/l	3.0	2517	
Zn	66	72	He	36.46297	ug/l	2.8	6578	
As	75	72	He	0.50030	ug/l	21.9	44	
Pb	208	175	He	0.87764	ug/l	1.1	12036	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1523828	3.0	1645686.17	92.6	
Sc	45	He	26618	3.3	30058.35	88.56	
Ge	72	He	25807	1.8	28963.31	89.1	
In	115	He	312311	0.7	330803.53	94.41	
Lu	175	He	1121306	0.3	1155617.88	97.03	
Th	232	He	2316322	4.0	2230925.07	103.83	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	076_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:56:11 PM
Sample Type	CCV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.86884	ug/l	1.4	185402	95.48	
Co	59	72	He	24.65374	ug/l	1.5	40994	98.61	
Cu	63	72	He	24.55317	ug/l	1.2	33386	98.21	
Cu	65	72	He	24.93688	ug/l	2.6	17379	99.75	
Zn	66	72	He	23.34823	ug/l	3.8	4401	93.39	
As	75	72	He	24.41469	ug/l	1.5	2134	97.66	
Pb	208	175	He	25.58701	ug/l	1.6	354505	102.35	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1524451	1.2	1645686.17	92.63	
Sc	45	He	27339	2.7	30058.35	90.95	
Ge	72	He	26936	0.5	28963.31	93	
In	115	He	314382	1.4	330803.53	95.04	
Lu	175	He	1141713	2.3	1155617.88	98.8	
Th	232	He	2320240	1.1	2230925.07	104	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	077_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:58:06 PM
Sample Type	CCB
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.09091	ug/l	16.6	1063	
Co	59	72	He	0.00863	ug/l	52.3	18	
Cu	63	72	He	-0.00136	ug/l	N/A	27	
Cu	65	72	He	0.01493	ug/l	124.1	20	
Zn	66	72	He	0.03809	ug/l	76.6	17	
As	75	72	He	-0.01368	ug/l	N/A	1	
Pb	208	175	He	0.00380	ug/l	28.9	148	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1589108	1.4	1645686.17	96.56	
Sc	45	He	28068	2.3	30058.35	93.38	
Ge	72	He	27317	1.6	28963.31	94.31	
In	115	He	319768	1.4	330803.53	96.66	
Lu	175	He	1139238	0.9	1155617.88	98.58	
Th	232	He	2337212	0.9	2230925.07	104.76	

Sample Report

Sample Name	1000ppb Li LRSTD
File Name	078SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 2:05:35 PM
Sample Type	Sample
Comment	1/10mL MS29-80-A
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	934.30845	ug/l	1.1	7667027	<LDR
Co	59	72	He	0.00004	ug/l	51.1	3	
Cu	63	72	He	-0.01104	ug/l	N/A	13	
Cu	65	72	He	0.00760	ug/l	2.9	15	
Zn	66	72	He	0.07084	ug/l	109.2	23	
As	75	72	He	-0.00662	ug/l	N/A	2	
Pb	208	175	He	-0.00179	ug/l	N/A	71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1613012	0.2	1645686.17	98.01	
Sc	45	He	28819	1.4	30058.35	95.88	
Ge	72	He	27761	1.1	28963.31	95.85	
In	115	He	324998	0.8	330803.53	98.25	
Lu	175	He	1147081	0.9	1155617.88	99.26	
Th	232	He	2390114	1.2	2230925.07	107.14	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 10, 2022

Analytical Report for Service Request No: K2211194

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 27, 2022
For your reference, these analyses have been assigned our service request number **K2211194.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211194
Project: Greene County Treatability
Date Received: 09/27/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 09/27/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 10/10/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

K2211194

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	9/23/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Sulfate (method 300.0/9056A)											Comments/Preservation
1	MW-1-INF-20220923	9/23/2022	7:45	Water	2	X		X	X											One unpreserved bottle for sulfate test.
2	MW-5-INF-20220923	9/23/2022	7:46	Water	2	X	X		X											One unpreserved bottle for sulfate test.
3	MW-10-INF-20220923	9/23/2022	7:47	Water	2	X	X		X											One unpreserved bottle for sulfate test.
4	MW-14-INF-20220923	9/23/2022	7:48	Water	2	X	X	X	X											One unpreserved bottle for sulfate test.
5	MW-17-INF-20220923	9/23/2022	7:49	Water	2	X	X		X											One unpreserved bottle for sulfate test.
6	MW-44H-INF-20220923	9/23/2022	7:50	Water	2			X	X											One unpreserved bottle for sulfate test.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	9/27/22 08:30

Received by:
ALS 9/27/22 1020
Signature/Print Name:

Relinquished by:	Company:
ALS	9/27/22 1210
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2211194

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	9/26/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Comments/Preservation
1	MW-1-INF-20220926	9/26/2022	7:45	Water	1	X		X	HNO3 preserved.
2	MW-5-INF-20220926	9/26/2022	7:46	Water	1	X	X		HNO3 preserved.
3	MW-10-INF-20220926	9/26/2022	7:47	Water	1	X	X		HNO3 preserved.
4	MW-14-INF-20220926	9/26/2022	7:48	Water	1	X	X	X	HNO3 preserved.
5	MW-17-INF-20220926	9/26/2022	7:49	Water	1	X	X		HNO3 preserved.
6	MW-44H-INF-20220926	9/26/2022	7:50	Water	1			X	HNO3 preserved.
7									
8									
9									
10									
11									
12									
13									
14									
15									

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 9/27/22 08:30

Received by: ALS 9/27/22 1020
Signature/Print Name:

Relinquished by: ALS 9/27/22 1210
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11194

Received: 9/27/22 Opened: 9/27/22 By: PDP Unloaded: 9/27/22 By: PDP

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
7.7	3.9	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA [✓ Y] N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank was on top of samples which were surrounded by ice

1/13/22 *Page* *of*

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22
Sample Matrix:	Water	**Date Received:**	09/27/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MW-1-INF-20220923	K2211194-001	**862**	25	10	250	10/07/22 14:14	
MW-5-INF-20220923	K2211194-002	**160**	5.0	2.0	50	10/07/22 14:25	
MW-10-INF-20220923	K2211194-003	**118**	5.0	2.0	50	10/07/22 14:36	
MW-14-INF-20220923	K2211194-004	**164**	5.0	2.0	50	10/07/22 14:47	
MW-17-INF-20220923	K2211194-005	**39.6**	5.0	2.0	50	10/07/22 14:58	
MW-44H-INF-20220923	K2211194-006	**363**	10	4	100	10/07/22 15:09	
Method Blank	K2211194-MB1	ND U	0.10	0.04	1	10/06/22 20:33	
Method Blank	K2211194-MB2	ND U	0.10	0.04	1	10/07/22 01:23	
Method Blank	K2211194-MB3	ND U	0.10	0.04	1	10/07/22 13:25	

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/06/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	780389

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211194-LCS1	5.11	5.00	102	90-110
Lab Control Sample	K2211194-LCS2	5.11	5.00	102	90-110
Lab Control Sample	K2211194-LCS3	5.07	5.00	101	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	780389	KQ2217427-01	10/06/22 20:00	5.00	5.25	105	90-110
CCV2	780389	KQ2217427-02	10/06/22 22:34	5.00	5.15	103	90-110
CCV3	780389	KQ2217427-03	10/07/22 00:47	5.00	5.22	104	90-110
CCV4	780389	KQ2217427-04	10/07/22 10:38	5.00	5.05	101	90-110
CCV5	780389	KQ2217427-05	10/07/22 12:51	5.00	5.04	101	90-110
CCV6	780389	KQ2217427-06	10/07/22 15:20	5.00	5.20	104	90-110

Client: Anchor QEA, LLC **Service Request:**K2211194
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	780389	KQ2217427-07	10/06/22 20:11	0.10	0.04	ND	U
CCB2	780389	KQ2217427-08	10/06/22 22:46	0.10	0.04	ND	U
CCB3	780389	KQ2217427-09	10/07/22 00:59	0.10	0.04	ND	U
CCB4	780389	KQ2217427-10	10/07/22 10:49	0.10	0.04	ND	U
CCB5	780389	KQ2217427-11	10/07/22 13:03	0.10	0.04	ND	U
CCB6	780389	KQ2217427-12	10/07/22 15:32	0.10	0.04	ND	U

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 07:45
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-1-INF-20220923	**Basis:**	NA
Lab Code:	K2211194-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.71**	ug/L	0.50	0.09	1	10/04/22 12:28	10/03/22	
Cobalt	200.8	**271**	ug/L	0.020	0.009	1	10/04/22 12:28	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 07:46
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-5-INF-20220923	**Basis:**	NA
Lab Code:	K2211194-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.43**	ug/L	0.50	0.09	1	10/04/22 12:34	10/03/22	
Lithium	200.8	**80.8**	ug/L	0.20	0.20	1	10/04/22 12:34	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 07:47
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-10-INF-20220923	**Basis:**	NA
Lab Code:	K2211194-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**25.3**	ug/L	0.50	0.09	1	10/04/22 12:36	10/03/22	
Lithium	200.8	**246**	ug/L	0.20	0.20	1	10/04/22 12:36	10/03/22	

Printed 10/4/2022 5:42:52 PM

Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 07:48
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-14-INF-20220923	**Basis:**	NA
Lab Code:	K2211194-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**15.6**	ug/L	0.50	0.09	1	10/04/22 12:38	10/03/22	
Cobalt	200.8	**34.5**	ug/L	0.020	0.009	1	10/04/22 12:38	10/03/22	
Lithium	200.8	**546**	ug/L	0.20	0.20	1	10/04/22 12:38	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 07:49
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-17-INF-20220923	**Basis:**	NA
Lab Code:	K2211194-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**134**	ug/L	0.50	0.09	1	10/04/22 12:40	10/03/22	
Lithium	200.8	**562**	ug/L	0.20	0.20	1	10/04/22 12:40	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 07:50
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-44H-INF-20220923	**Basis:**	NA
Lab Code:	K2211194-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**281**	ug/L	0.020	0.009	1	10/04/22 12:42	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 07:45
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-1-INF-20220926	**Basis:**	NA
Lab Code:	K2211194-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.24**	ug/L	0.50	0.09	1	10/04/22 13:18	10/03/22	
Cobalt	200.8	**273**	ug/L	0.020	0.009	1	10/04/22 13:18	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 07:46
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-5-INF-20220926	**Basis:**	NA
Lab Code:	K2211194-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.82**	ug/L	0.50	0.09	1	10/04/22 13:20	10/03/22	
Lithium	200.8	**80.1**	ug/L	0.20	0.20	1	10/04/22 13:20	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 07:47
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-10-INF-20220926	**Basis:**	NA
Lab Code:	K2211194-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.61**	ug/L	0.50	0.09	1	10/04/22 13:22	10/03/22	
Lithium	200.8	**250**	ug/L	0.20	0.20	1	10/04/22 13:22	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 07:48
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-14-INF-20220926	**Basis:**	NA
Lab Code:	K2211194-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**13.9**	ug/L	0.50	0.09	1	10/04/22 13:24	10/03/22	
Cobalt	200.8	**34.3**	ug/L	0.020	0.009	1	10/04/22 13:24	10/03/22	
Lithium	200.8	**534**	ug/L	0.20	0.20	1	10/04/22 13:24	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 07:49
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-17-INF-20220926	**Basis:**	NA
Lab Code:	K2211194-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**73.8**	ug/L	0.50	0.09	1	10/04/22 13:26	10/03/22	
Lithium	200.8	**555**	ug/L	0.20	0.20	1	10/04/22 13:26	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 07:50
Sample Matrix:	Water	**Date Received:**	09/27/22 10:20
Sample Name:	MW-44H-INF-20220926	**Basis:**	NA
Lab Code:	K2211194-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**285**	ug/L	0.020	0.009	1	10/04/22 13:28	10/03/22	

Printed 10/4/2022 5:42:53 PM

Superset Reference:

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216890-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/04/22 12:24	10/03/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/04/22 12:24	10/03/22	
Lithium	200.8	ND	U	ug/L	0.20	0.20	1	10/04/22 12:24	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/04/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220923	**Units:**	ug/L
Lab Code:	K2211194-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2216890-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	1.71	1.60	1.66	7	20
Cobalt	200.8	0.020	0.009	271	272	272	<1	20
Lithium	200.8	0.20	0.20	5.71	5.76	5.74	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/4/2022 5:42:53 PM

Superset Reference:

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/04/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-44H-INF-20220923	**Units:**	ug/L
Lab Code:	K2211194-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2216890-05 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.23 J	0.18 J	0.21	24 #	20
Cobalt	200.8	0.020	0.009	281	285	283	1	20
Lithium	200.8	0.20	0.20	3.92	3.56	3.74	10	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/4/2022 5:42:53 PM

Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/4/22
		Date Extracted:	10/3/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220923	**Units:**	ug/L
Lab Code:	K2211194-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2216890-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.71	48.0	50.0	92	70-130
Cobalt	271	294	25.0	90 #	70-130
Lithium	5.71	52.3	50.0	93	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Printed 10/4/2022 5:42:53 PM   Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/4/22
		Date Extracted:	10/3/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-44H-INF-20220923	**Units:**	ug/L
Lab Code:	K2211194-006	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2216890-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.23 J	48.7	50.0	97	70-130
Cobalt	281	313	25.0	129 #	70-130
Lithium	3.92	49.4	50.0	91	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/04/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2216890-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.3	50.0	99	85-115
Cobalt	200.8	24.9	25.0	100	85-115
Lithium	200.8	48.5	50.0	97	85-115

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0 **Extraction Lot:** 407400
Analytical Method: 200.8 **Extraction Date:** 10/03/22 10:28

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-INF-20220923	K2211194-001	9/23/22	9/27/22	10.0000 mL	10 mL	
MW-5-INF-20220923	K2211194-002	9/23/22	9/27/22	10.0000 mL	10 mL	
MW-10-INF-20220923	K2211194-003	9/23/22	9/27/22	10.0000 mL	10 mL	
MW-14-INF-20220923	K2211194-004	9/23/22	9/27/22	10.0000 mL	10 mL	
MW-17-INF-20220923	K2211194-005	9/23/22	9/27/22	10.0000 mL	10 mL	
MW-44H-INF-20220923	K2211194-006	9/23/22	9/27/22	10.0000 mL	10 mL	
MW-1-INF-20220926	K2211194-007	9/26/22	9/27/22	10.0000 mL	10 mL	
MW-5-INF-20220926	K2211194-008	9/26/22	9/27/22	10.0000 mL	10 mL	
MW-10-INF-20220926	K2211194-009	9/26/22	9/27/22	10.0000 mL	10 mL	
MW-14-INF-20220926	K2211194-010	9/26/22	9/27/22	10.0000 mL	10 mL	
MW-17-INF-20220926	K2211194-011	9/26/22	9/27/22	10.0000 mL	10 mL	
MW-44H-INF-20220926	K2211194-012	9/26/22	9/27/22	10.0000 mL	10 mL	
Method Blank	KQ2216890-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216890-02LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate	KQ2216890-03DUP	9/23/22	9/27/22	10.0000 mL	10 mL	
Matrix Spike	KQ2216890-04MS	9/23/22	9/27/22	10.0000 mL	10.4 mL	
Duplicate	KQ2216890-05DUP	9/23/22	9/27/22	10.0000 mL	10 mL	
Matrix Spike	KQ2216890-06MS	9/23/22	9/27/22	10.0000 mL	10.4 mL	

Printed 10/4/2022 5:42:54 PM Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:** K2211194
Project:	Greene County Treatability/221114-01.05 Task 05	

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
ICV 10/04/22 11:07						
Arsenic	200.8	779974	23.7	25.0	95	90-110
Cobalt	200.8	779974	24.5	25.0	98	90-110
Lithium	200.8	779974	25.7	25.0	103	90-110
CCV 10/04/22 11:09						
Arsenic	200.8	779974	25.1	25.0	100	90-110
Cobalt	200.8	779974	24.9	25.0	100	90-110
Lithium	200.8	779974	25.6	25.0	102	90-110
CCV 10/04/22 11:32						
Arsenic	200.8	779974	24.8	25.0	99	90-110
Cobalt	200.8	779974	25.1	25.0	100	90-110
Lithium	200.8	779974	24.2	25.0	97	90-110
CCV 10/04/22 11:56						
Arsenic	200.8	779974	25.1	25.0	100	90-110
Cobalt	200.8	779974	25.1	25.0	100	90-110
Lithium	200.8	779974	23.9	25.0	95	90-110
CCV 10/04/22 12:21						
Arsenic	200.8	779974	25.3	25.0	101	90-110
Cobalt	200.8	779974	25.5	25.0	102	90-110
Lithium	200.8	779974	24.1	25.0	97	90-110
CCV 10/04/22 12:44						
Arsenic	200.8	779974	25.4	25.0	101	90-110
Cobalt	200.8	779974	25.3	25.0	101	90-110
Lithium	200.8	779974	23.2	25.0	93	90-110
CCV 10/04/22 13:34						
Arsenic	200.8	779974	24.8	25.0	99	90-110
Cobalt	200.8	779974	24.8	25.0	99	90-110
Lithium	200.8	779974	23.3	25.0	93	90-110

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 10/04/22 11:11				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 11:12				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 11:37				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 12:04				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 12:23				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 13:13				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U
CCB 10/04/22 13:42				
Arsenic	200.8	779974	0.09	U
Cobalt	200.8	779974	0.009	U
Lithium	200.8	779974	0.20	U

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Arsenic	200.8	779974	0.40	0.5	81	50-199	10/04/22 11:14
Cobalt	200.8	779974	0.015	0.02	75	50-199	10/04/22 11:14
Lithium	200.8	779974	0.085	0.1	85	50-199	10/04/22 11:14

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-06 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Lithium	7	ug/L	0.2	0.2	200.8

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Service Request: K2211194
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-06

Analyte	Concentration (ug/L)	Method
Arsenic 75	4500	200.8
Cobalt 59	9000	200.8

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	Dilution Factor	Date/Time	As	Co	Li
ZZZZZZ	1	10/04/22 11:04			
ZZZZZZ	1	10/04/22 11:06			
ICV	1	10/04/22 11:07	X	X	X
CCV	1	10/04/22 11:09	X	X	X
ICB	1	10/04/22 11:11	X	X	X
CCB	1	10/04/22 11:12	X	X	X
LLICVW	1	10/04/22 11:14	X	X	X
ZZZZZZ	1	10/04/22 11:16			
ZZZZZZ	1	10/04/22 11:17			
ZZZZZZ	1	10/04/22 11:19			
ZZZZZZ	1	10/04/22 11:21			
ZZZZZZ	1	10/04/22 11:22			
ZZZZZZ	1	10/04/22 11:24			
ZZZZZZ	1	10/04/22 11:26			
ZZZZZZ	1	10/04/22 11:27			
ZZZZZZ	1	10/04/22 11:29			
ZZZZZZ	1	10/04/22 11:30			
CCV	1	10/04/22 11:32	X	X	X
ZZZZZZ	1	10/04/22 11:34			
CCB	1	10/04/22 11:37	X	X	X
ZZZZZZ	1	10/04/22 11:39			
ZZZZZZ	1	10/04/22 11:41			
ZZZZZZ	1	10/04/22 11:42			
ZZZZZZ	1	10/04/22 11:44			
ZZZZZZ	1	10/04/22 11:46			
ZZZZZZ	1	10/04/22 11:47			
ZZZZZZ	1	10/04/22 11:49			
ZZZZZZ	1	10/04/22 11:50			
ZZZZZZ	1	10/04/22 11:52			
ZZZZZZ	1	10/04/22 11:54			
CCV	1	10/04/22 11:56	X	X	X
ZZZZZZ	1	10/04/22 11:57			
CCB	1	10/04/22 12:04	X	X	X
ZZZZZZ	1	10/04/22 12:09			
ZZZZZZ	1	10/04/22 12:11			
ZZZZZZ	1	10/04/22 12:13			
ZZZZZZ	1	10/04/22 12:15			

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	Dilution Factor	Date/Time	As	Co	Li
ZZZZZZ	1	10/04/22 12:17			
ZZZZZZ	1	10/04/22 12:19			
CCV	1	10/04/22 12:21	X	X	X
CCB	1	10/04/22 12:23	X	X	X
KQ2216890-01MB	1	10/04/22 12:24	X	X	X
KQ2216890-02LCS	1	10/04/22 12:26	X	X	X
K2211194-001	1	10/04/22 12:28	X	X	
K2211194-001DUP	1	10/04/22 12:30	X	X	X
K2211194-001MS	1	10/04/22 12:32	X	X	X
K2211194-002	1	10/04/22 12:34	X		X
K2211194-003	1	10/04/22 12:36	X		X
K2211194-004	1	10/04/22 12:38	X	X	X
K2211194-005	1	10/04/22 12:40	X		X
K2211194-006	1	10/04/22 12:42		X	
CCV	1	10/04/22 12:44	X	X	X
ZZZZZZ	1	10/04/22 12:45			
CCB	1	10/04/22 13:13	X	X	X
K2211194-006DUP	1	10/04/22 13:15	X	X	X
K2211194-006MS	1	10/04/22 13:17	X	X	X
K2211194-007	1	10/04/22 13:18	X	X	
K2211194-008	1	10/04/22 13:20	X		X
K2211194-009	1	10/04/22 13:22	X		X
K2211194-010	1	10/04/22 13:24	X	X	X
K2211194-011	1	10/04/22 13:26	X		X
K2211194-012	1	10/04/22 13:28		X	
ZZZZZZ	1	10/04/22 13:30			
ZZZZZZ	1	10/04/22 13:32			
CCV	1	10/04/22 13:34	X	X	X
ZZZZZZ	1	10/04/22 13:36			
CCB	1	10/04/22 13:42	X	X	X
ZZZZZZ	1	10/04/22 13:44			
ZZZZZZ	1	10/04/22 13:46			
ZZZZZZ	1	10/04/22 13:48			
ZZZZZZ	1	10/04/22 13:50			
ZZZZZZ	1	10/04/22 13:52			
ZZZZZZ	1	10/04/22 13:54			
ZZZZZZ	1	10/04/22 13:56			

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	**Date/Time**	Sc45NG	Ge72He	Lu175He
ZZZZZZ	10/04/22 11:04			
ZZZZZZ	10/04/22 11:06			
ICV	10/04/22 11:07	99	95	98
CCV	10/04/22 11:09	97	96	98
ICB	10/04/22 11:11	96	96	98
CCB	10/04/22 11:12	97	97	98
LLICVW	10/04/22 11:14	97	96	98
ZZZZZZ	10/04/22 11:16			
ZZZZZZ	10/04/22 11:17			
ZZZZZZ	10/04/22 11:19			
ZZZZZZ	10/04/22 11:21			
ZZZZZZ	10/04/22 11:22			
ZZZZZZ	10/04/22 11:24			
ZZZZZZ	10/04/22 11:26			
ZZZZZZ	10/04/22 11:27			
ZZZZZZ	10/04/22 11:29			
ZZZZZZ	10/04/22 11:30			
CCV	10/04/22 11:32	94	95	99
ZZZZZZ	10/04/22 11:34			
CCB	10/04/22 11:37	97	96	99
ZZZZZZ	10/04/22 11:39			
ZZZZZZ	10/04/22 11:41			
ZZZZZZ	10/04/22 11:42			
ZZZZZZ	10/04/22 11:44			
ZZZZZZ	10/04/22 11:46			
ZZZZZZ	10/04/22 11:47			
ZZZZZZ	10/04/22 11:49			
ZZZZZZ	10/04/22 11:50			
ZZZZZZ	10/04/22 11:52			
ZZZZZZ	10/04/22 11:54			
CCV	10/04/22 11:56	99	97	100
ZZZZZZ	10/04/22 11:57			
CCB	10/04/22 12:04	100	96	101
ZZZZZZ	10/04/22 12:09			
ZZZZZZ	10/04/22 12:11			
ZZZZZZ	10/04/22 12:13			
ZZZZZZ	10/04/22 12:15			

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211194
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **779974**

Sample	Date/Time	Sc45NG	Ge72He	Lu175He
ZZZZZZ	10/04/22 12:17			
ZZZZZZ	10/04/22 12:19			
CCV	10/04/22 12:21	96	95	101
CCB	10/04/22 12:23	97	95	100
KQ2216890-01MB	10/04/22 12:24	98	97	101
KQ2216890-02LCS	10/04/22 12:26	100	98	101
K2211194-001	10/04/22 12:28	84	79	89
K2211194-001DUP	10/04/22 12:30	81	77	88
K2211194-001MS	10/04/22 12:32	81	78	89
K2211194-002	10/04/22 12:34	90	91	96
K2211194-003	10/04/22 12:36	92	90	99
K2211194-004	10/04/22 12:38	92	88	96
K2211194-005	10/04/22 12:40	97	94	99
K2211194-006	10/04/22 12:42	93	91	97
CCV	10/04/22 12:44	99	96	101
ZZZZZZ	10/04/22 12:45			
CCB	10/04/22 13:13	97	96	102
K2211194-006DUP	10/04/22 13:15	88	86	97
K2211194-006MS	10/04/22 13:17	89	84	95
K2211194-007	10/04/22 13:18	84	78	91
K2211194-008	10/04/22 13:20	91	89	96
K2211194-009	10/04/22 13:22	91	89	98
K2211194-010	10/04/22 13:24	89	84	96
K2211194-011	10/04/22 13:26	96	94	100
K2211194-012	10/04/22 13:28	91	85	94
ZZZZZZ	10/04/22 13:30			
ZZZZZZ	10/04/22 13:32			
CCV	10/04/22 13:34	99	98	102
ZZZZZZ	10/04/22 13:36			
CCB	10/04/22 13:42	100	96	100
ZZZZZZ	10/04/22 13:44			
ZZZZZZ	10/04/22 13:46			
ZZZZZZ	10/04/22 13:48			
ZZZZZZ	10/04/22 13:50			
ZZZZZZ	10/04/22 13:52			
ZZZZZZ	10/04/22 13:54			
ZZZZZZ	10/04/22 13:56			

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Ion Chromatography Data Quality Report

Inorganics

	Yes	No	N/A
1. Holding times met for all samples analyzed?	☑	☐	☐
2. Are dilutions within upper limits of the curve?	☑	☐	☐
3. Were peaks manually integrated?	☑	☐	☐
a.)Does DOD QUAPP apply?	☐	☑	☐
4. Are detection limits reported correctly?	☑	☐	☐
5. Are all quality control criteria met?	☐	☑	☐
a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency?	☑	☐	☐
b. Are CCV's and CCB's all within acceptance limits?	☑	☐	☐
c. Are results for Method Blanks all ND?	☑	☐	☐
d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.)	☐	☑	☐
e. Are all exceptions explained? LAST QC (MS+MSd) ON 11941 Failed. SENT Back LAST 7 Samples As there is not enough QC For 27 Samples.	☑	☐	☐
6. Are all samples labelled correctly?	☑	☐	☐

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS	ALS ID# 22-GEN-01-	87K	Expires: 10/5/2022	
Fluoride	True Value=5.0ppm		10K ALS ID#22GEN-01-84C	2/22/2023
Chloride	True Value=5.0ppm		10K ALS ID#22GEN-01-84D	3/21/2023
Nitrite	True Value=2.5ppm		10K ALS ID#22GEN-01-43H	10/26/2022
Bromide	True Value=2.5ppm		10K ALS ID#22GEN-01-84A	3/21/2023
Nitrate	True Value=2.5ppm		10K ALS ID#22GEN-01-84B	3/21/2023
Sulfate	True Value=5.0ppm		10K ALS ID#22GEN-01-84E	3/21/2023

CCV	ALS ID# 22-GEN-01-	87L	Expires: 10/5/2022	
Fluoride	True Value=5.0ppm		10K ALS ID#22GEN-01-82L	3/16/2023
Chloride	True Value=5.0ppm		10K ALS ID#22GEN-01-82M	3/16/2023
Nitrite	True Value=2.5ppm		10K ALS ID#22GEN-01-77I	2/27/2023
Bromide	True Value=2.5ppm		10K ALS ID#22GEN-01-82J	3/16/2023
Nitrate	True Value=2.5ppm		10K ALS ID#22GEN-01-82K	3/16/2023
Sulfate	True Value=5.0ppm		10K ALS ID#22GEN-01-82N	3/16/2023

Spike				
100/50 ppm	ALS ID# 22-GEN-01-	87M	Expires: 10/5/2022	
Fluoride	10K ALS ID#22GEN-01-82L			3/16/2023
Chloride	10K ALS ID#22GEN-01-82M			3/16/2023
Nitrite	10K ALS ID#22GEN-01-77I			2/27/2023
Bromide	10K ALS ID#22GEN-01-82J			3/16/2023
Nitrate	10K ALS ID#22GEN-01-82K			3/16/2023
Sulfate	10K ALS ID#22GEN-01-82N			3/16/2023

Pipetes#:

037544E	Mr Burns	IC Not yours	208613Z	18100839	18094324	39487243	41883884	18112947
	People Eater	Purple Papa	IC Mama	J17591H				

Analyst: NF Date: 10/5/2022

First Review: NF Date: 10/7/2022

Final Review: RRM Date: 10/7/22

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780217 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2210830-001	Chloride	N/A		Water	323.18 mg/L	5 mL	323 mg/L	50	1.5	5.0			10/5/22 17:57:00	N	IV
K2210830-001	Fluoride	N/A		Water	0.27 mg/L	5 mL	0.27 mg/L	2	0.04	0.20			10/5/22 17:46:00	N	IV
K2210830-001	Sulfate	N/A		Water	421.09 mg/L	5 mL	421 mg/L	100	4	10			10/6/22 12:15:00	N	IV
K2210830-002	Chloride	N/A		Water	324.14 mg/L	5 mL	324 mg/L	50	1.5	5.0			10/5/22 18:19:00	N	IV
K2210830-002	Fluoride	N/A		Water	0.27 mg/L	5 mL	0.27 mg/L	2	0.04	0.20			10/5/22 18:08:00	N	IV
K2210830-002	Sulfate	N/A		Water	418.20 mg/L	5 mL	418 mg/L	100	4	10			10/6/22 12:25:00	N	IV
K2210830-003	Chloride	N/A		Water	100.32 mg/L	5 mL	100 mg/L	50	1.5	5.0			10/5/22 18:41:00	N	IV
K2210830-003	Fluoride	N/A		Water	10.52 mg/L	5 mL	10.5 mg/L	2	0.04	0.20			10/5/22 18:30:00	N	IV
K2210830-003	Sulfate	N/A		Water	278.33 mg/L	5 mL	278 mg/L	50	2.0	5.0			10/5/22 18:41:00	N	IV
K2210830-004	Chloride	N/A		Water	0.02 mg/L	5 mL	0.20 mg/L U	2	0.06	0.20			10/5/22 18:52:00	N	IV
K2210830-004	Fluoride	N/A		Water	0.00 mg/L	5 mL	0.20 mg/L U	2	0.04	0.20			10/5/22 18:52:00	N	IV
K2210830-004	Sulfate	N/A		Water	0.02 mg/L	5 mL	0.20 mg/L U	2	0.08	0.20			10/5/22 18:52:00	N	IV
K2210830-005	Chloride	N/A		Water	156.78 mg/L	5 mL	157 mg/L	50	1.5	5.0			10/5/22 16:28:00	Y	IV
K2210830-005	Fluoride	N/A		Water	0.28 mg/L	5 mL	0.28 mg/L	2	0.04	0.20			10/5/22 15:33:00	Y	IV
K2210830-005	Sulfate	N/A		Water	687.63 mg/L	5 mL	688 mg/L	250	10	25			10/6/22 09:37:00	Y	IV
K2210830-006	Chloride	N/A		Water	261.64 mg/L	5 mL	262 mg/L	50	1.5	5.0			10/5/22 19:25:00	N	IV
K2210830-006	Fluoride	N/A		Water	1.96 mg/L	5 mL	1.96 mg/L	2	0.04	0.20			10/5/22 19:14:00	N	IV
K2210830-006	Sulfate	N/A		Water	192.68 mg/L	5 mL	193 mg/L	50	2.0	5.0			10/5/22 19:25:00	N	IV
K2210831-002.R01	Chloride	N/A		Water	196.26 mg/L	5 mL	196 mg/L	50	1.5	5.0			10/6/22 02:07:00	N	IV
K2210831-002.R01	Fluoride	N/A		Water	4.43 mg/L	5 mL	5.0 mg/L U	50	1.0	5.0			10/6/22 02:07:00	N	IV
K2210831-002.R01	Sulfate	N/A		Water	656.07 mg/L	5 mL	656 mg/L	200	8	20			10/6/22 12:58:00	N	IV
K2210831-003.R01	Chloride	N/A		Water	91.16 mg/L	5 mL	91.2 mg/L	50	1.5	5.0			10/6/22 02:30:00	N	IV
K2210831-003.R01	Fluoride	N/A		Water	2.90 mg/L	5 mL	2.90 mg/L	2	0.04	0.20			10/6/22 02:18:00	N	IV
K2210831-003.R01	Sulfate	N/A		Water	322.27 mg/L	5 mL	322 mg/L	50	2.0	5.0			10/6/22 02:30:00	N	IV
K2210906-001	Chloride	N/A		Surface Water	5.56 mg/L	5 mL	5.6 mg/L	10	0.3	1.0			10/5/22 20:23:00	N	II
K2210906-002	Chloride	N/A		Surface Water	5.87 mg/L	5 mL	5.9 mg/L	10	0.3	1.0			10/5/22 21:07:00	N	II
K2210906-003	Chloride	N/A		Surface Water	4.55 mg/L	5 mL	4.5 mg/L	10	0.3	1.0			10/5/22 21:18:00	N	II
K2210906-004	Chloride	N/A		Surface Water	5.31 mg/L	5 mL	5.3 mg/L	10	0.3	1.0			10/5/22 21:29:00	N	II
K2210906-005	Chloride	N/A		Surface Water	7.69 mg/L	5 mL	7.7 mg/L	10	0.3	1.0			10/5/22 21:40:00	N	II
K2210906-006	Chloride	N/A		Surface Water	5.68 mg/L	5 mL	5.7 mg/L	10	0.3	1.0			10/5/22 21:51:00	N	II
K2210906-007	Chloride	N/A		Surface Water	5.68 mg/L	5 mL	5.7 mg/L	10	0.3	1.0			10/5/22 22:02:00	N	II
K2210906-008	Chloride	N/A		Surface Water	5.78 mg/L	5 mL	5.8 mg/L	10	0.3	1.0			10/5/22 23:19:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780217 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2210906-009	Chloride	N/A		Surface Water	5.84 mg/L	5 mL	5.8 mg/L	10	0.3	1.0			10/5/22 23:30:00	N	II
K2210906-010	Chloride	N/A		Surface Water	5.58 mg/L	5 mL	5.6 mg/L	10	0.3	1.0			10/5/22 23:41:00	N	II
K2210906-011	Chloride	N/A		Surface Water	5.84 mg/L	5 mL	5.8 mg/L	10	0.3	1.0			10/5/22 23:52:00	N	II
K2210906-012	Chloride	N/A		Surface Water	5.74 mg/L	5 mL	5.7 mg/L	10	0.3	1.0			10/6/22 00:03:00	N	II
K2211194-001.R01	Sulfate	N/A		Water	1029.69 mg/L	5 mL	1030 mg/L	200	8	20			10/6/22 10:24:00	N	IV
K2211194-002.R01	Sulfate	N/A		Water	163.79 mg/L	5 mL	164 mg/L	50	2.0	5.0			10/6/22 11:09:00	N	IV
K2211194-003.R01	Sulfate	N/A		Water	122.87 mg/L	5 mL	123 mg/L	20	0.8	2.0			10/6/22 01:11:00	N	IV
K2211194-004.R01	Sulfate	N/A		Water	160.91 mg/L	5 mL	161 mg/L	50	2.0	5.0			10/6/22 12:36:00	N	IV
K2211194-005.R01	Sulfate	N/A		Water	40.51 mg/L	5 mL	40.5 mg/L	20	0.8	2.0			10/6/22 01:34:00	N	IV
K2211194-006.R01	Sulfate	N/A		Water	361.08 mg/L	5 mL	361 mg/L	100	4	10			10/6/22 12:47:00	N	IV
KQ2217398-01	Chloride	CCV		Water	5.07 mg/L	5 mL	5.07 mg/L	1					10/5/22 13:47:00	N	IV
KQ2217398-01	Fluoride	CCV		Water	5.13 mg/L	5 mL	5.13 mg/L	1					10/5/22 13:47:00	N	IV
KQ2217398-01	Sulfate	CCV		Water	5.14 mg/L	5 mL	5.14 mg/L	1					10/5/22 13:47:00	N	IV
KQ2217398-02	Chloride	CCV		Water	5.05 mg/L	5 mL	5.05 mg/L	1					10/5/22 17:23:00	N	IV
KQ2217398-02	Fluoride	CCV		Water	5.12 mg/L	5 mL	5.12 mg/L	1					10/5/22 17:23:00	N	IV
KQ2217398-02	Sulfate	CCV		Water	5.11 mg/L	5 mL	5.11 mg/L	1					10/5/22 17:23:00	N	IV
KQ2217398-03	Chloride	CCV		Water	5.07 mg/L	5 mL	5.07 mg/L	1					10/5/22 19:36:00	N	IV
KQ2217398-03	Fluoride	CCV		Water	5.09 mg/L	5 mL	5.09 mg/L	1					10/5/22 19:36:00	N	IV
KQ2217398-03	Sulfate	CCV		Water	5.06 mg/L	5 mL	5.06 mg/L	1					10/5/22 19:36:00	N	IV
KQ2217398-04	Chloride	CCV		Water	5.05 mg/L	5 mL	5.05 mg/L	1					10/5/22 22:13:00	N	IV
KQ2217398-04	Fluoride	CCV		Water	5.07 mg/L	5 mL	5.07 mg/L	1					10/5/22 22:13:00	N	IV
KQ2217398-04	Sulfate	CCV		Water	5.06 mg/L	5 mL	5.06 mg/L	1					10/5/22 22:13:00	N	IV
KQ2217398-05	Chloride	CCV		Water	5.07 mg/L	5 mL	5.07 mg/L	1					10/6/22 00:25:00	N	IV
KQ2217398-05	Fluoride	CCV		Water	5.12 mg/L	5 mL	5.12 mg/L	1					10/6/22 00:25:00	N	IV
KQ2217398-05	Sulfate	CCV		Water	5.13 mg/L	5 mL	5.13 mg/L	1					10/6/22 00:25:00	N	IV
KQ2217398-06	Chloride	CCV		Water	5.06 mg/L	5 mL	5.06 mg/L	1					10/6/22 02:53:00	N	IV
KQ2217398-06	Fluoride	CCV		Water	5.14 mg/L	5 mL	5.14 mg/L	1					10/6/22 02:53:00	N	IV
KQ2217398-06	Sulfate	CCV		Water	5.14 mg/L	5 mL	5.14 mg/L	1					10/6/22 02:53:00	N	IV
KQ2217398-07	Chloride	CCV		Water	5.03 mg/L	5 mL	5.03 mg/L	1					10/6/22 11:31:00	N	IV
KQ2217398-07	Fluoride	CCV		Water	5.10 mg/L	5 mL	5.10 mg/L	1					10/6/22 11:31:00	N	IV
KQ2217398-07	Sulfate	CCV		Water	5.14 mg/L	5 mL	5.14 mg/L	1					10/6/22 11:31:00	N	IV
KQ2217398-08	Chloride	CCV		Water	5.03 mg/L	5 mL	5.03 mg/L	1					10/6/22 13:09:00	N	IV
KQ2217398-08	Fluoride	CCV		Water	5.11 mg/L	5 mL	5.11 mg/L	1					10/6/22 13:09:00	N	IV
KQ2217398-08	Sulfate	CCV		Water	5.17 mg/L	5 mL	5.17 mg/L	1					10/6/22 13:09:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780217 **Method/Testcode:** 300.0/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217398-09	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/5/22 13:58:00	N	IV
KQ2217398-09	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/5/22 13:58:00	N	IV
KQ2217398-09	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/5/22 13:58:00	N	IV
KQ2217398-10	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/5/22 17:34:00	N	IV
KQ2217398-10	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/5/22 17:34:00	N	IV
KQ2217398-10	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/5/22 17:34:00	N	IV
KQ2217398-11	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/5/22 19:48:00	N	IV
KQ2217398-11	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/5/22 19:48:00	N	IV
KQ2217398-11	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/5/22 19:48:00	N	IV
KQ2217398-12	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/5/22 22:24:00	N	IV
KQ2217398-12	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/5/22 22:24:00	N	IV
KQ2217398-12	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/5/22 22:24:00	N	IV
KQ2217398-13	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 00:36:00	N	IV
KQ2217398-13	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 00:36:00	N	IV
KQ2217398-13	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 00:36:00	N	IV
KQ2217398-14	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 03:05:00	N	IV
KQ2217398-14	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 03:05:00	N	IV
KQ2217398-14	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 03:05:00	N	IV
KQ2217398-15	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 11:42:00	N	IV
KQ2217398-15	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 11:42:00	N	IV
KQ2217398-15	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 11:42:00	N	IV
KQ2217398-16	Chloride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 13:21:00	N	IV
KQ2217398-16	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 13:21:00	N	IV
KQ2217398-16	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 13:21:00	N	IV
KQ2217398-17	Chloride	LCS		Water	5.07 mg/L	5 mL	5.07 mg/L	1	0.03	0.10	101		10/5/22 14:09:00	N	IV
KQ2217398-17	Fluoride	LCS		Water	5.12 mg/L	5 mL	5.12 mg/L	1	0.02	0.10	102		10/5/22 14:09:00	N	IV
KQ2217398-17	Sulfate	LCS		Water	5.07 mg/L	5 mL	5.07 mg/L	1	0.04	0.10	101		10/5/22 14:09:00	N	IV
KQ2217398-18	Chloride	LCS		Water	5.07 mg/L	5 mL	5.07 mg/L	1	0.03	0.10	101		10/5/22 20:00:00	N	IV
KQ2217398-18	Fluoride	LCS		Water	5.13 mg/L	5 mL	5.13 mg/L	1	0.02	0.10	103		10/5/22 20:00:00	N	IV
KQ2217398-18	Sulfate	LCS		Water	5.06 mg/L	5 mL	5.06 mg/L	1	0.04	0.10	101		10/5/22 20:00:00	N	IV
KQ2217398-19	Chloride	LCS		Water	5.07 mg/L	5 mL	5.07 mg/L	1	0.03	0.10	101		10/6/22 00:47:00	N	IV
KQ2217398-19	Fluoride	LCS		Water	5.14 mg/L	5 mL	5.14 mg/L	1	0.02	0.10	103		10/6/22 00:47:00	N	IV
KQ2217398-19	Sulfate	LCS		Water	5.14 mg/L	5 mL	5.14 mg/L	1	0.04	0.10	103		10/6/22 00:47:00	N	IV
KQ2217398-20	Chloride	LCS		Water	5.03 mg/L	5 mL	5.03 mg/L	1	0.03	0.10	101		10/6/22 11:53:00	N	IV
KQ2217398-20	Fluoride	LCS		Water	5.13 mg/L	5 mL	5.13 mg/L	1	0.02	0.10	103		10/6/22 11:53:00	N	IV
KQ2217398-20	Sulfate	LCS		Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.04	0.10	102		10/6/22 11:53:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780217 **Method/Testcode:** 300.0/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217398-21	Chloride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/5/22 14:20:00	N	IV
KQ2217398-21	Fluoride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/5/22 14:20:00	N	IV
KQ2217398-21	Sulfate	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/5/22 14:20:00	N	IV
KQ2217398-22	Chloride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/5/22 20:11:00	N	IV
KQ2217398-22	Fluoride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/5/22 20:11:00	N	IV
KQ2217398-22	Sulfate	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/5/22 20:11:00	N	IV
KQ2217398-23	Chloride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 00:59:00	N	IV
KQ2217398-23	Fluoride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 00:59:00	N	IV
KQ2217398-23	Sulfate	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 00:59:00	N	IV
KQ2217398-24	Chloride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 12:04:00	N	IV
KQ2217398-24	Fluoride	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 12:04:00	N	IV
KQ2217398-24	Sulfate	MB		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 12:04:00	N	IV
KQ2217398-25	Chloride	DUP	K2210830-005	Water	156.47 mg/L	5 mL	156 mg/L	50	1.5	5.0		<1	10/5/22 16:39:00	N	IV
KQ2217398-25	Fluoride	DUP	K2210830-005	Water	0.28 mg/L	5 mL	0.28 mg/L	2	0.04	0.20		<1	10/5/22 15:44:00	N	IV
KQ2217398-25	Sulfate	DUP	K2210830-005	Water	686.39 mg/L	5 mL	686 mg/L	250	10	25		<1	10/6/22 09:49:00	N	IV
KQ2217398-26	Chloride	MS	K2210830-005	Water	346.20 mg/L	5 mL	346 mg/L	100	3	10	95		10/5/22 16:50:00	N	IV
KQ2217398-26	Fluoride	MS	K2210830-005	Water	7.91 mg/L	5 mL	7.91 mg/L	4	0.08	0.40	95		10/5/22 15:55:00	N	IV
KQ2217398-26	Sulfate	MS	K2210830-005	Water	1735.72 mg/L	5 mL	1740 mg/L	500	20	50	105		10/6/22 10:01:00	N	IV
KQ2217398-27	Chloride	DMS	K2210830-005	Water	347.48 mg/L	5 mL	347 mg/L	100	3	10	95	<1	10/5/22 17:00:00	N	IV
KQ2217398-27	Fluoride	DMS	K2210830-005	Water	7.94 mg/L	5 mL	7.94 mg/L	4	0.08	0.40	96	<1	10/5/22 16:06:00	N	IV
KQ2217398-27	Sulfate	DMS	K2210830-005	Water	1740.71 mg/L	5 mL	1740 mg/L	500	20	50	105	<1	10/6/22 10:12:00	N	IV
KQ2217398-28	Chloride	DUP	K2210906-001	Surface Water	5.59 mg/L	5 mL	5.6 mg/L	10	0.3	1.0		<1	10/5/22 20:34:00	N	II
KQ2217398-29	Chloride	MS	K2210906-001	Surface Water	43.86 mg/L	5 mL	43.9 mg/L	20	0.6	2.0	96		10/5/22 20:45:00	N	II
KQ2217398-30	Chloride	DMS	K2210906-001	Surface Water	43.73 mg/L	5 mL	43.7 mg/L	20	0.6	2.0	95	<1	10/5/22 20:56:00	N	II
KQ2217398-31	Sulfate	DUP	K2211194-001	Water	1106.67 mg/L	5 mL	1110 mg/L	200	8	20		7	10/6/22 10:35:00	N	IV
KQ2217398-32	Sulfate	MS	K2211194-001	Water	2033.96 mg/L	5 mL	2030 mg/L	400	16	40	126*		10/6/22 10:47:00	N	IV
KQ2217398-33	Sulfate	DMS	K2211194-001	Water	2045.34 mg/L	5 mL	2050 mg/L	400	16	40	127*	<1	10/6/22 10:58:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

ALS ENVIRONMENTAL, INC.

Ion Chromatography Calibration Data

Sequence: IC08072922 CAL **Date:** 07/29/22

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope	Residuals
F	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.9677	0.1438	
Cl	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.9389	0.083	
NO2	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9669	0.1886	
Br	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9967	0.0333	
NO3	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9535	0.2072	
SO4	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.998	0.0616	
								99.9703	0.1196	

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

No.	Peak Name	Cal.Type	#Points	Rel.Std.Dev. %	Corr.Coeff. %	Offset	Slope		Curve
1	Fluoride	Lin	6	2.3723	99.9677	0	0.1438	0	0
2	Chloride	Lin	6	3.2972	99.9389	0	0.083	0	0
3	Nitrite	Lin	6	2.4214	99.9669	0	0.1886	0.0000	0
4	Bromide	Lin	6	0.7498	99.9967	0	0.0333	0	0
5	Nitrate	Lin	6	2.8736	99.9535	0	0.2072	0	0
6	Sulfate	Lin	6	0.5841	99.998	0	0.0616	0	0
Average:			6	2.0497	99.9703	0	0.1196	0	0

	0.5mL	22-GEN-01-71E	1.0mL	22-GEN-01-71E	to 100 mL flask
	50ppm	NO2, BR, NO3	100ppm	F, CL, SO4	

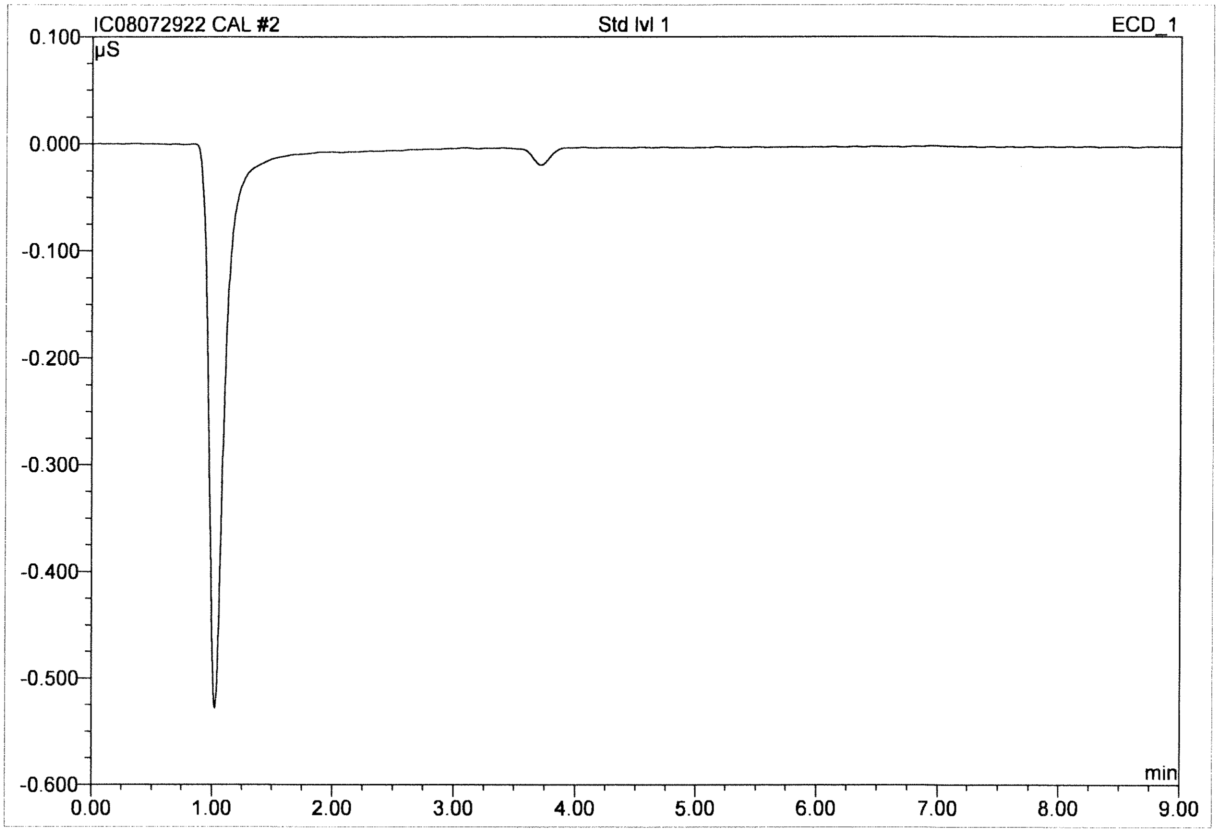
mL added (100mL)

	22-GEN-01-71-K	22-GEN-01-71-J	22-GEN-01-71-I	22-GEN-01-71-H	22-GEN-01-71-G	22-GEN-01-71-F	DIW
	STD2	STD3	STD4	STD5	STD6	STD7	STD1
F	0.100	0.200	0.500	1.000	5.00	7.50	0
CL	0.100	0.200	0.500	1.000	5.00	7.50	0
SO4	0.100	0.200	0.500	1.000	5.00	3.75	0
NO2	0.050	0.100	0.250	0.500	2.50	3.75	0
NO3	0.050	0.100	0.250	0.500	2.50	3.75	0
BR	0.050	0.100	0.250	0.500	2.50	7.50	0

Eluent: 22-GEN-01-71A
ICV: 22-GEN-01-71B

2 Std lvl 1

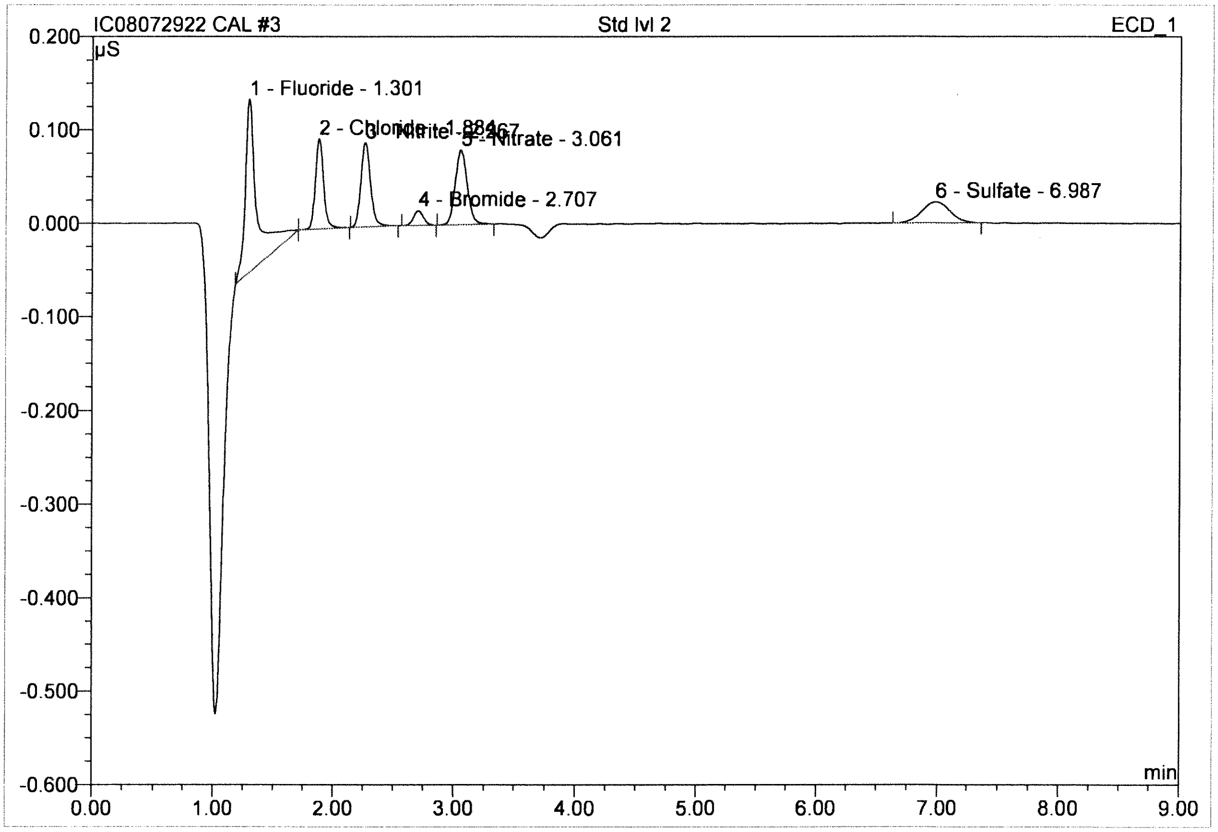
Sample Name:	**Std lvl 1**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

3 Std lvl 2

Sample Name:	**Std lvl 2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



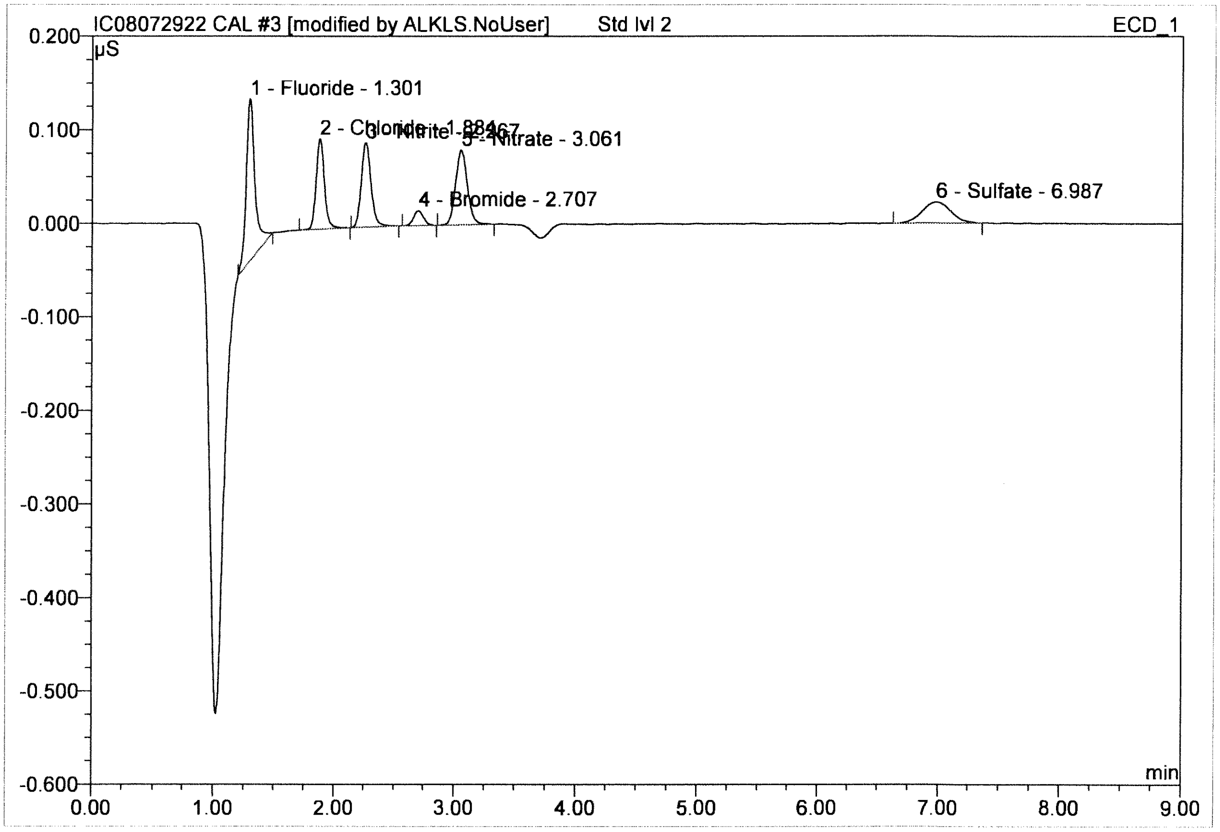
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.185	0.021	39.12	0.149	BMB
2	1.88	Chloride	0.096	0.008	14.26	0.094	bMB
3	2.27	Nitrite	0.090	0.008	15.56	0.045	BMB
4	2.71	Bromide	0.016	0.002	2.87	0.047	BMB
5	3.06	Nitrate	0.080	0.009	16.95	0.045	BMB
6	6.99	Sulfate	0.023	0.006	11.24	0.100	BMB
Total:			0.490	0.055	100.00	0.479	

Before

AUG 1 8

3 Std lvl 2

Sample Name:	**Std lvl 2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.173	0.015	30.59	0.102	BMB*
2	1.88	Chloride	0.096	0.008	16.26	0.094	BMB*
3	2.27	Nitrite	0.090	0.008	17.74	0.045	BMB
4	2.71	Bromide	0.016	0.002	3.27	0.047	BMB
5	3.06	Nitrate	0.080	0.009	19.32	0.045	BMB
6	6.99	Sulfate	0.023	0.006	12.82	0.100	BMB
Total:			0.477	0.048	100.00	0.432	

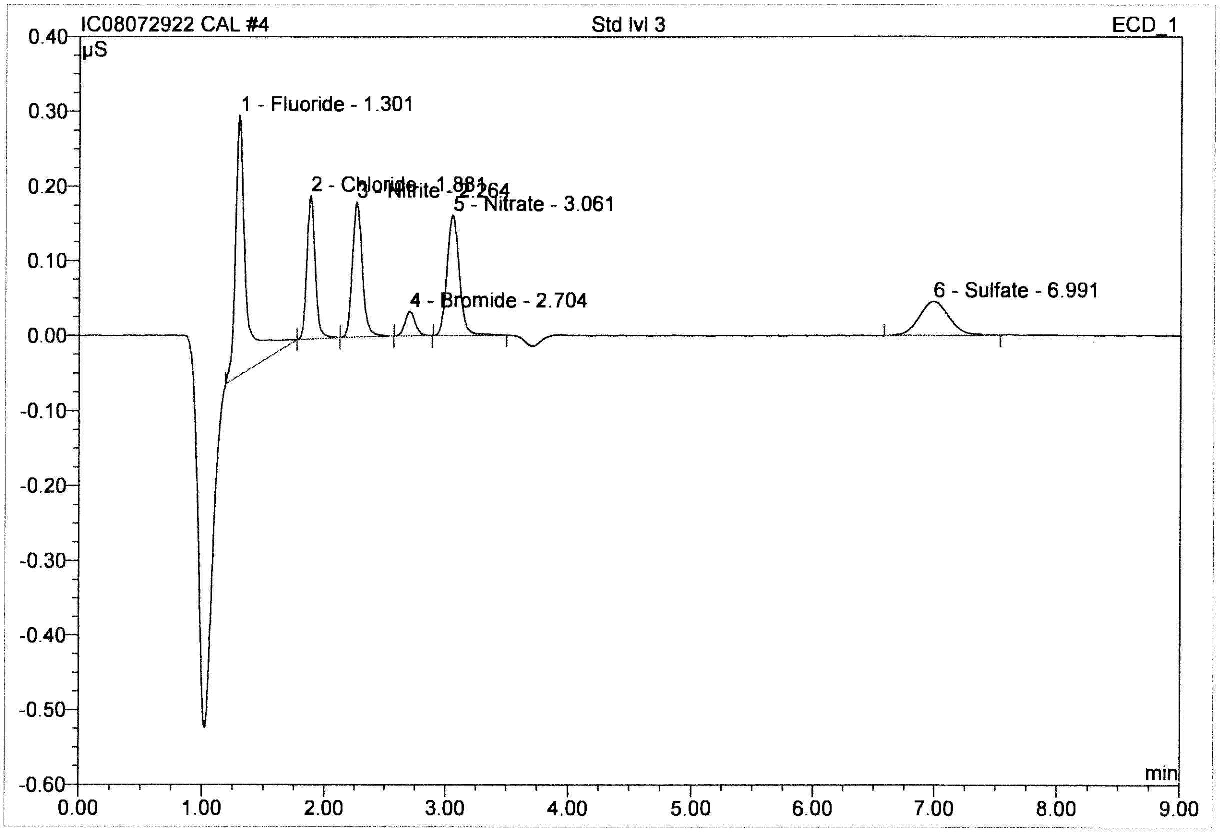
After
Initials NP

AUG 18

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

4 Std lvl 3

Sample Name:	**Std lvl 3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



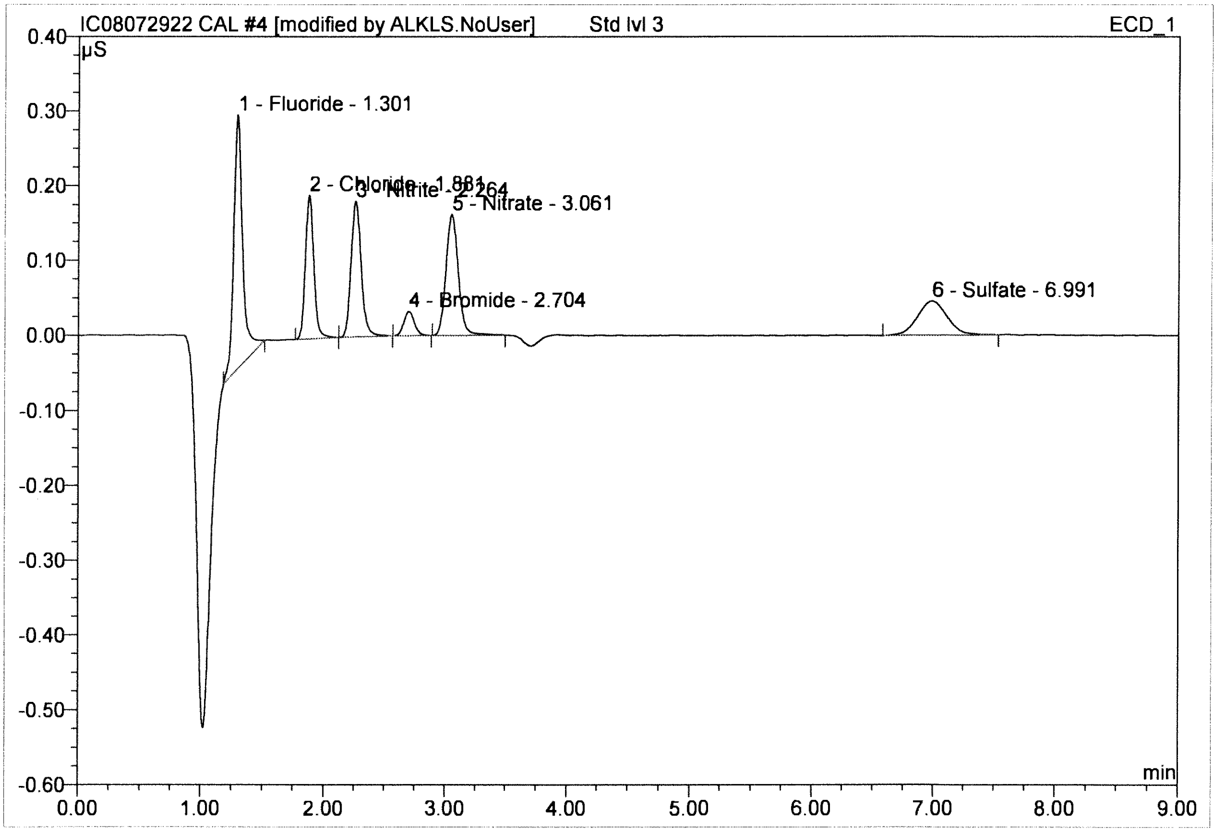
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.348	0.036	34.33	0.247	BMB
2	1.88	Chloride	0.192	0.015	14.87	0.185	bMB
3	2.26	Nitrite	0.181	0.017	16.73	0.092	BMB
4	2.70	Bromide	0.032	0.003	3.19	0.099	BMB
5	3.06	Nitrate	0.162	0.019	18.48	0.092	BMB
6	6.99	Sulfate	0.046	0.013	12.40	0.208	BMB
Total:			0.960	0.103	100.00	0.924	

Before

AUG 18

4 Std lvl 3

Sample Name:	**Std lvl 3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.339	0.028	29.54	0.198	BMB*
2	1.88	Chloride	0.192	0.015	15.96	0.185	BMB*
3	2.26	Nitrite	0.181	0.017	17.94	0.092	BMB
4	2.70	Bromide	0.032	0.003	3.42	0.099	BMB
5	3.06	Nitrate	0.162	0.019	19.83	0.092	BMB
6	6.99	Sulfate	0.046	0.013	13.30	0.208	BMB
Total:			0.952	0.096	100.00	0.875	

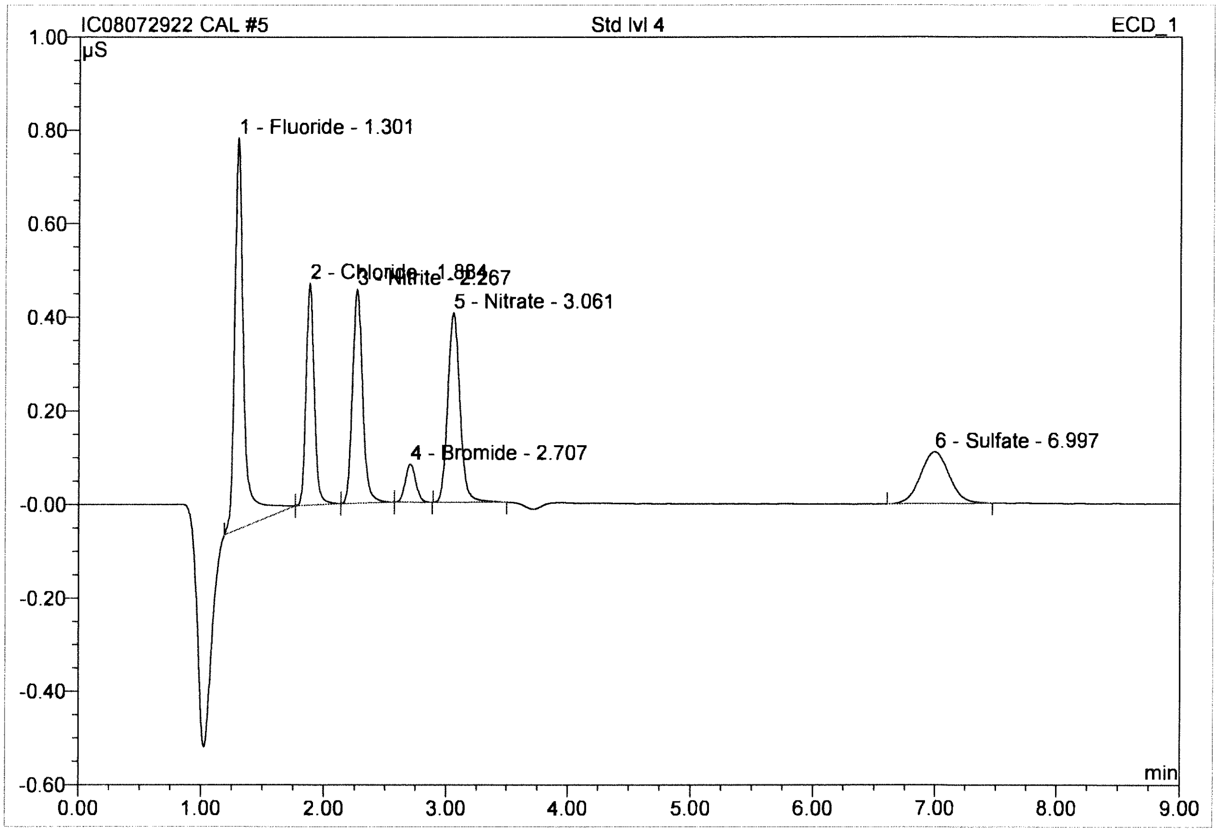
After
Initials NF

AUG 1 8

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

5 Std lvl 4

Sample Name:	**Std lvl 4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



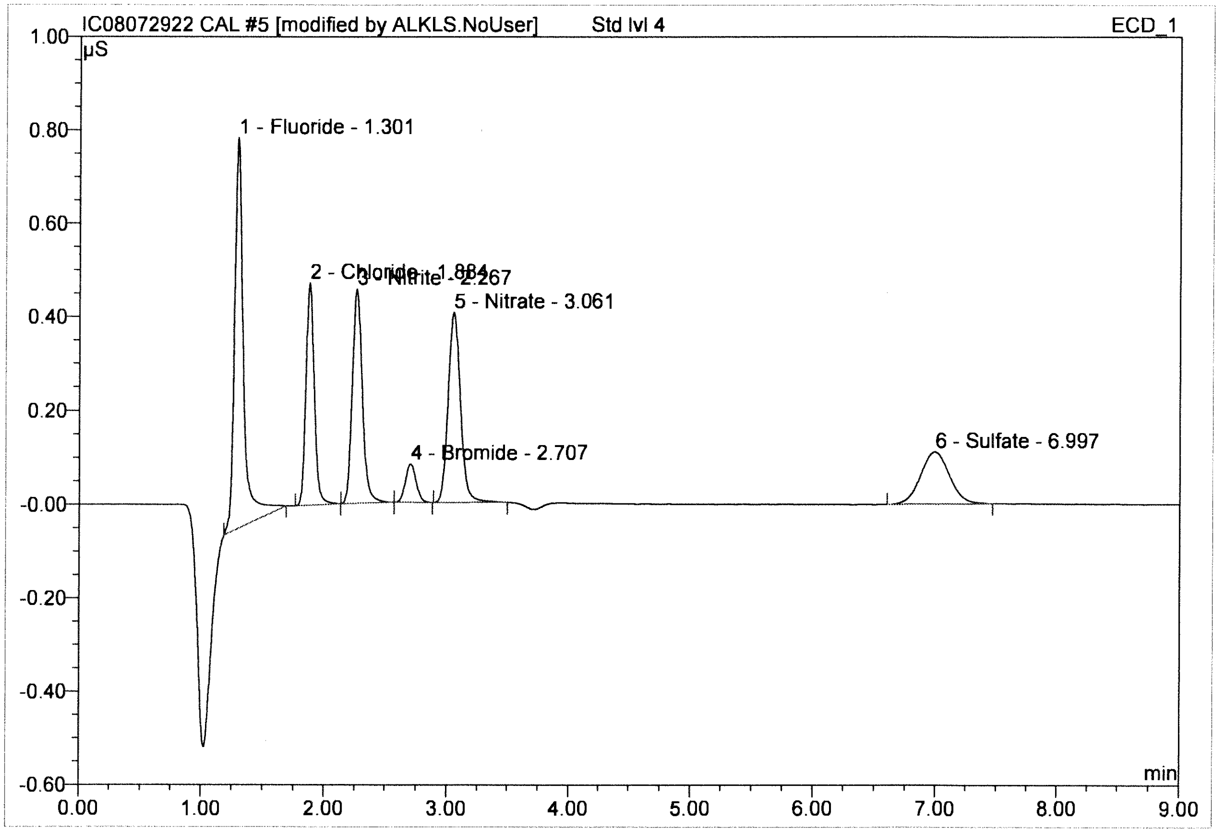
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.836	0.073	30.45	0.508	BMB
2	1.88	Chloride	0.474	0.038	15.72	0.454	bMB
3	2.27	Nitrite	0.457	0.043	18.11	0.230	BMB
4	2.71	Bromide	0.081	0.008	3.38	0.244	bMB
5	3.06	Nitrate	0.405	0.047	19.76	0.229	BMB
6	7.00	Sulfate	0.110	0.030	12.58	0.490	BMB
Total:			2.364	0.240	100.00	2.154	

Before

AUG 1 8

5 Std lvl 4

Sample Name:	**Std lvl 4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.834	0.071	29.76	0.491	BMB*
2	1.88	Chloride	0.474	0.038	15.88	0.454	BMB*
3	2.27	Nitrite	0.457	0.043	18.29	0.230	BMb*
4	2.71	Bromide	0.081	0.008	3.41	0.244	bMB
5	3.06	Nitrate	0.405	0.047	19.95	0.229	BMB
6	7.00	Sulfate	0.110	0.030	12.70	0.490	BMB
Total:			2.362	0.237	100.00	2.138	

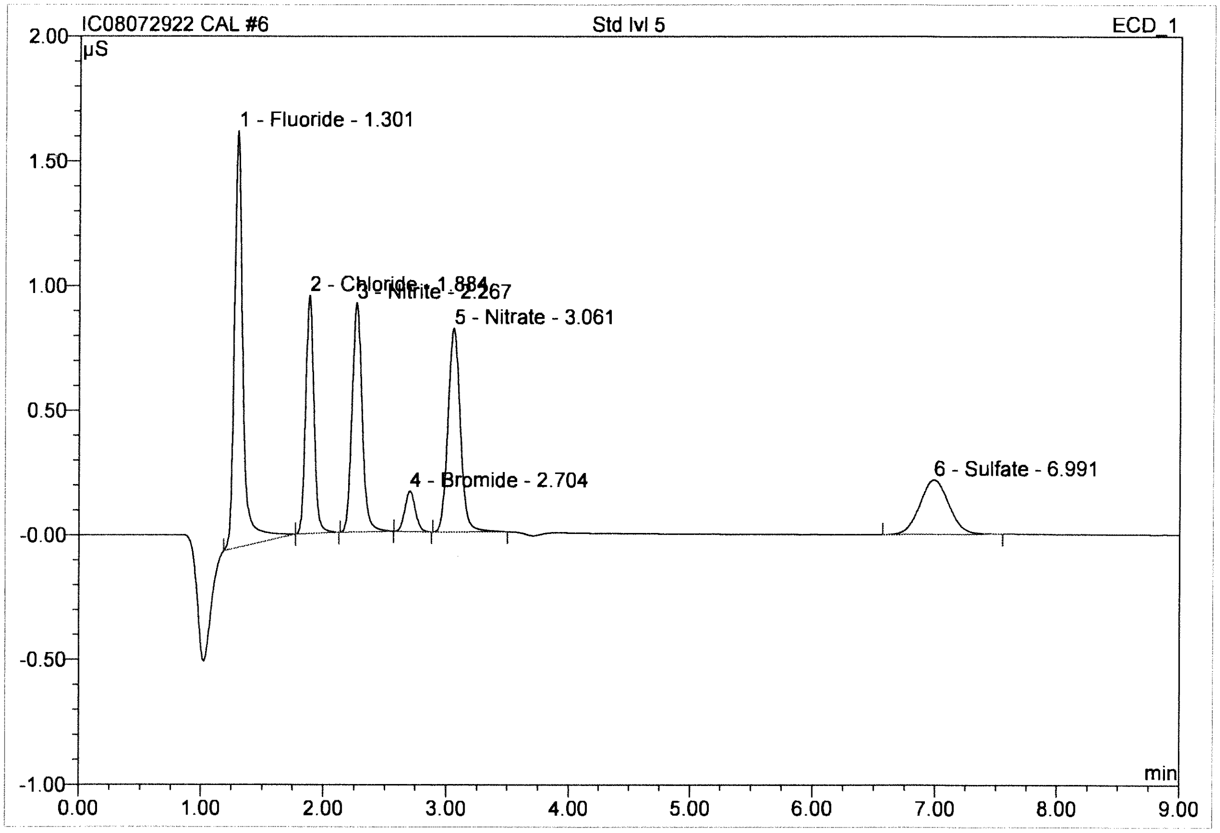
After
Initials NF

AUG 18

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

6 Std lvl 5

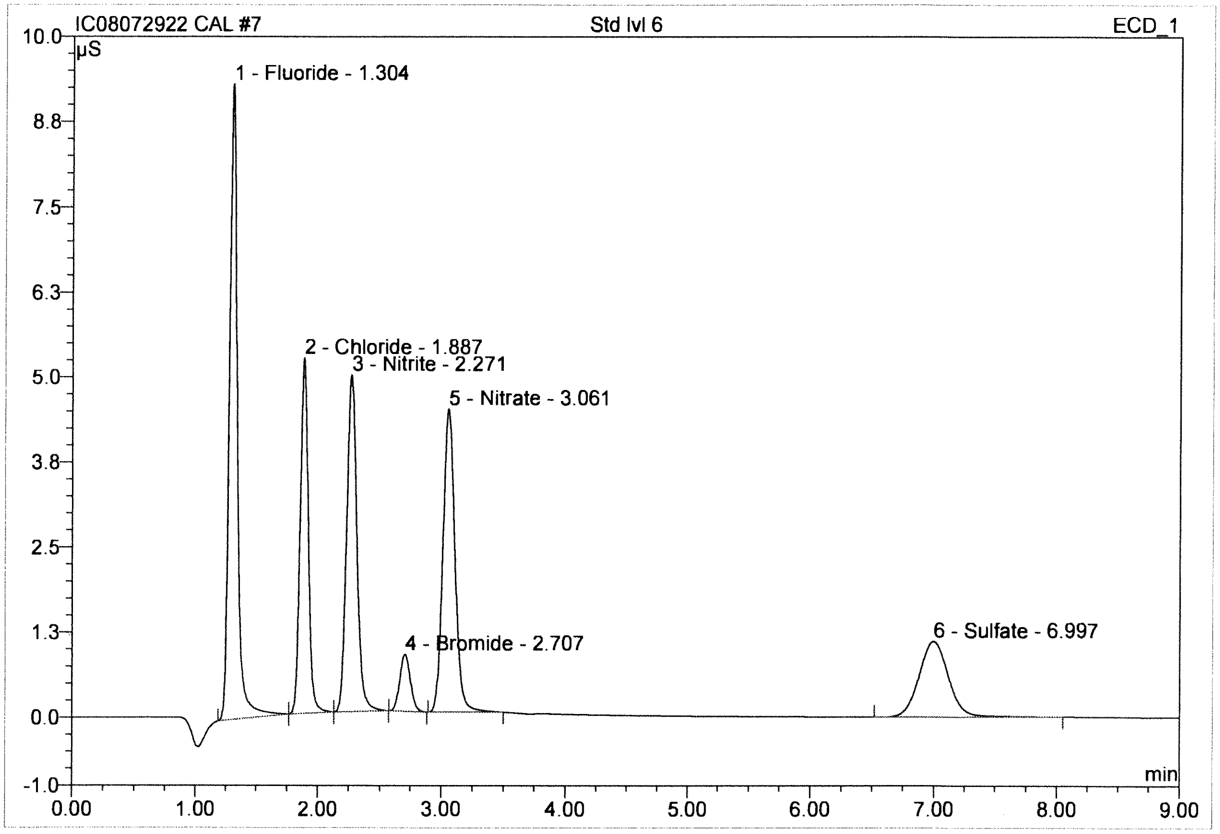
Sample Name:	**Std lvl 5**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	1.670	0.137	29.00	0.951	BMB
2	1.88	Chloride	0.956	0.076	16.07	0.912	bMB
3	2.27	Nitrite	0.920	0.087	18.51	0.463	BMB
4	2.70	Bromide	0.162	0.016	3.46	0.489	BMB
5	3.06	Nitrate	0.818	0.096	20.26	0.461	BMB
6	6.99	Sulfate	0.219	0.060	12.71	0.973	BMB
Total:			4.745	0.471	100.00	4.249	

7 Std lvl 6

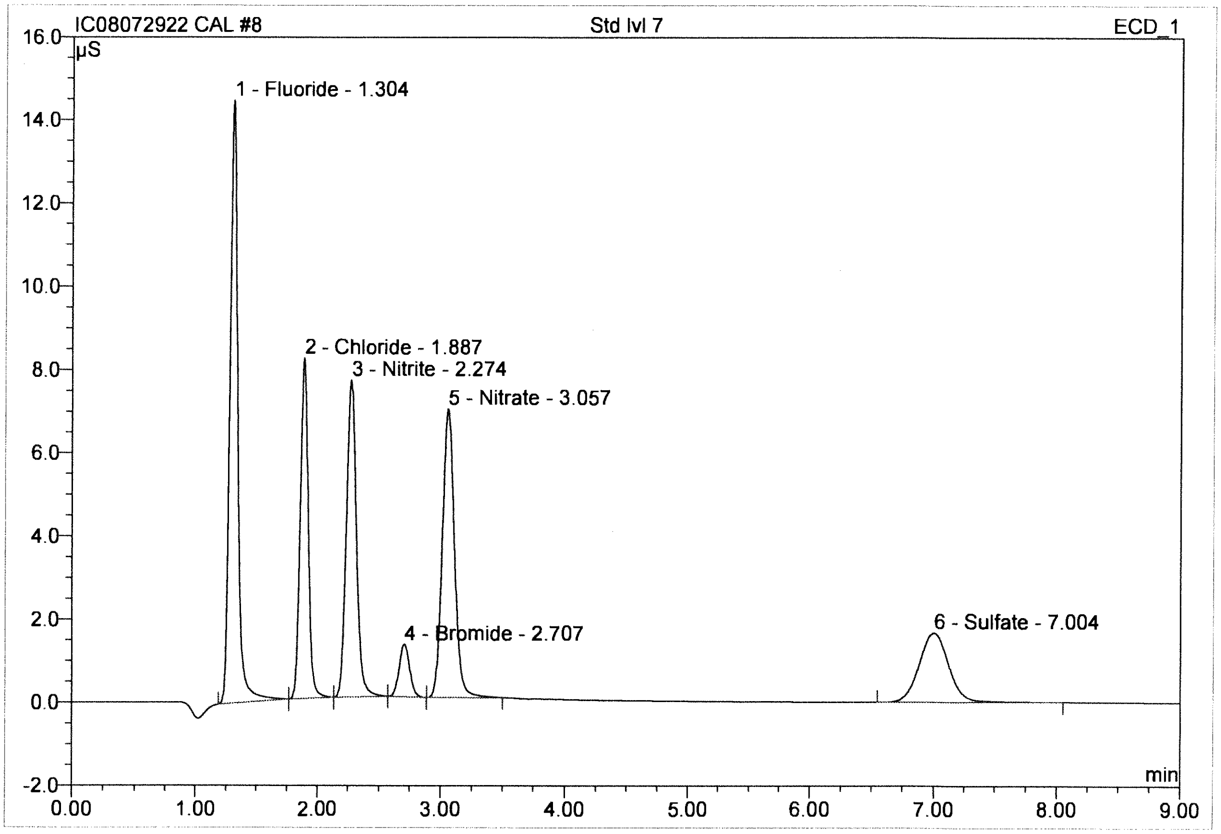
Sample Name:	**Std lvl 6**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.332	0.706	28.51	4.907	BMB
2	1.89	Chloride	5.224	0.406	16.40	4.890	bMb
3	2.27	Nitrite	4.949	0.465	18.78	2.464	bMB
4	2.71	Bromide	0.833	0.083	3.35	2.488	BMB
5	3.06	Nitrate	4.452	0.508	20.54	2.453	BMB
6	7.00	Sulfate	1.106	0.308	12.43	4.996	BMB
Total:			25.896	2.475	100.00	22.198	

8 Std lvl 7

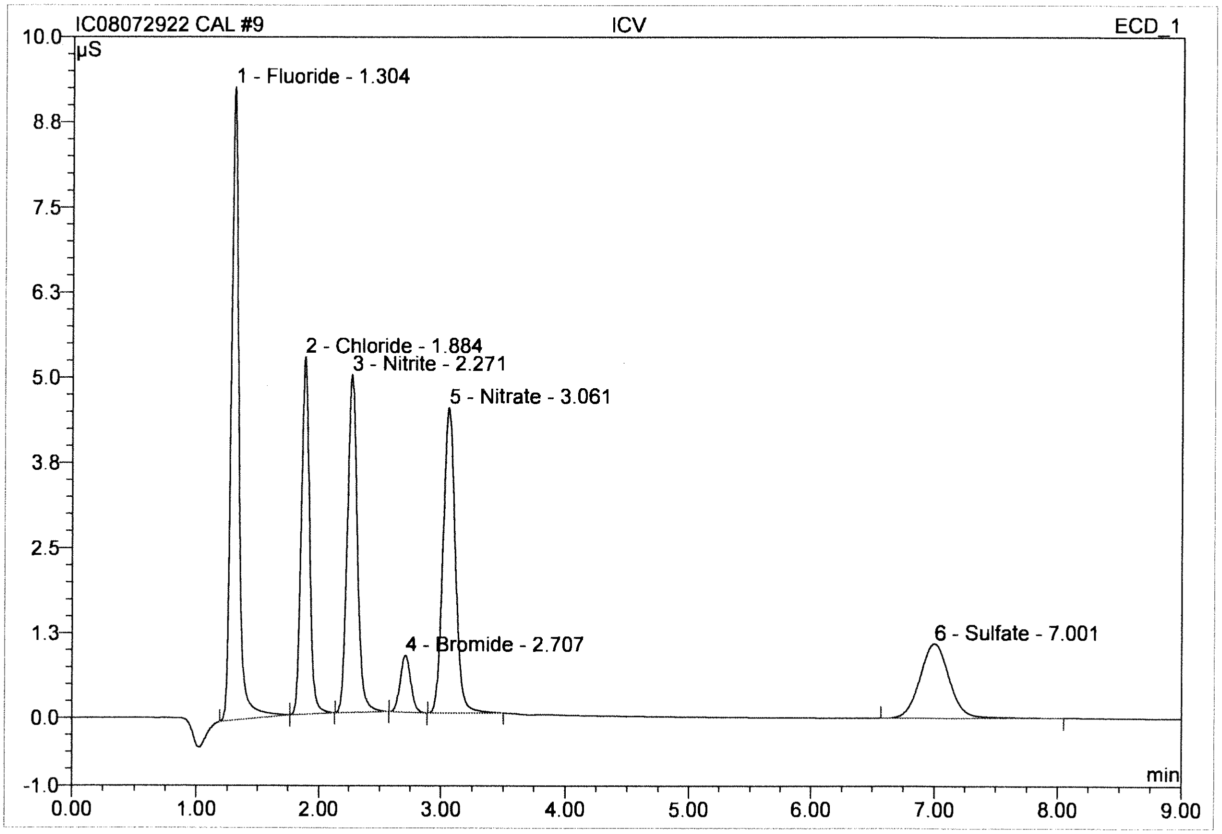
Sample Name:	**Std lvl 7**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	14.491	1.088	28.61	7.569	BMB
2	1.89	Chloride	8.191	0.630	16.56	7.589	bMB
3	2.27	Nitrite	7.627	0.713	18.75	3.780	bMb
4	2.71	Bromide	1.261	0.125	3.29	3.760	bMB
5	3.06	Nitrate	6.948	0.785	20.64	3.788	BMB
6	7.00	Sulfate	1.669	0.462	12.15	7.507	BMB
Total:			40.188	3.804	100.00	33.993	

9 ICV

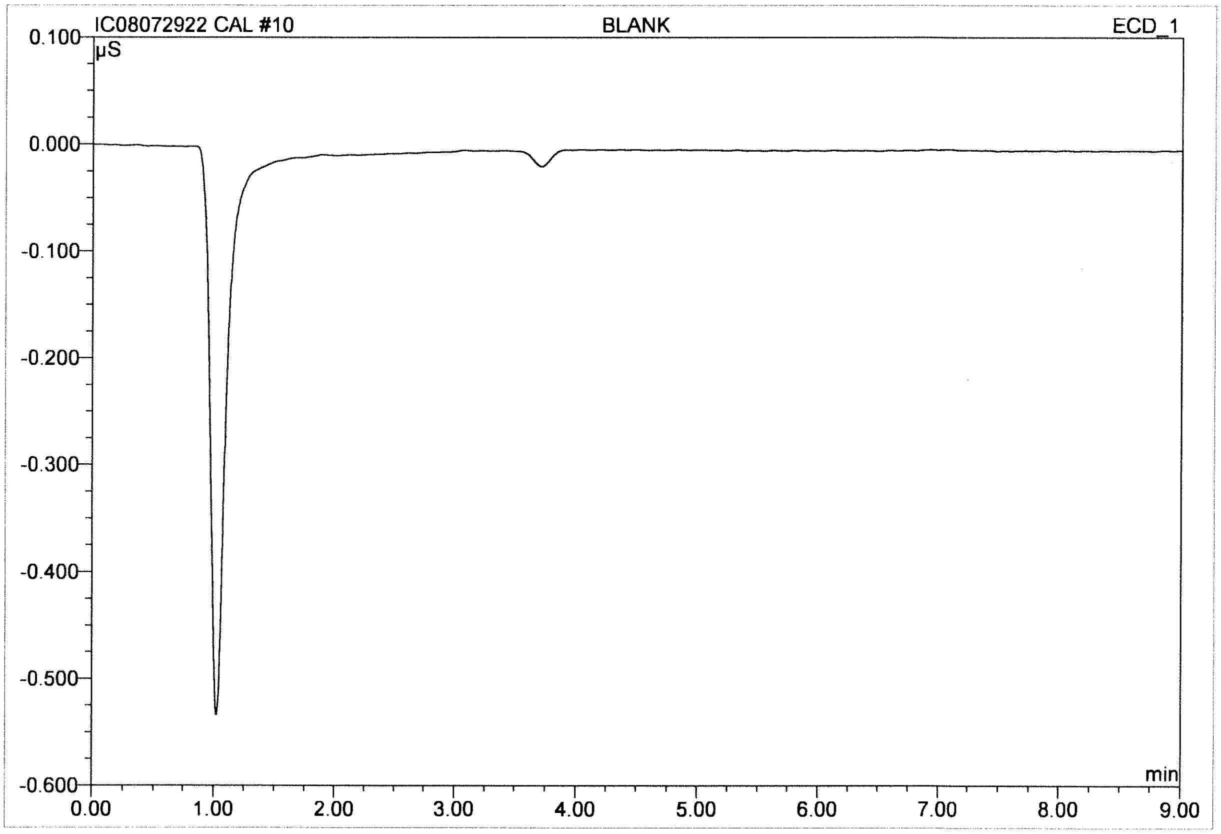
Sample Name:	**ICV**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.294	0.699	28.32	4.864	BMB
2	1.88	Chloride	5.247	0.407	16.48	4.902	bMB
3	2.27	Nitrite	4.962	0.465	18.84	2.466	BMB
4	2.71	Bromide	0.838	0.083	3.37	2.503	BMB
5	3.06	Nitrate	4.485	0.511	20.69	2.466	BMB
6	7.00	Sulfate	1.096	0.304	12.30	4.936	BMB
Total:			25.922	2.470	100.00	22.137	

10 BLANK

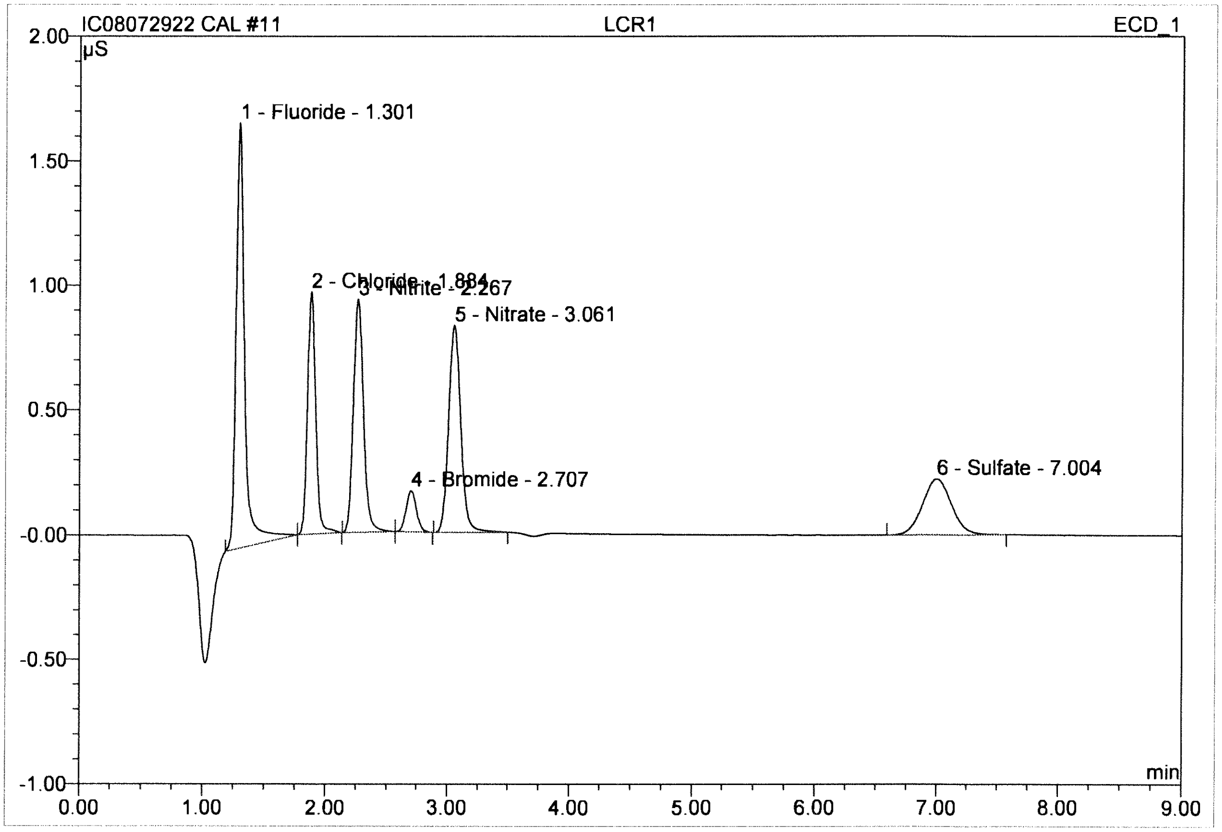
Sample Name:	**BLANK**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

11 LCR1

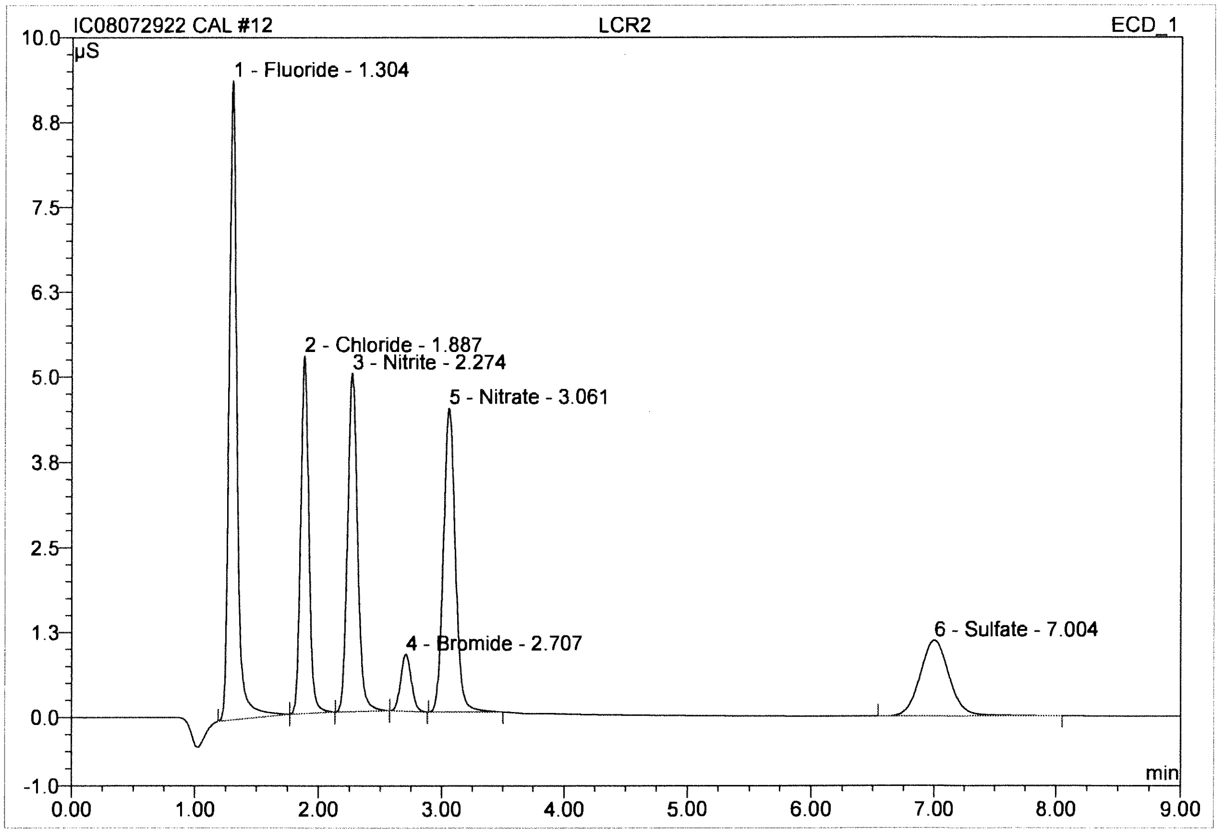
Sample Name:	**LCR1**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	1.705	0.139	29.06	0.966	BMB
2	1.88	Chloride	0.968	0.077	16.11	0.928	bMB
3	2.27	Nitrite	0.933	0.088	18.41	0.467	BMb
4	2.71	Bromide	0.164	0.016	3.44	0.494	bMB
5	3.06	Nitrate	0.828	0.096	20.16	0.465	BMB
6	7.00	Sulfate	0.223	0.061	12.82	0.996	BMB
Total:			4.820	0.478	100.00	4.315	

12 LCR2

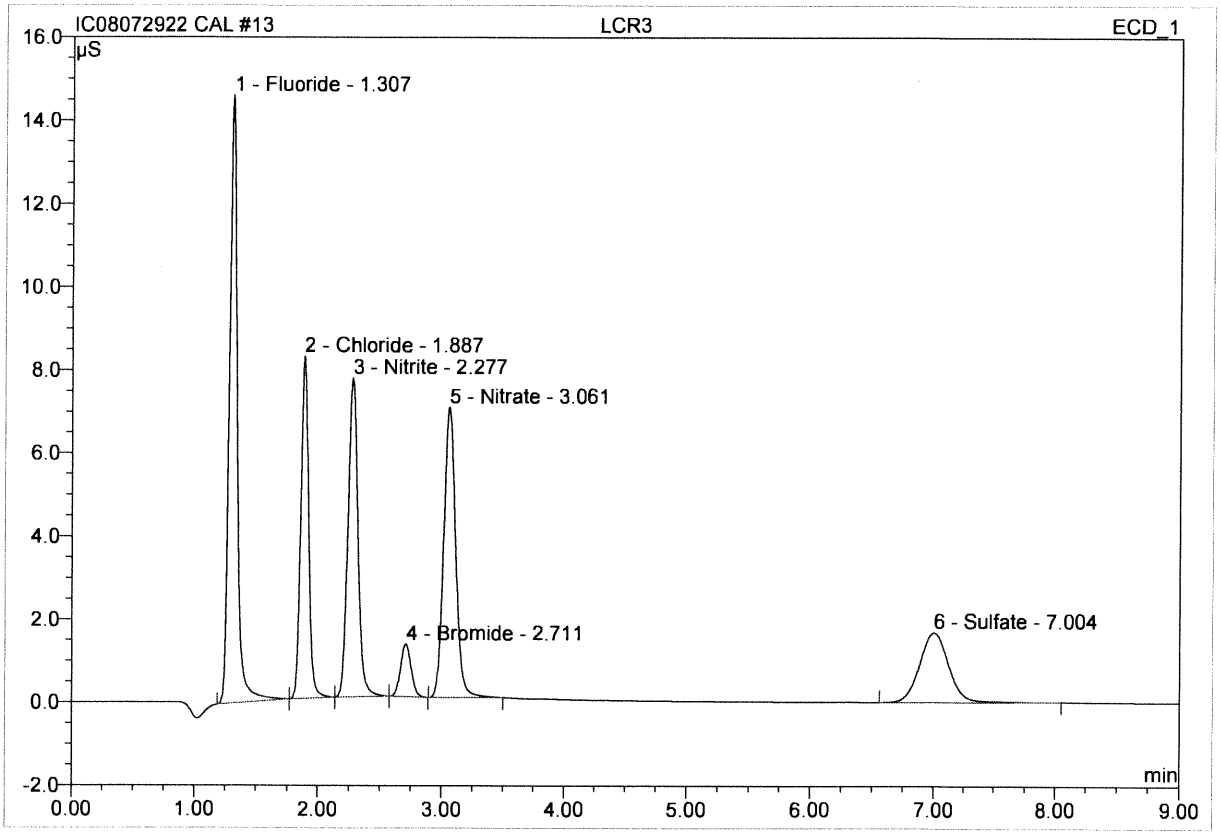
Sample Name:	**LCR2**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.395	0.708	28.56	4.925	BMB
2	1.89	Chloride	5.247	0.407	16.39	4.896	bMB
3	2.27	Nitrite	4.968	0.465	18.76	2.467	BMB
4	2.71	Bromide	0.835	0.083	3.34	2.488	BMB
5	3.06	Nitrate	4.462	0.508	20.50	2.453	BMB
6	7.00	Sulfate	1.110	0.309	12.45	5.015	BMB
Total:			26.017	2.480	100.00	22.245	

13 LCR3

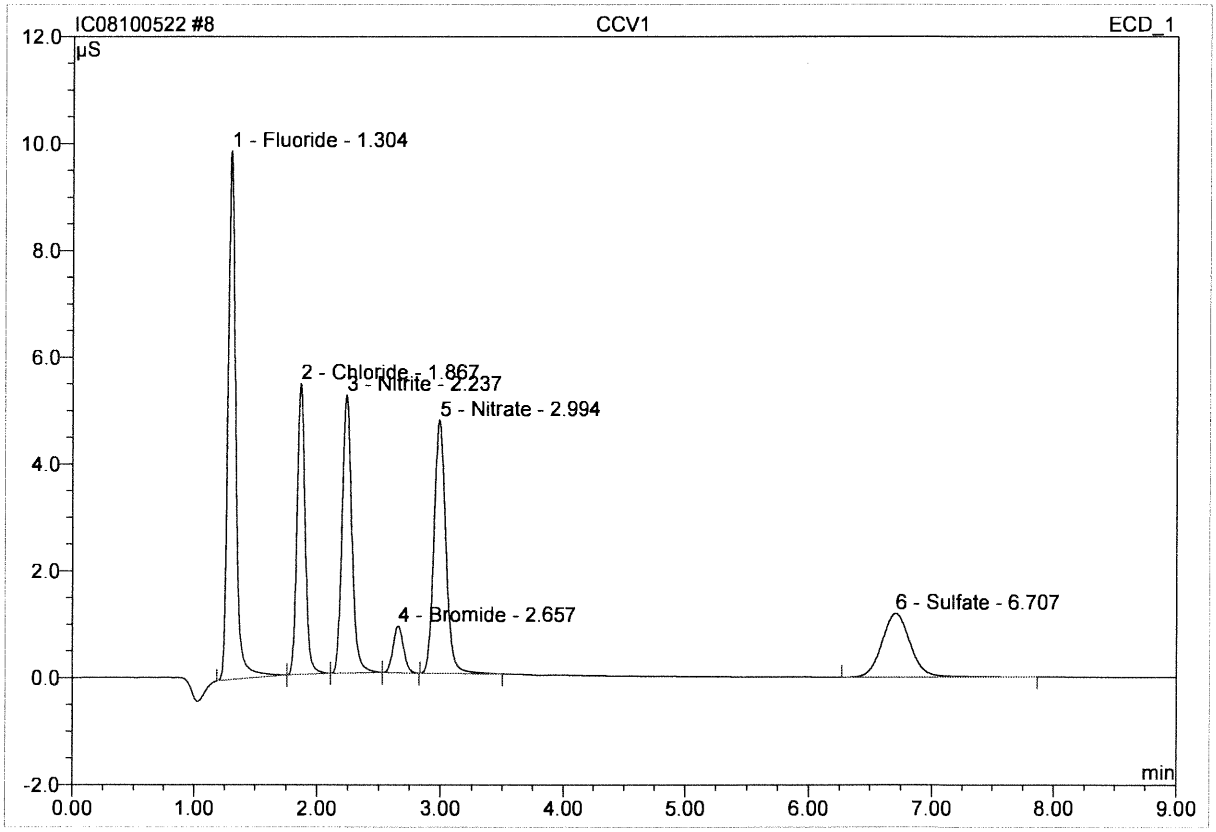
Sample Name:	**LCR3**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	14.626	1.097	28.65	7.633	BMB
2	1.89	Chloride	8.240	0.635	16.56	7.643	bMB
3	2.28	Nitrite	7.677	0.718	18.75	3.808	bMb
4	2.71	Bromide	1.269	0.126	3.29	3.782	bMB
5	3.06	Nitrate	6.992	0.790	20.62	3.812	BMB
6	7.00	Sulfate	1.683	0.465	12.14	7.557	BMB
Total:			40.486	3.831	100.00	34.234	

8 CCV1

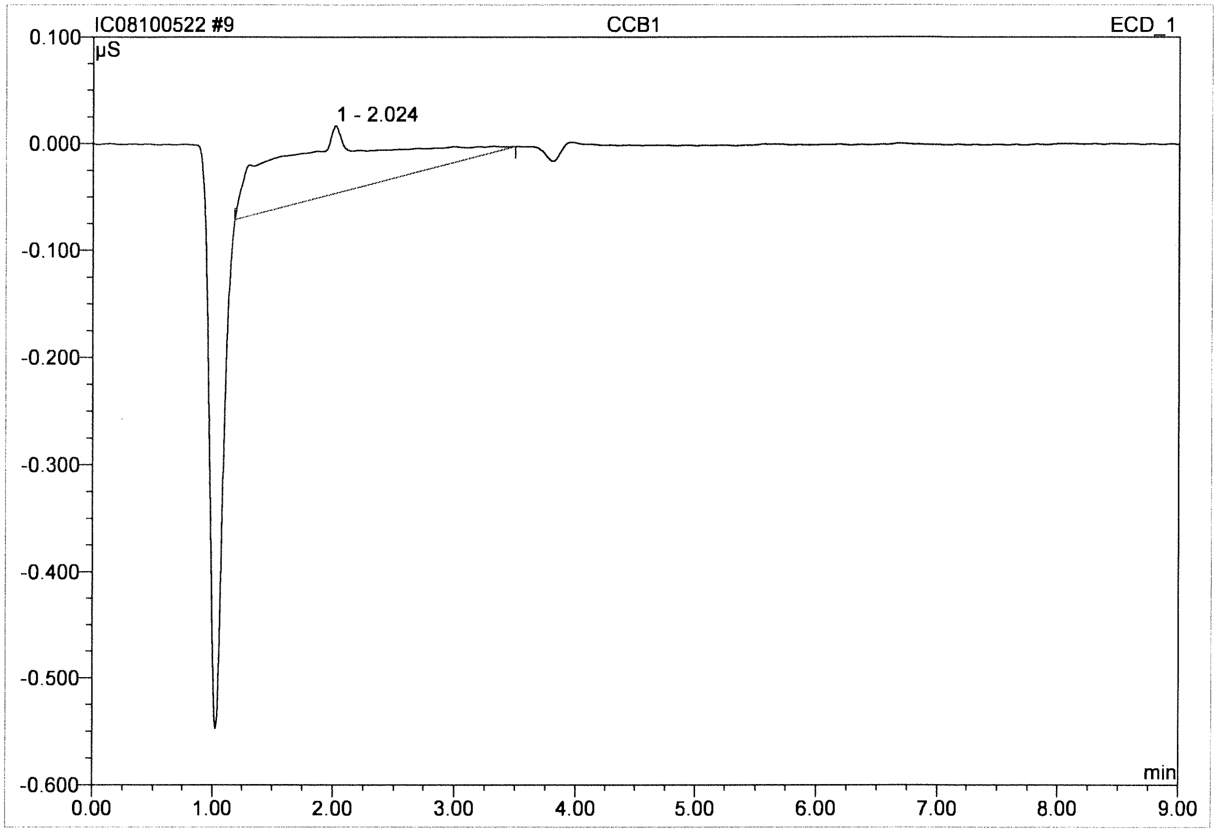
Sample Name:	**CCV1**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 13:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.897	0.738	28.70	5.134	BMB
2	1.87	Chloride	5.450	0.421	16.37	5.070	bMB
3	2.24	Nitrite	5.204	0.482	18.74	2.555	bMb
4	2.66	Bromide	0.877	0.086	3.33	2.571	bMB
5	2.99	Nitrate	4.742	0.529	20.56	2.552	BMB
6	6.71	Sulfate	1.189	0.316	12.30	5.138	BMB
Total:			27.359	2.572	100.00	23.020	

9 CCB1

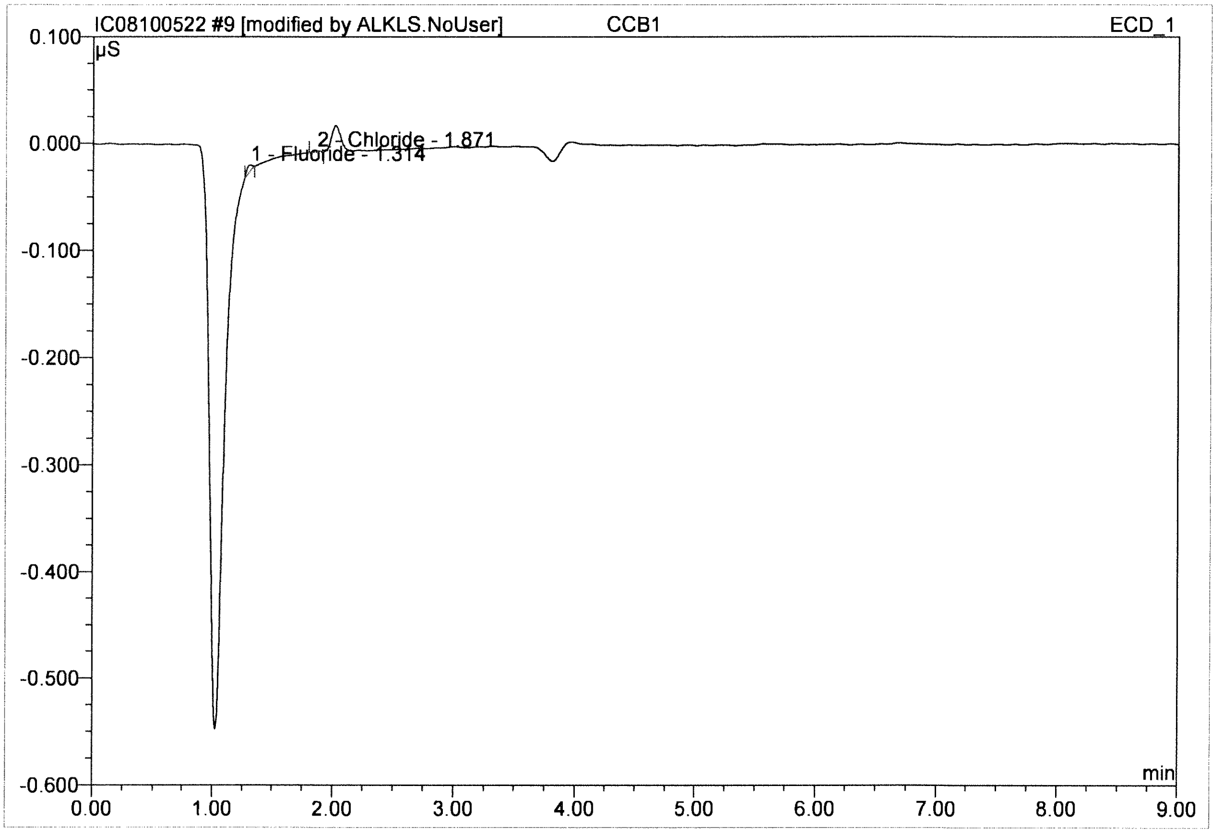
Sample Name:	**CCB1**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 13:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.063	0.067	100.00	n.a.	BMB
Total:			0.063	0.067	100.00	0.000	

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 13:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	0.005	0.000	85.16	0.002	BMB*
2	1.87	Chloride	0.001	0.000	14.84	0.001	BMB*
Total:			0.006	0.000	100.00	0.003	

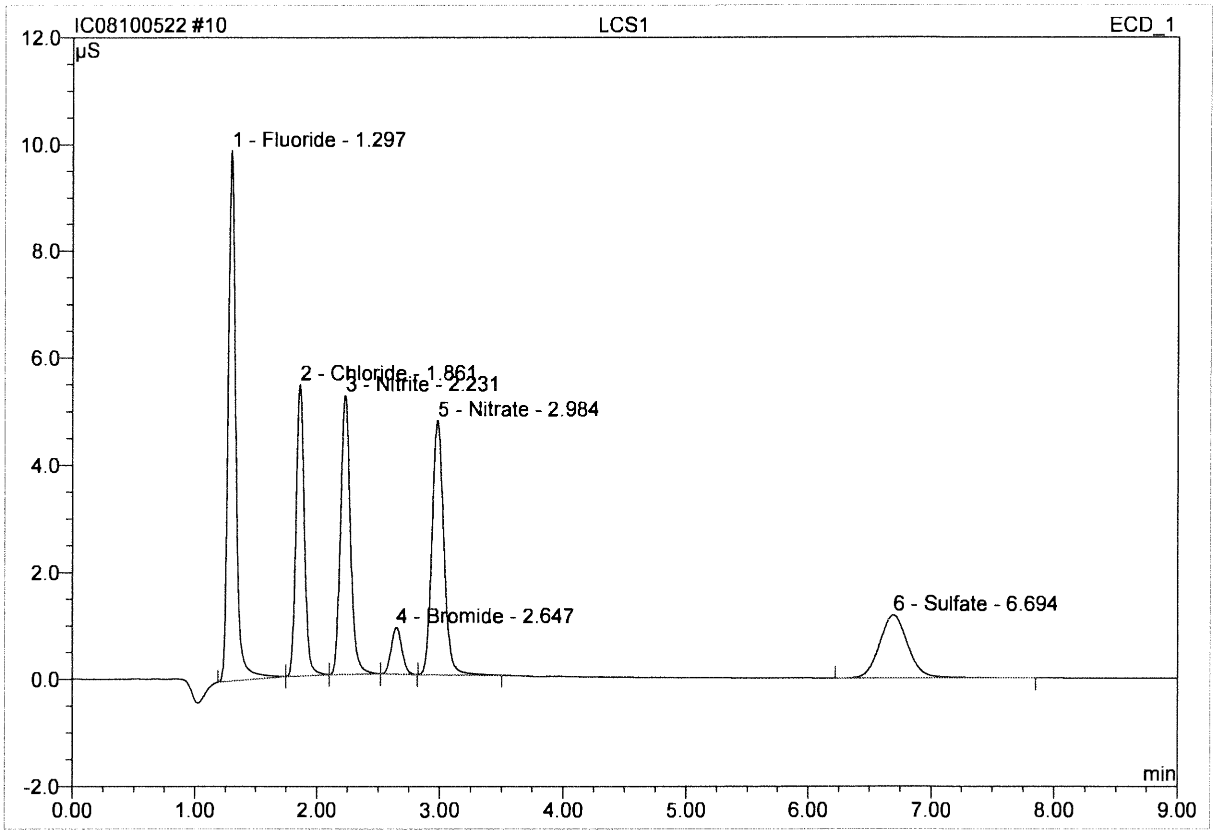
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

10 LCS1

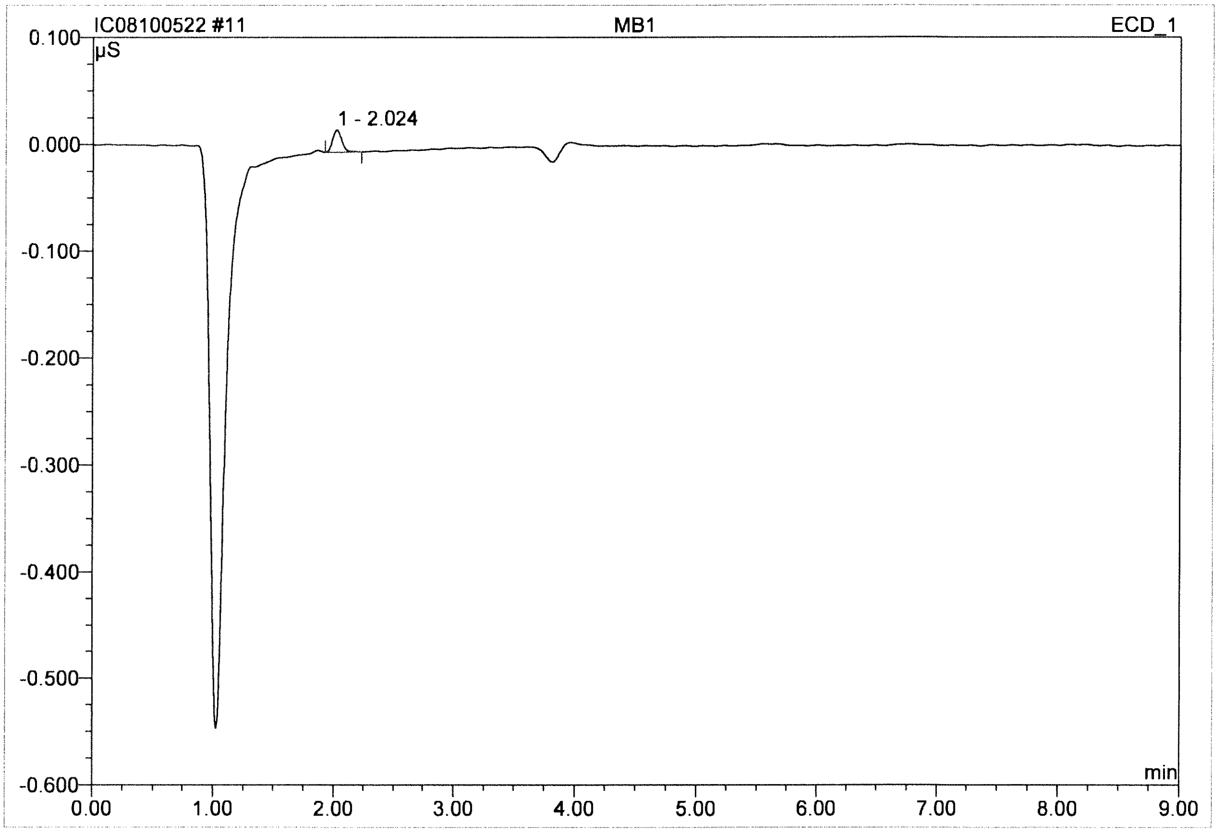
Sample Name:	**LCS1**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 14:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.917	0.736	28.69	5.120	BMB
2	1.86	Chloride	5.442	0.421	16.40	5.068	bMB
3	2.23	Nitrite	5.209	0.481	18.74	2.549	bMb
4	2.65	Bromide	0.877	0.086	3.34	2.571	bMB
5	2.98	Nitrate	4.756	0.530	20.66	2.559	BMB
6	6.69	Sulfate	1.178	0.312	12.17	5.072	BMB
Total:			27.378	2.566	100.00	22.939	

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 14:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



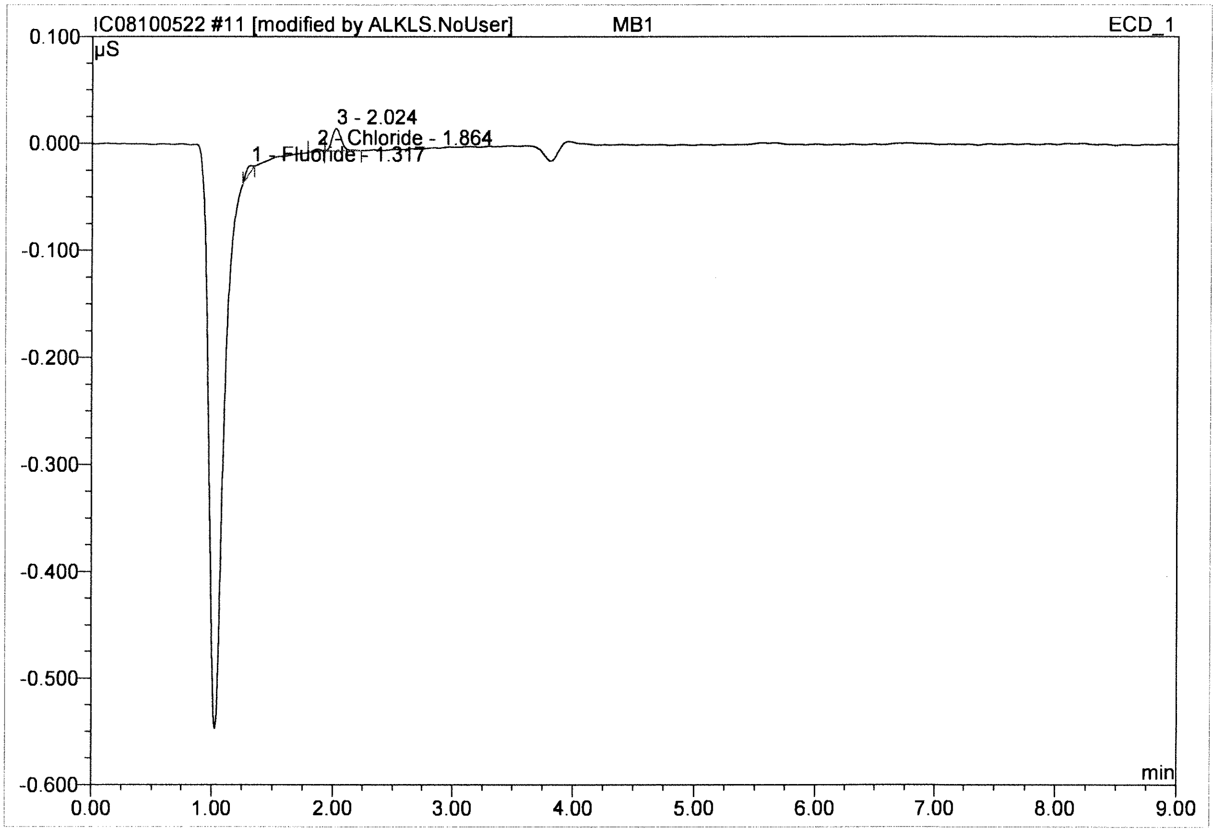
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.021	0.002	100.00	n.a.	BMB
Total:			0.021	0.002	100.00	0.000	

Before

OCT 07

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 14:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.32	Fluoride	0.005	0.000	17.84	0.003	BMB*
2	1.86	Chloride	0.002	0.000	7.00	0.002	BMB*
3	2.02	n.a.	0.021	0.002	75.16	n.a.	BMB
Total:			0.028	0.002	100.00	0.005	

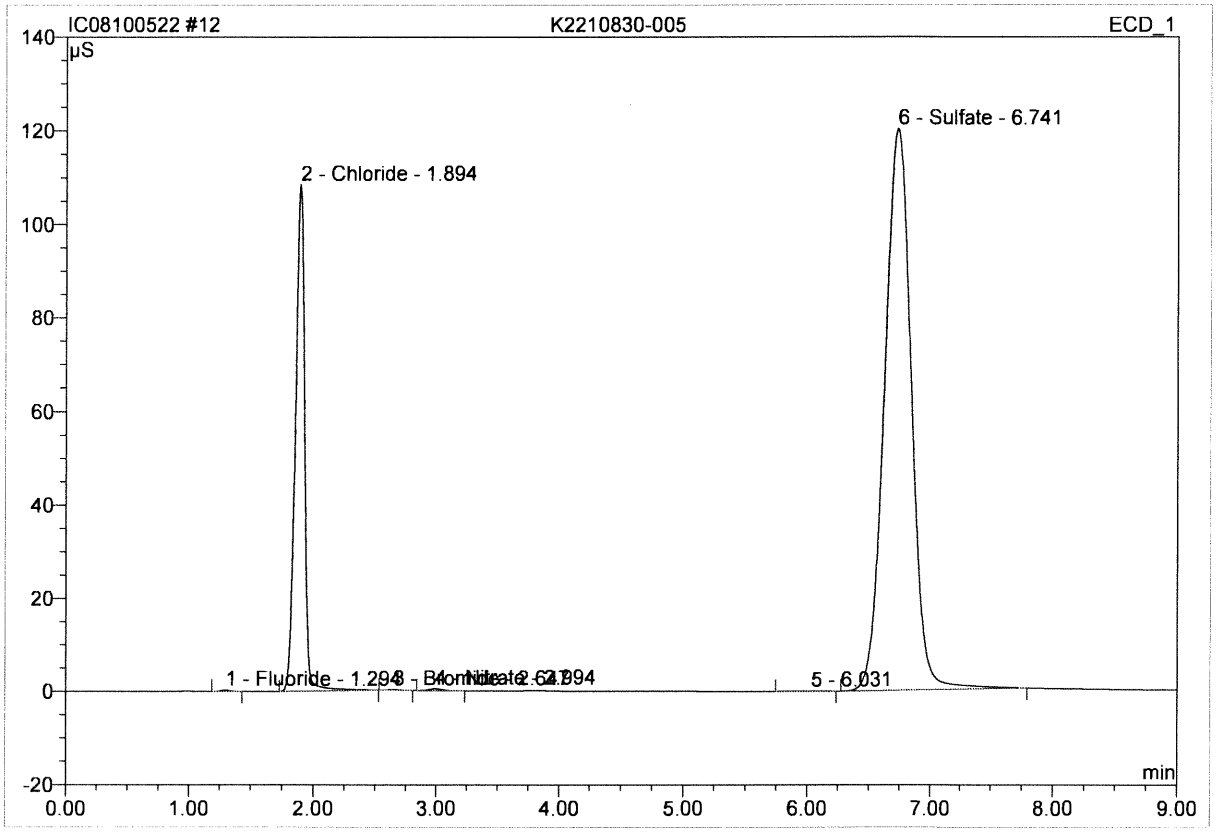
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

12 K2210830-005

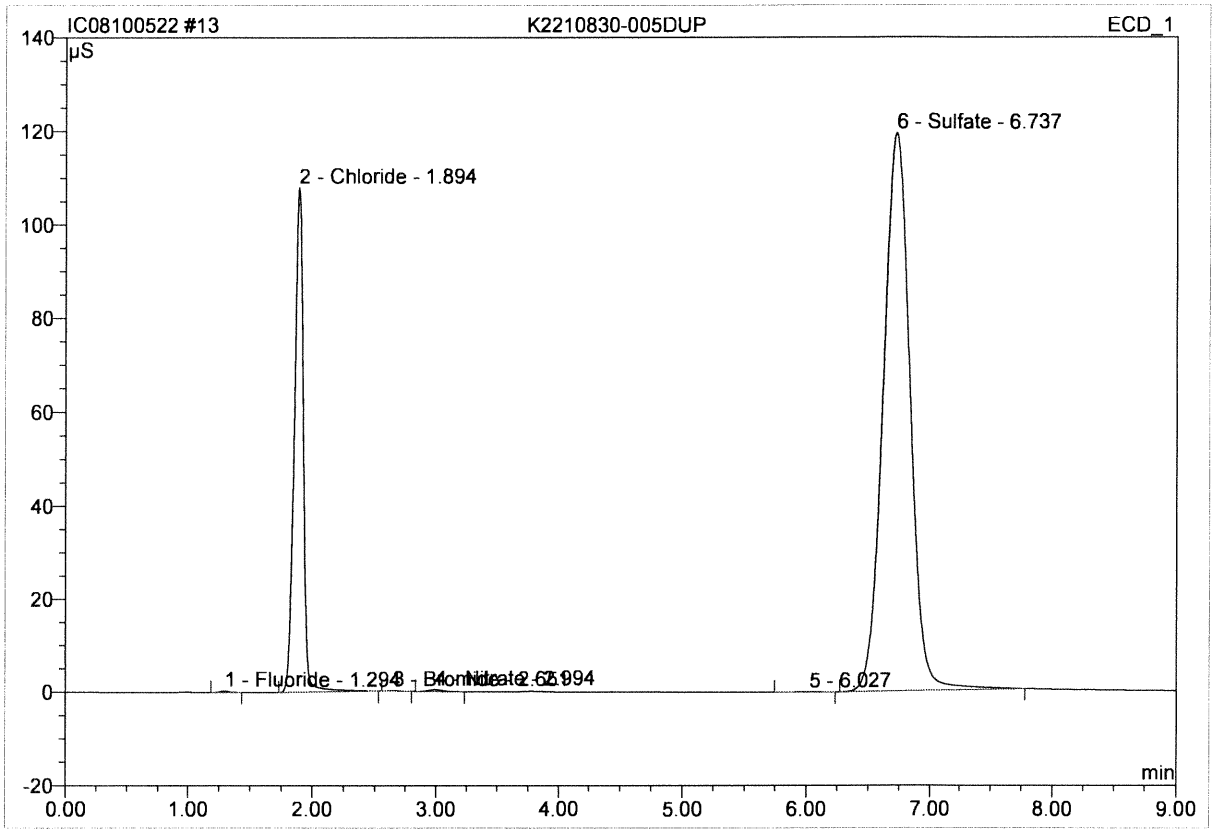
Sample Name:	**K2210830-005**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 15:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.282	0.020	0.05	0.284	BMB
2	1.89	Chloride	108.452	9.217	23.17	222.042	BMB
3	2.65	Bromide	0.126	0.013	0.03	0.774	BMB
4	2.99	Nitrate	0.391	0.047	0.12	0.457	BMB
5	6.03	n.a.	0.042	0.010	0.03	n.a.	BMB
6	6.74	Sulfate	120.089	30.468	76.60	989.854	BMB
Total:			229.382	39.776	100.00	1213.411	

13 K2210830-005DUP

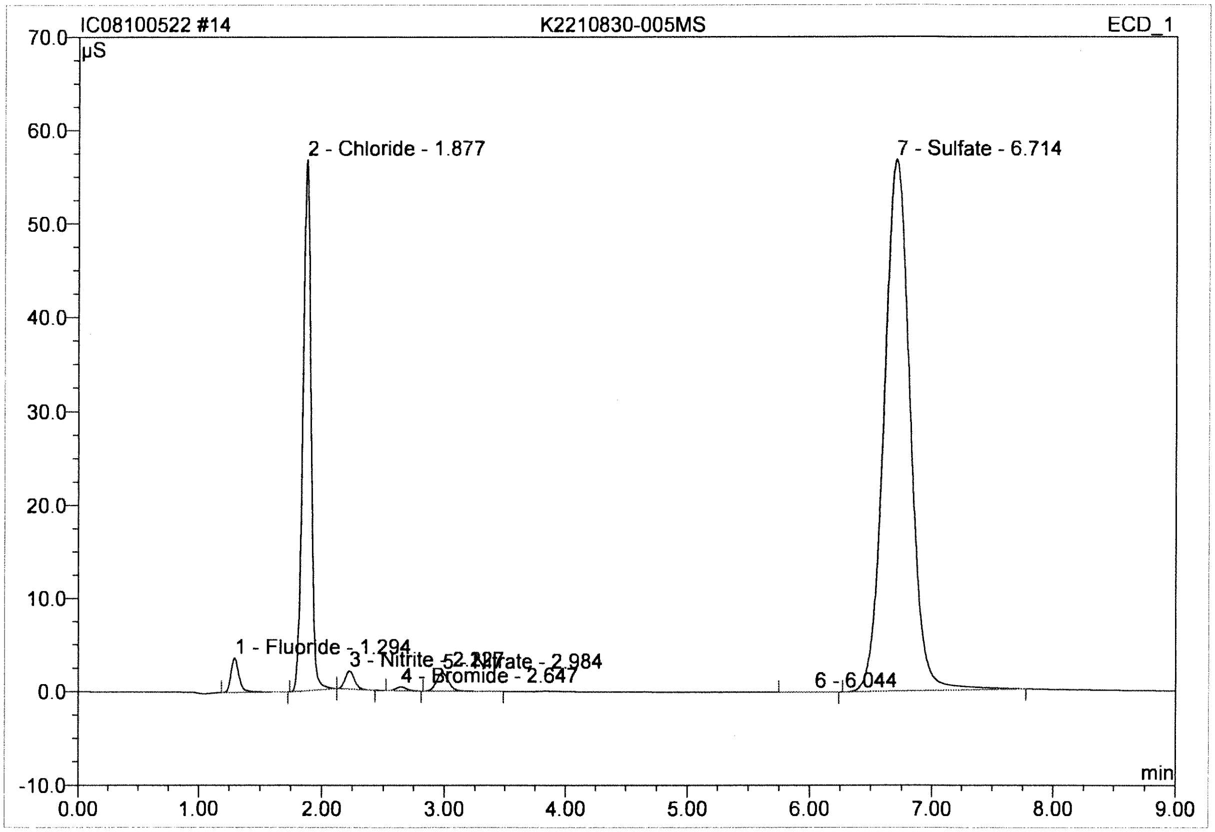
Sample Name:	**K2210830-005DUP**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 15:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.280	0.020	0.05	0.282	BMB
2	1.89	Chloride	107.940	9.164	23.23	220.758	BMB
3	2.65	Bromide	0.123	0.012	0.03	0.735	BMB
4	2.99	Nitrate	0.387	0.047	0.12	0.450	BMB
5	6.03	n.a.	0.039	0.009	0.02	n.a.	BMB
6	6.74	Sulfate	119.334	30.193	76.54	980.935	BMB
Total:			228.103	39.446	100.00	1203.160	

14 K2210830-005MS

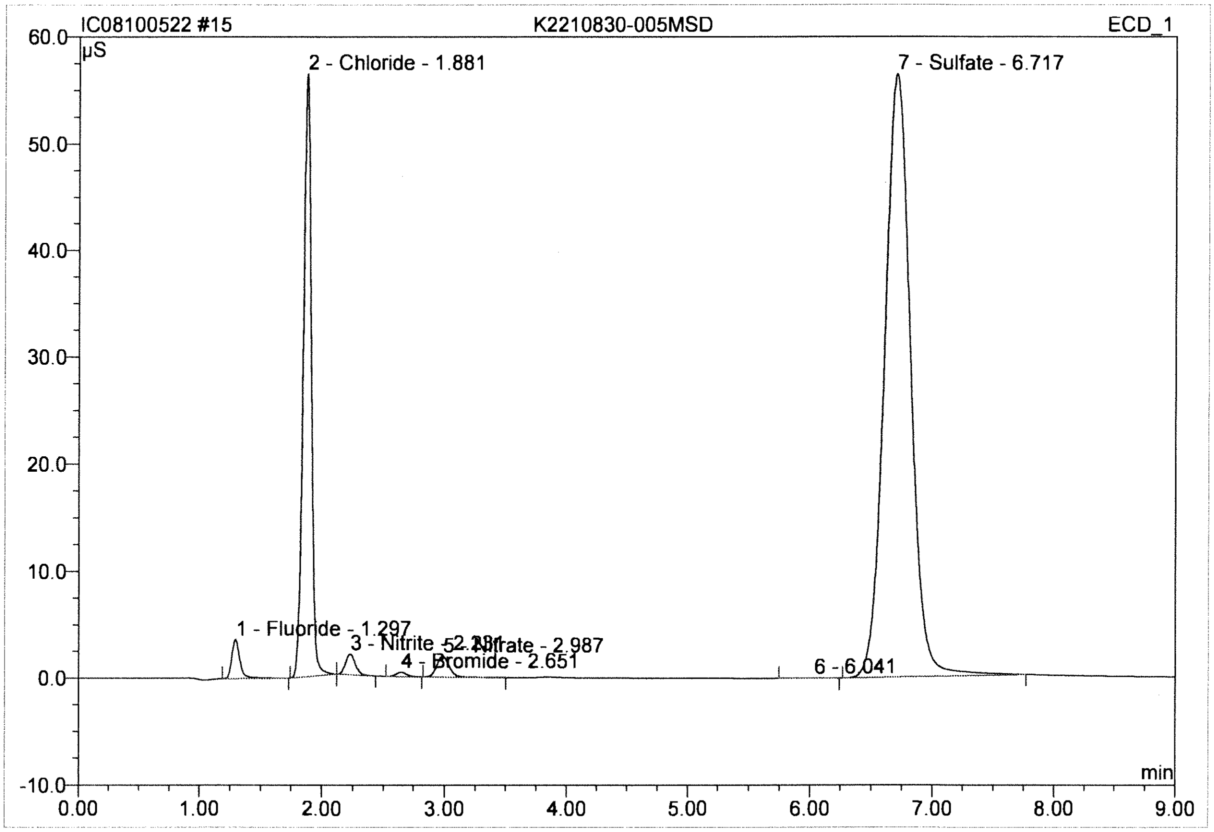
Sample Name:	**K2210830-005MS**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**4.0000**
Recording Time:	**10/5/2022 15:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.645	0.284	1.49	7.912	BMB
2	1.88	Chloride	56.746	4.345	22.75	209.355	BMb
3	2.23	Nitrite	1.918	0.173	0.91	3.671	bMB
4	2.65	Bromide	0.402	0.040	0.21	4.807	BMB
5	2.98	Nitrate	1.936	0.225	1.18	4.335	BMB
6	6.04	n.a.	0.020	0.005	0.02	n.a.	BMB
7	6.71	Sulfate	56.798	14.028	73.44	911.497	BMB
Total:			121.467	19.100	100.00	1141.577	

15 K2210830-005MSD

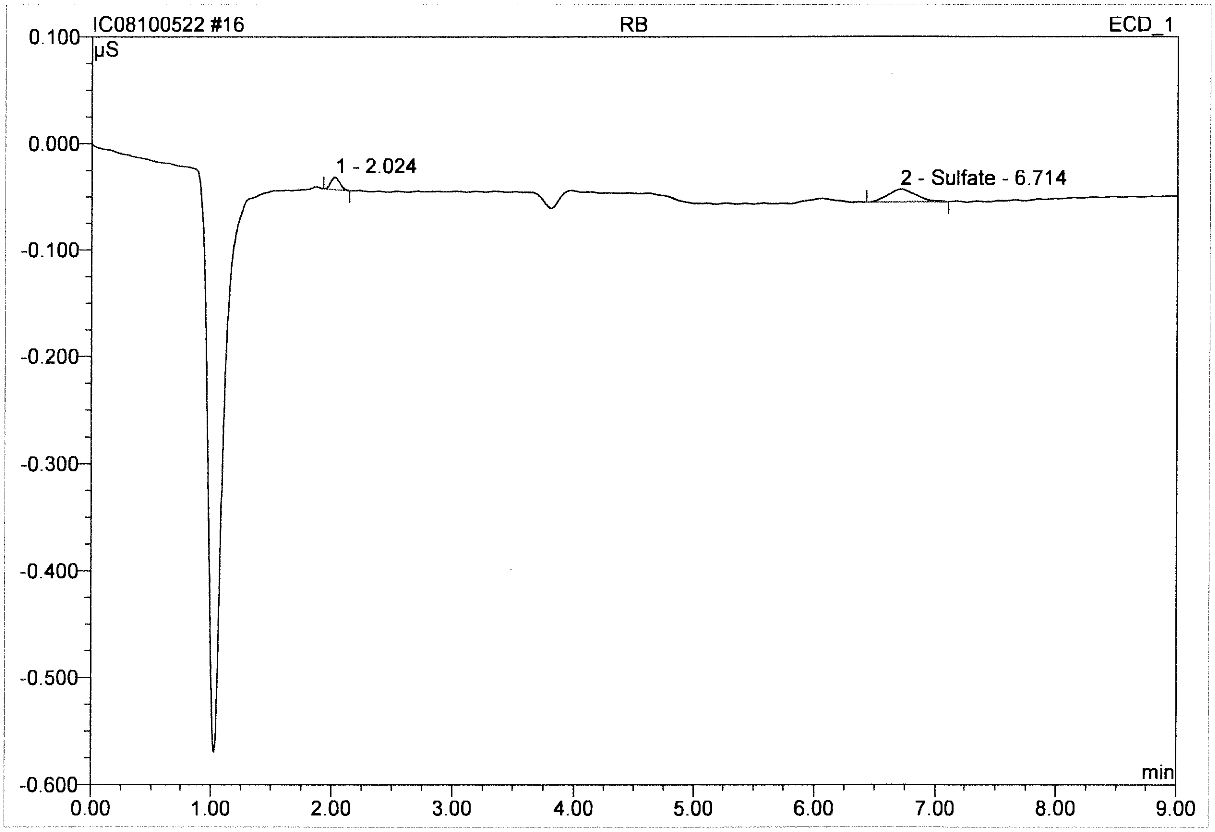
Sample Name:	**K2210830-005MSD**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**4.0000**
Recording Time:	**10/5/2022 16:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	3.653	0.286	1.50	7.943	BMB
2	1.88	Chloride	56.404	4.324	22.77	208.330	BMb
3	2.23	Nitrite	1.924	0.174	0.92	3.694	bMB
4	2.65	Bromide	0.402	0.040	0.21	4.785	BMB
5	2.99	Nitrate	1.937	0.224	1.18	4.326	BMB
6	6.04	n.a.	0.020	0.005	0.03	n.a.	BMB
7	6.72	Sulfate	56.415	13.936	73.39	905.537	BMB
Total:			120.755	18.989	100.00	1134.616	

16 RB

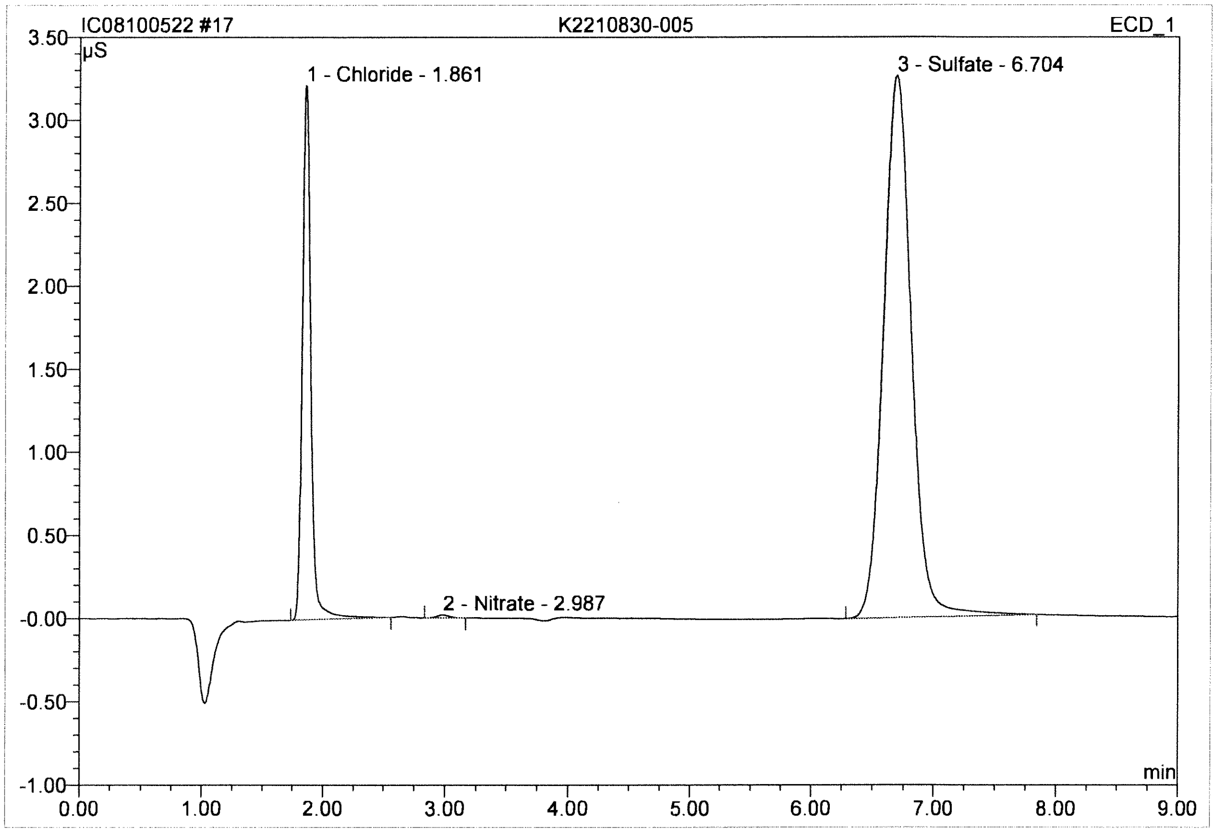
Sample Name:	**RB**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 16:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.011	0.001	23.97	n.a.	BMB
2	6.71	Sulfate	0.012	0.003	76.03	0.052	BMB
Total:			0.023	0.004	100.00	0.052	

17 K2210830-005

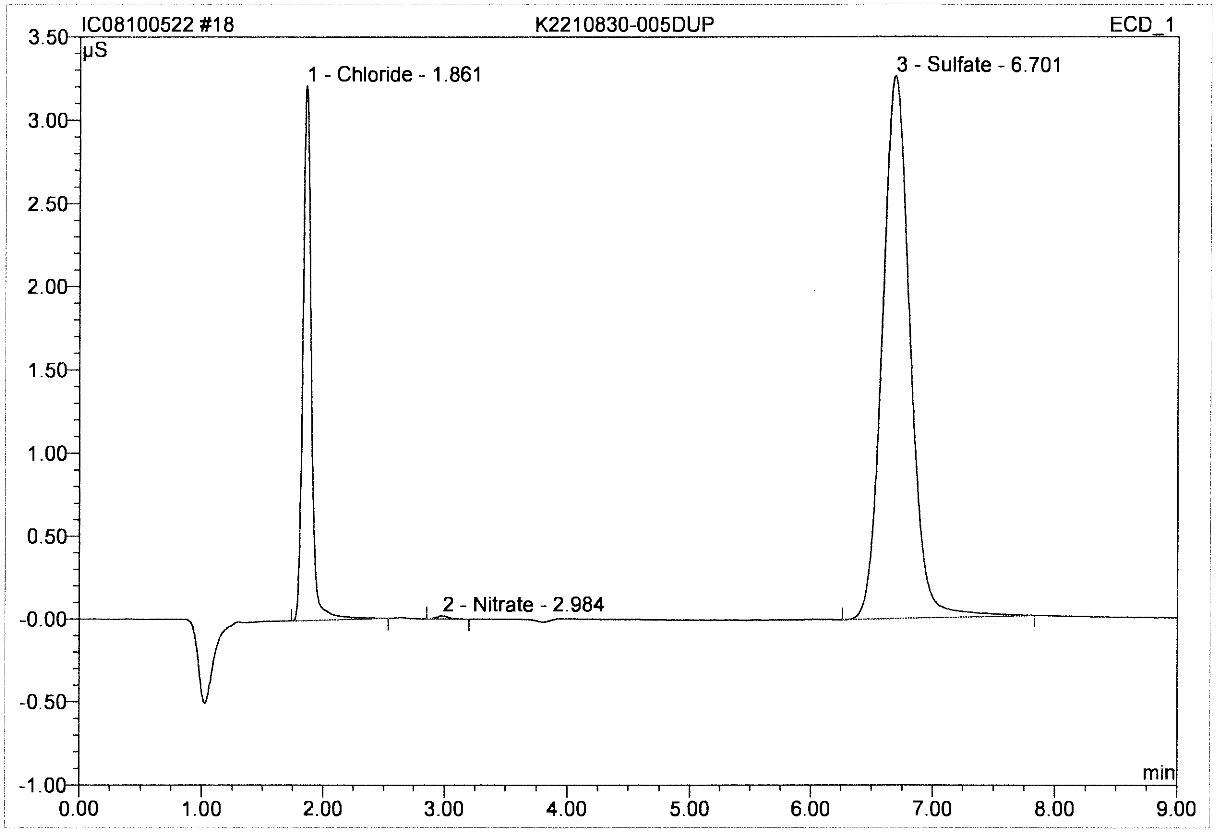
Sample Name:	**K2210830-005**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 16:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	3.217	0.260	23.29	156.778	BMB
2	2.99	Nitrate	0.018	0.002	0.18	0.496	BMB
3	6.70	Sulfate	3.262	0.855	76.53	694.763	BMB
Total:			6.497	1.118	100.00	852.037	

18 K2210830-005DUP

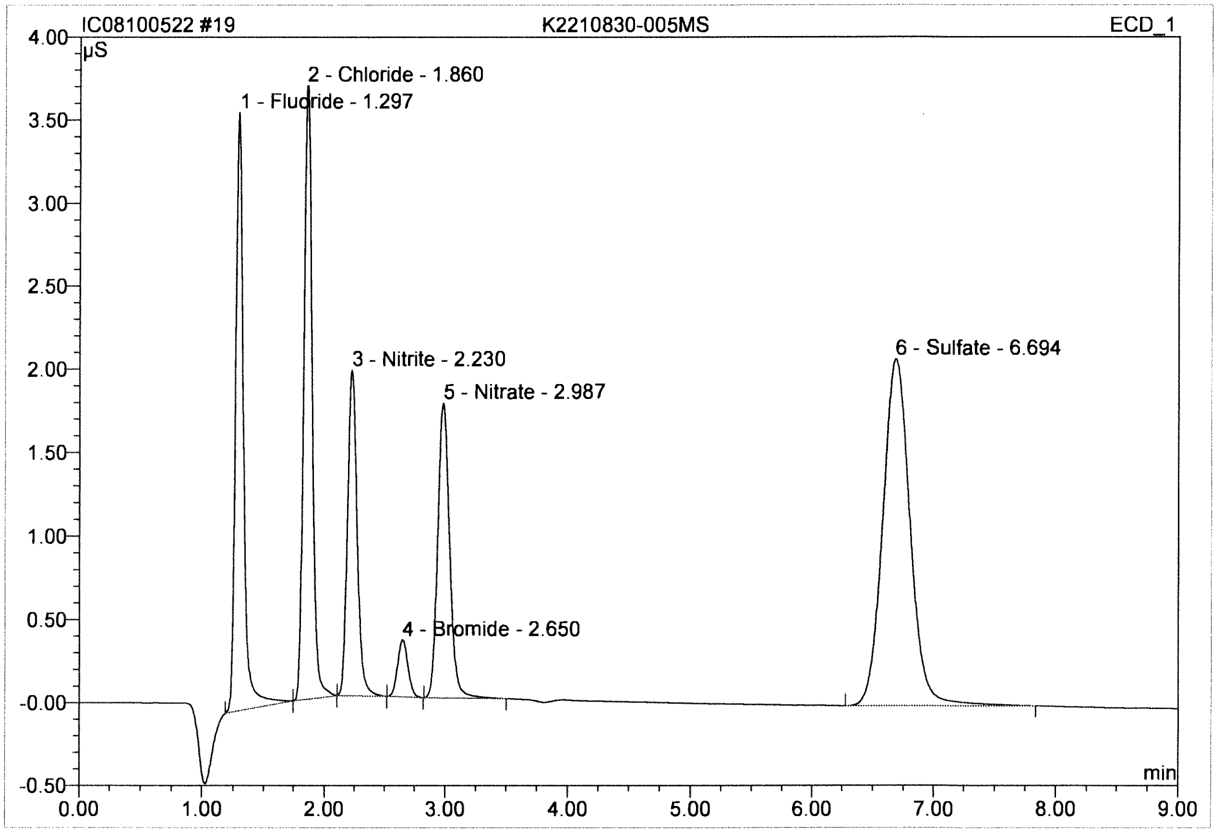
Sample Name:	**K2210830-005DUP**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 16:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	3.216	0.260	23.24	156.472	BMB
2	2.98	Nitrate	0.018	0.002	0.18	0.473	BMB
3	6.70	Sulfate	3.261	0.856	76.58	695.380	BMB
Total:			6.495	1.118	100.00	852.325	

19 K2210830-005MS

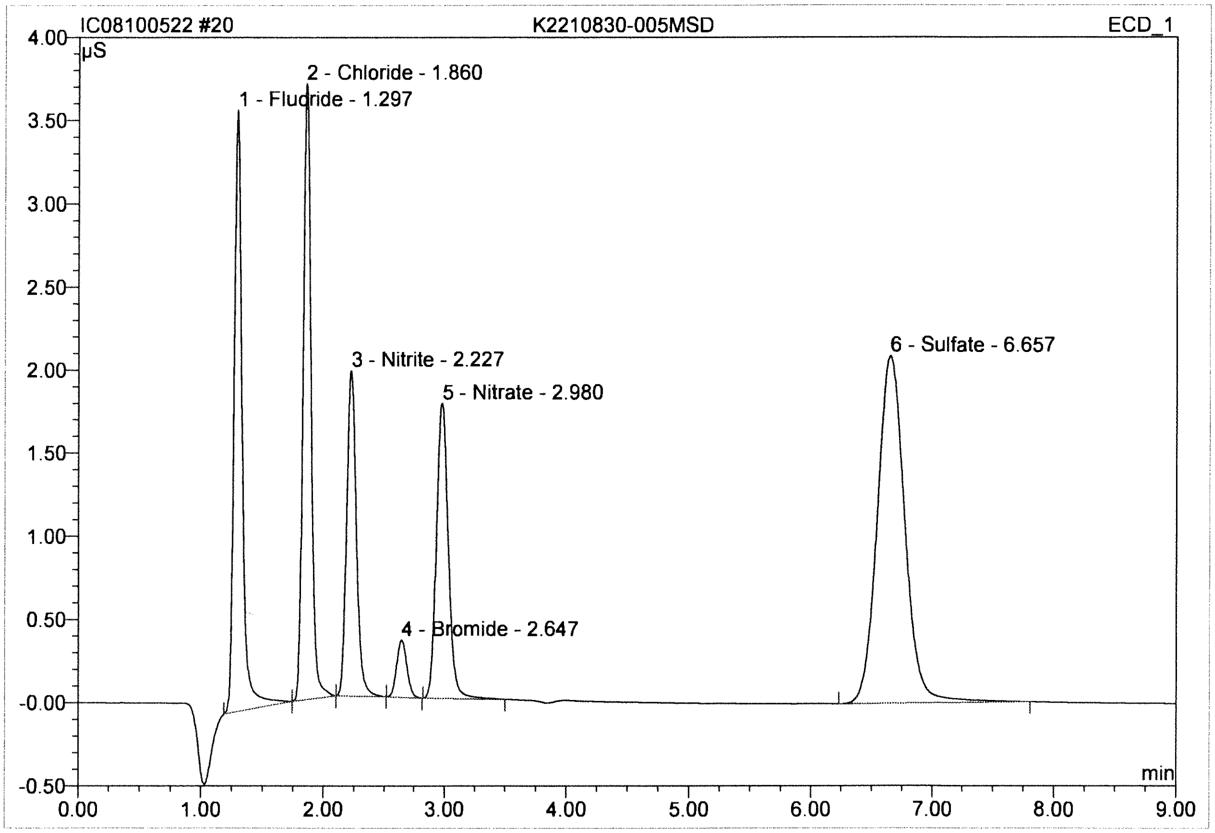
Sample Name:	**K2210830-005MS**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/5/2022 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	3.596	0.275	18.08	191.443	BMB
2	1.86	Chloride	3.687	0.287	18.88	346.198	bMB
3	2.23	Nitrite	1.951	0.181	11.88	95.913	BMB
4	2.65	Bromide	0.342	0.034	2.20	100.822	BMB
5	2.99	Nitrate	1.767	0.200	13.15	96.624	BMB
6	6.69	Sulfate	2.079	0.545	35.81	885.744	BMB
Total:			13.422	1.523	100.00	1716.744	

20 K2210830-005MSD

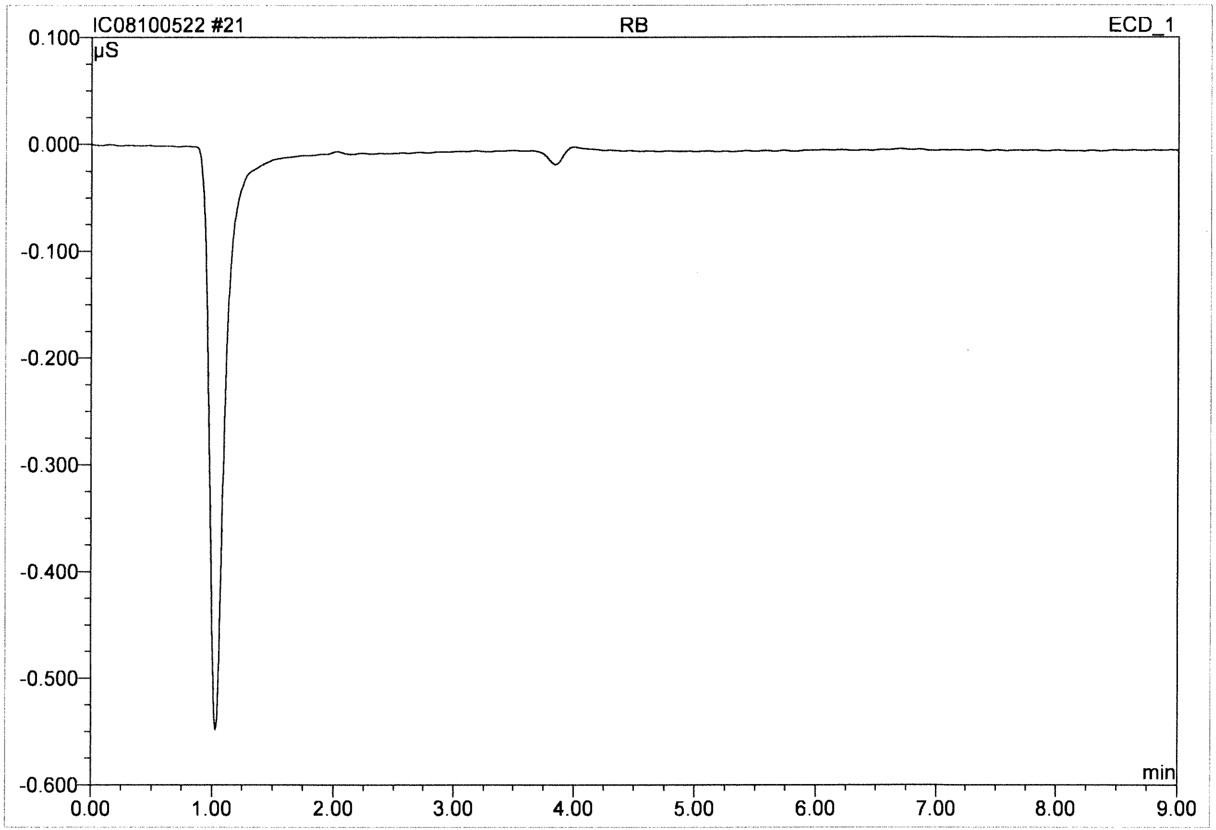
Sample Name:	**K2210830-005MSD**	*Injection Volume:*	**5.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/5/2022 17:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	3.616	0.277	18.11	192.746	BMB
2	1.86	Chloride	3.703	0.288	18.86	347.476	bMB
3	2.23	Nitrite	1.958	0.181	11.86	96.168	BMB
4	2.65	Bromide	0.344	0.034	2.20	101.258	BMB
5	2.98	Nitrate	1.774	0.201	13.15	97.103	BMB
6	6.66	Sulfate	2.088	0.548	35.82	890.247	BMB
Total:			13.483	1.530	100.00	1724.998	

21 RB

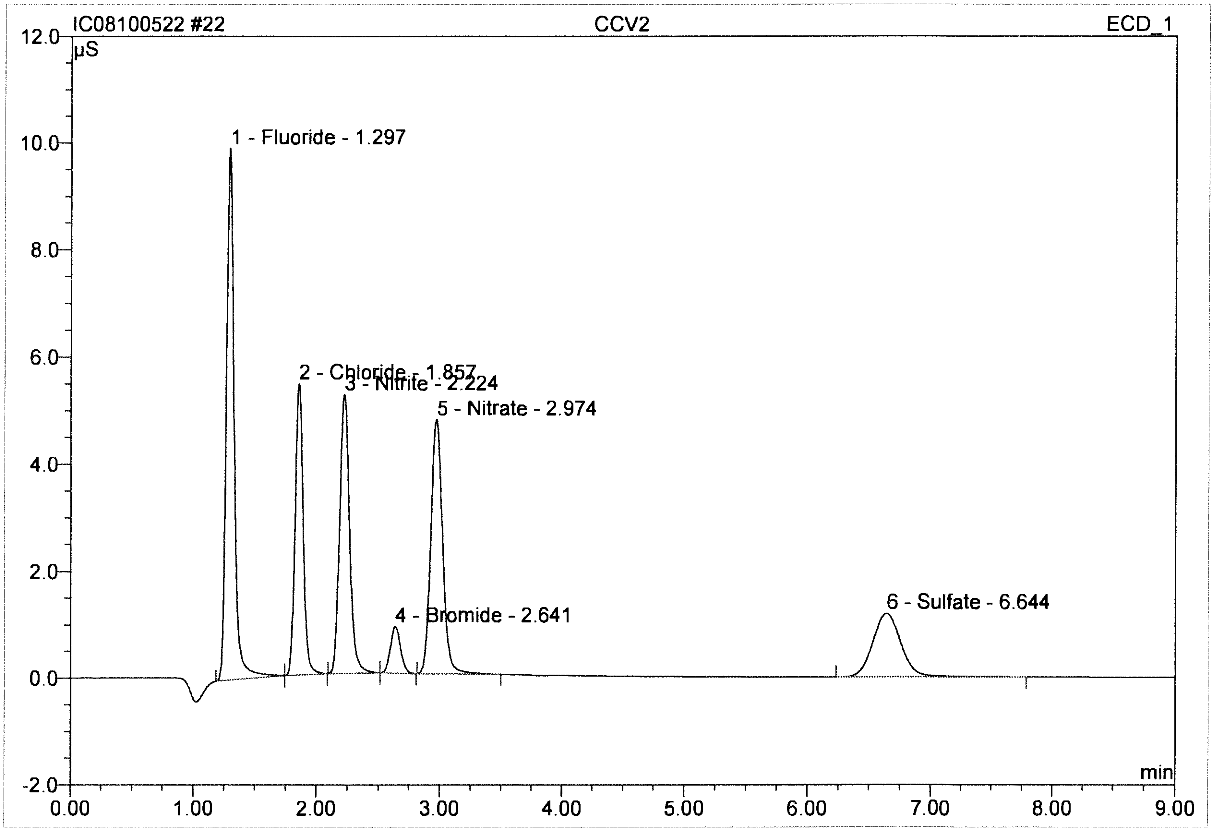
Sample Name:	**RB**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 17:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

22 CCV2

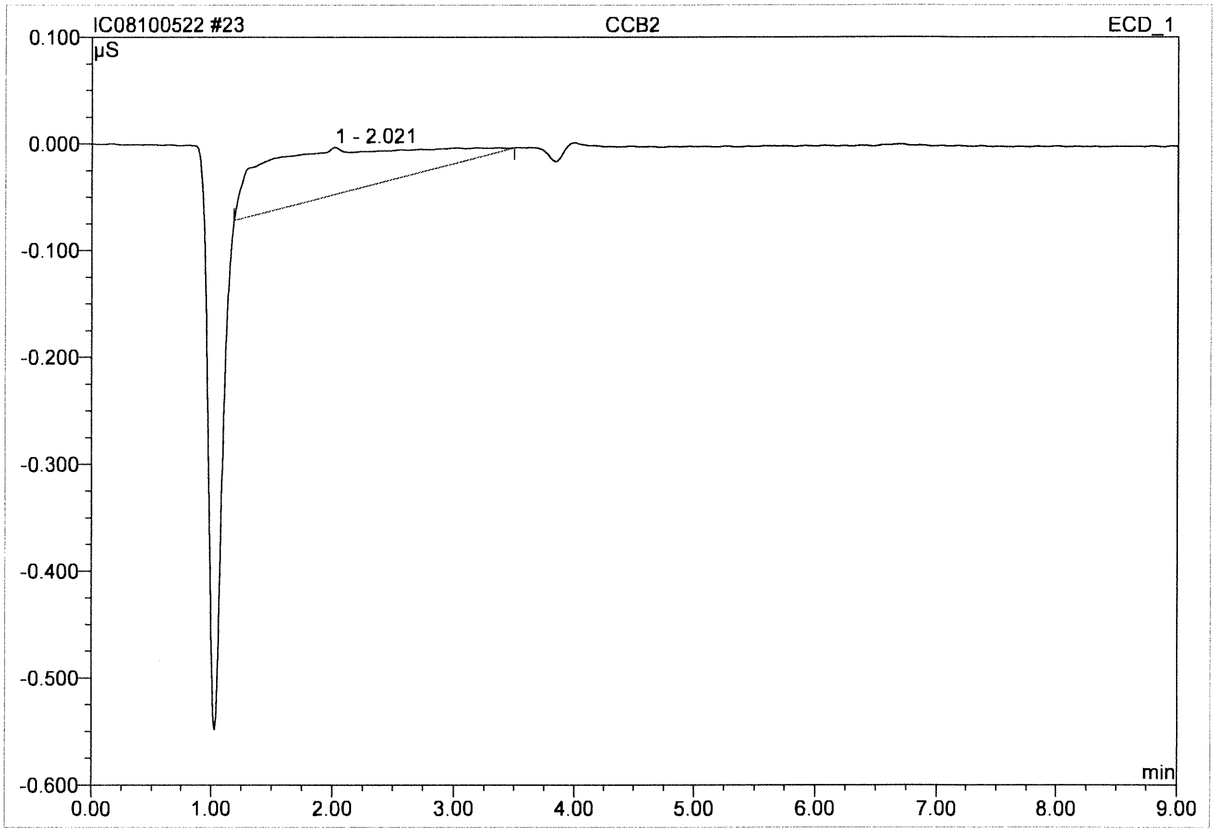
Sample Name:	**CCV2**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 17:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.930	0.737	28.72	5.123	BMB
2	1.86	Chloride	5.448	0.419	16.33	5.045	bMB
3	2.22	Nitrite	5.220	0.481	18.75	2.549	BMb
4	2.64	Bromide	0.878	0.085	3.33	2.564	bMB
5	2.97	Nitrate	4.758	0.528	20.59	2.549	BMB
6	6.64	Sulfate	1.195	0.315	12.27	5.112	BMB
Total:			27.429	2.565	100.00	22.942	

23 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 17:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



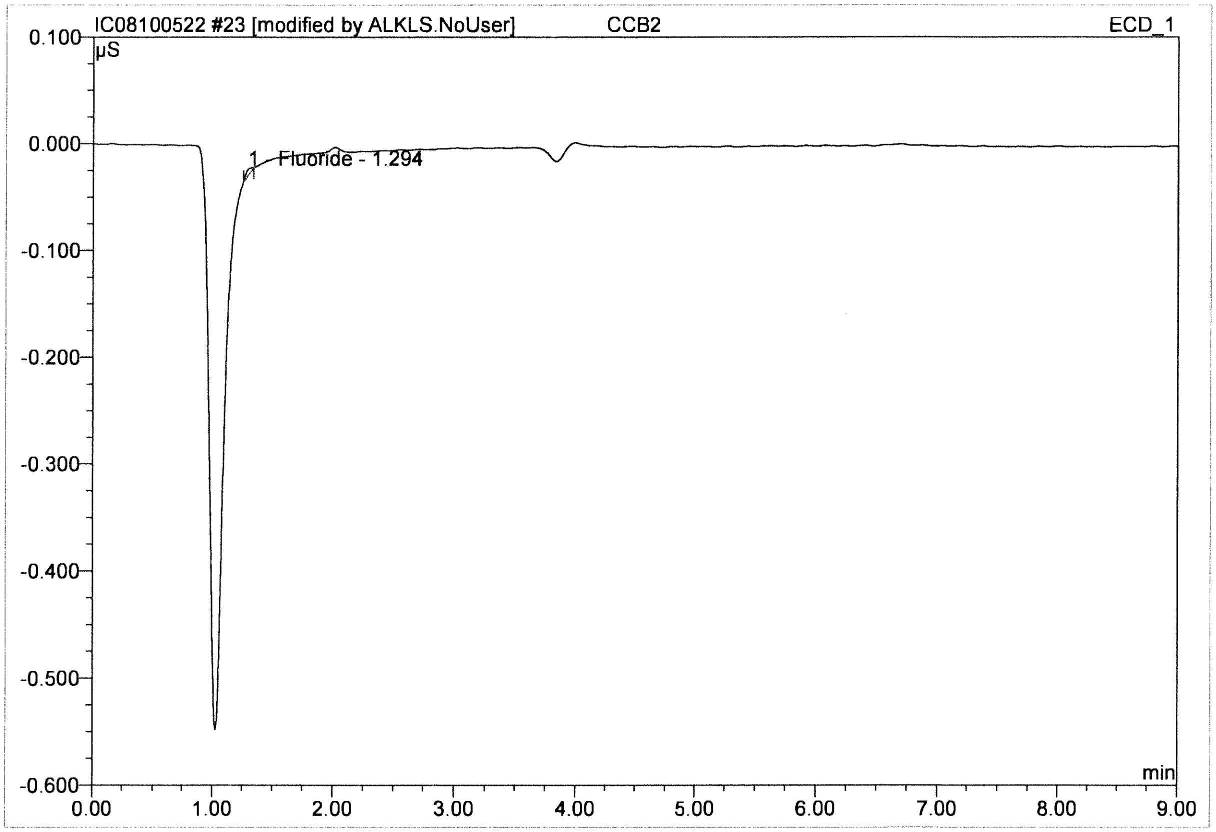
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.044	0.066	100.00	n.a.	BMB
Total:			0.044	0.066	100.00	0.000	

Before

OCT 07

23 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 17:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.005	0.000	100.00	0.002	BMB*
Total:			0.005	0.000	100.00	0.002	

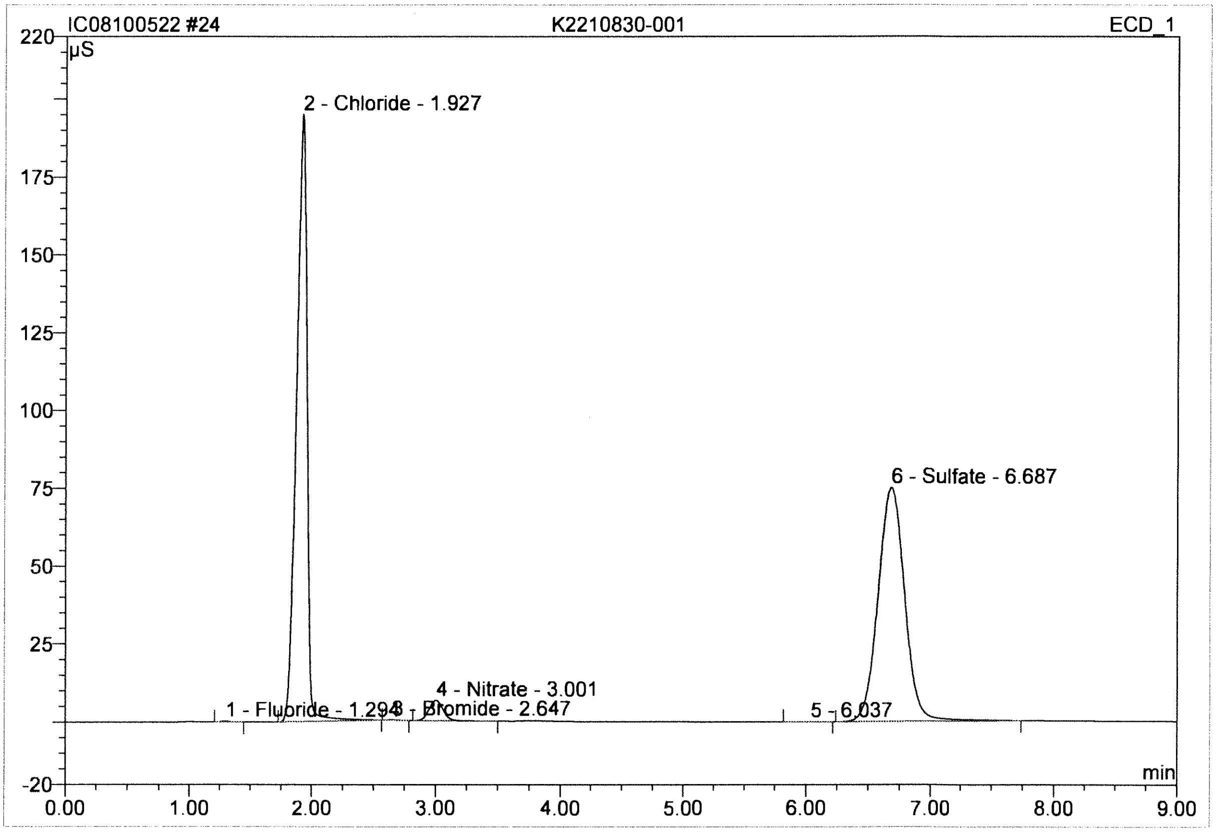
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

24 K2210830-001

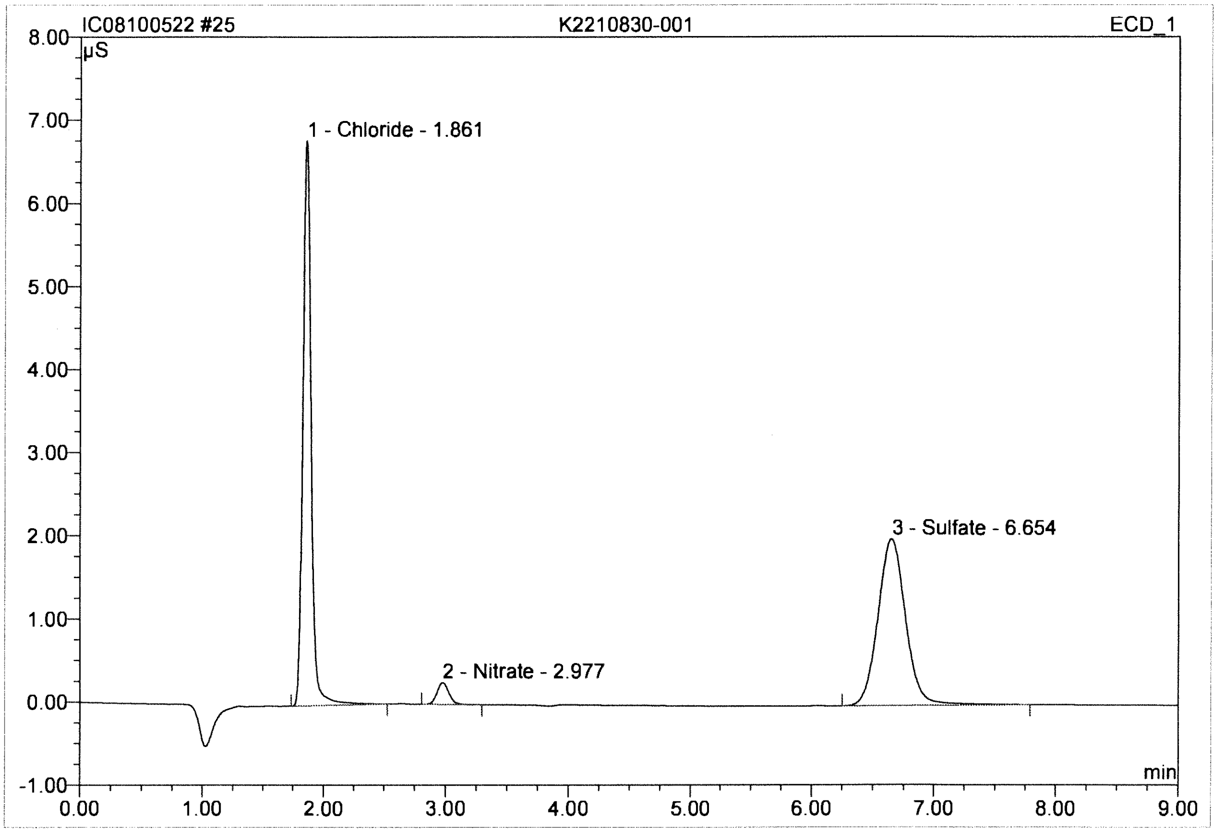
Sample Name:	**K2210830-001**	*Injection Volume:*	**5.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 17:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.262	0.019	0.05	0.269	BMB
2	1.93	Chloride	194.884	19.729	50.56	475.257	BMB
3	2.65	Bromide	0.117	0.012	0.03	0.704	BMB
4	3.00	Nitrate	6.458	0.841	2.16	8.122	BMB
5	6.04	n.a.	0.018	0.004	0.01	n.a.	BMB
6	6.69	Sulfate	74.854	18.414	47.19	598.256	BMB
Total:			276.592	39.019	100.00	1082.608	

25 K2210830-001

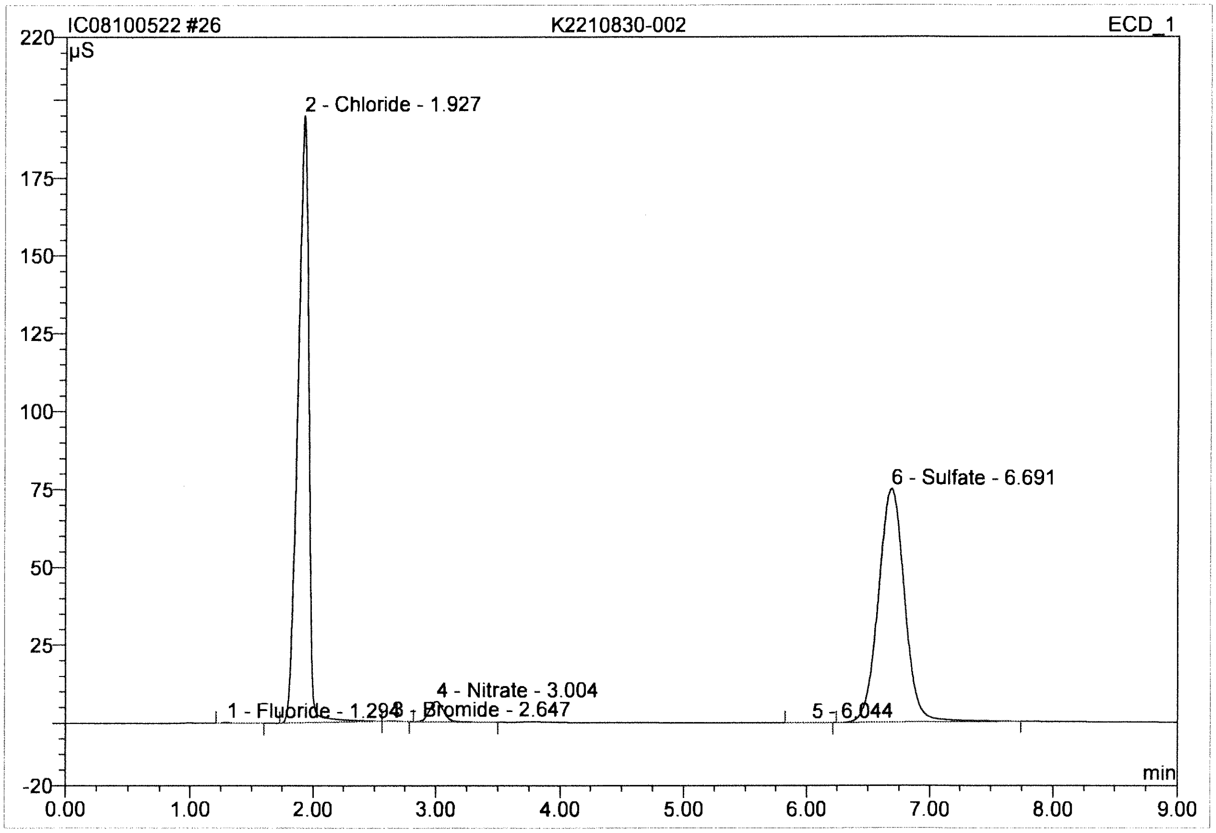
Sample Name:	**K2210830-001**	*Injection Volume:*	**5.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 17:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	6.800	0.537	49.19	323.183	BMB
2	2.98	Nitrate	0.263	0.030	2.71	7.131	BMB
3	6.65	Sulfate	2.002	0.525	48.11	426.309	BMB
Total:			9.065	1.091	100.00	756.623	

26 K2210830-002

Sample Name:	**K2210830-002**	*Injection Volume:*	**5.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 18:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



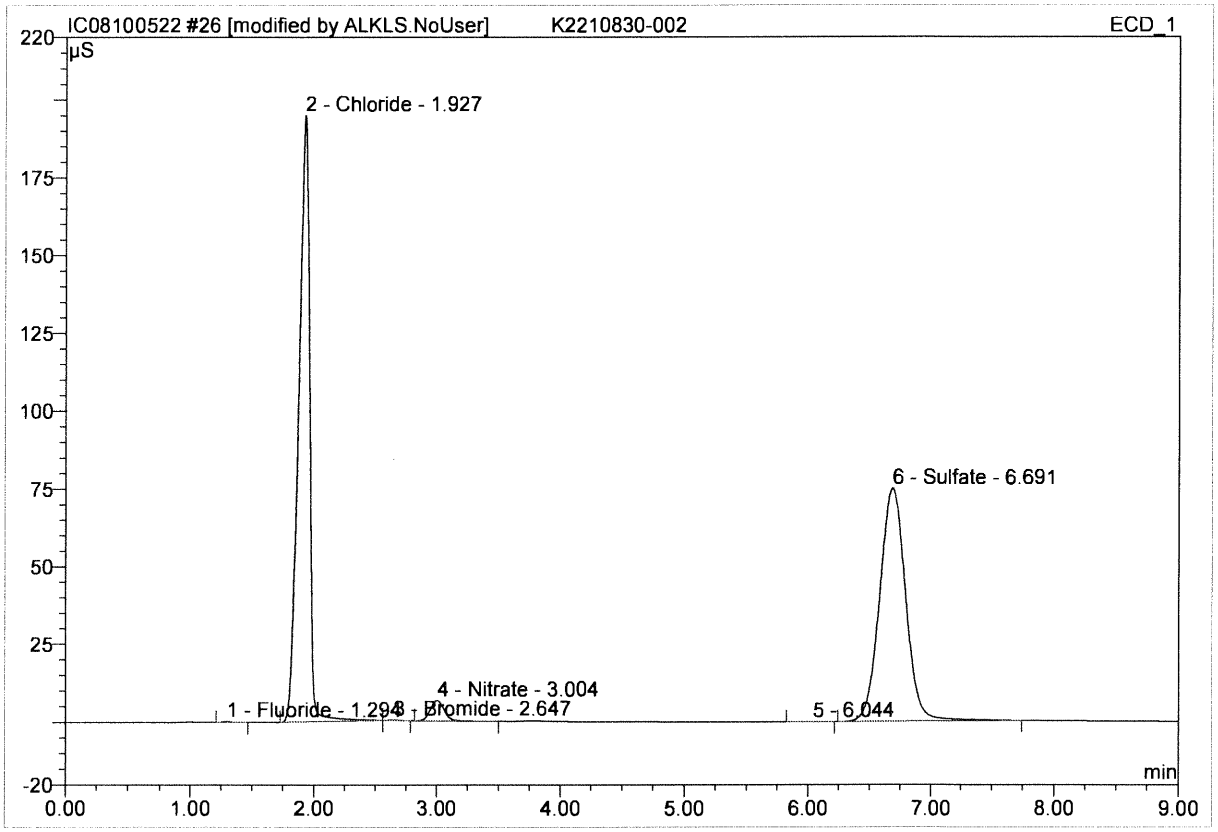
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.261	0.020	0.05	0.278	BMB
2	1.93	Chloride	194.834	19.749	50.56	475.729	BMb
3	2.65	Bromide	0.122	0.013	0.03	0.760	bMB
4	3.00	Nitrate	6.456	0.842	2.16	8.129	BMB
5	6.04	n.a.	0.017	0.003	0.01	n.a.	BMB
6	6.69	Sulfate	74.904	18.433	47.19	598.866	BMB
Total:			276.594	39.060	100.00	1083.762	

Before

OCT 07

26 K2210830-002

Sample Name:	**K2210830-002**	*Injection Volume:*	**5.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 18:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.260	0.019	0.05	0.267	BMB*
2	1.93	Chloride	194.834	19.749	50.56	475.729	BMb
3	2.65	Bromide	0.122	0.013	0.03	0.760	bMB
4	3.00	Nitrate	6.456	0.842	2.16	8.129	BMB
5	6.04	n.a.	0.017	0.003	0.01	n.a.	BMB
6	6.69	Sulfate	74.904	18.433	47.19	598.866	BMB
Total:			276.592	39.059	100.00	1083.751	

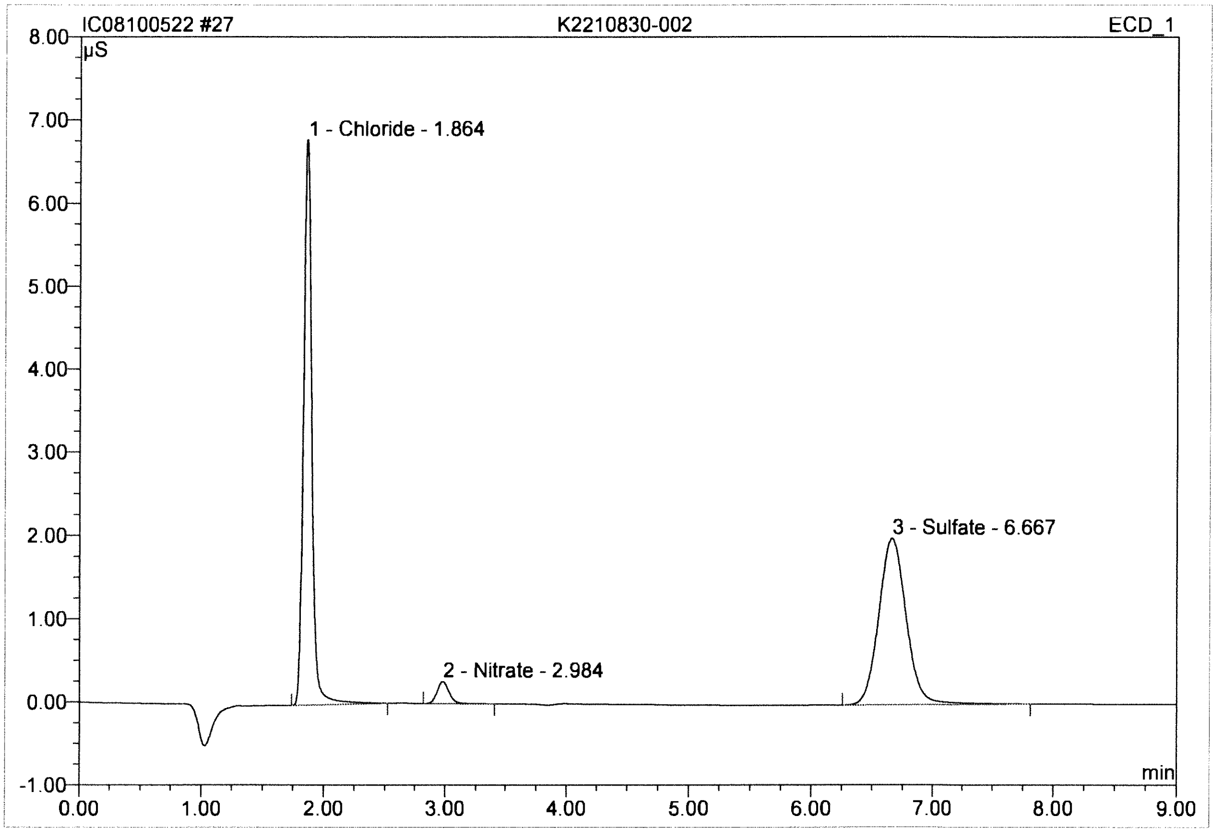
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

27 K2210830-002

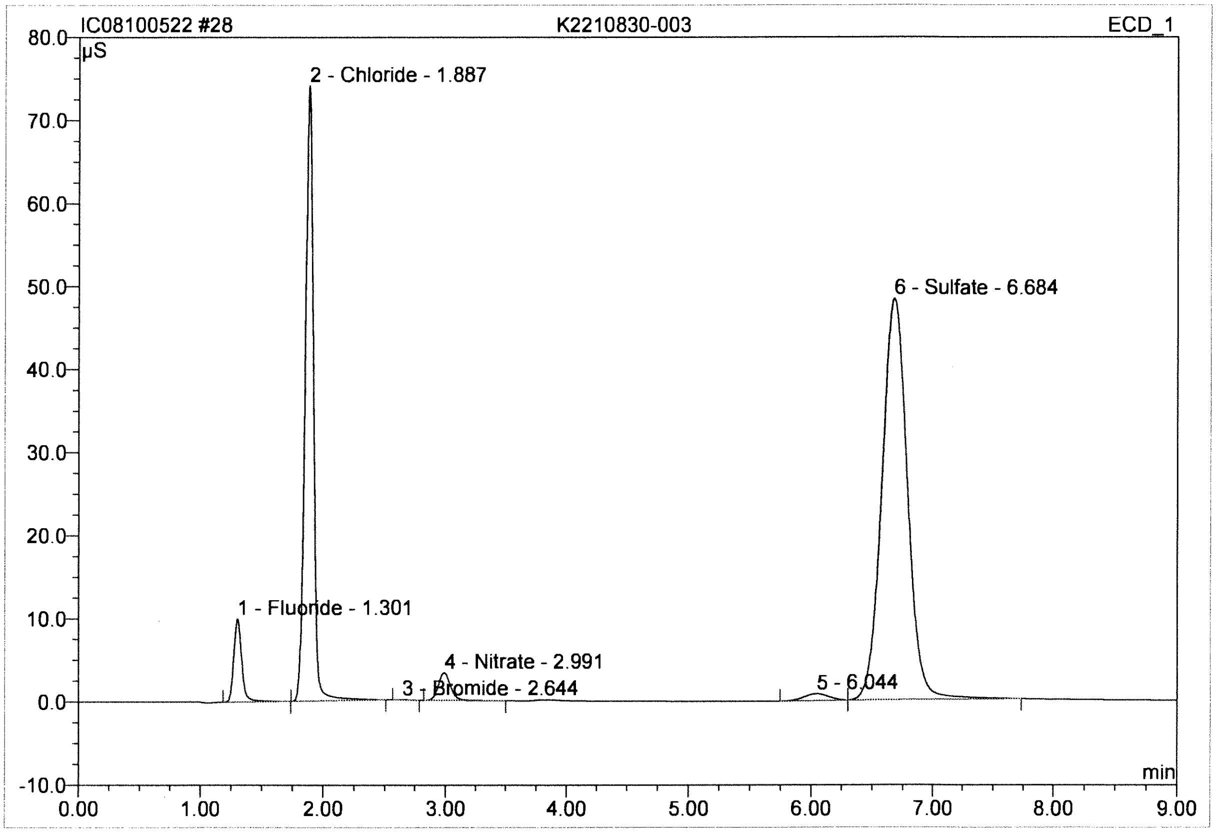
Sample Name:	**K2210830-002**	*Injection Volume:*	**5.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 18:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	6.802	0.538	49.24	324.140	BMB
2	2.98	Nitrate	0.264	0.030	2.76	7.285	BMB
3	6.67	Sulfate	2.000	0.525	48.00	426.141	BMB
Total:			9.066	1.093	100.00	757.566	

28 K2210830-003

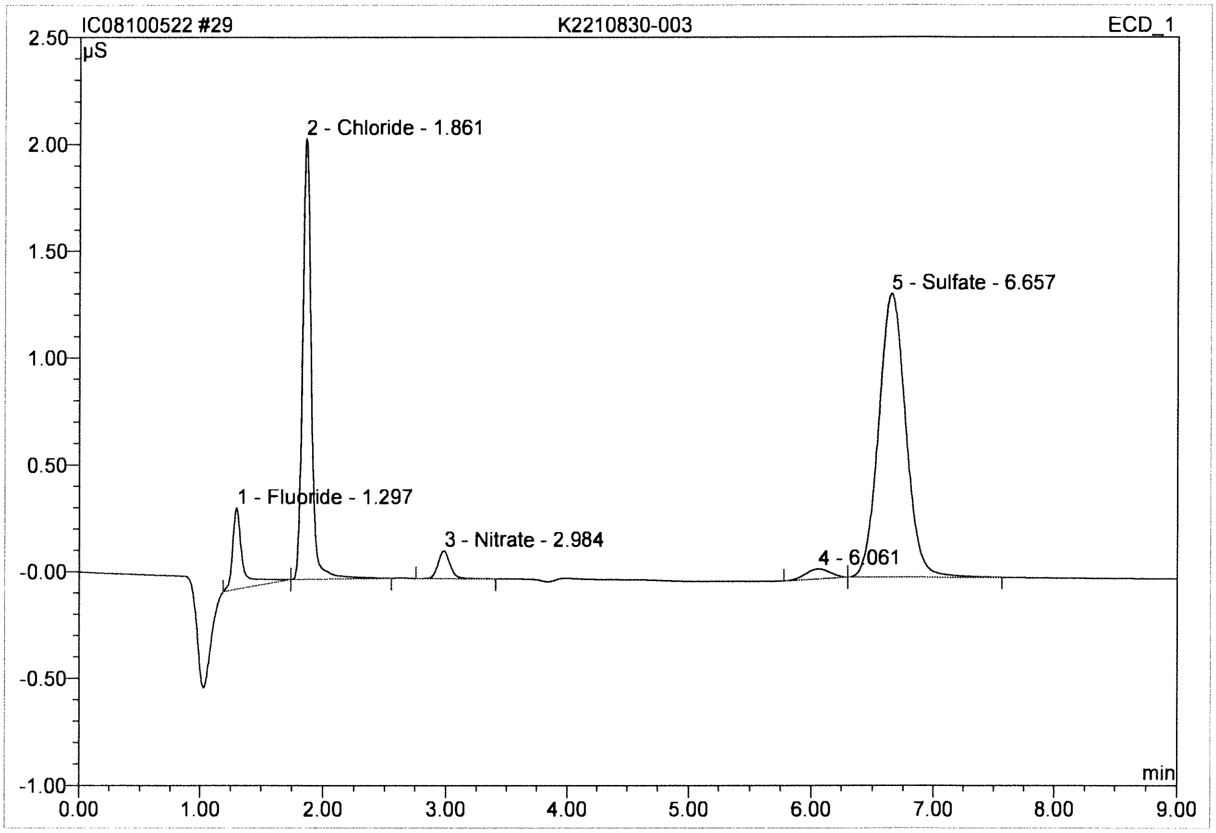
Sample Name:	**K2210830-003**	*Injection Volume:*	**5.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 18:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.980	0.756	3.98	10.518	BMB
2	1.89	Chloride	74.060	5.912	31.11	142.413	BMB
3	2.64	Bromide	0.044	0.004	0.02	0.253	BMB
4	2.99	Nitrate	3.302	0.392	2.06	3.786	BMB
5	6.04	n.a.	0.817	0.190	1.00	n.a.	BMB
6	6.68	Sulfate	48.331	11.746	61.82	381.618	bMB
Total:			136.535	19.000	100.00	538.589	

29 K2210830-003

Sample Name:	**K2210830-003**	*Injection Volume:*	**5.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 18:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



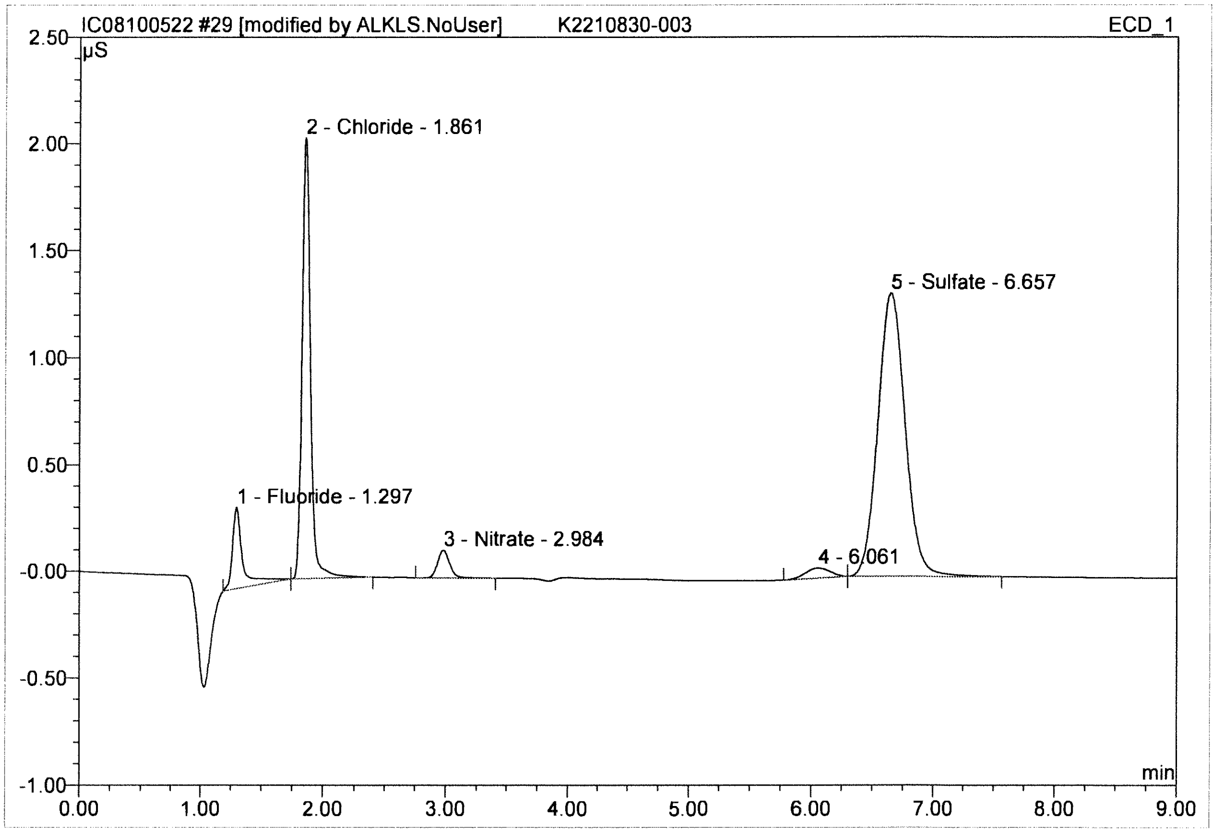
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.381	0.037	6.47	12.904	BMB
2	1.86	Chloride	2.063	0.168	29.27	101.089	bMB
3	2.98	Nitrate	0.129	0.015	2.58	3.570	BMB
4	6.06	n.a.	0.047	0.011	1.92	n.a.	BMB
5	6.66	Sulfate	1.327	0.343	59.76	278.329	bMB
Total:			3.946	0.573	100.00	395.892	

Before

OCT 07

29 K2210830-003

Sample Name:	**K2210830-003**	*Injection Volume:*	**5.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 18:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.381	0.037	6.49	12.904	BMb*
2	1.86	Chloride	2.063	0.167	29.11	100.316	bMB*
3	2.98	Nitrate	0.129	0.015	2.59	3.570	BMB
4	6.06	n.a.	0.047	0.011	1.92	n.a.	BMb*
5	6.66	Sulfate	1.327	0.343	59.89	278.329	bMB
Total:			3.945	0.572	100.00	395.119	

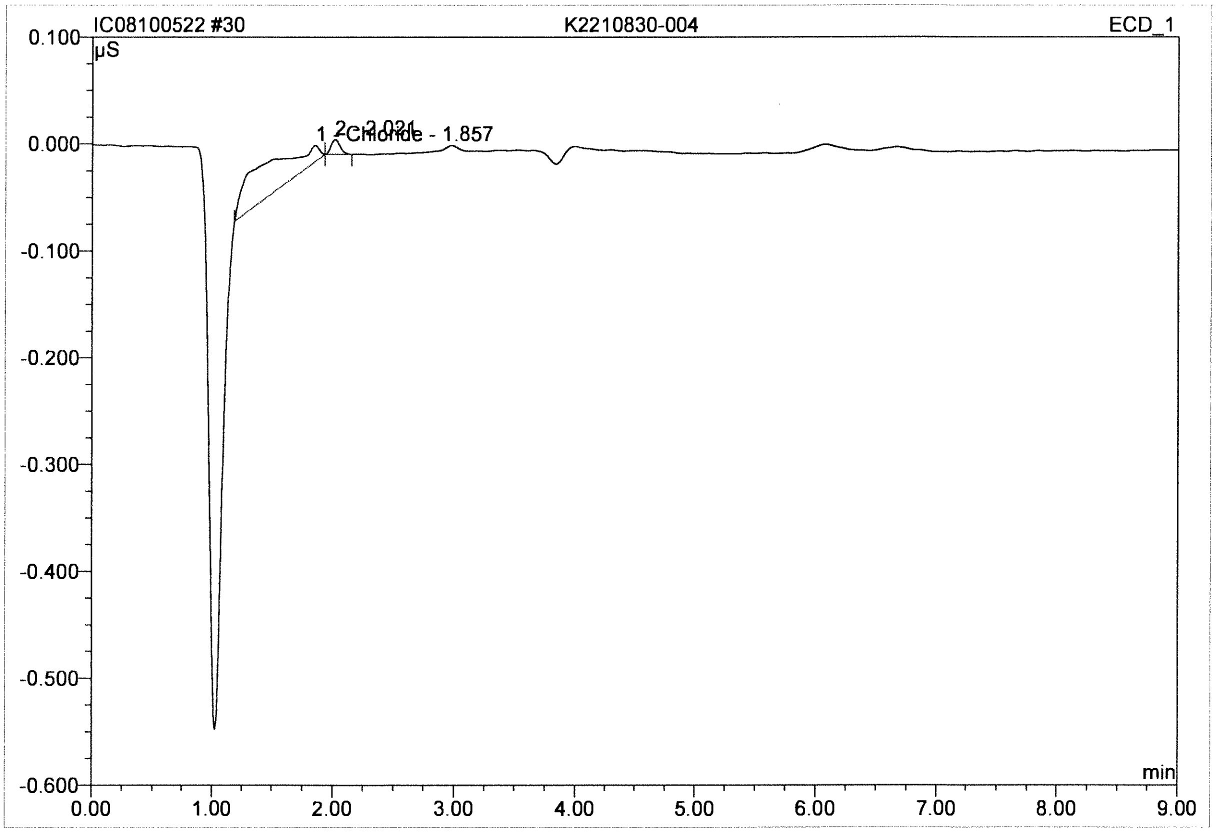
After
Initials JF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

30 K2210830-004

Sample Name:	**K2210830-004**	*Injection Volume:*	**5.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 18:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



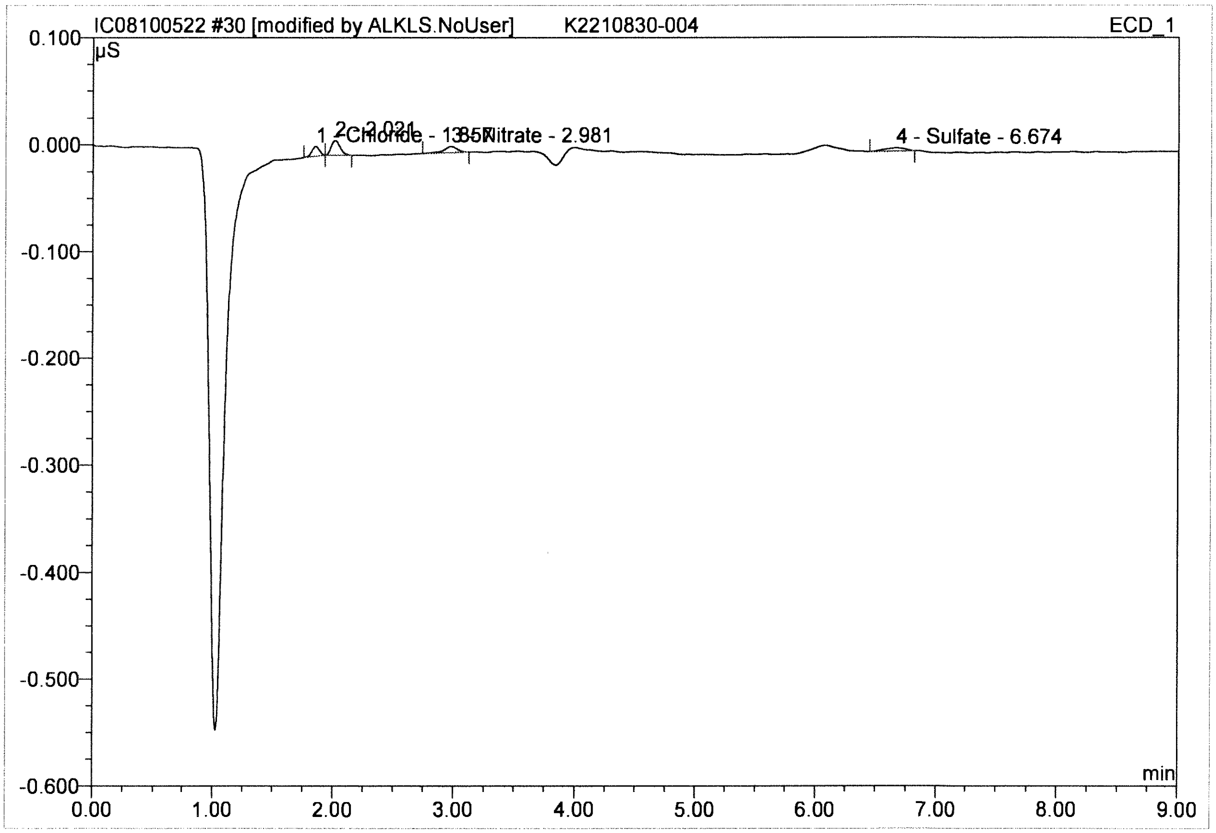
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.015	0.017	93.41	0.405	BMB
2	2.02	n.a.	0.014	0.001	6.59	n.a.	bMB
Total:			0.028	0.018	100.00	0.405	

Before

OCT 07

30 K2210830-004

Sample Name:	**K2210830-004**	*Injection Volume:*	**5.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 18:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.009	0.001	21.25	0.016	BMb*
2	2.02	n.a.	0.014	0.001	37.48	n.a.	bMB*
3	2.98	Nitrate	0.006	0.001	23.25	0.007	BMB*
4	6.67	Sulfate	0.003	0.001	18.02	0.019	BMB*
Total:			0.031	0.003	100.00	0.042	

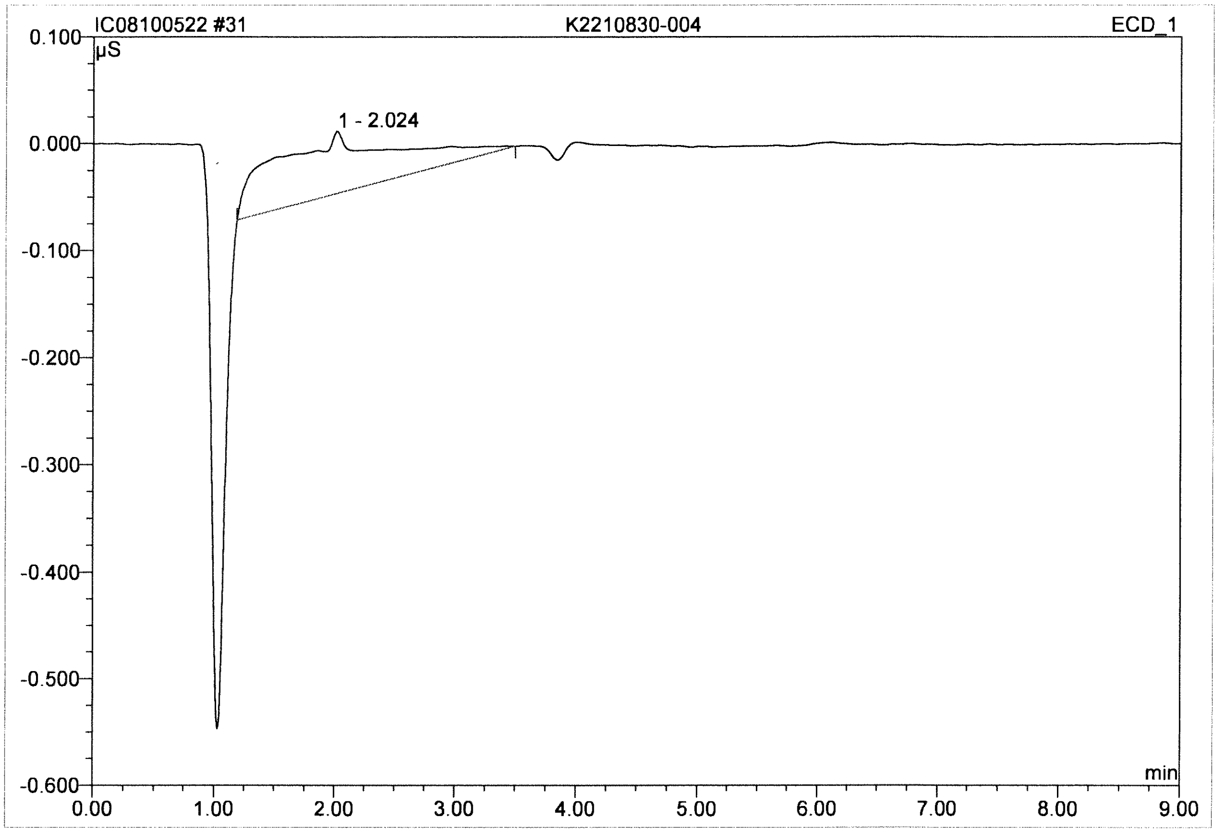
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

31 K2210830-004

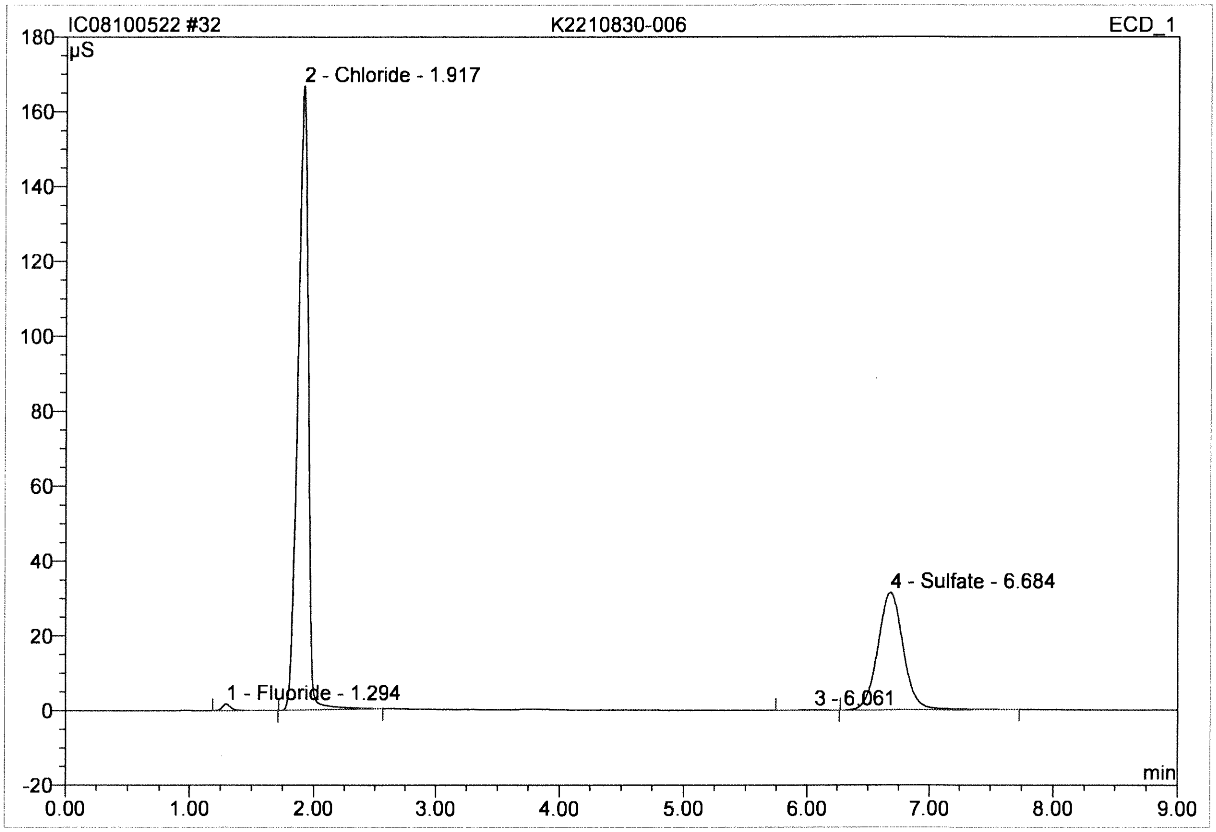
Sample Name:	**K2210830-004**	*Injection Volume:*	**5.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 19:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.058	0.067	100.00	n.a.	BMB
Total:			0.058	0.067	100.00	0.000	

32 K2210830-006

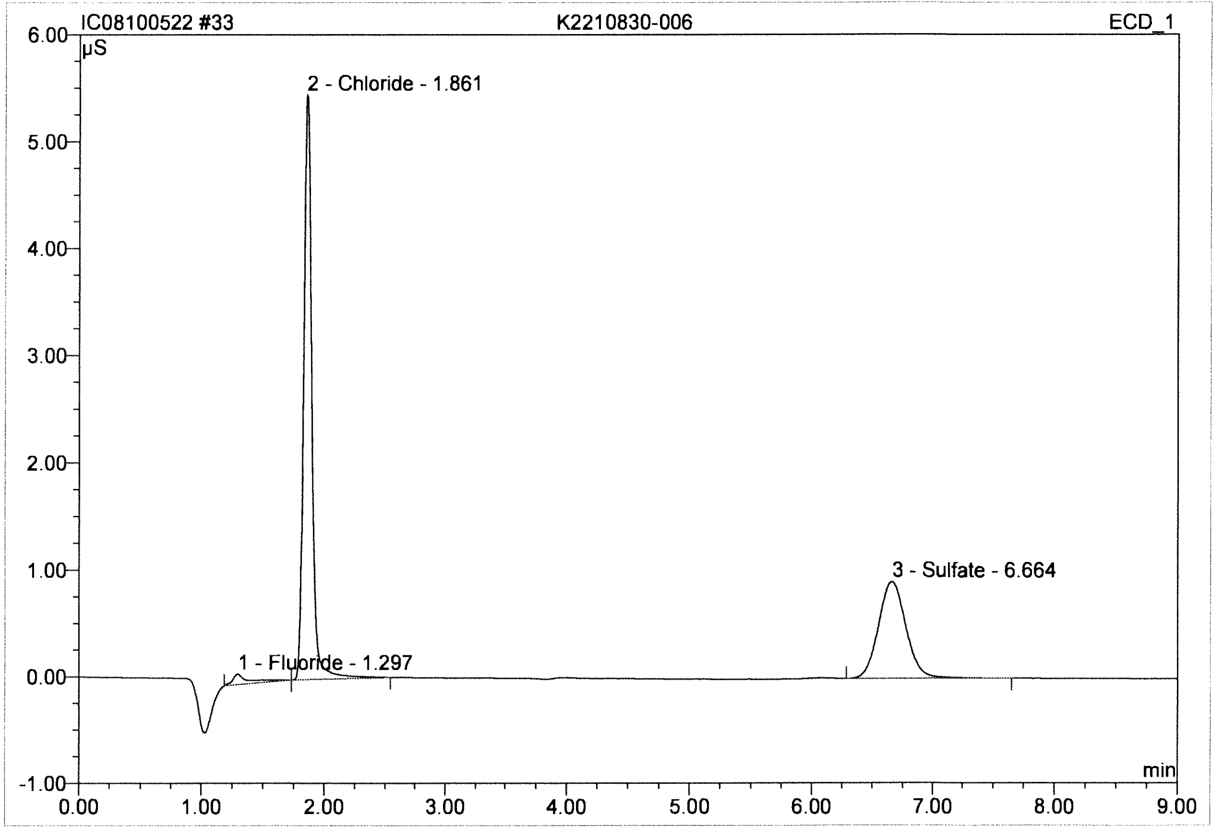
Sample Name:	**K2210830-006**	*Injection Volume:*	**5.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/5/2022 19:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	1.759	0.141	0.60	1.965	BMB
2	1.92	Chloride	166.715	15.912	67.11	383.309	BMB
3	6.06	n.a.	0.077	0.017	0.07	n.a.	BMB
4	6.68	Sulfate	31.447	7.640	32.22	248.213	BMB
Total:			199.999	23.710	100.00	633.487	

33 K2210830-006

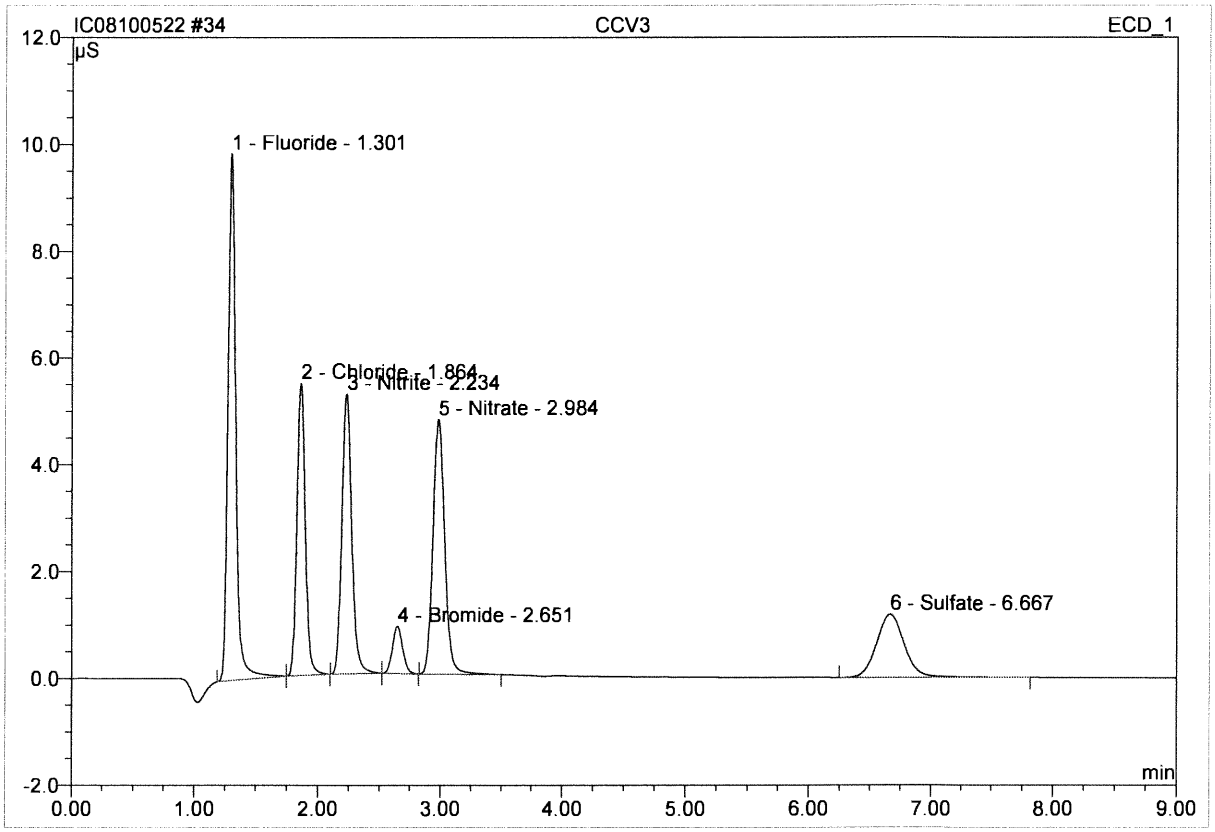
Sample Name:	**K2210830-006**	*Injection Volume:*	**5.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/5/2022 19:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.100	0.015	2.23	5.335	BMB
2	1.86	Chloride	5.463	0.434	63.24	261.644	bMB
3	6.66	Sulfate	0.907	0.237	34.53	192.680	BMB
Total:			6.470	0.687	100.00	459.659	

34 CCV3

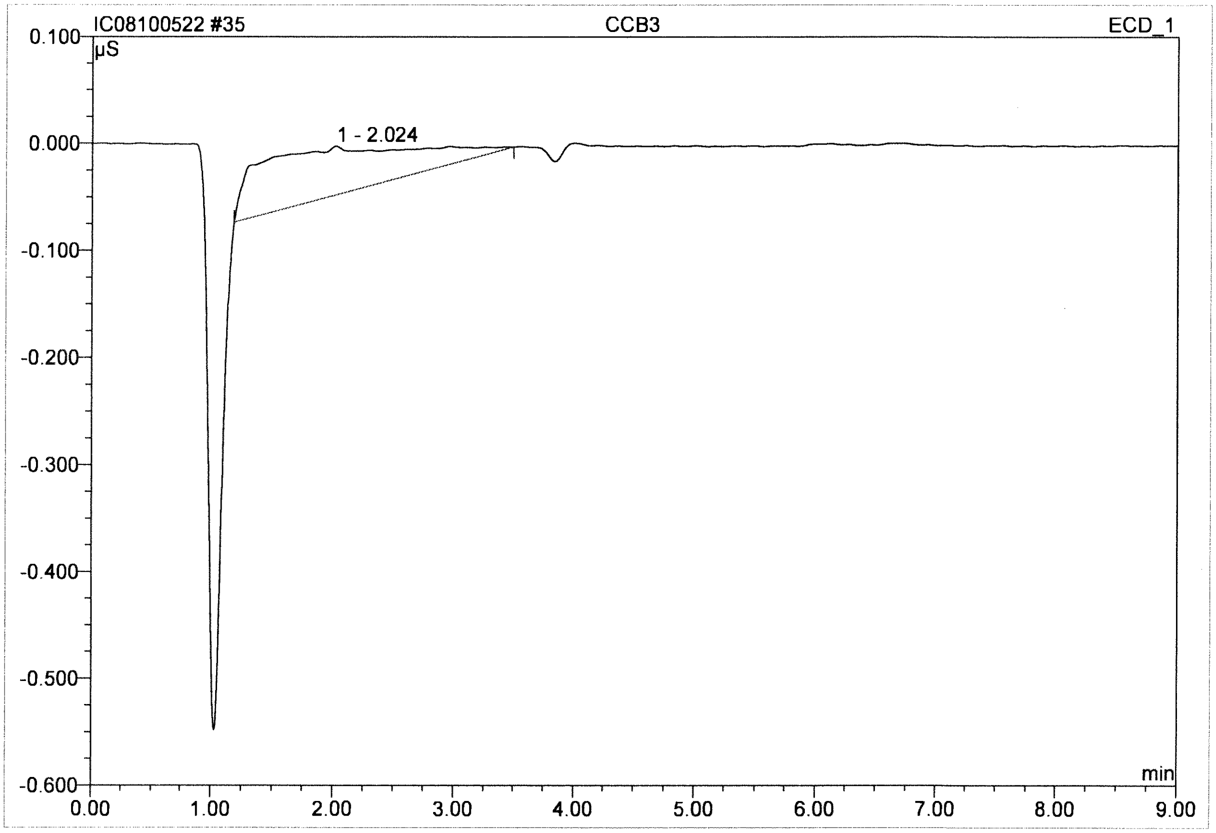
Sample Name:	**CCV3**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 19:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.859	0.731	28.54	5.085	BMB
2	1.86	Chloride	5.467	0.421	16.43	5.070	bMB
3	2.23	Nitrite	5.235	0.482	18.83	2.557	BMb
4	2.65	Bromide	0.881	0.086	3.34	2.574	bMB
5	2.98	Nitrate	4.768	0.530	20.71	2.560	BMB
6	6.67	Sulfate	1.182	0.311	12.15	5.056	BMB
Total:			27.392	2.562	100.00	22.902	

35 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 19:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



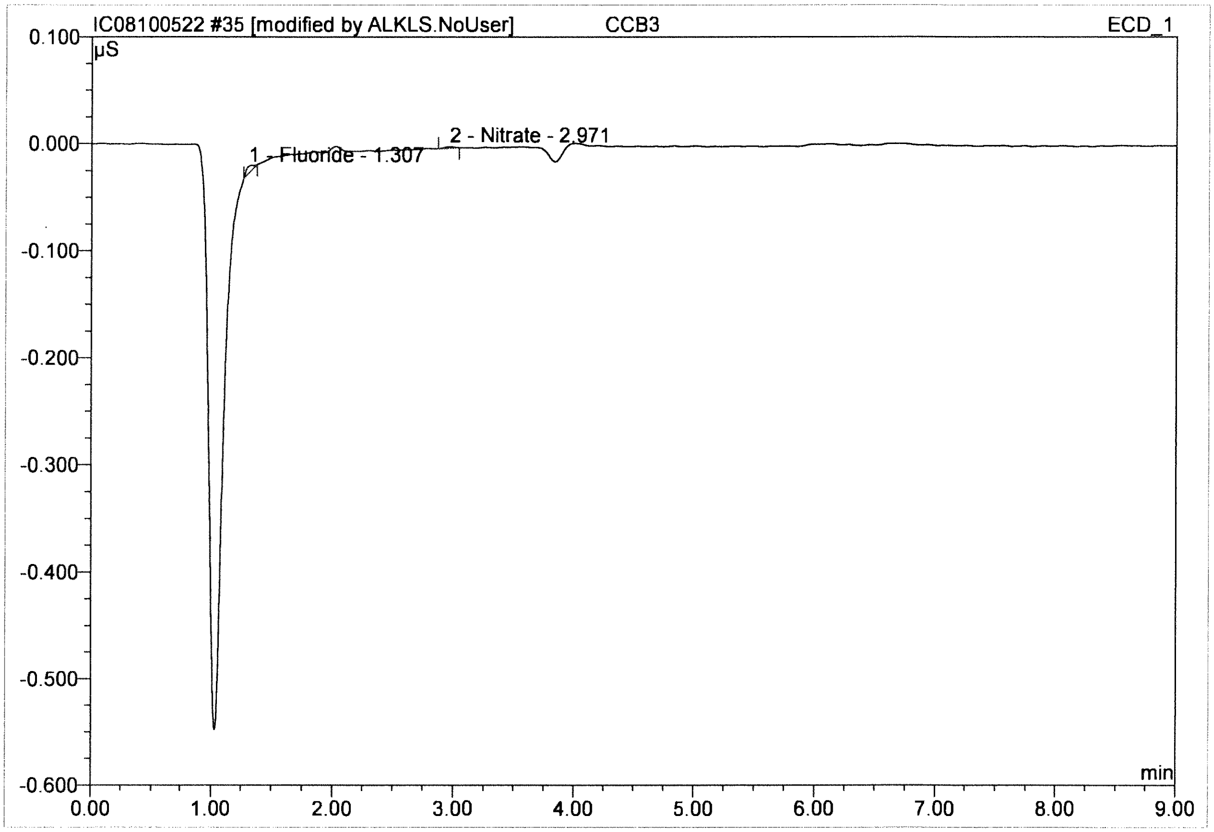
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.045	0.068	100.00	n.a.	BMB
Total:			0.045	0.068	100.00	0.000	

Before

OCT 07

35 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 19:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	0.007	0.000	77.69	0.003	BMB*
2	2.97	Nitrate	0.001	0.000	22.31	0.001	BMB*
Total:			0.008	0.001	100.00	0.003	

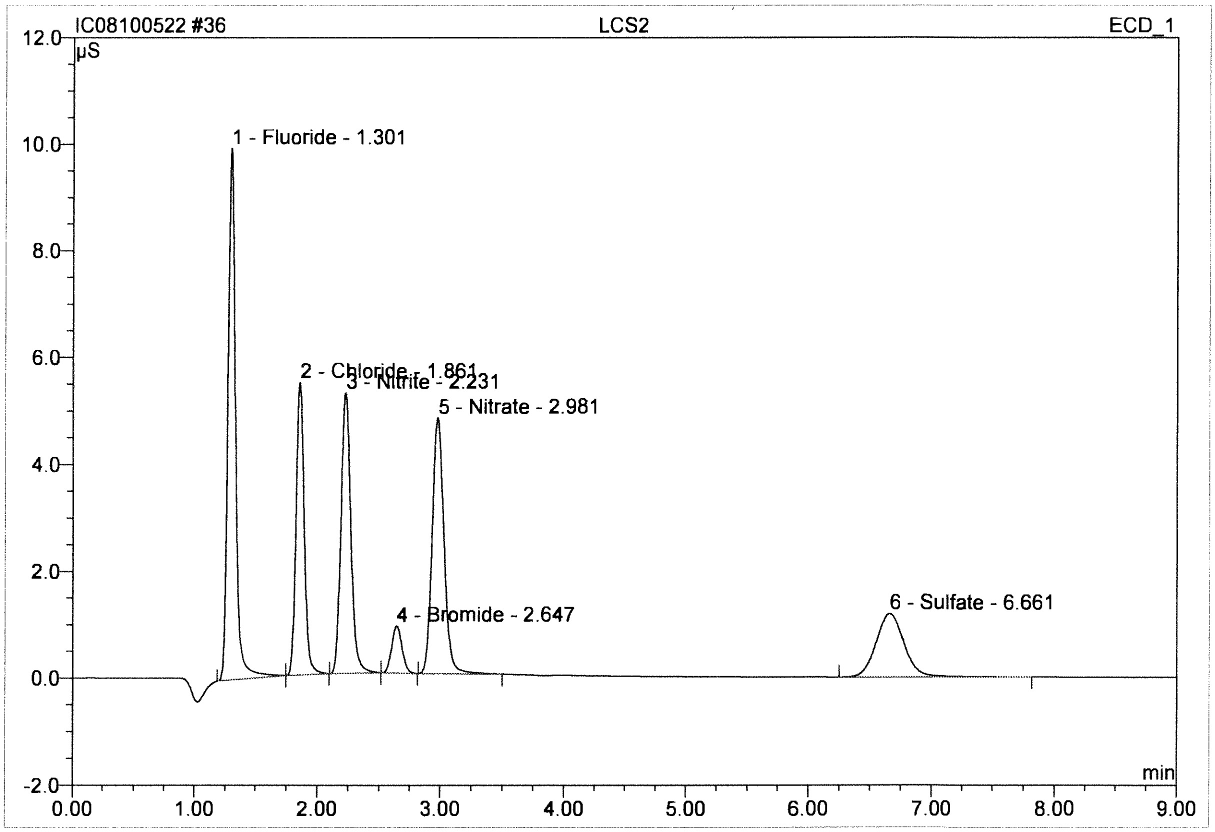
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

36 LCS2

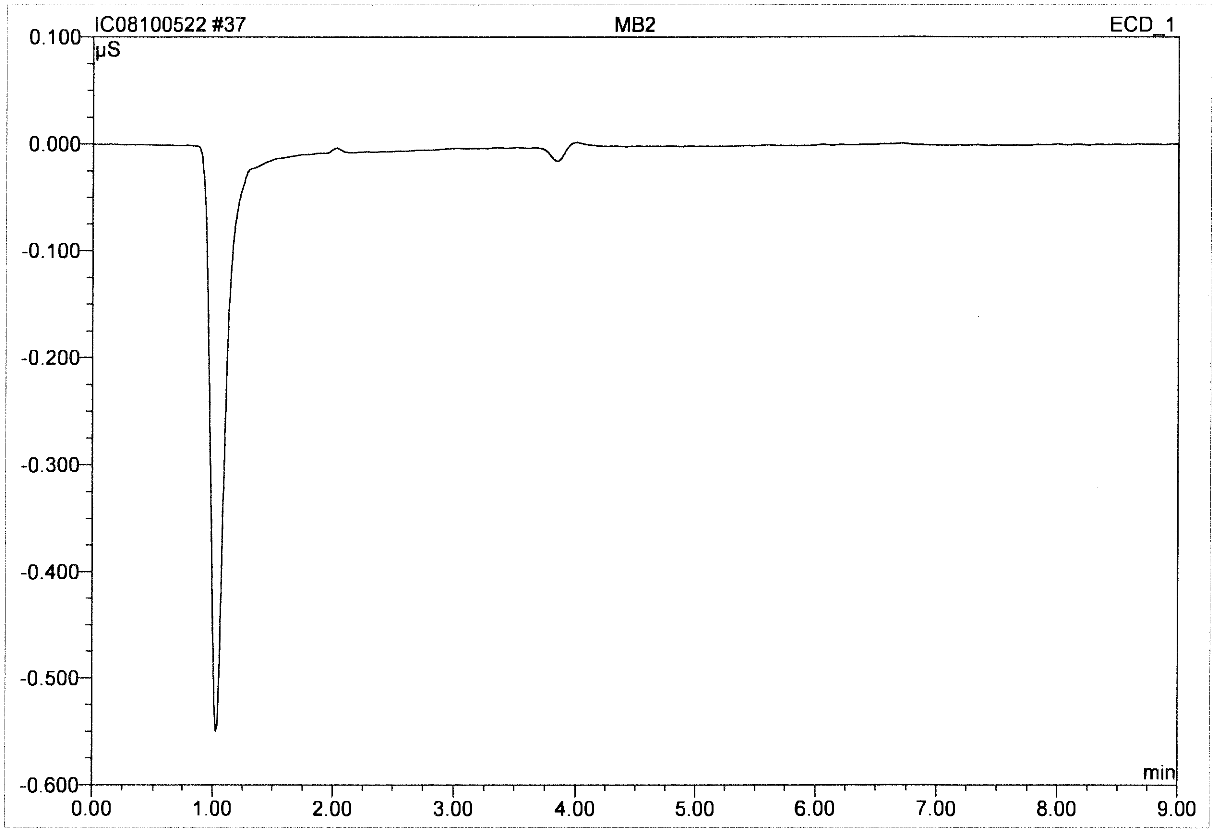
Sample Name:	**LCS2**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 20:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.959	0.737	28.68	5.127	BMB
2	1.86	Chloride	5.472	0.421	16.37	5.067	bMB
3	2.23	Nitrite	5.246	0.483	18.78	2.559	BMB
4	2.65	Bromide	0.881	0.086	3.33	2.575	BMB
5	2.98	Nitrate	4.788	0.532	20.71	2.568	BMB
6	6.66	Sulfate	1.183	0.312	12.13	5.064	BMB
Total:			27.529	2.570	100.00	22.960	

37 MB2

Sample Name:	**MB2**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 20:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



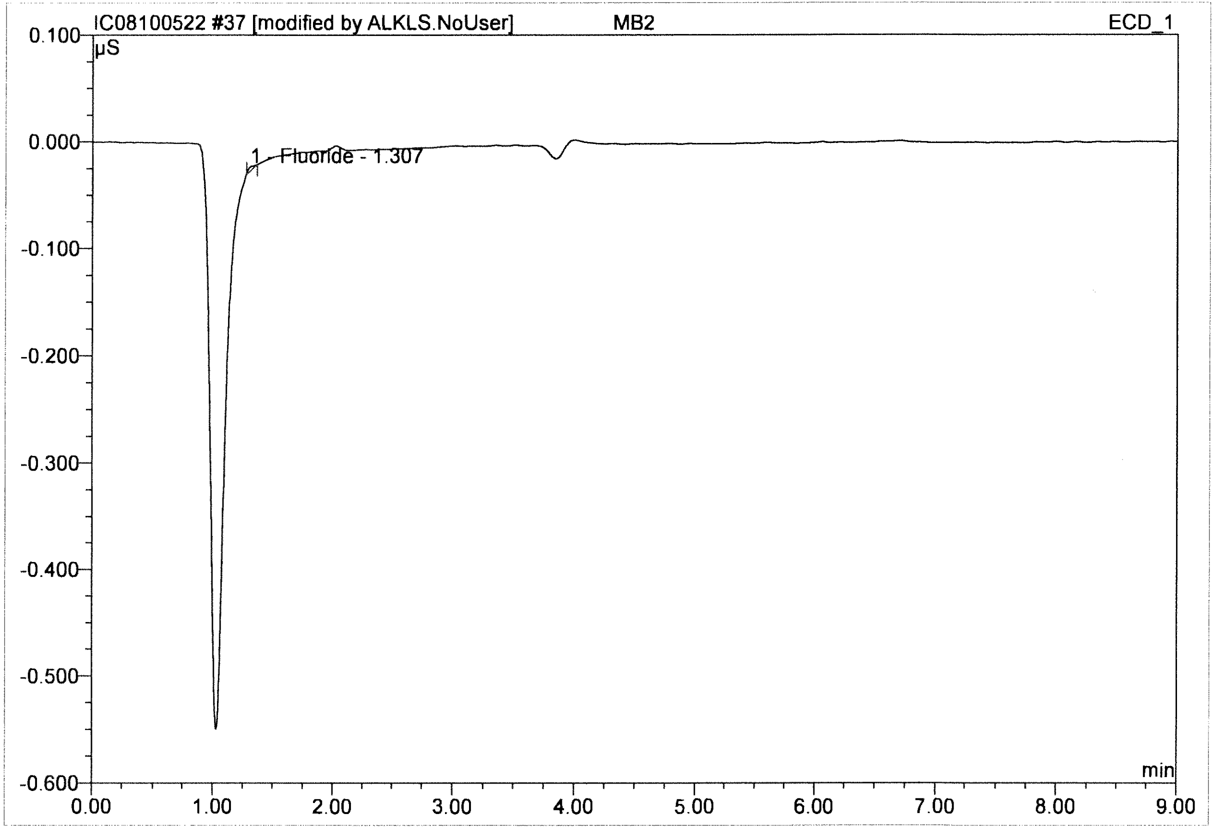
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Before

OCT 07

37 MB2

Sample Name:	**MB2**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 20:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	0.004	0.000	100.00	0.001	BMB*
Total:			0.004	0.000	100.00	0.001	

After
Initials NF

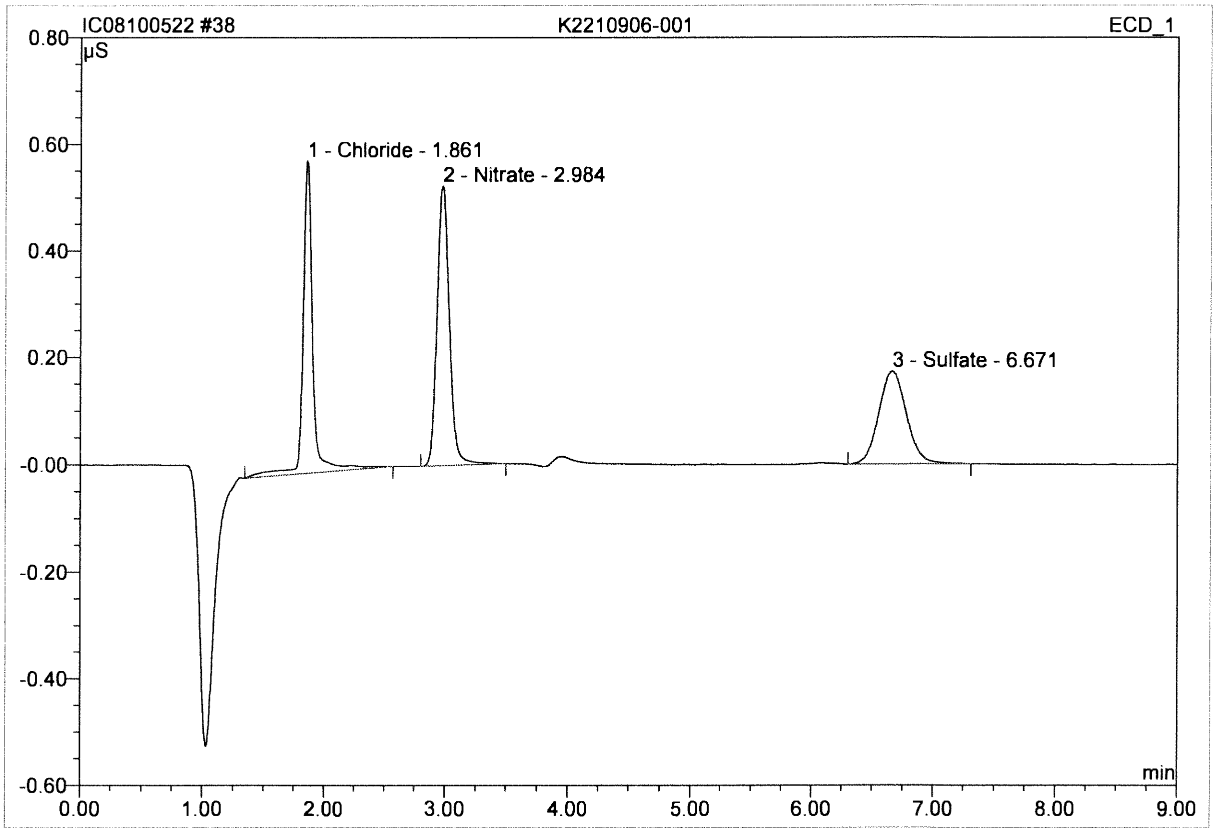
OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

38 K2210906-001

F

Sample Name:	**K2210906-001**	*Injection Volume:*	**5.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 20:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.584	0.054	33.98	6.534	BMB
2	2.98	Nitrate	0.524	0.060	37.84	2.915	BMB
3	6.67	Sulfate	0.172	0.045	28.19	7.310	BMB
Total:			1.280	0.160	100.00	16.759	

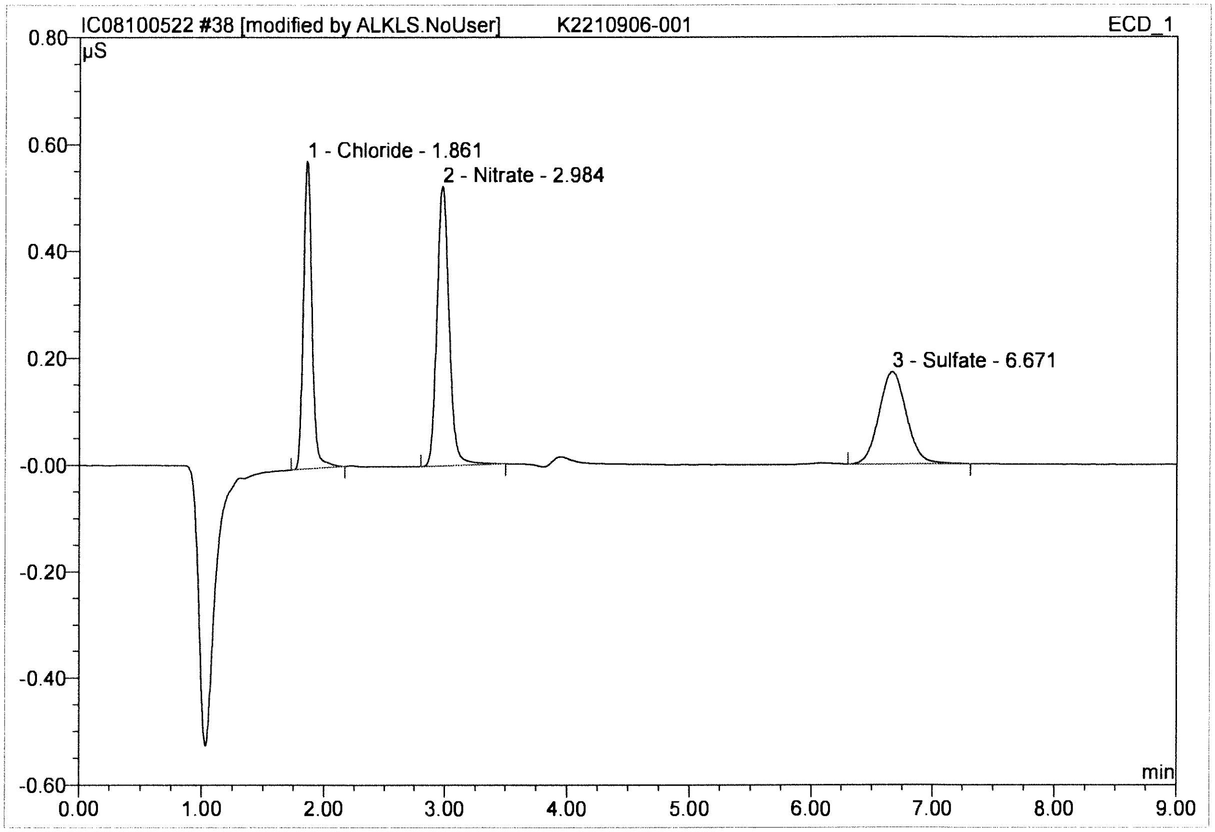
Before

OCT 07

38 K2210906-001

F

Sample Name:	**K2210906-001**	*Injection Volume:*	**5.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 20:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.575	0.046	30.44	5.556	BMB*
2	2.98	Nitrate	0.524	0.060	39.86	2.915	BMB
3	6.67	Sulfate	0.172	0.045	29.70	7.310	BMB
Total:			1.271	0.152	100.00	15.782	

After
Initials NF

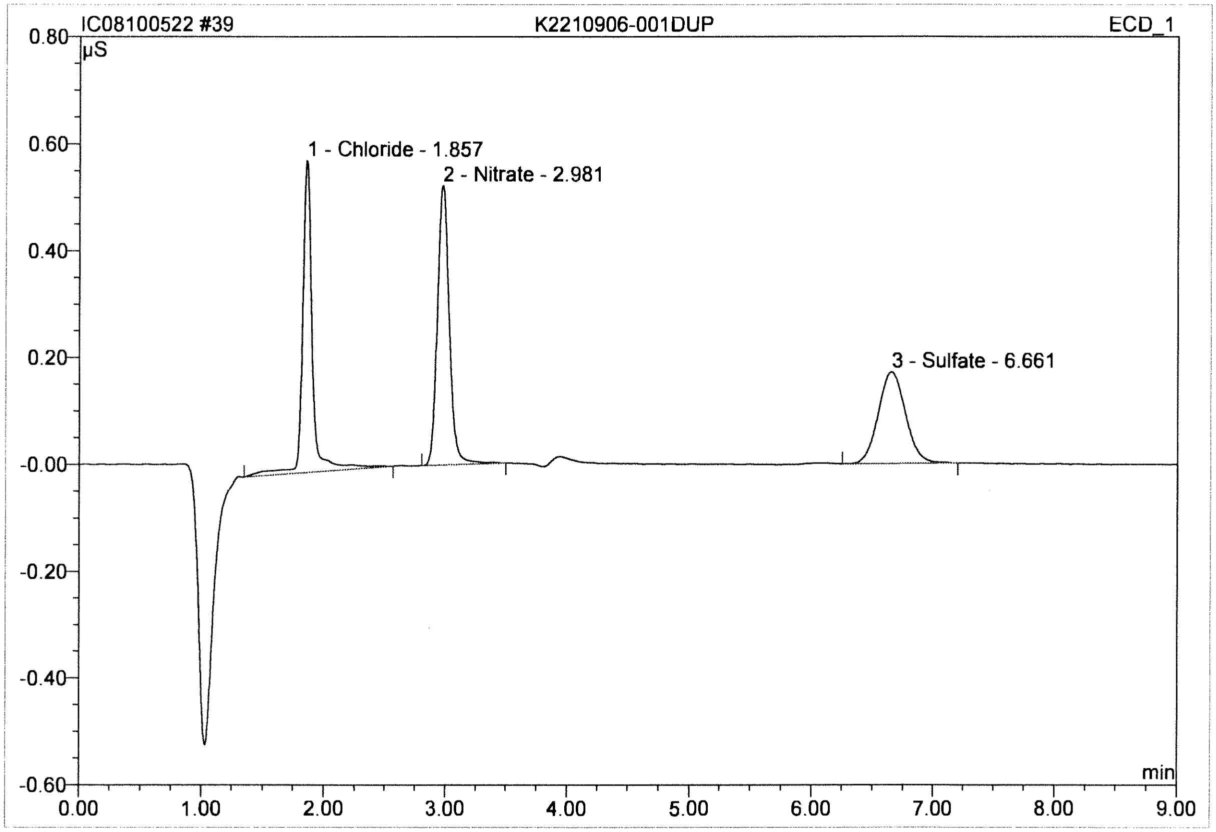
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

39 K2210906-001DUP

F

Sample Name:	**K2210906-001DUP**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 20:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.584	0.054	34.14	6.530	BMB
2	2.98	Nitrate	0.524	0.060	37.98	2.911	BMB
3	6.66	Sulfate	0.171	0.044	27.88	7.191	BMB
Total:			1.279	0.159	100.00	16.632	

Before

OCT 07

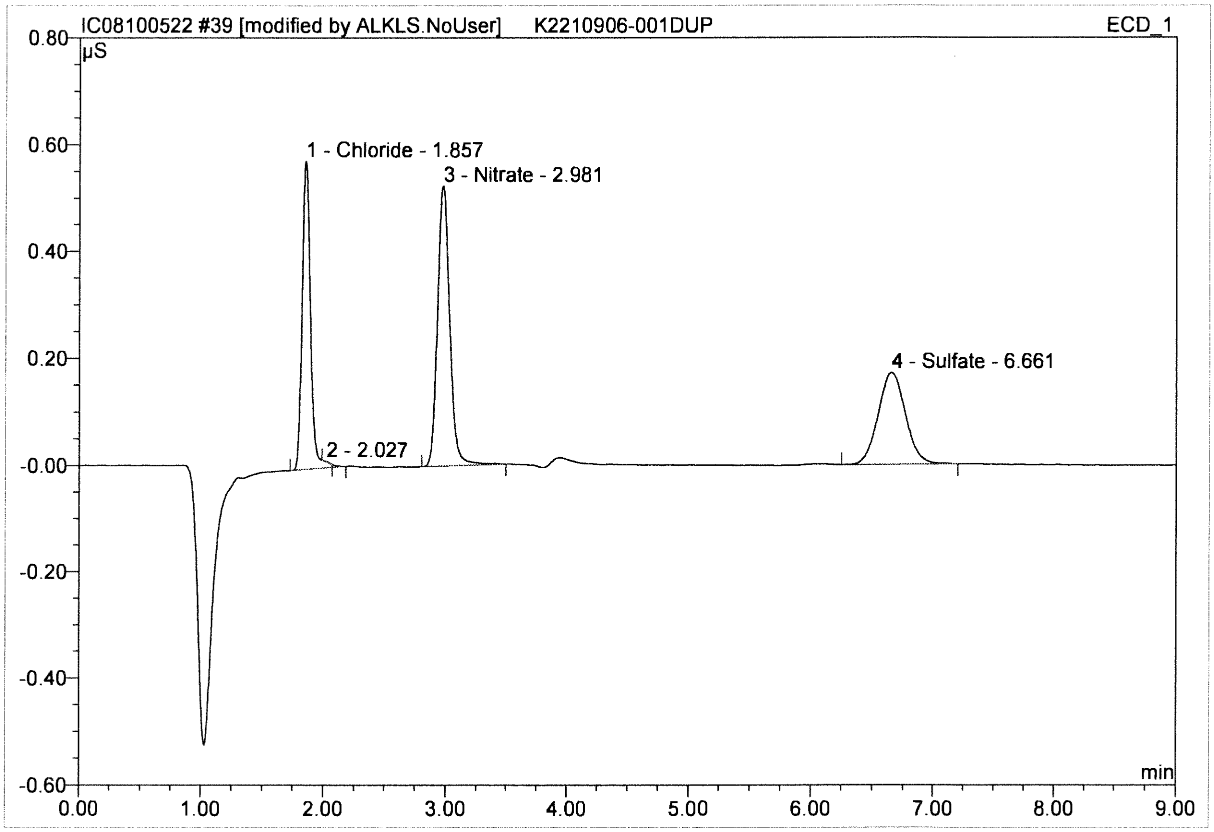
default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

39 K2210906-001DUP

F

Sample Name:	**K2210906-001DUP**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 20:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.576	0.046	30.74	5.594	BMB*
2	2.03	n.a.	0.001	0.000	0.04	n.a.	Rd*
3	2.98	Nitrate	0.524	0.060	39.92	2.911	BMB
4	6.66	Sulfate	0.171	0.044	29.30	7.191	BMB
Total:			1.272	0.151	100.00	15.695	

After
Initials NF

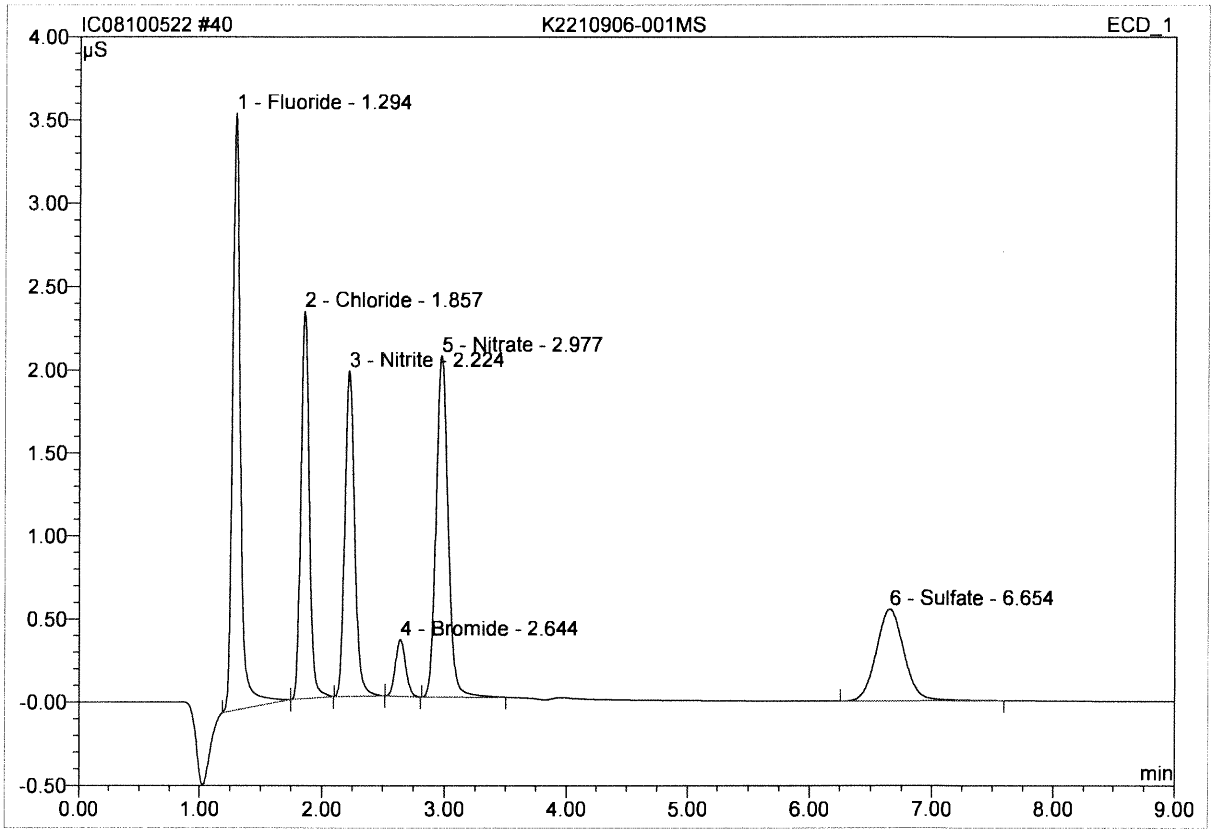
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

40 K2210906-001MS

F

Sample Name:	**K2210906-001MS**	*Injection Volume:*	**5.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/5/2022 20:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

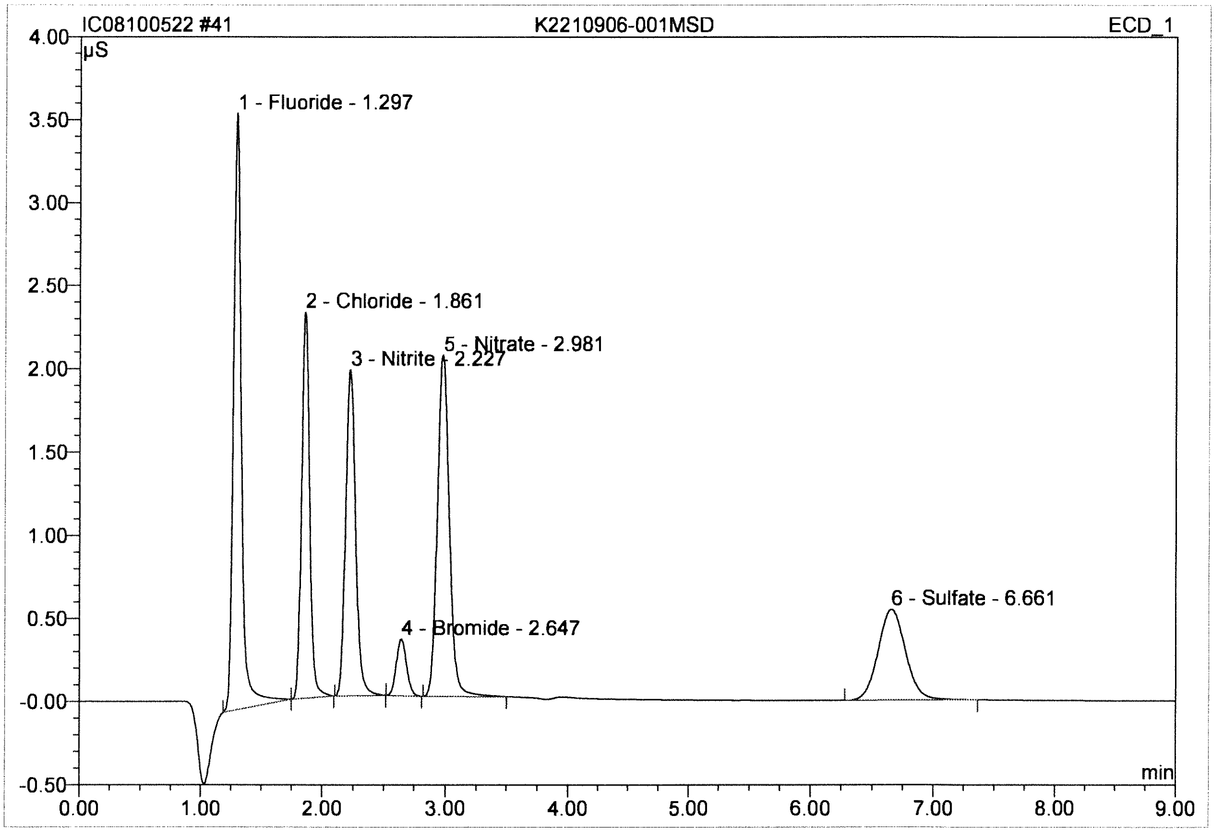


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.588	0.274	26.13	38.058	BMB
2	1.86	Chloride	2.332	0.182	17.39	43.864	bMB
3	2.22	Nitrite	1.961	0.181	17.33	19.238	BMB
4	2.64	Bromide	0.341	0.033	3.17	19.967	BMB
5	2.98	Nitrate	2.055	0.232	22.17	22.407	BMB
6	6.65	Sulfate	0.551	0.145	13.82	47.006	BMB
Total:			10.828	1.047	100.00	190.540	

41 K2210906-001MSD

F

Sample Name:	**K2210906-001MSD**	*Injection Volume:*	**5.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/5/2022 20:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

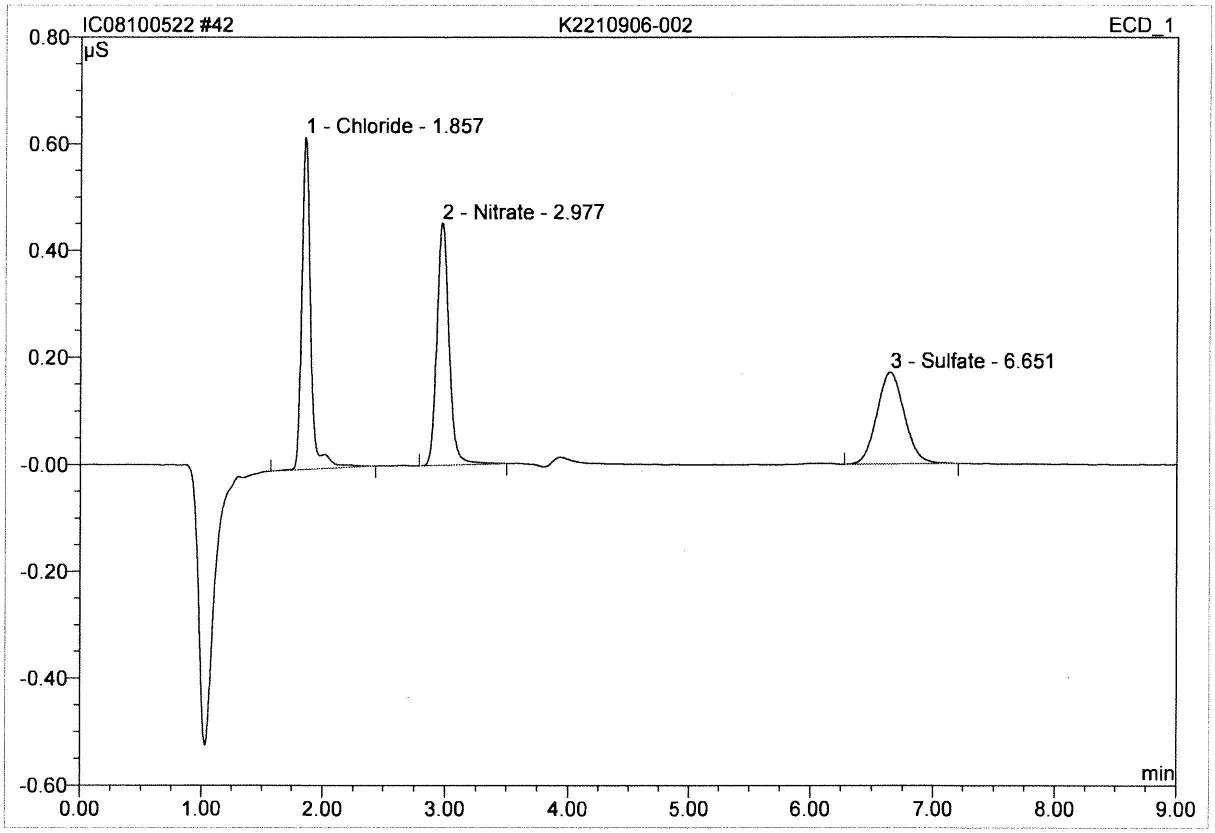


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	3.588	0.273	26.17	38.028	BMB
2	1.86	Chloride	2.320	0.182	17.38	43.735	bMB
3	2.23	Nitrite	1.960	0.181	17.37	19.242	BMB
4	2.65	Bromide	0.341	0.033	3.19	20.031	BMB
5	2.98	Nitrate	2.051	0.232	22.21	22.401	BMB
6	6.66	Sulfate	0.549	0.143	13.68	46.431	BMB
Total:			10.809	1.045	100.00	189.868	

42 K2210906-002

F

Sample Name:	**K2210906-002**	*Injection Volume:*	**5.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.622	0.053	35.36	6.331	BMB
2	2.98	Nitrate	0.452	0.052	34.99	2.510	BMB
3	6.65	Sulfate	0.171	0.044	29.65	7.159	BMB
Total:			1.244	0.149	100.00	16.000	

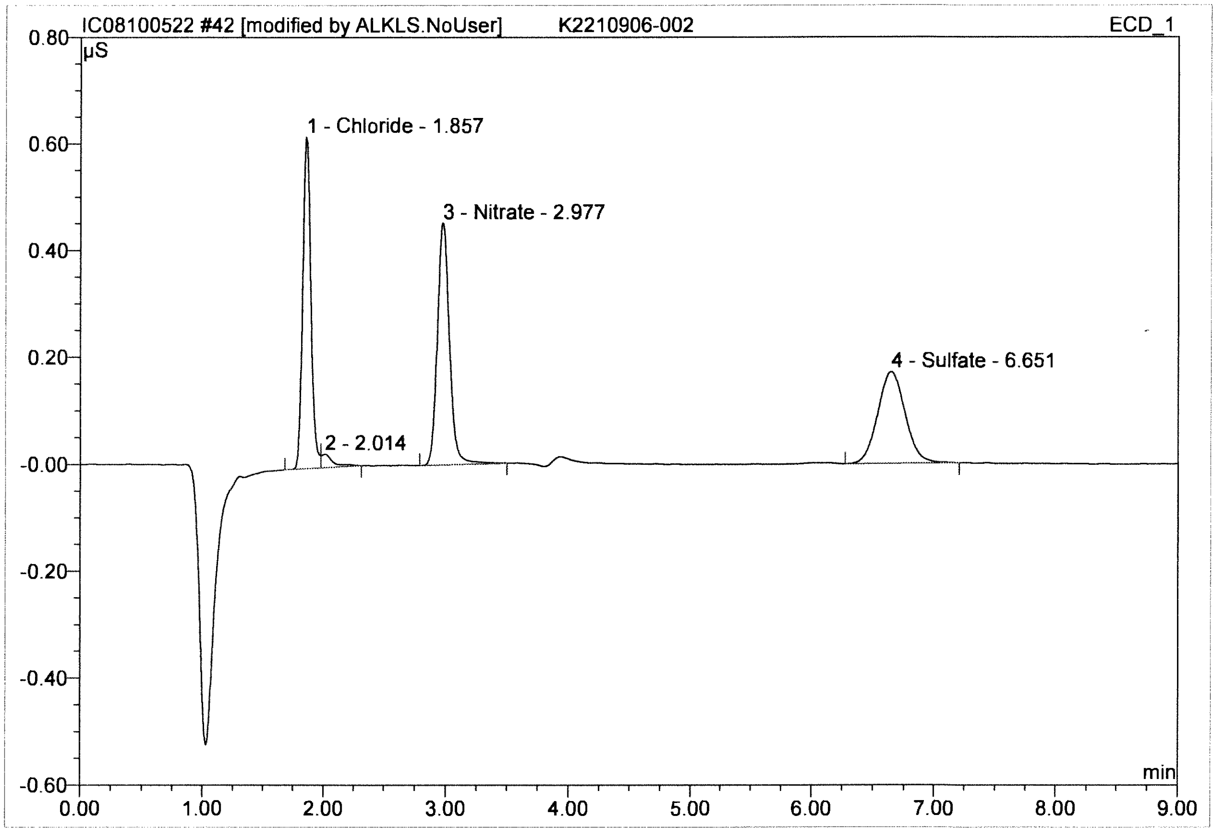
Before

OCT 07

42 K2210906-002

F

Sample Name:	**K2210906-002**	*Injection Volume:*	**5.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.620	0.049	33.02	5.869	BM *
2	2.01	n.a.	0.025	0.003	1.87	n.a.	MB*
3	2.98	Nitrate	0.452	0.052	35.24	2.510	BMB
4	6.65	Sulfate	0.171	0.044	29.86	7.159	BMB
Total:			1.267	0.148	100.00	15.538	

After
Initials NF

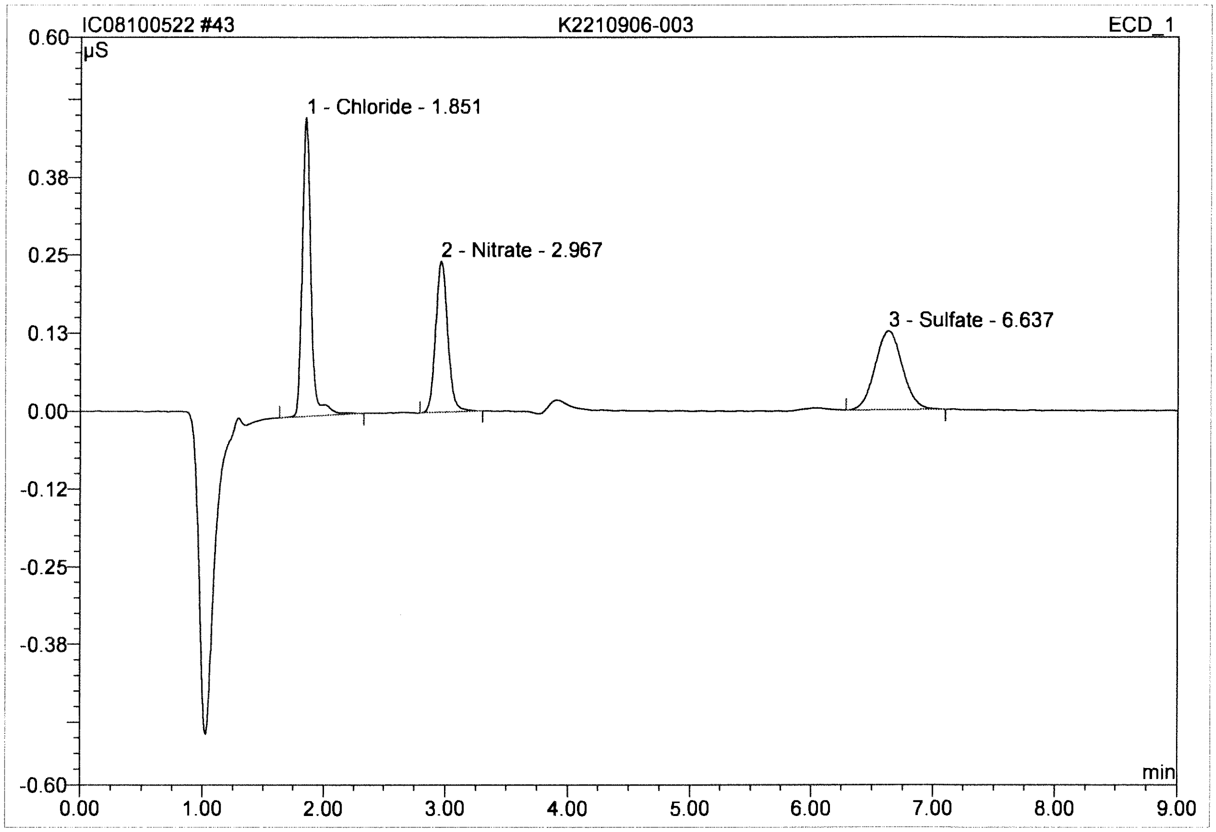
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

43 K2210906-003

F

Sample Name:	**K2210906-003**	*Injection Volume:*	**5.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.479	0.040	39.86	4.791	BMB
2	2.97	Nitrate	0.241	0.027	27.56	1.327	BMB
3	6.64	Sulfate	0.126	0.033	32.59	5.282	BMB
Total:			0.847	0.100	100.00	11.401	

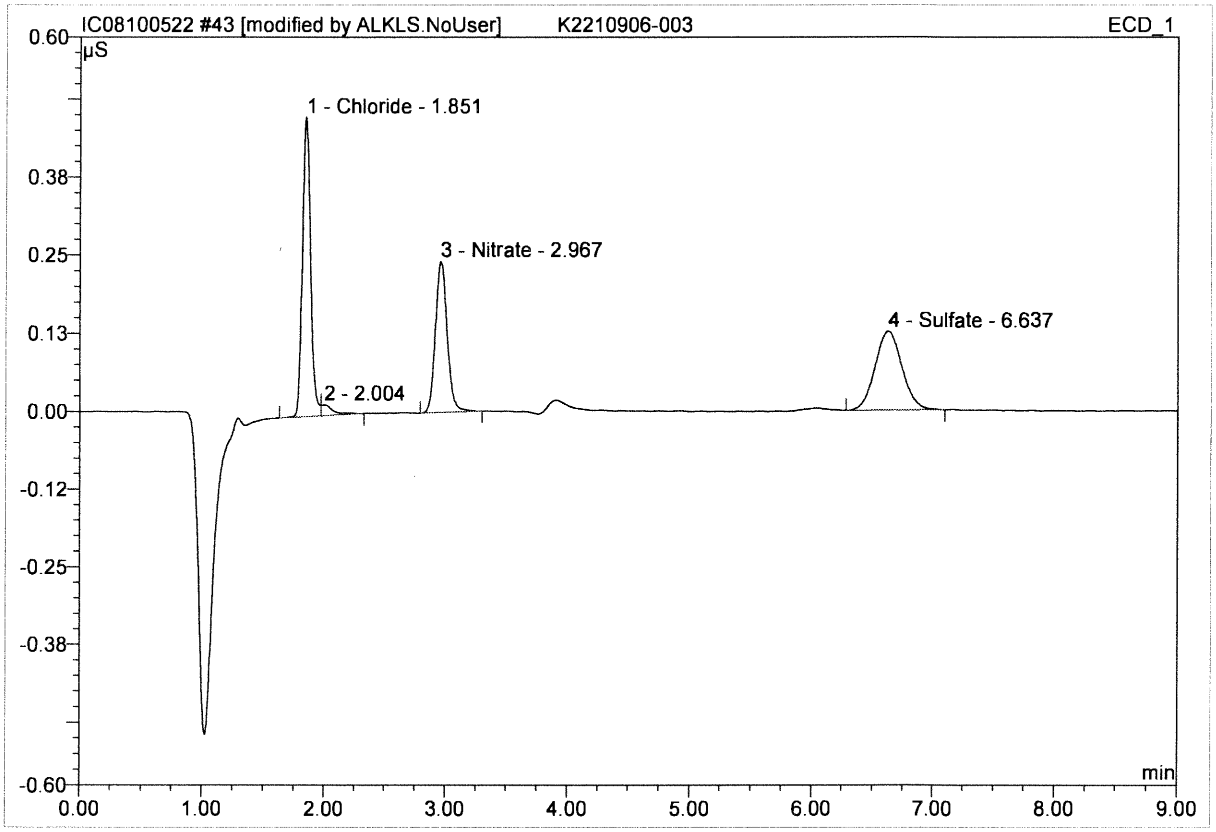
Before

OCT 07

43 K2210906-003

F

Sample Name:	**K2210906-003**	*Injection Volume:*	**5.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.479	0.038	37.85	4.550	BM *
2	2.00	n.a.	0.017	0.002	2.01	n.a.	MB*
3	2.97	Nitrate	0.241	0.027	27.56	1.327	BMB
4	6.64	Sulfate	0.126	0.033	32.58	5.282	BMB
Total:			0.864	0.100	100.00	11.159	

After
Initials NF

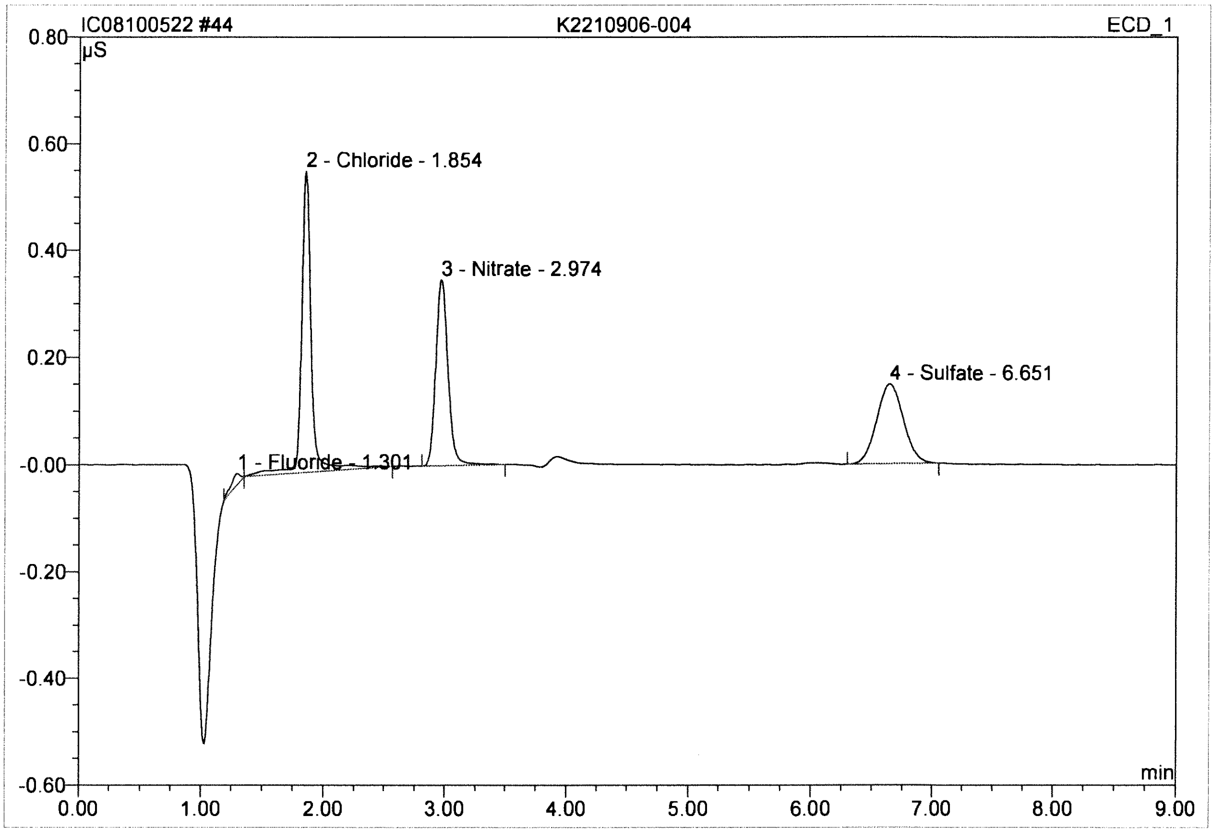
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

44 K2210906-004

F

Sample Name:	**K2210906-004**	*Injection Volume:*	**5.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.021	0.002	1.52	0.139	BMB
2	1.85	Chloride	0.562	0.051	39.22	6.192	bMB
3	2.97	Nitrate	0.346	0.040	30.49	1.929	BMB
4	6.65	Sulfate	0.148	0.038	28.76	6.124	BMB
Total:			1.077	0.131	100.00	14.383	

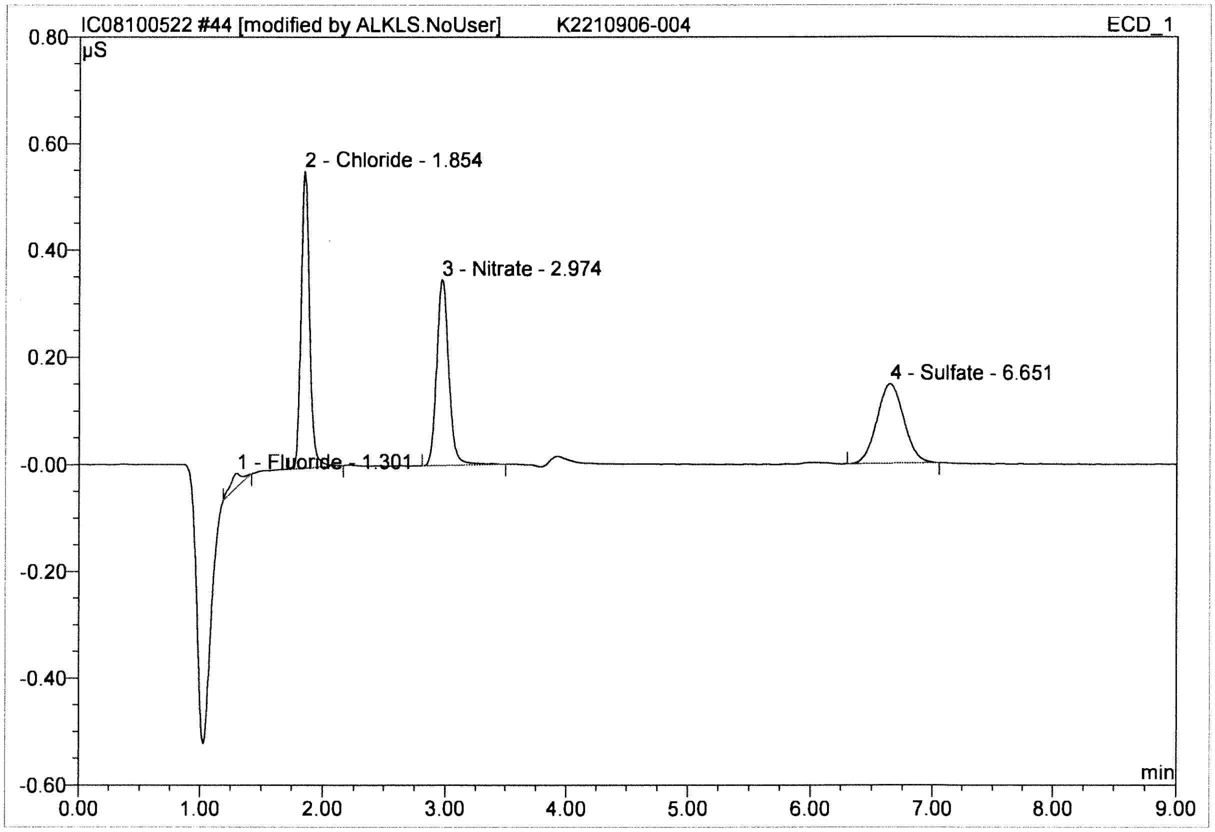
Before

OCT 07

44 K2210906-004

F

Sample Name:	**K2210906-004**	*Injection Volume:*	**5.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.026	0.003	2.40	0.208	BMB*
2	1.85	Chloride	0.555	0.044	35.36	5.313	BMB*
3	2.97	Nitrate	0.346	0.040	32.03	1.929	BMB
4	6.65	Sulfate	0.148	0.038	30.21	6.124	BMB
Total:			1.075	0.125	100.00	13.574	

After
Initials NF

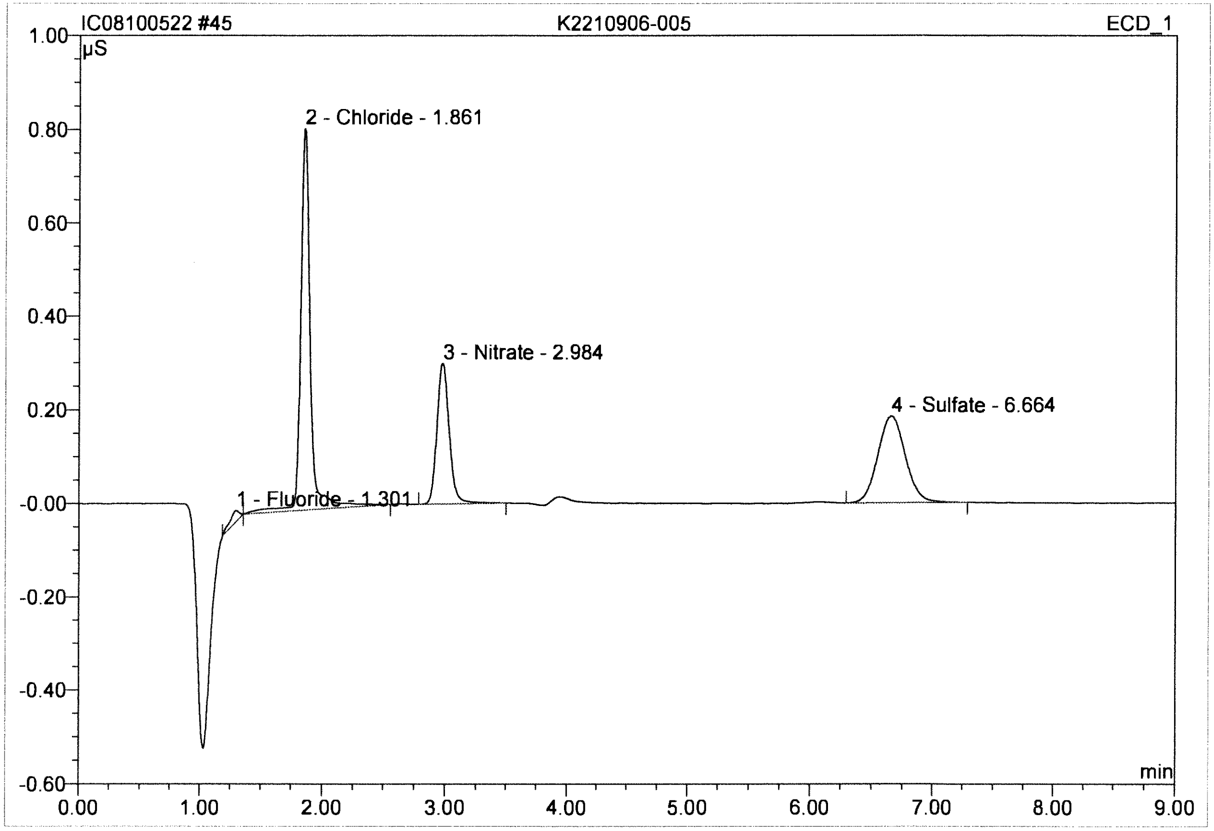
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

45 K2210906-005

F

Sample Name:	**K2210906-005**	*Injection Volume:*	**5.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.024	0.002	1.48	0.162	BMB
2	1.86	Chloride	0.816	0.072	46.07	8.732	bMB
3	2.98	Nitrate	0.299	0.035	22.01	1.672	BMB
4	6.66	Sulfate	0.185	0.048	30.45	7.783	BMB
Total:			1.324	0.157	100.00	18.349	

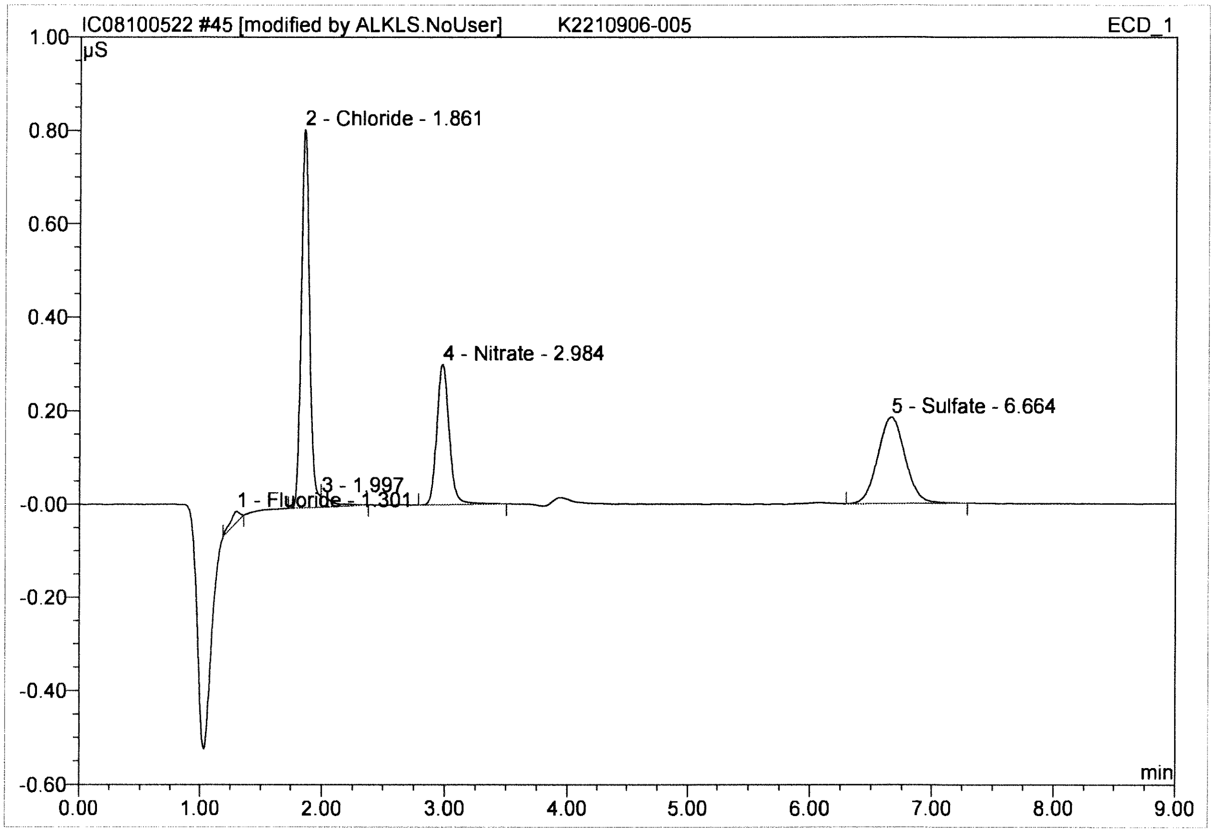
Before

OCT 07

45 K2210906-005

F

Sample Name:	**K2210906-005**	*Injection Volume:*	**5.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.024	0.002	1.53	0.162	BMB
2	1.86	Chloride	0.809	0.064	42.23	7.695	BM *
3	2.00	n.a.	0.023	0.003	1.67	n.a.	MB*
4	2.98	Nitrate	0.299	0.035	22.90	1.672	BMB
5	6.66	Sulfate	0.185	0.048	31.67	7.783	BMB
Total:			1.341	0.151	100.00	17.312	

After
Initials NF

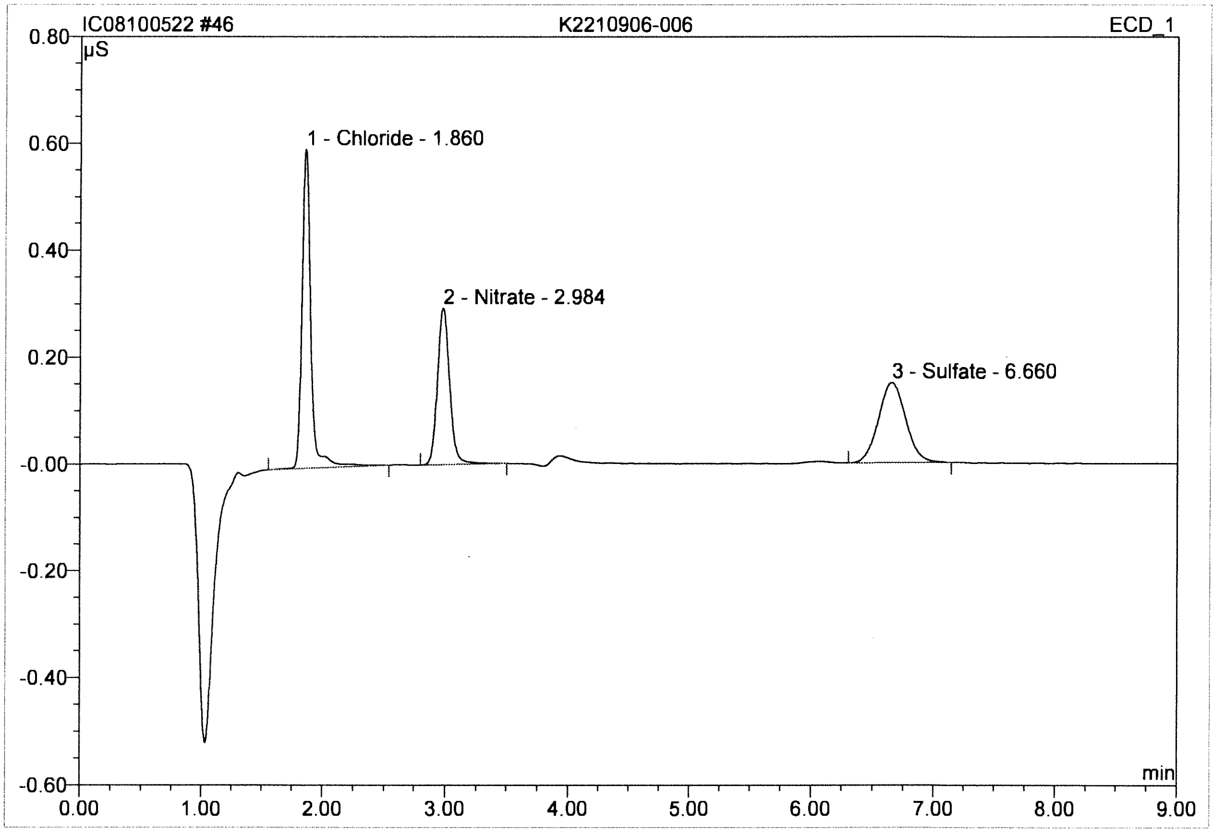
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

46 K2210906-006

F

Sample Name:	**K2210906-006**	*Injection Volume:*	**5.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.597	0.051	41.15	6.107	BMB
2	2.98	Nitrate	0.293	0.034	27.43	1.631	BMB
3	6.66	Sulfate	0.150	0.039	31.42	6.288	BMB
Total:			1.039	0.123	100.00	14.026	

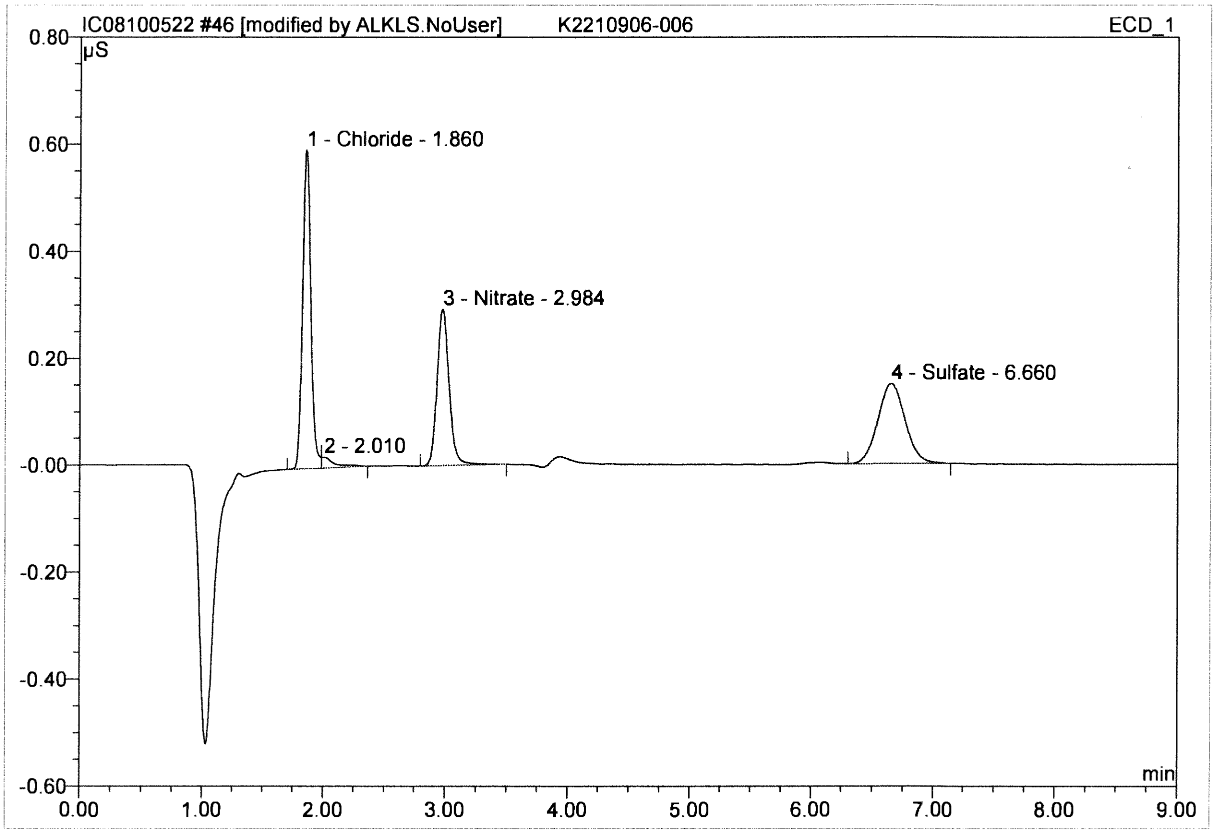
Before

OCT 07

46 K2210906-006

F

Sample Name:	**K2210906-006**	*Injection Volume:*	**5.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 21:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.596	0.047	38.57	5.680	BM *
2	2.01	n.a.	0.021	0.003	2.12	n.a.	MB*
3	2.98	Nitrate	0.293	0.034	27.64	1.631	BMB
4	6.66	Sulfate	0.150	0.039	31.67	6.288	BMB
Total:			1.059	0.122	100.00	13.599	

After
Initials NF

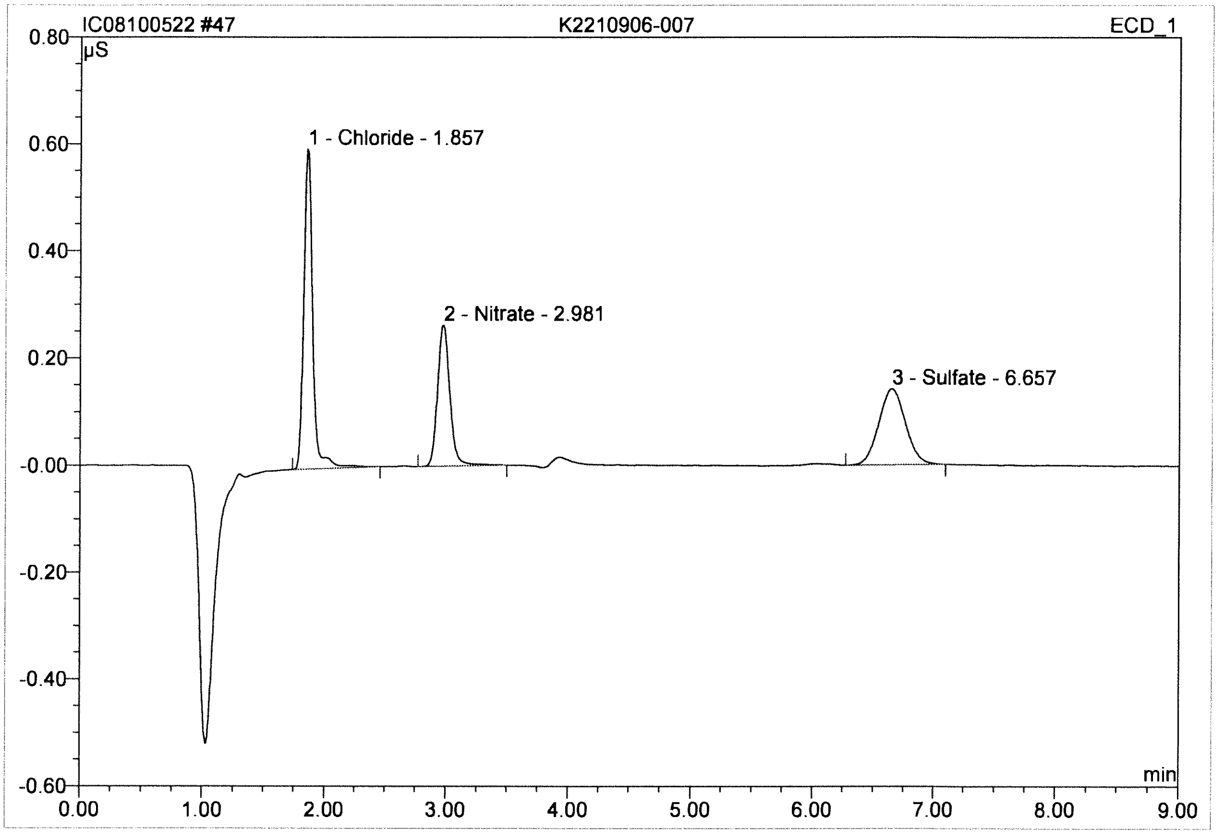
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

47 K2210906-007

F

Sample Name:	**K2210906-007**	*Injection Volume:*	**5.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 22:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.597	0.050	42.71	5.991	BMB
2	2.98	Nitrate	0.263	0.031	26.28	1.477	BMB
3	6.66	Sulfate	0.141	0.036	31.01	5.868	BMB
Total:			1.002	0.116	100.00	13.336	

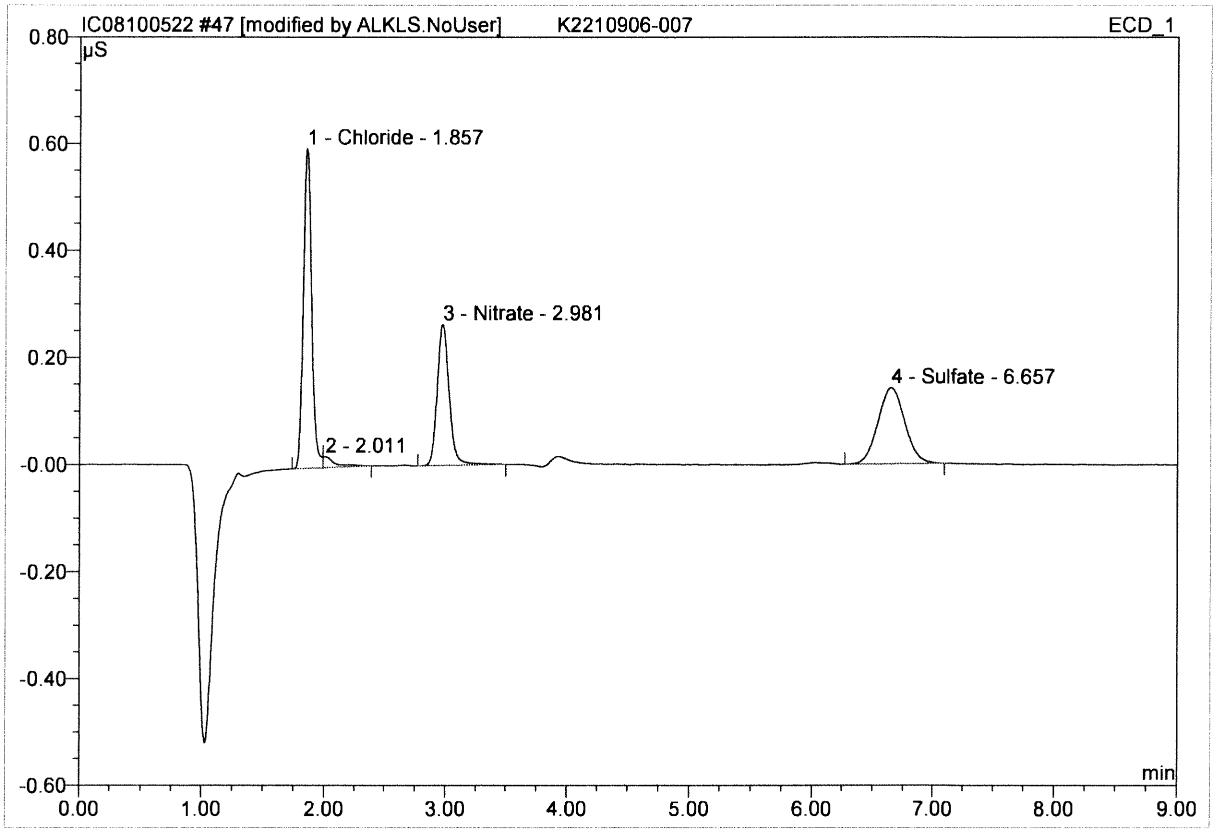
Before

OCT 07

47 K2210906-007

F

Sample Name:	**K2210906-007**	*Injection Volume:*	**5.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 22:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.597	0.047	40.59	5.682	BM *
2	2.01	n.a.	0.020	0.002	2.01	n.a.	MB*
3	2.98	Nitrate	0.263	0.031	26.33	1.477	BMB
4	6.66	Sulfate	0.141	0.036	31.08	5.868	BMB
Total:			1.022	0.116	100.00	13.027	

After
Initials NF

OCT 07

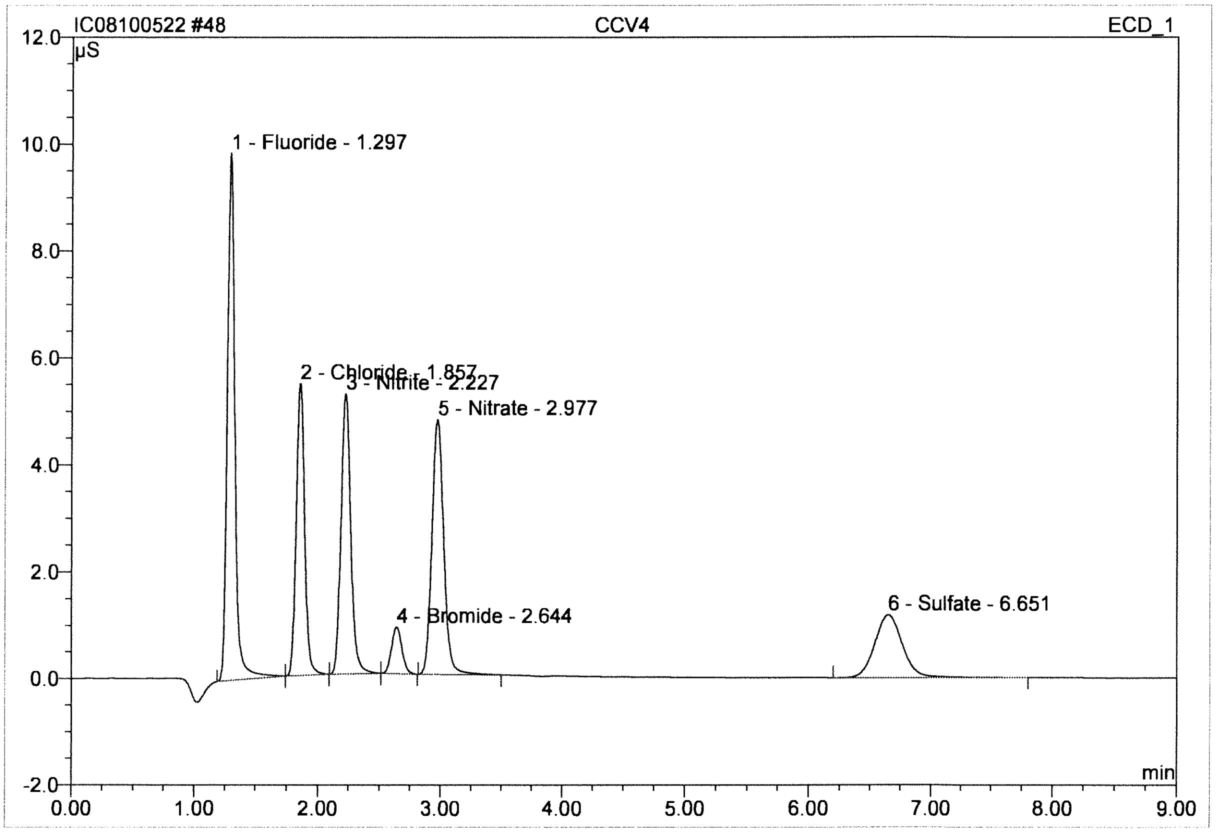
☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

48 CCV4

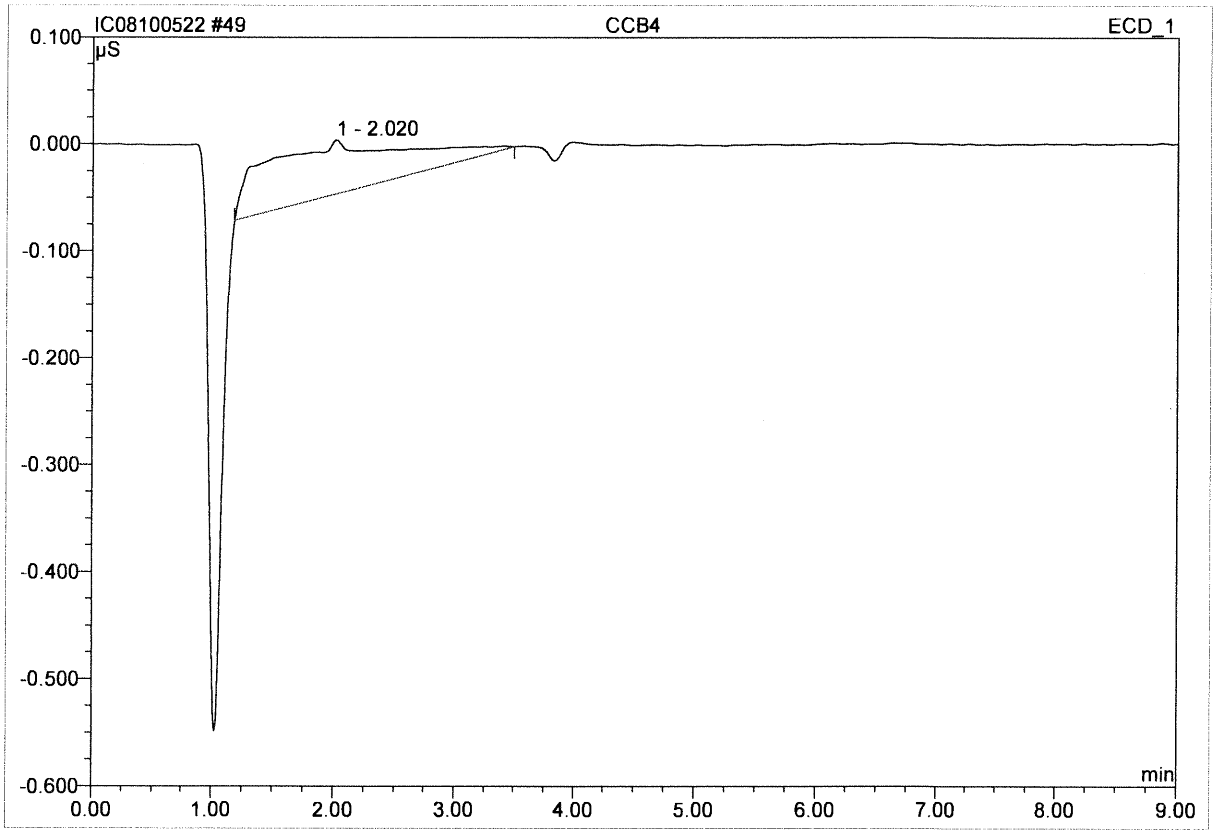
Sample Name:	**CCV4**	*Injection Volume:*	**5.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 22:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.863	0.729	28.51	5.068	BMB
2	1.86	Chloride	5.461	0.420	16.42	5.054	bMB
3	2.23	Nitrite	5.242	0.481	18.83	2.551	BMB
4	2.64	Bromide	0.880	0.086	3.35	2.571	BMB
5	2.98	Nitrate	4.770	0.529	20.70	2.554	BMB
6	6.65	Sulfate	1.182	0.312	12.19	5.062	BMB
Total:			27.398	2.556	100.00	22.860	

49 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 22:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



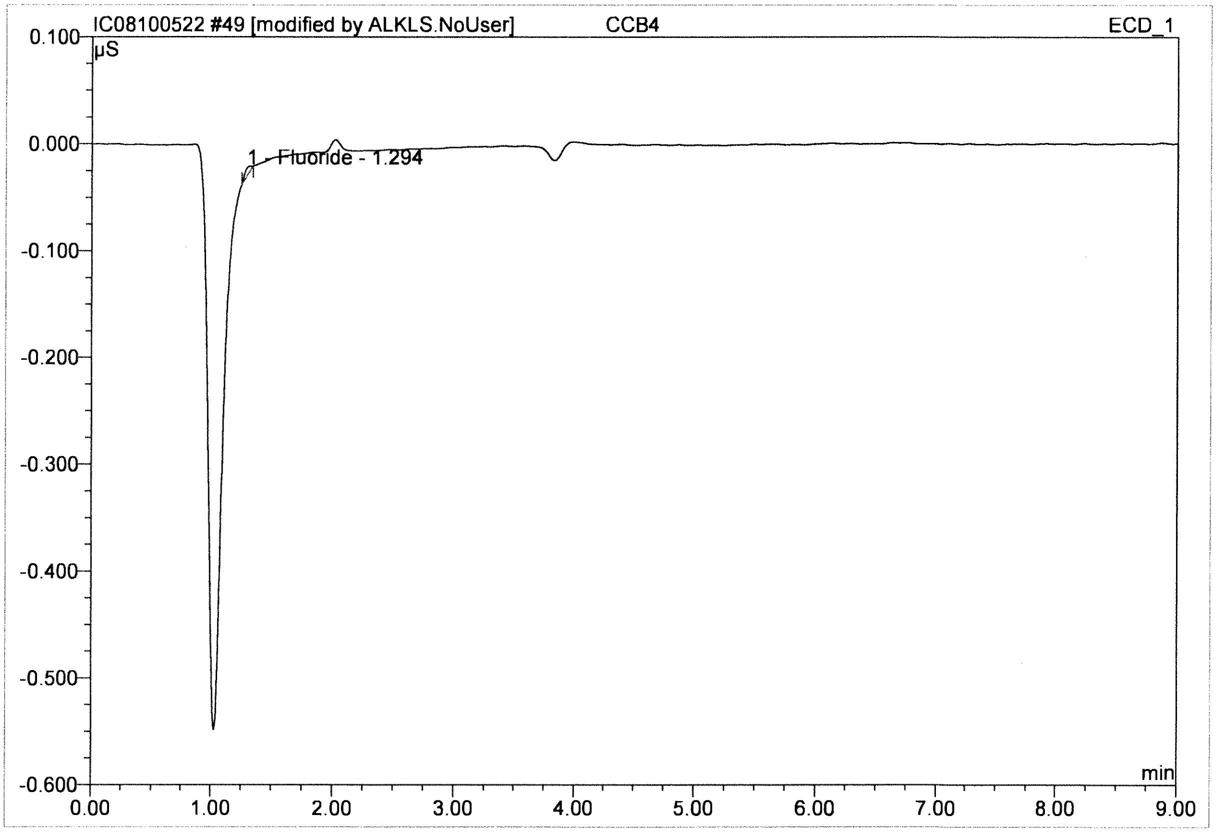
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.050	0.066	100.00	n.a.	BMB
Total:			0.050	0.066	100.00	0.000	

Before

OCT 07

49 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/5/2022 22:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.007	0.000	100.00	0.003	BMB*
Total:			0.007	0.000	100.00	0.003	

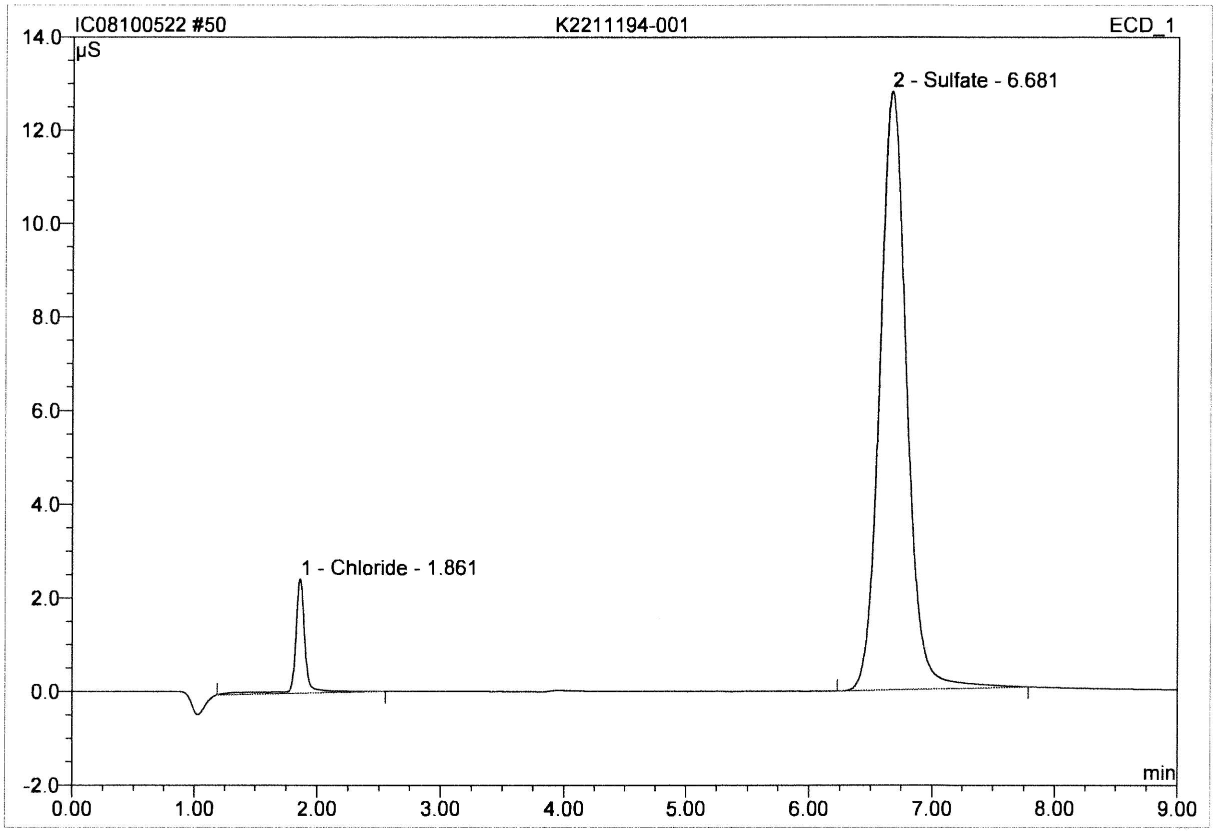
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

50 K2211194-001

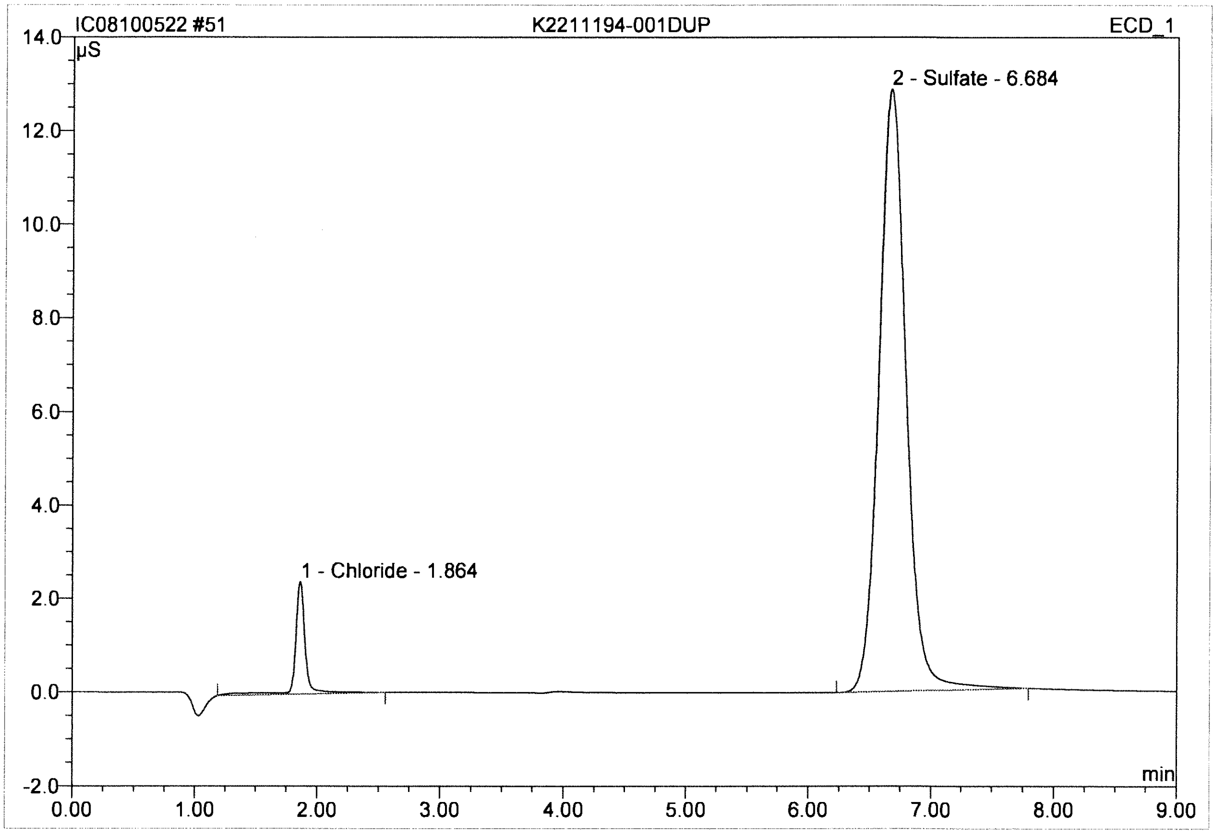
Sample Name:	**K2211194-001**	*Injection Volume:*	**5.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/5/2022 22:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	2.439	0.229	6.56	55.282	BMB
2	6.68	Sulfate	12.793	3.268	93.44	1061.694	BMB
Total:			15.232	3.497	100.00	1116.976	

51 K2211194-001DUP

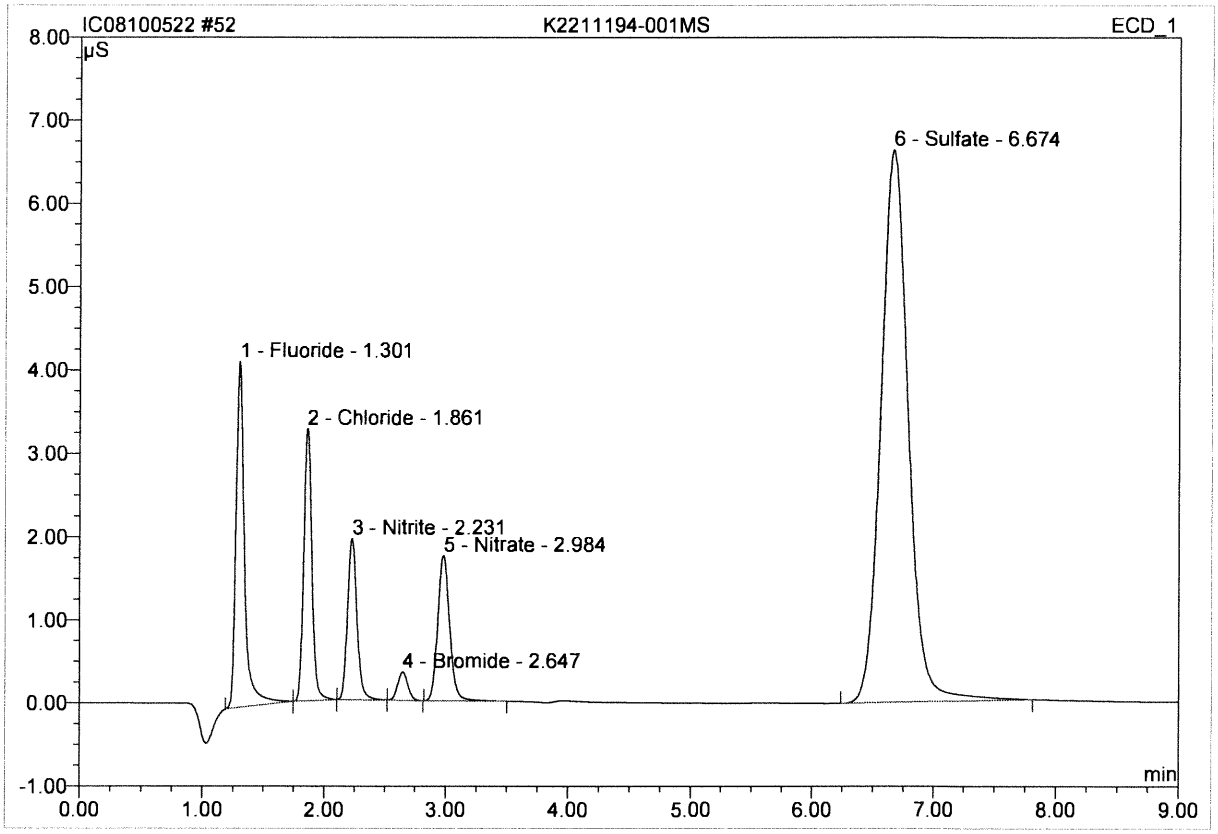
Sample Name:	**K2211194-001DUP**	*Injection Volume:*	**5.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/5/2022 22:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	2.398	0.228	6.46	54.939	BMB
2	6.68	Sulfate	12.867	3.300	93.54	1072.229	BMB
Total:			15.265	3.528	100.00	1127.168	

52 K2211194-001MS

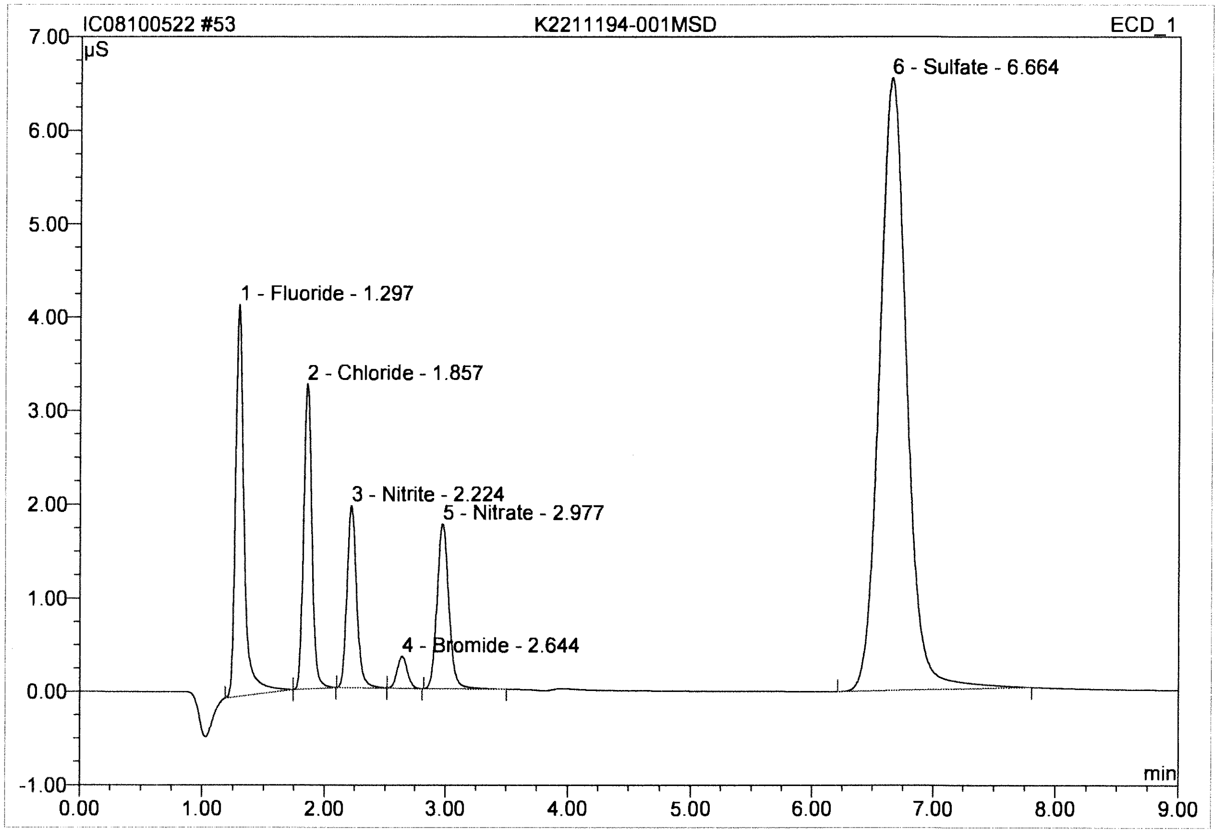
Sample Name:	**K2211194-001MS**	*Injection Volume:*	**5.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**40.0000**
Recording Time:	**10/5/2022 22:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	4.156	0.340	12.42	94.721	BMB
2	1.86	Chloride	3.272	0.255	9.30	122.821	bMB
3	2.23	Nitrite	1.943	0.180	6.58	38.230	BMB
4	2.65	Bromide	0.340	0.033	1.21	39.917	BMB
5	2.98	Nitrate	1.753	0.199	7.25	38.385	BMB
6	6.67	Sulfate	6.637	1.733	63.24	1126.288	BMB
Total:			18.101	2.741	100.00	1460.362	

53 K2211194-001MSD

Sample Name:	**K2211194-001MSD**	*Injection Volume:*	**5.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**40.0000**
Recording Time:	**10/5/2022 23:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

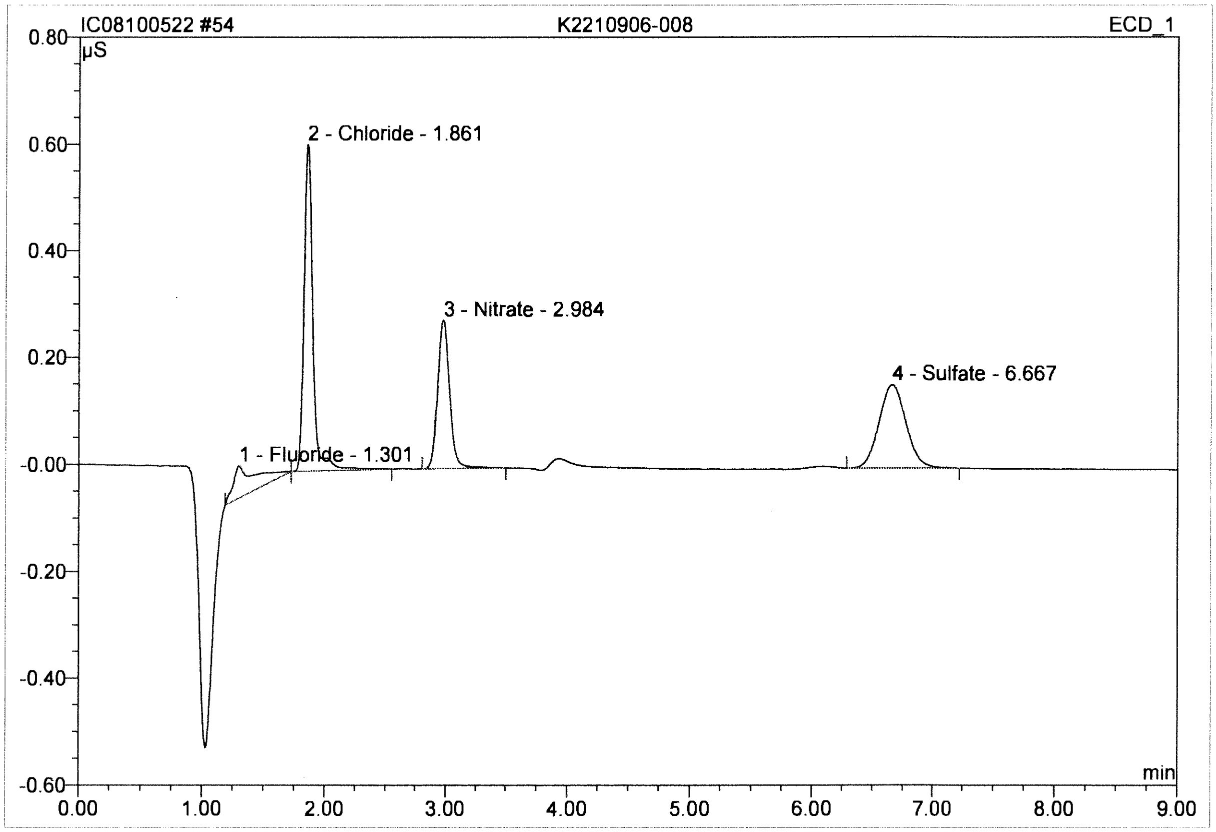


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	4.187	0.340	12.53	94.632	BMB
2	1.86	Chloride	3.257	0.253	9.31	121.803	bMB
3	2.22	Nitrite	1.945	0.180	6.63	38.161	BMB
4	2.64	Bromide	0.341	0.033	1.23	40.134	BMB
5	2.98	Nitrate	1.761	0.199	7.34	38.492	BMB
6	6.66	Sulfate	6.541	1.709	62.96	1110.741	BMB
Total:			18.032	2.715	100.00	1443.963	

54 K2210906-008

F

Sample Name:	**K2210906-008**	*Injection Volume:*	**5.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.060	0.013	9.25	0.876	BMB
2	1.86	Chloride	0.612	0.051	37.79	6.200	bMB
3	2.98	Nitrate	0.277	0.032	23.51	1.545	BMB
4	6.67	Sulfate	0.155	0.040	29.45	6.516	BMB
Total:			1.103	0.136	100.00	15.137	

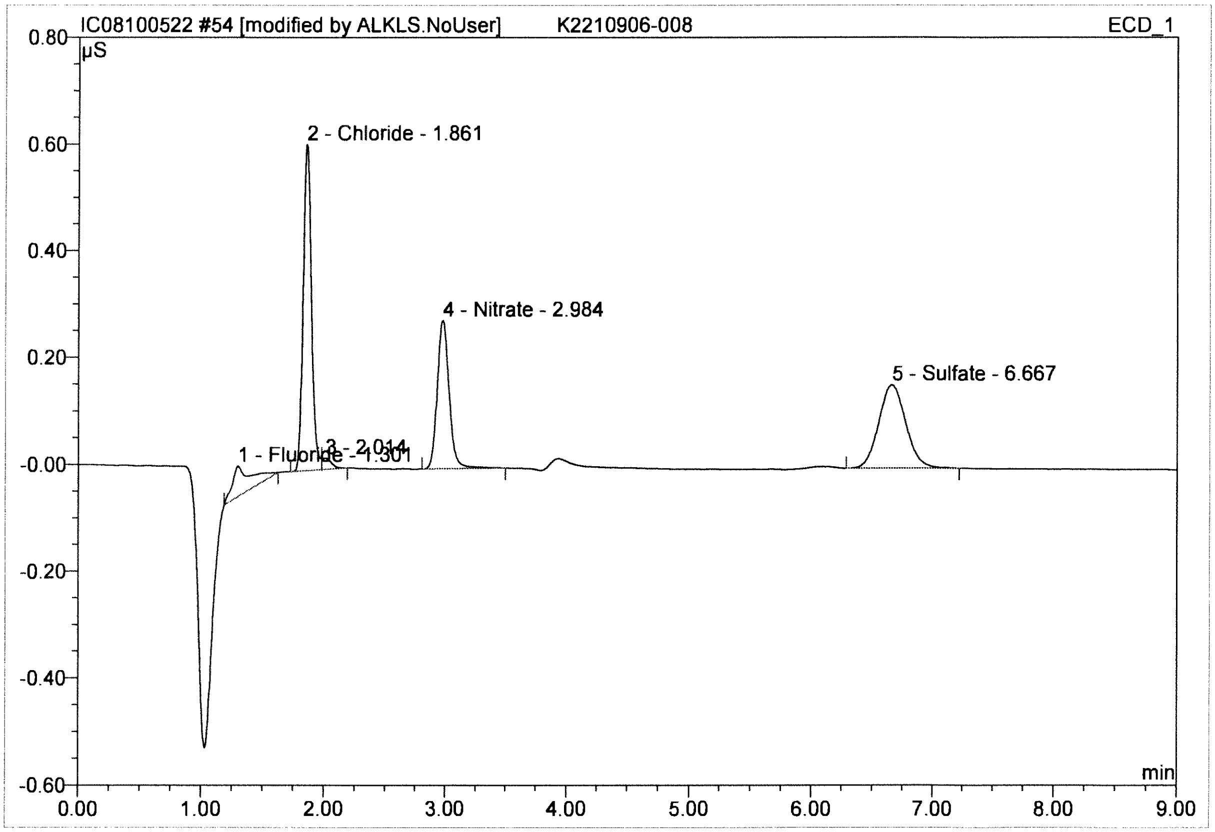
Before

OCT 07

54 K2210906-008

F

Sample Name:	**K2210906-008**	*Injection Volume:*	**5.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.057	0.010	7.52	0.690	BMB*
2	1.86	Chloride	0.611	0.048	36.38	5.776	BM *
3	2.01	n.a.	0.021	0.002	1.37	n.a.	MB*
4	2.98	Nitrate	0.277	0.032	24.29	1.545	BMB
5	6.67	Sulfate	0.155	0.040	30.44	6.516	BMB
Total:			1.120	0.132	100.00	14.526	

After
Initials NF

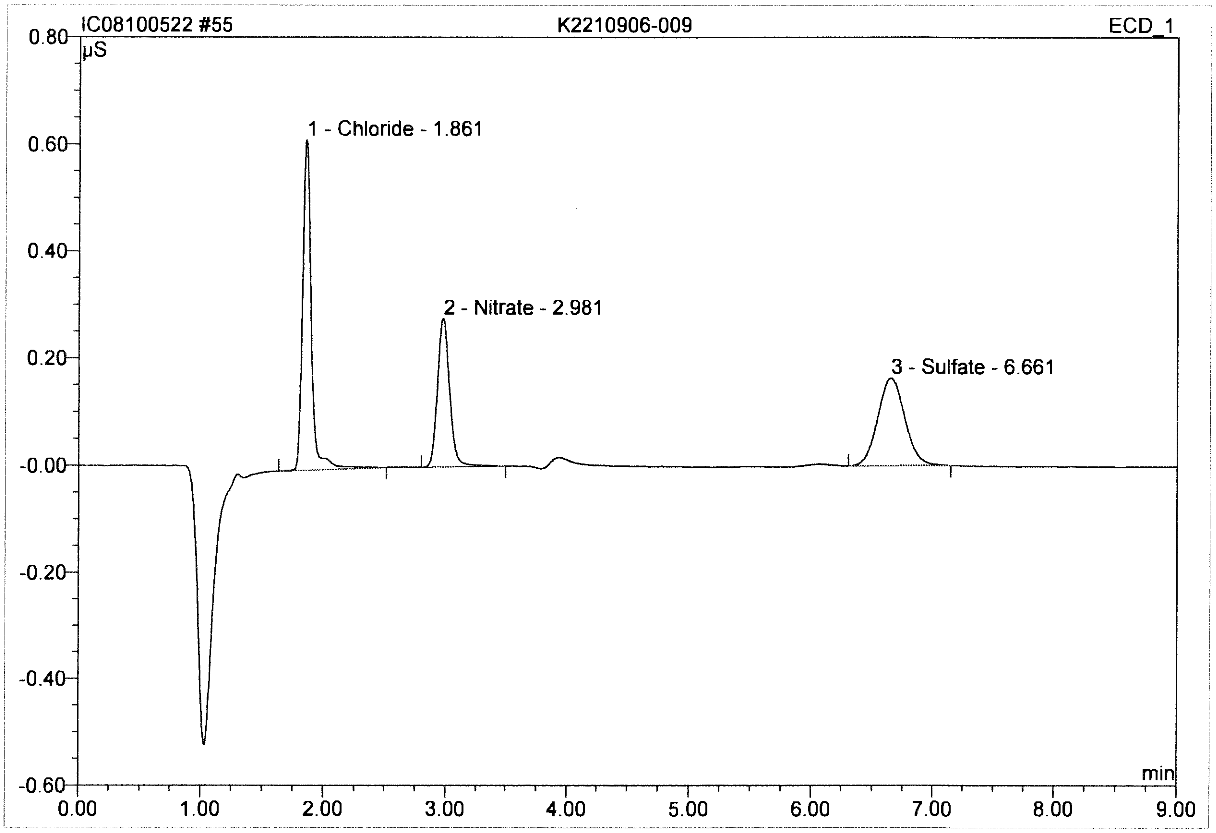
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

55 K2210906-009

F

Sample Name:	**K2210906-009**	*Injection Volume:*	**5.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.617	0.052	41.16	6.234	BMB
2	2.98	Nitrate	0.277	0.032	25.43	1.543	BMB
3	6.66	Sulfate	0.163	0.042	33.40	6.823	BMB
Total:			1.056	0.126	100.00	14.601	

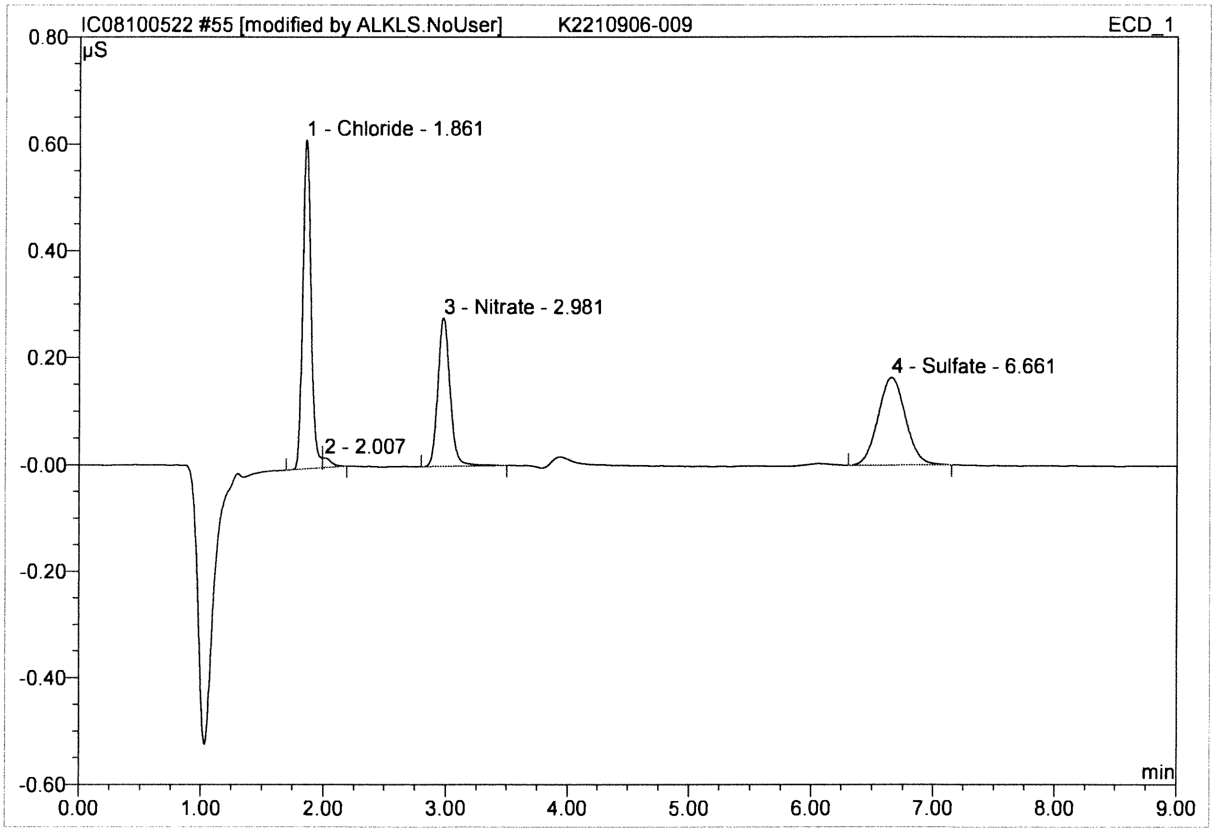
Before

OCT 07

55 K2210906-009

F

Sample Name:	**K2210906-009**	*Injection Volume:*	**5.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.615	0.048	39.10	5.836	BM *
2	2.01	n.a.	0.018	0.001	1.20	n.a.	MB*
3	2.98	Nitrate	0.277	0.032	25.80	1.543	BMB
4	6.66	Sulfate	0.163	0.042	33.89	6.823	BMB
Total:			1.072	0.124	100.00	14.203	

After
Initials NF

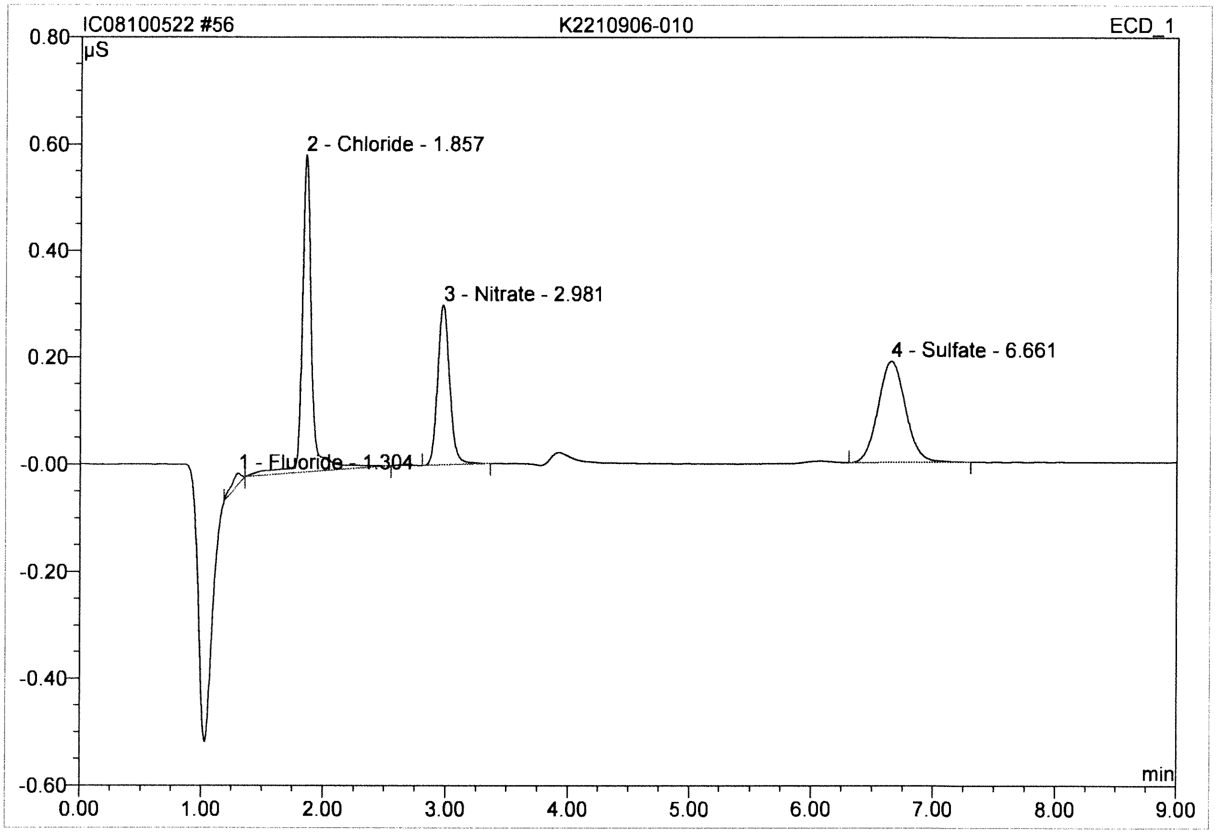
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

56 K2210906-010

F

Sample Name:	**K2210906-010**	*Injection Volume:*	**5.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.020	0.002	1.46	0.143	BMB
2	1.86	Chloride	0.594	0.055	39.21	6.622	bMB
3	2.98	Nitrate	0.299	0.034	24.42	1.652	BMB
4	6.66	Sulfate	0.189	0.049	34.90	7.949	BMB
Total:			1.102	0.140	100.00	16.366	

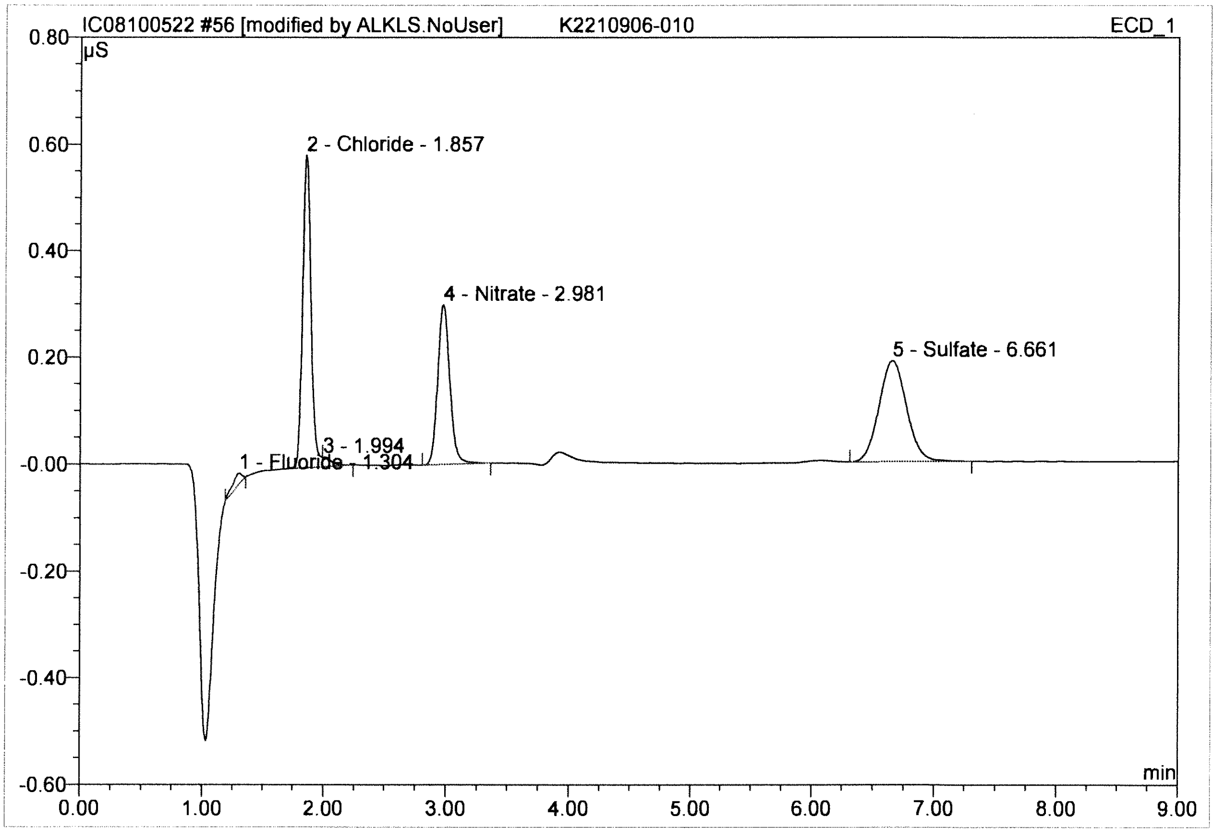
Before

OCT 07

56 K2210906-010

F

Sample Name:	**K2210906-010**	*Injection Volume:*	**5.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.020	0.002	1.54	0.143	BMB
2	1.86	Chloride	0.587	0.046	34.81	5.581	BM *
3	1.99	n.a.	0.018	0.002	1.15	n.a.	MB*
4	2.98	Nitrate	0.299	0.034	25.73	1.652	BMB
5	6.66	Sulfate	0.189	0.049	36.77	7.949	BMB
Total:			1.112	0.133	100.00	15.325	

After
Initials NF

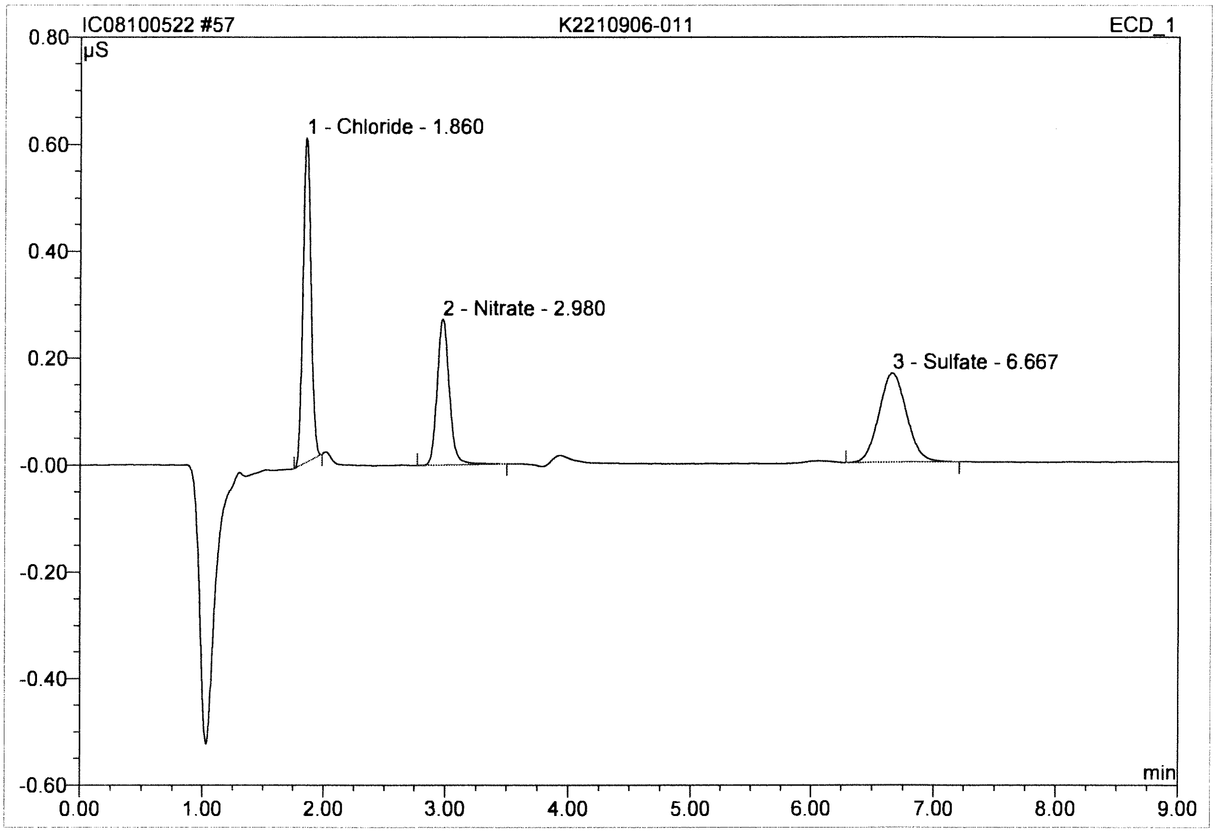
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

57 K2210906-011

F

Sample Name:	**K2210906-011**	*Injection Volume:*	**5.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.606	0.046	38.14	5.525	BMB
2	2.98	Nitrate	0.273	0.031	26.16	1.519	BMB
3	6.67	Sulfate	0.166	0.043	35.70	6.975	BMB
Total:			1.045	0.120	100.00	14.018	

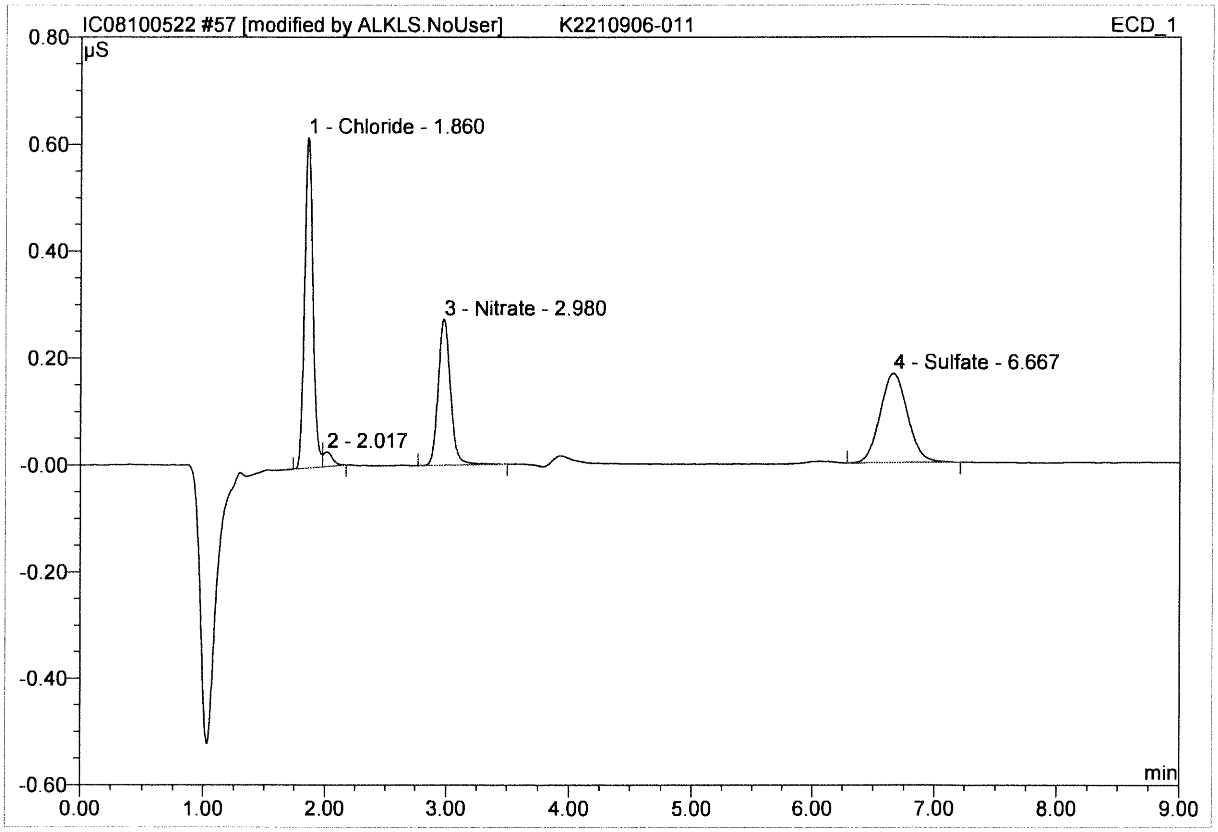
Before

OCT 07

57 K2210906-011

F

Sample Name:	**K2210906-011**	*Injection Volume:*	**5.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/5/2022 23:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.617	0.048	38.67	5.840	BM *
2	2.02	n.a.	0.027	0.002	1.98	n.a.	MB*
3	2.98	Nitrate	0.273	0.031	25.10	1.519	BMB
4	6.67	Sulfate	0.166	0.043	34.25	6.975	BMB
Total:			1.083	0.125	100.00	14.333	

After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

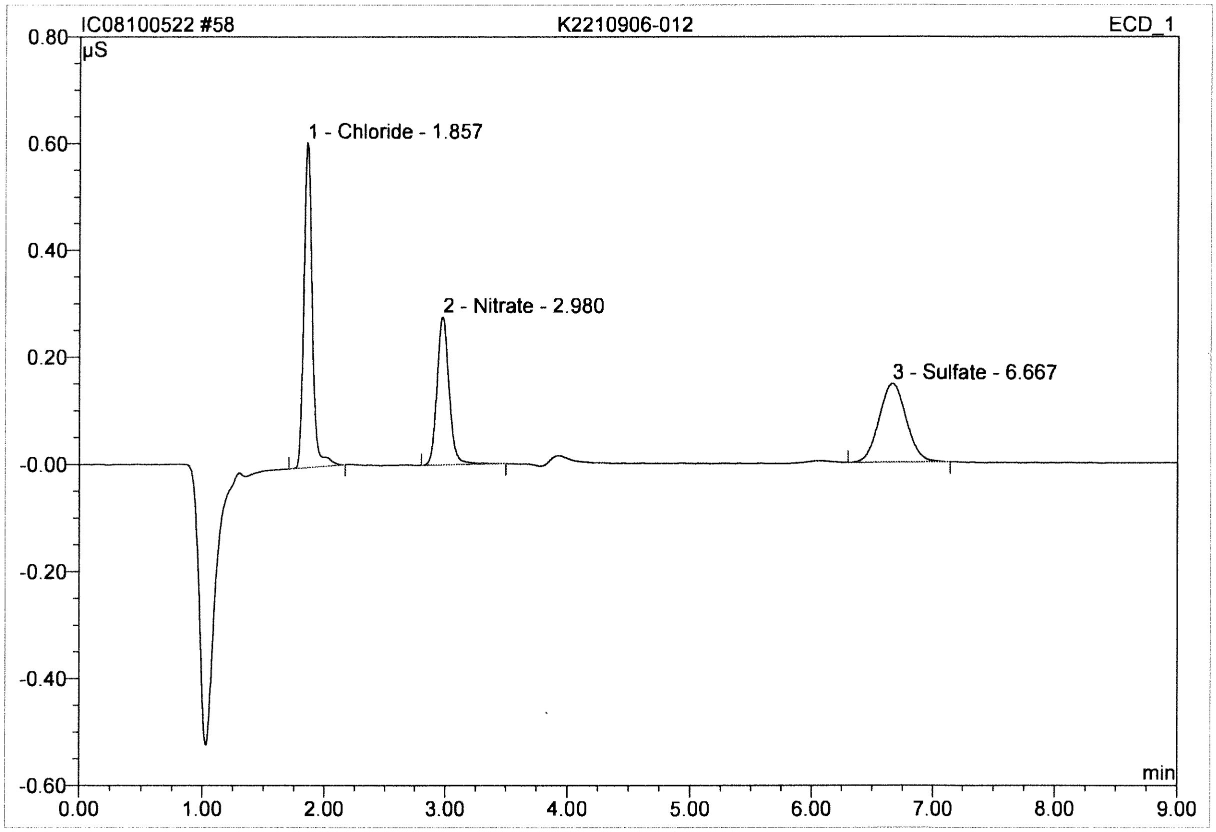
default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

58 K2210906-012

F

Sample Name:	**K2210906-012**	*Injection Volume:*	**5.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 0:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.607	0.049	41.34	5.903	BMB
2	2.98	Nitrate	0.276	0.032	26.93	1.541	BMB
3	6.67	Sulfate	0.146	0.038	31.74	6.112	BMB
Total:			1.029	0.119	100.00	13.556	

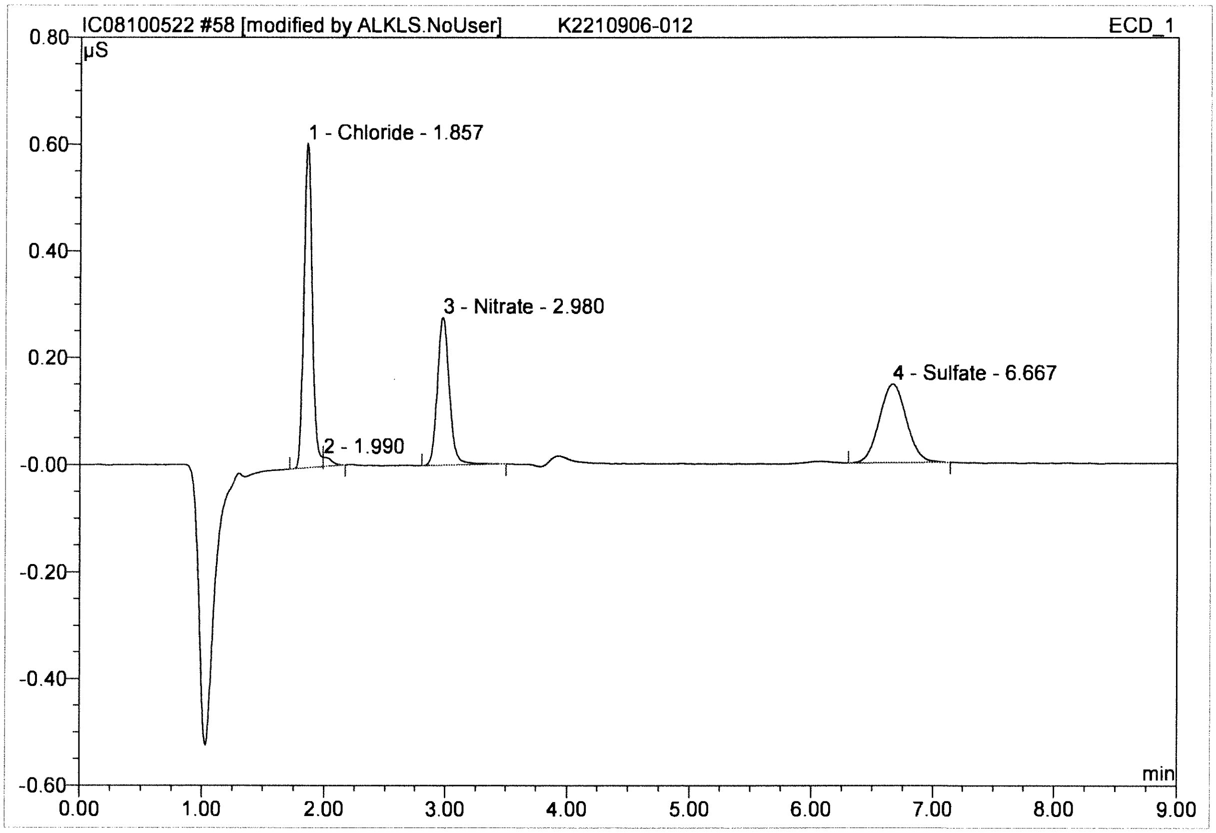
Before

OCT 07

58 K2210906-012

F

Sample Name:	**K2210906-012**	*Injection Volume:*	**5.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 0:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.607	0.048	40.18	5.737	BM *
2	1.99	n.a.	0.017	0.001	1.16	n.a.	MB*
3	2.98	Nitrate	0.276	0.032	26.93	1.541	BMB
4	6.67	Sulfate	0.146	0.038	31.74	6.112	BMB
Total:			1.046	0.119	100.00	13.390	

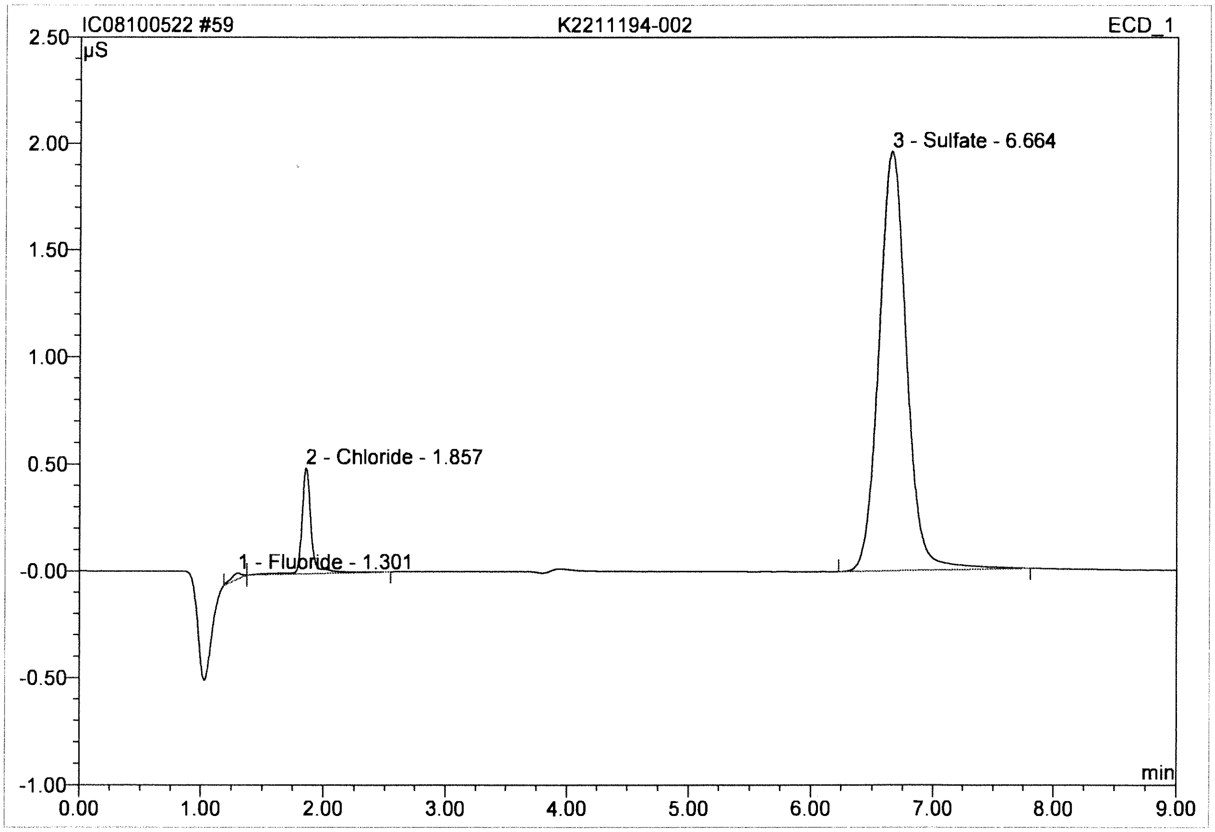
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

59 K2211194-002

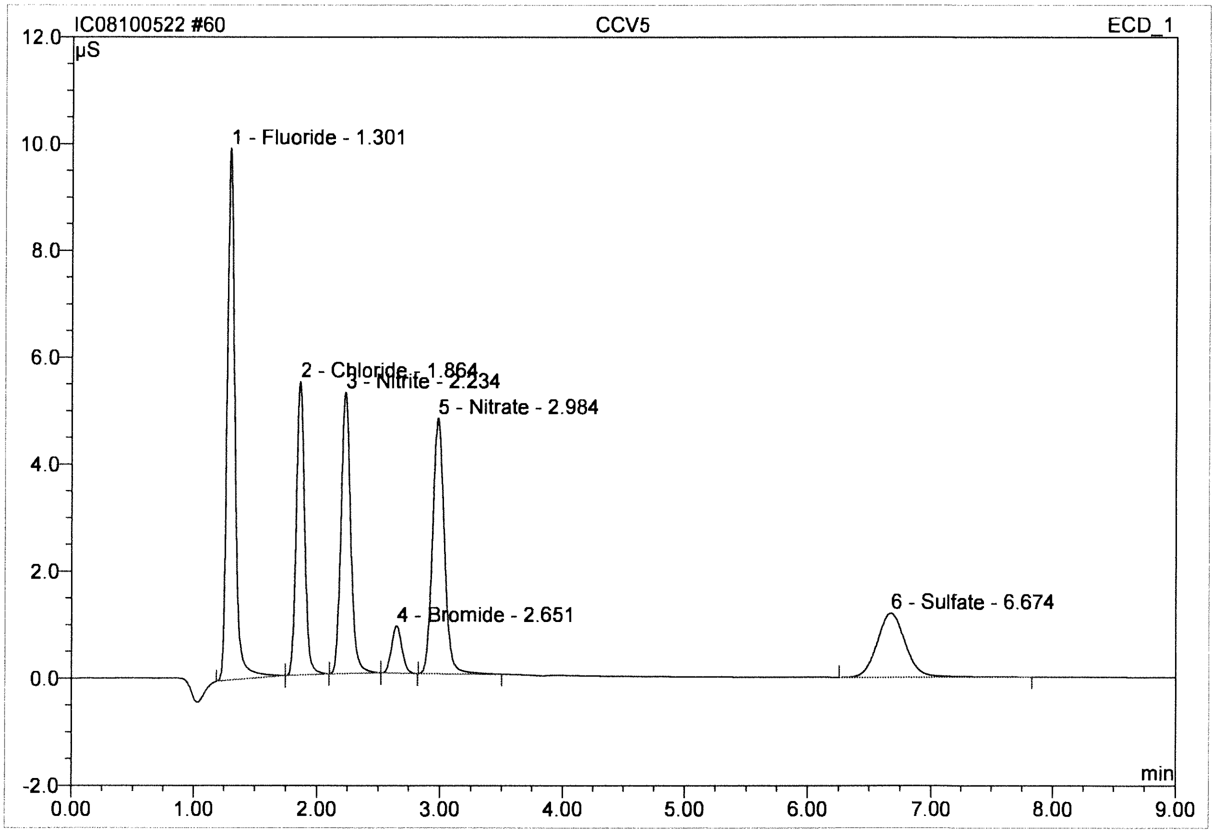
Sample Name:	**K2211194-002**	*Injection Volume:*	**5.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 0:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.029	0.003	0.51	0.403	BMB
2	1.86	Chloride	0.493	0.044	7.83	10.626	bMB
3	6.66	Sulfate	1.962	0.516	91.65	167.701	BMB
Total:			2.484	0.563	100.00	178.730	

60 CCV5

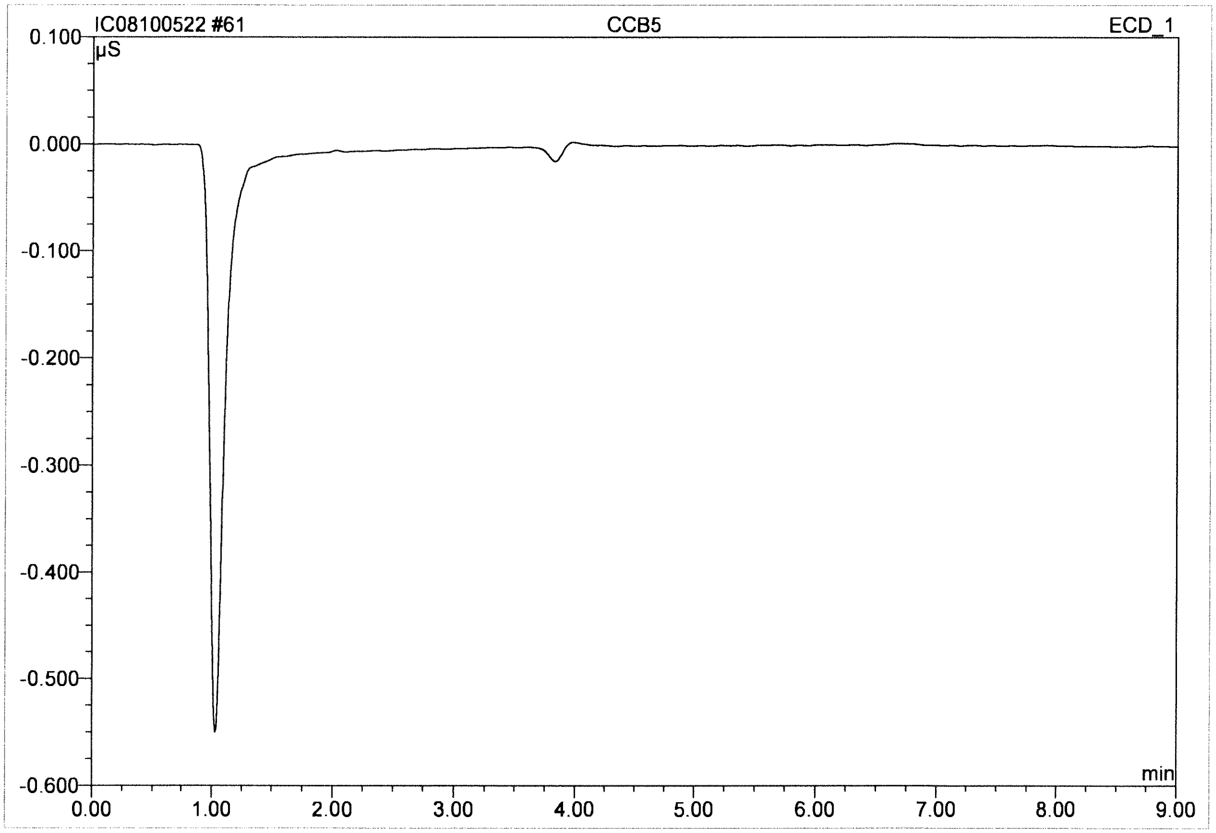
Sample Name:	**CCV5**	*Injection Volume:*	**5.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 0:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.950	0.736	28.61	5.118	BMB
2	1.86	Chloride	5.482	0.421	16.37	5.072	bMB
3	2.23	Nitrite	5.253	0.483	18.77	2.559	BMb
4	2.65	Bromide	0.882	0.086	3.33	2.576	bMB
5	2.98	Nitrate	4.777	0.531	20.65	2.563	BMB
6	6.67	Sulfate	1.194	0.316	12.27	5.126	BMB
Total:			27.538	2.572	100.00	23.014	

61 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 0:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



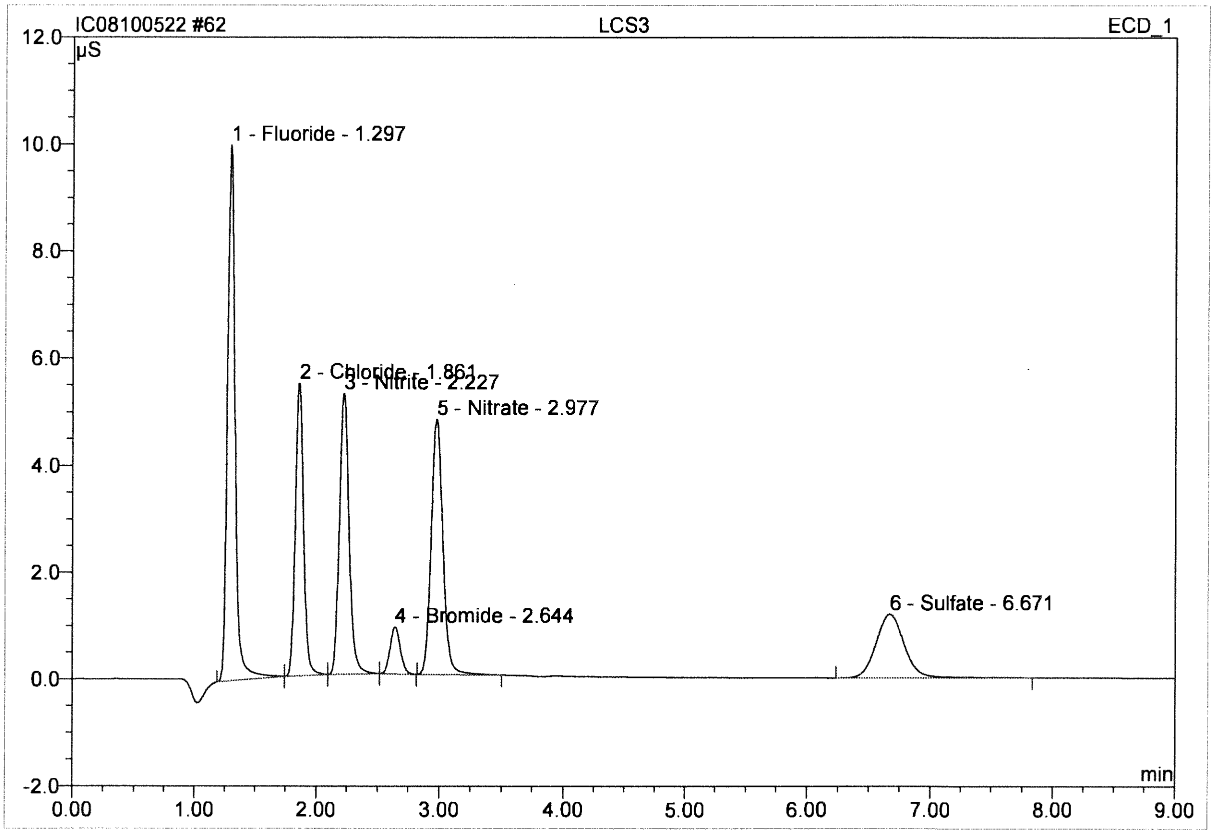
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

62 LCS3

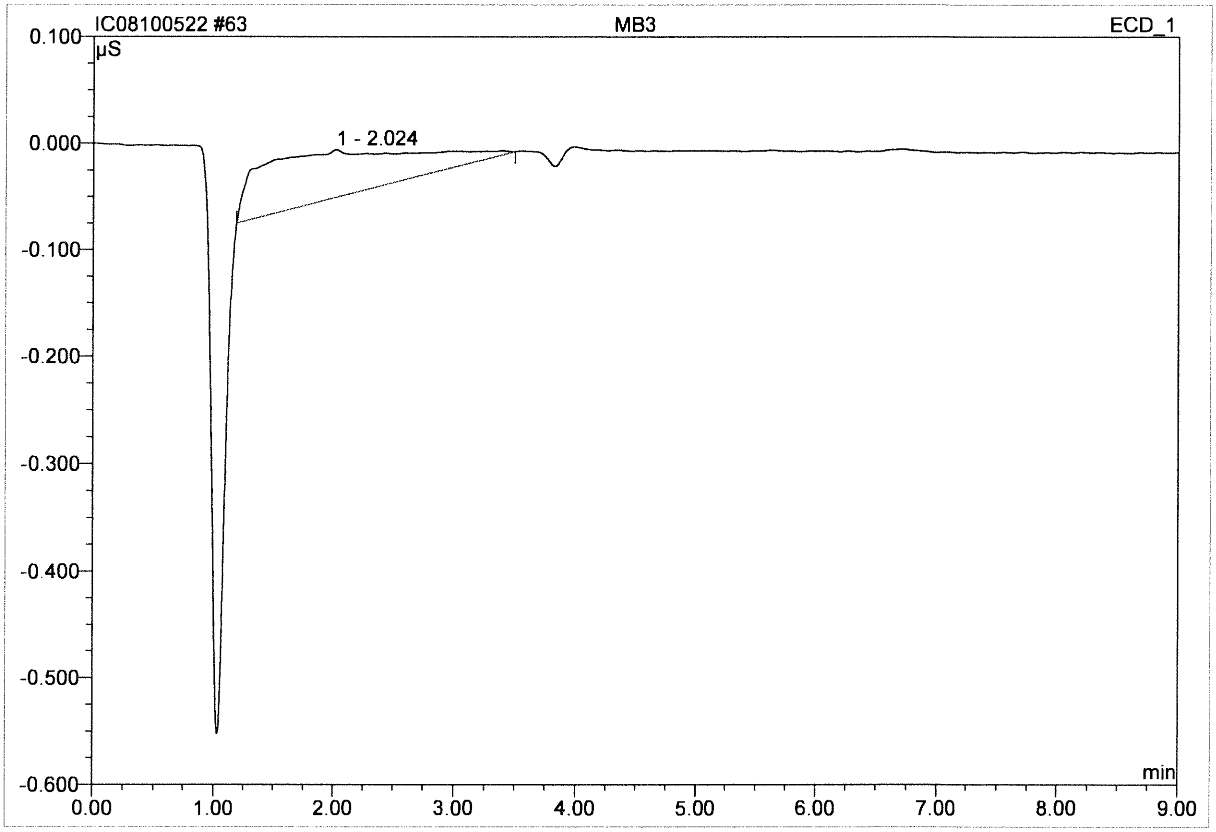
Sample Name:	**LCS3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 0:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	10.017	0.739	28.69	5.138	BMB
2	1.86	Chloride	5.474	0.421	16.33	5.065	bMB
3	2.23	Nitrite	5.255	0.482	18.71	2.554	bMb
4	2.64	Bromide	0.882	0.086	3.33	2.575	bMB
5	2.98	Nitrate	4.786	0.532	20.66	2.568	BMB
6	6.67	Sulfate	1.192	0.316	12.28	5.139	BMB
Total:			27.607	2.575	100.00	23.038	

63 MB3

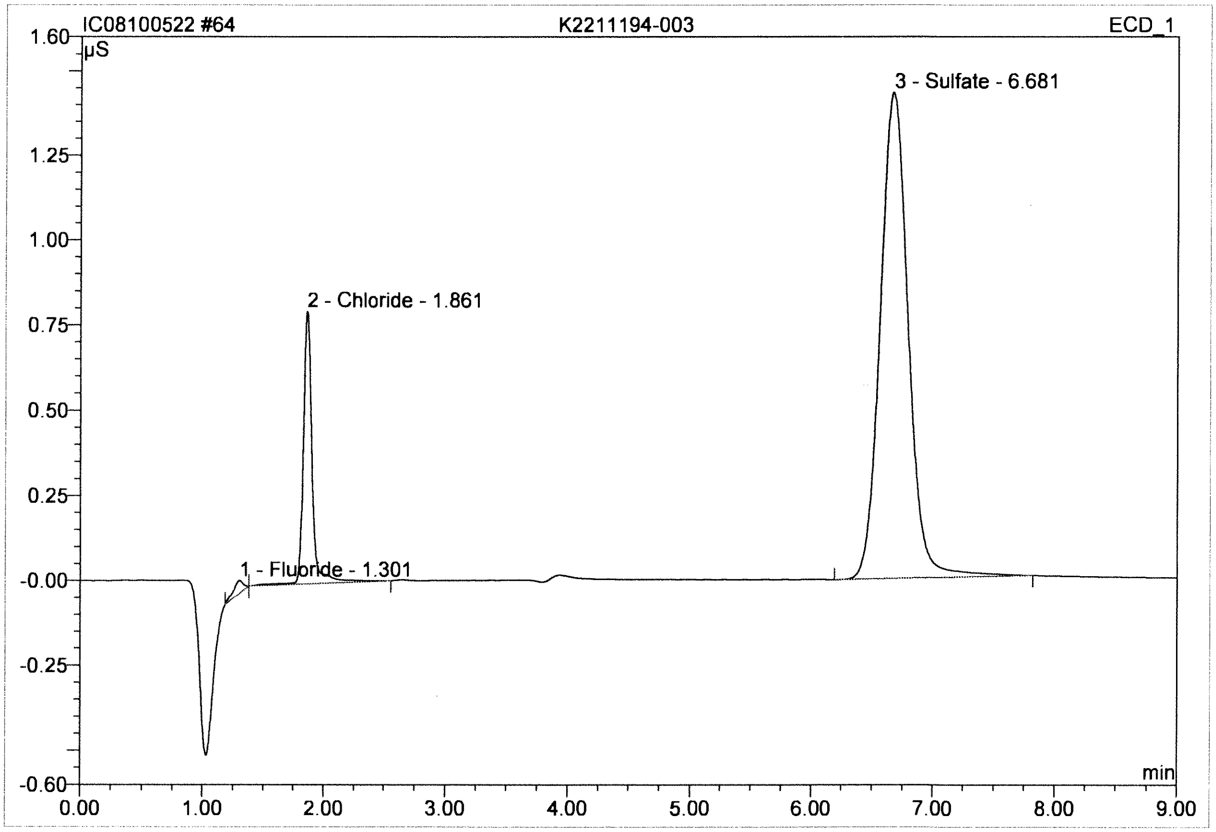
Sample Name:	**MB3**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 0:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	n.a.	0.045	0.067	100.00	n.a.	BMB
Total:			0.045	0.067	100.00	0.000	

64 K2211194-003

Sample Name:	**K2211194-003**	*Injection Volume:*	**5.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 1:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

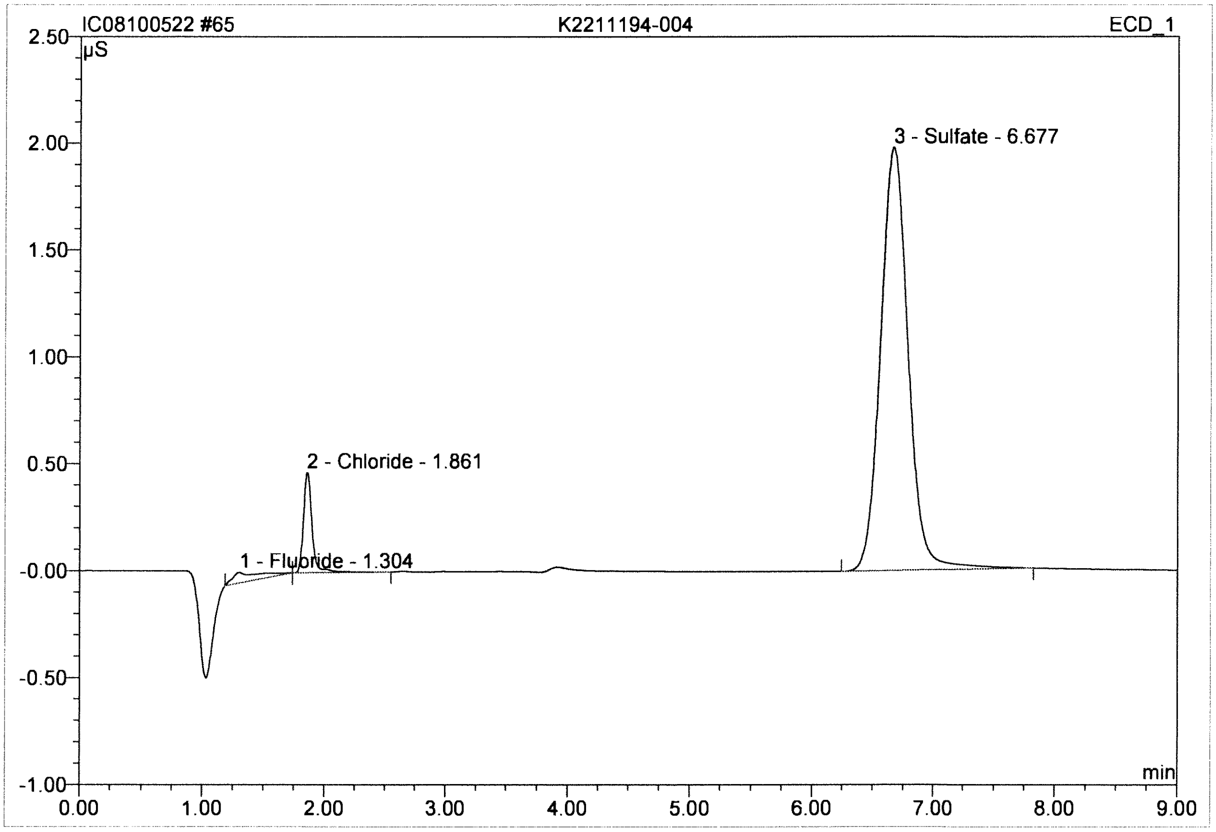


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.039	0.004	0.82	0.511	BMB
2	1.86	Chloride	0.799	0.069	15.29	16.599	bMB
3	6.68	Sulfate	1.429	0.378	83.90	122.867	BMB
Total:			2.267	0.451	100.00	139.978	

65 K2211194-004

F

Sample Name:	**K2211194-004**	*Injection Volume:*	**5.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 1:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

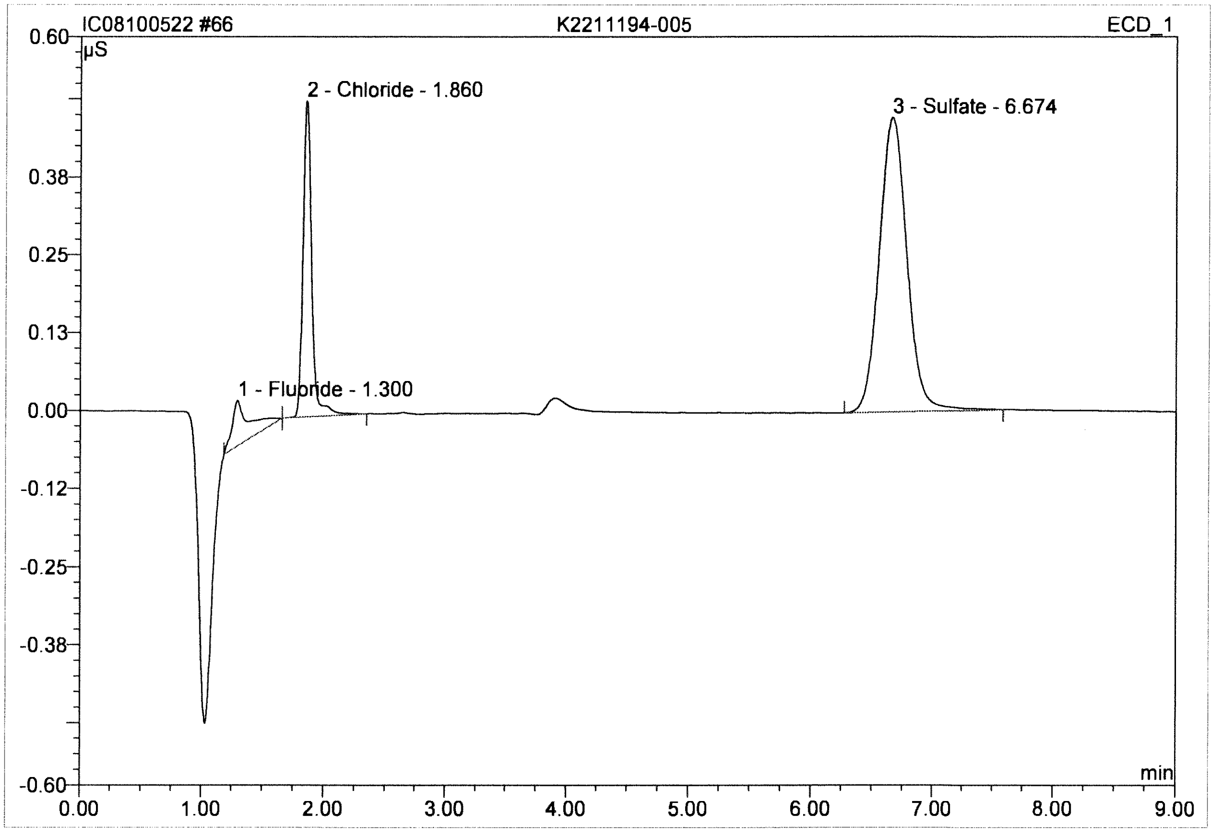


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.048	0.012	2.08	1.654	BMB
2	1.86	Chloride	0.467	0.039	6.81	9.399	bMB
3	6.68	Sulfate	1.979	0.522	91.11	169.483	BMB
Total:			2.495	0.573	100.00	180.536	

66 K2211194-005

F

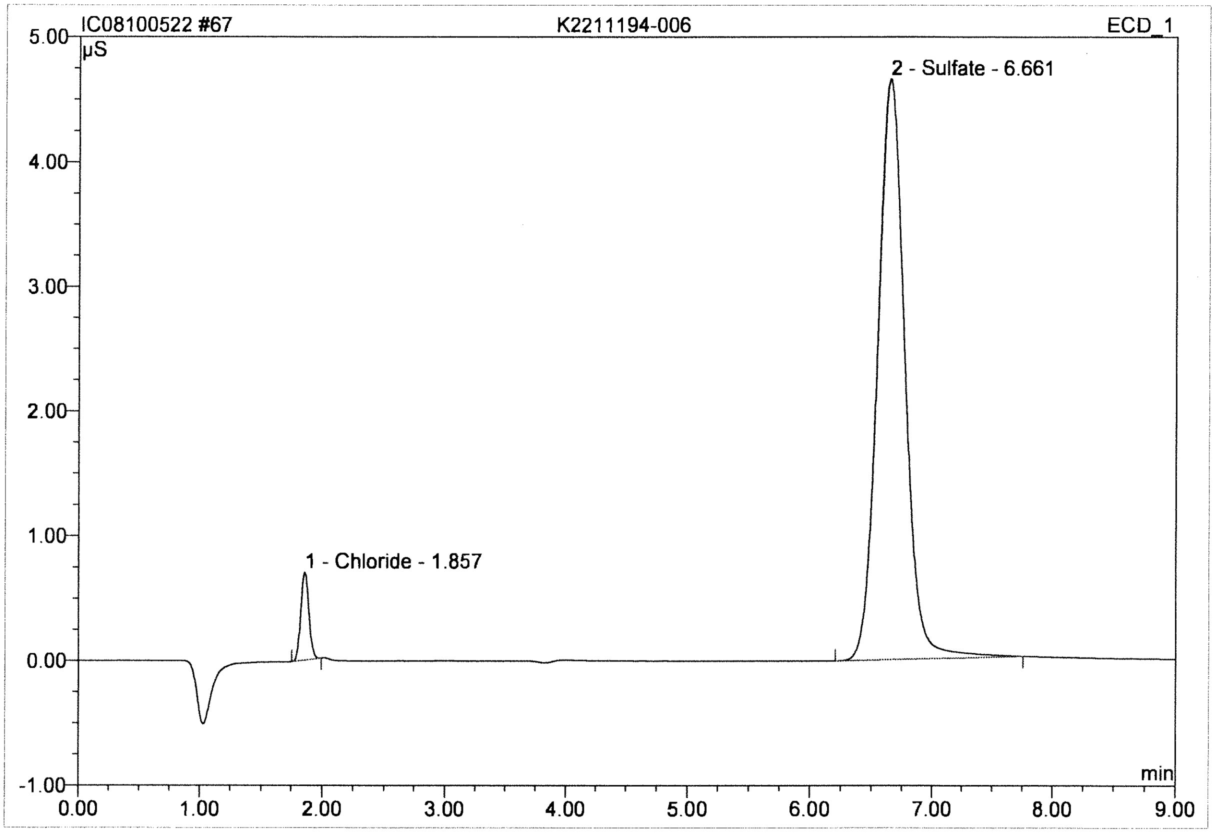
Sample Name:	**K2211194-005**	*Injection Volume:*	**5.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 1:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.072	0.012	6.68	1.659	BMB
2	1.86	Chloride	0.507	0.042	23.51	10.116	bMB
3	6.67	Sulfate	0.473	0.125	69.81	40.511	BMB
Total:			1.052	0.179	100.00	52.286	

67 K2211194-006

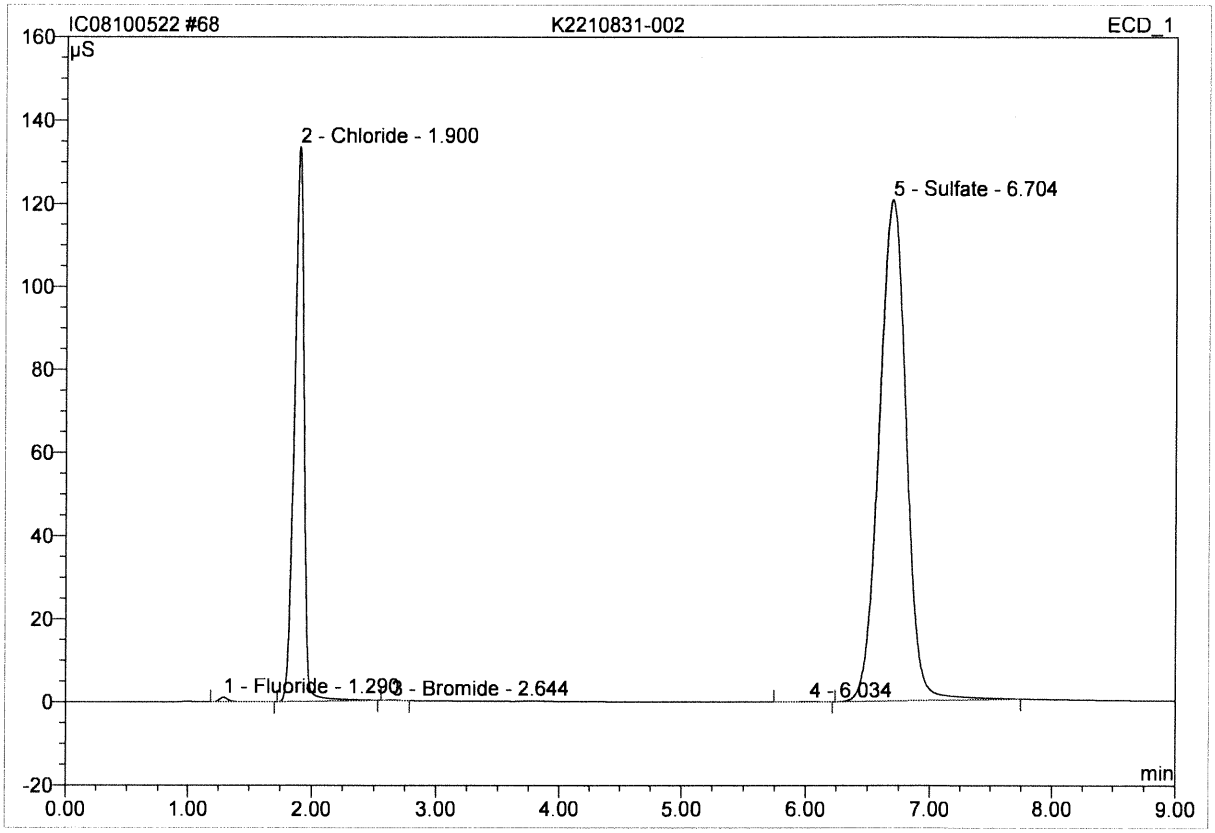
Sample Name:	**K2211194-006**	*Injection Volume:*	**5.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 1:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.703	0.053	4.23	12.805	BMB
2	6.66	Sulfate	4.654	1.204	95.77	391.075	BMB
Total:			5.357	1.257	100.00	403.880	

68 K2210831-002

Sample Name:	**K2210831-002**	*Injection Volume:*	**5.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/6/2022 1:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



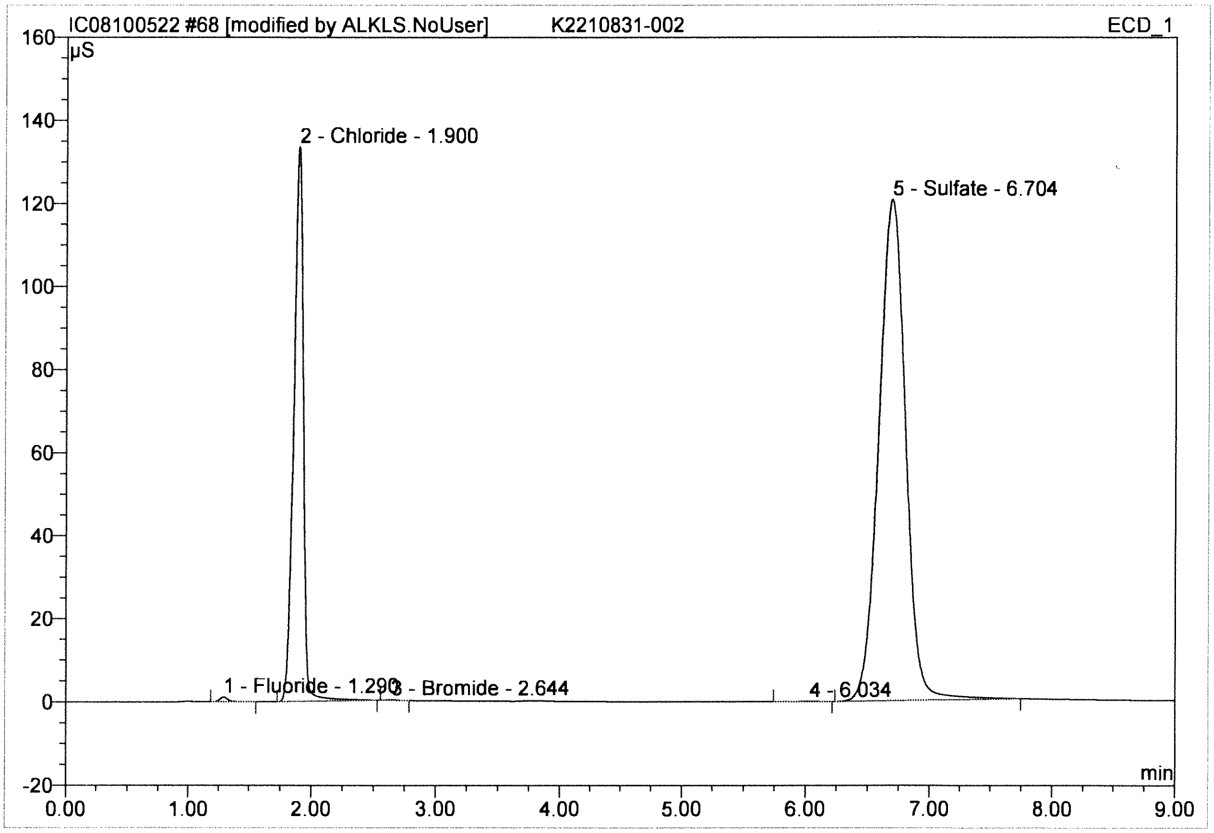
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	1.081	0.085	0.20	1.176	BMB
2	1.90	Chloride	133.580	11.881	28.03	286.195	BMB
3	2.64	Bromide	0.121	0.012	0.03	0.726	BMB
4	6.03	n.a.	0.038	0.009	0.02	n.a.	BMB
5	6.70	Sulfate	120.711	30.405	71.72	987.825	BMB
Total:			255.531	42.392	100.00	1275.922	

Before

OCT 07

68 K2210831-002

Sample Name:	**K2210831-002**	*Injection Volume:*	**5.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/6/2022 1:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	1.080	0.084	0.20	1.163	BMB*
2	1.90	Chloride	133.580	11.881	28.03	286.195	BMB
3	2.64	Bromide	0.121	0.012	0.03	0.726	BMB
4	6.03	n.a.	0.038	0.009	0.02	n.a.	BMB
5	6.70	Sulfate	120.711	30.405	71.73	987.825	BMB
Total:			255.530	42.391	100.00	1275.909	

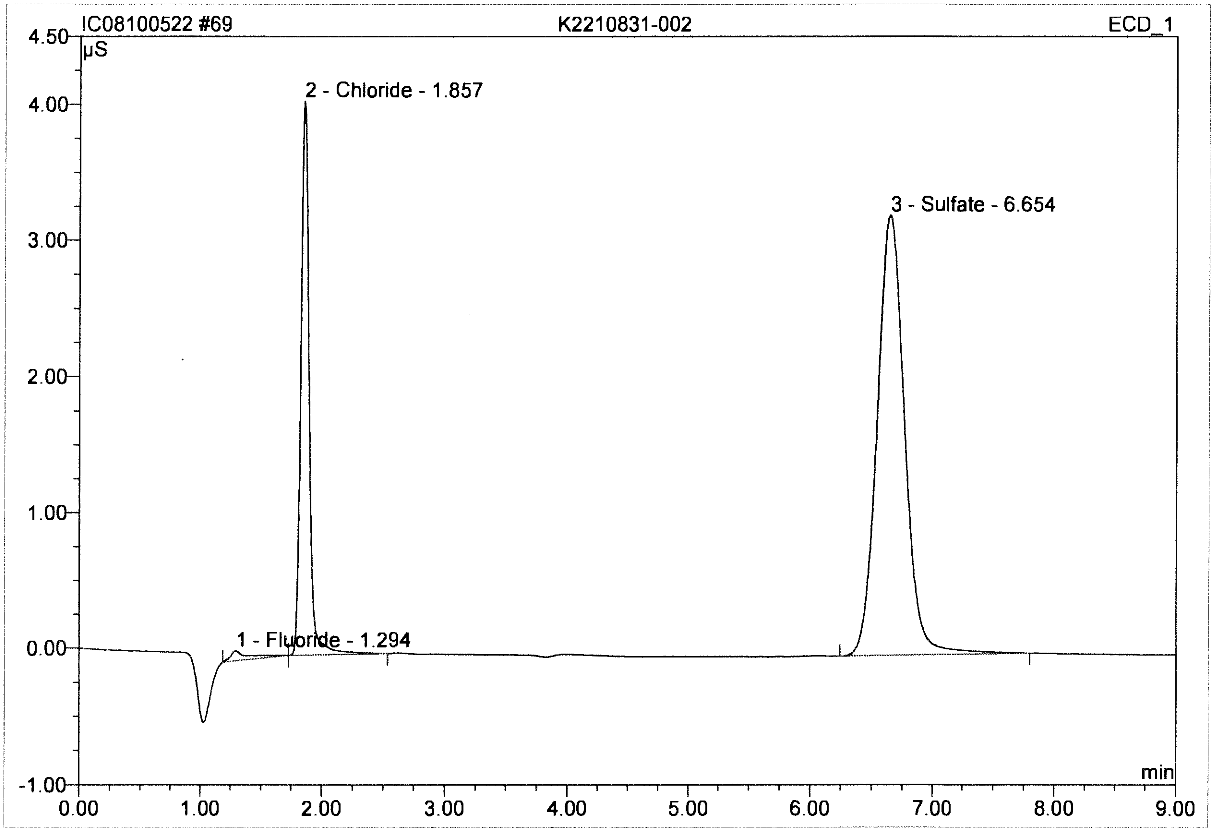
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

69 K2210831-002

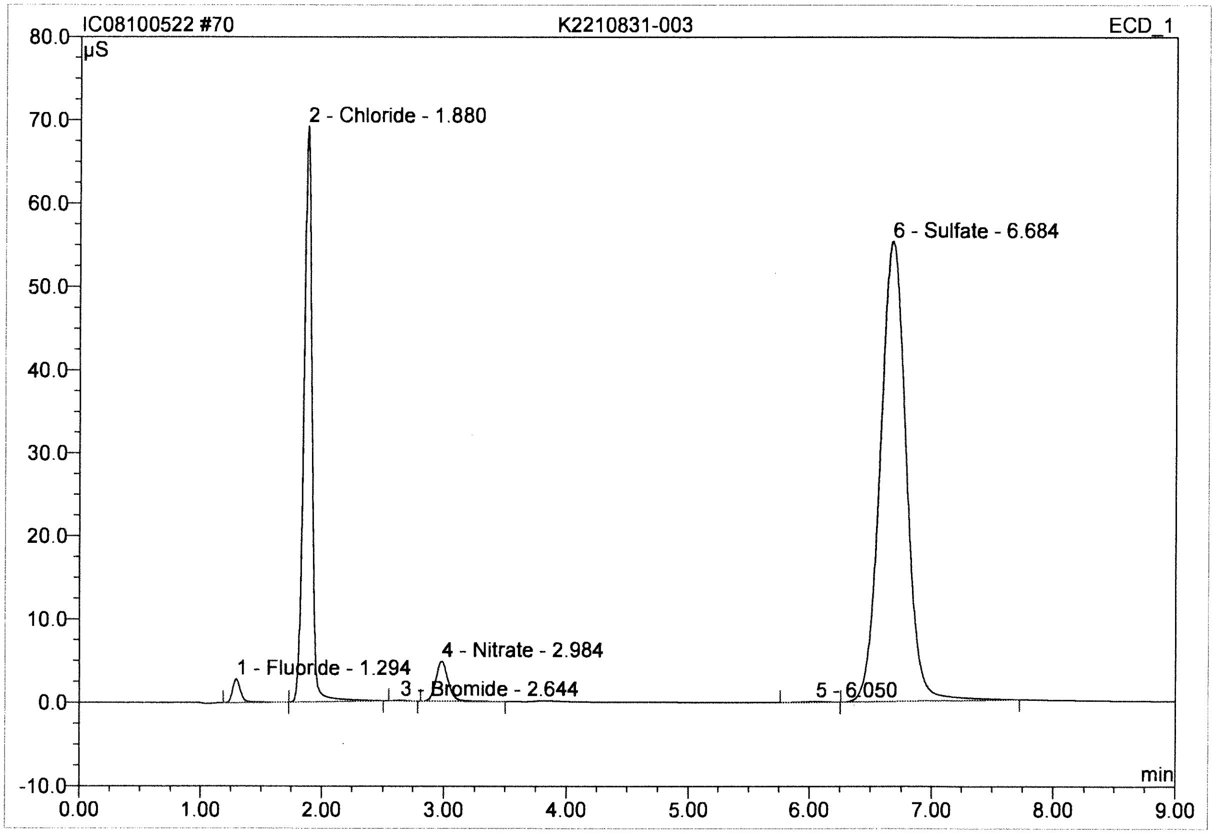
Sample Name:	**K2210831-002**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 2:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.072	0.013	1.08	4.430	BMB
2	1.86	Chloride	4.074	0.326	27.55	196.257	bMB
3	6.65	Sulfate	3.239	0.844	71.37	685.768	BMB
Total:			7.384	1.183	100.00	886.456	

70 K2210831-003

Sample Name:	**K2210831-003**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/6/2022 2:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



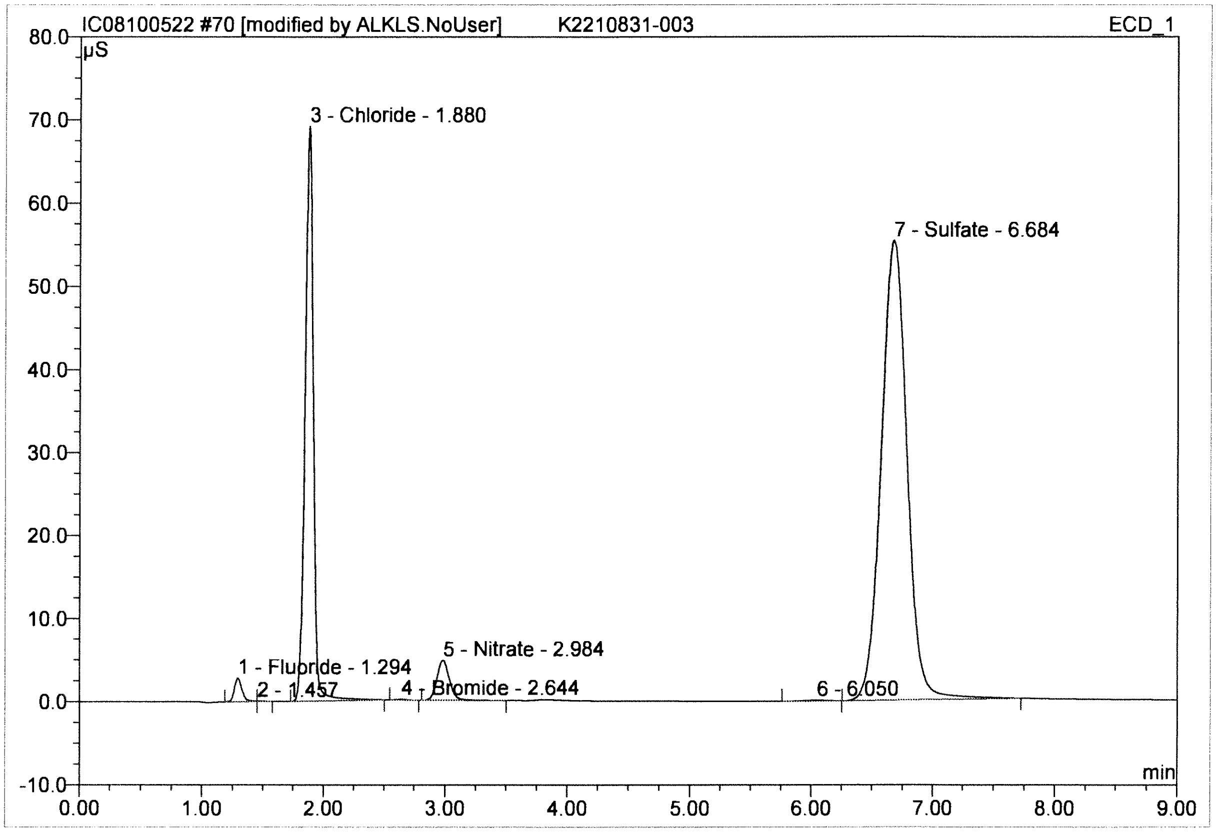
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	2.803	0.218	1.10	3.033	BMB
2	1.88	Chloride	69.174	5.486	27.71	132.150	BMB
3	2.64	Bromide	0.077	0.007	0.04	0.444	BMB
4	2.98	Nitrate	4.757	0.560	2.83	5.403	BMB
5	6.05	n.a.	0.086	0.018	0.09	n.a.	BMB
6	6.68	Sulfate	55.299	13.511	68.23	438.945	BMB
Total:			132.195	19.800	100.00	579.976	

Before

OCT 07

70 K2210831-003

Sample Name:	**K2210831-003**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/6/2022 2:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	2.796	0.208	1.05	2.899	BM *
2	1.46	n.a.	0.045	0.003	0.02	n.a.	MB*
3	1.88	Chloride	69.174	5.486	27.71	132.150	BMB
4	2.64	Bromide	0.077	0.007	0.04	0.444	BMB
5	2.98	Nitrate	4.757	0.560	2.83	5.403	BMB
6	6.05	n.a.	0.086	0.018	0.09	n.a.	BMB
7	6.68	Sulfate	55.299	13.511	68.26	438.945	BMB
Total:			132.234	19.794	100.00	579.842	

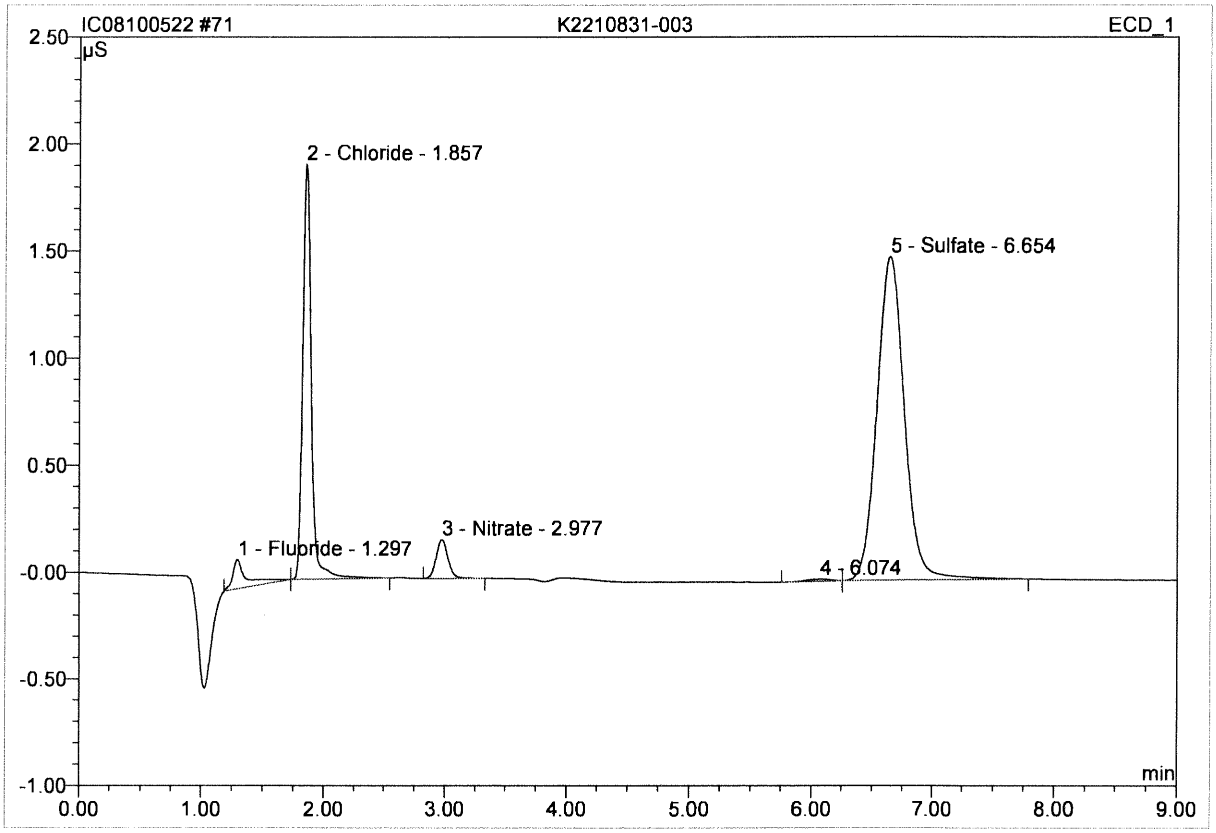
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder correct
☐Other

71 K2210831-003

Sample Name:	**K2210831-003**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 2:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



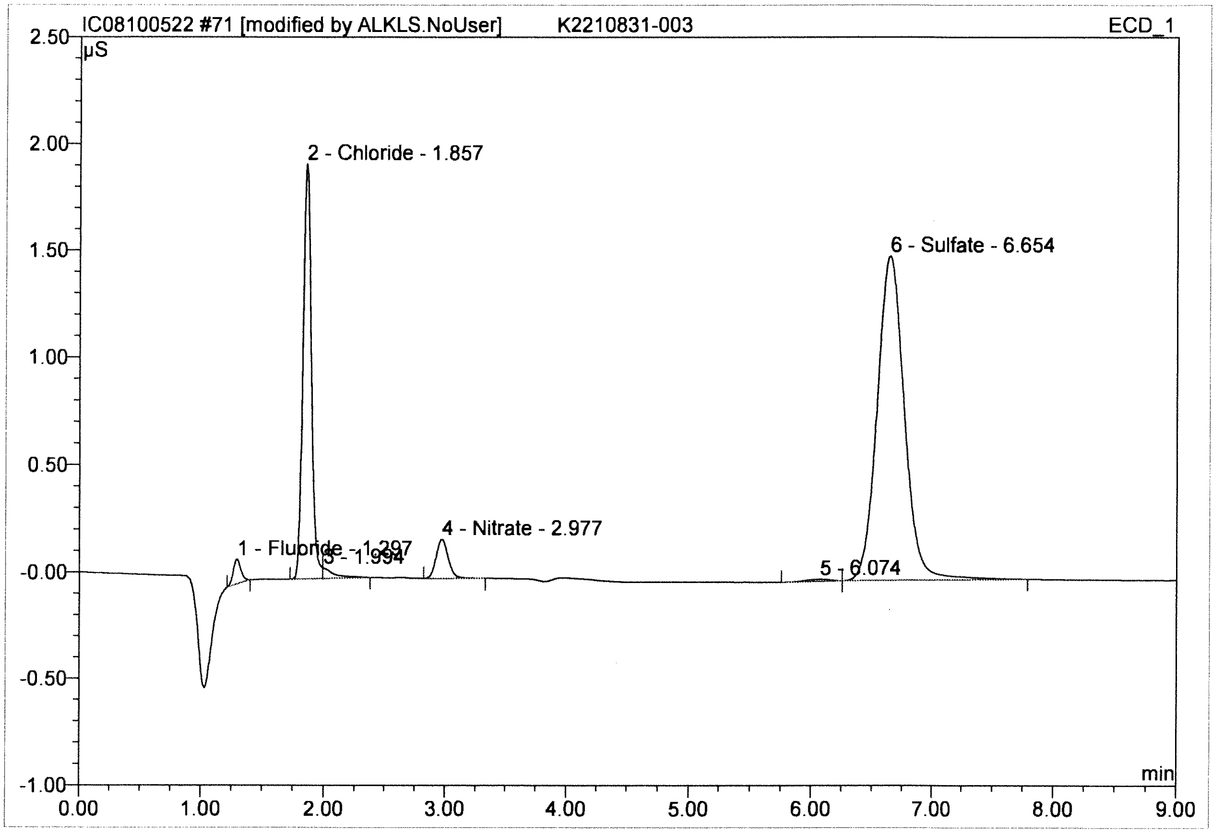
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.136	0.018	3.01	6.238	BMB
2	1.86	Chloride	1.938	0.158	26.58	95.346	bMB
3	2.98	Nitrate	0.181	0.021	3.47	4.983	BMB
4	6.07	n.a.	0.009	0.002	0.34	n.a.	BMB
5	6.65	Sulfate	1.511	0.397	66.60	322.272	bMB
Total:			3.775	0.596	100.00	428.839	

Before

OCT 07

71 K2210831-003

Sample Name:	**K2210831-003**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 2:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.115	0.009	1.46	2.960	BMB*
2	1.86	Chloride	1.937	0.151	25.88	91.157	BM *
3	1.99	n.a.	0.049	0.005	0.93	n.a.	MB*
4	2.98	Nitrate	0.181	0.021	3.53	4.983	BMB
5	6.07	n.a.	0.009	0.002	0.35	n.a.	BMb*
6	6.65	Sulfate	1.511	0.397	67.85	322.272	bMB
Total:			3.803	0.585	100.00	421.372	

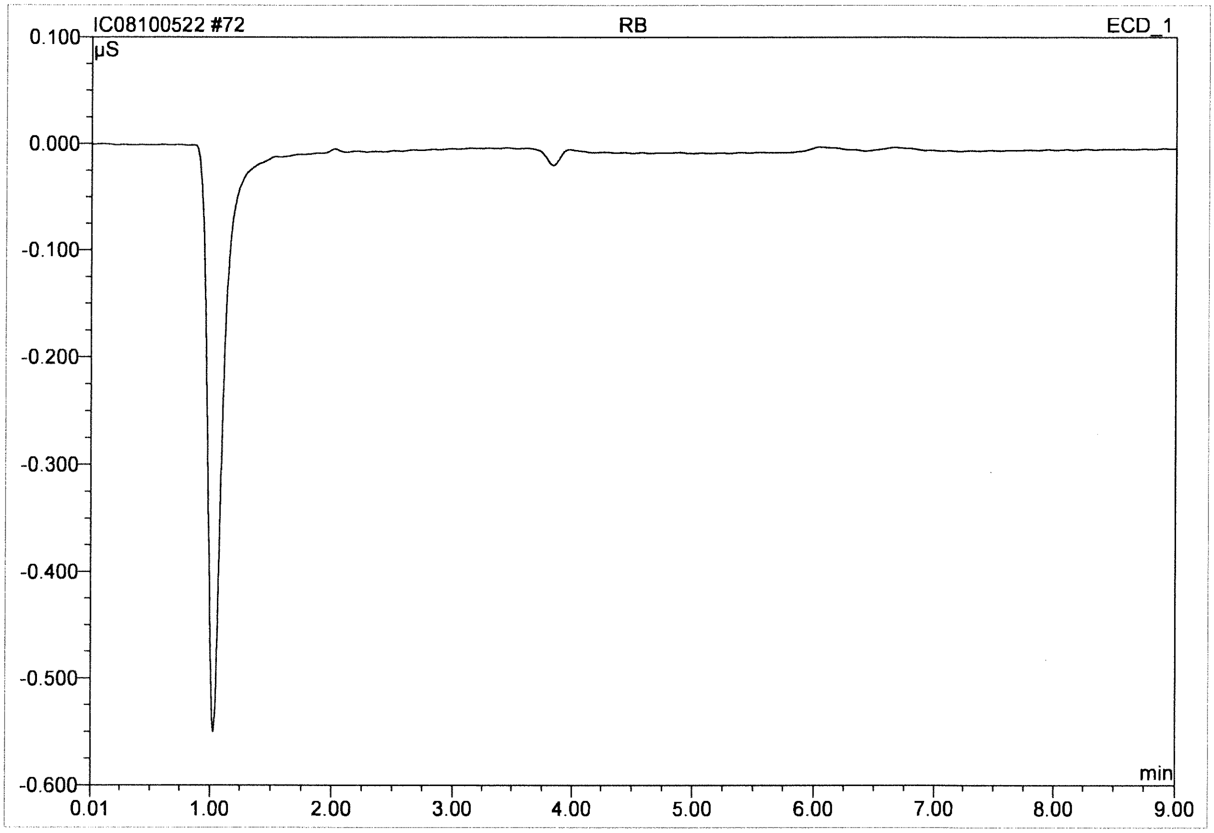
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

72 RB

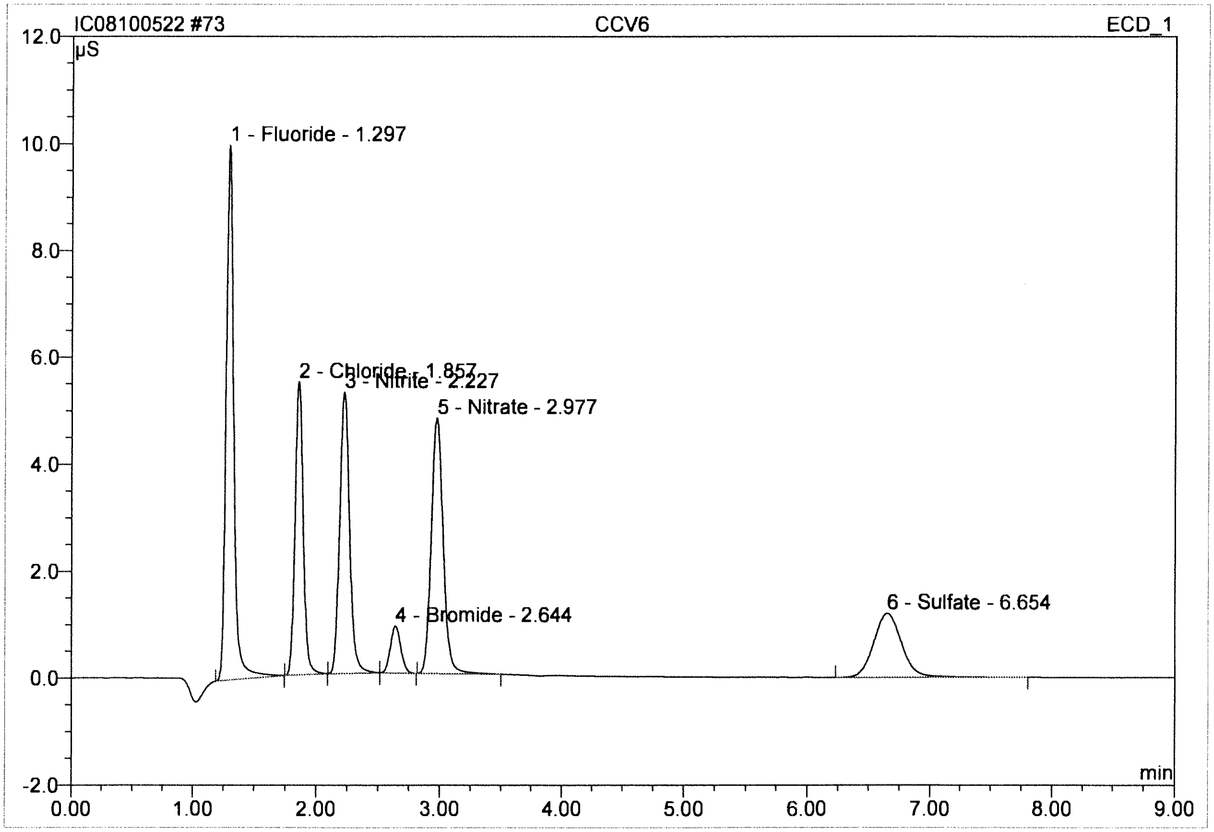
Sample Name:	**RB**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 2:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

73 CCV6

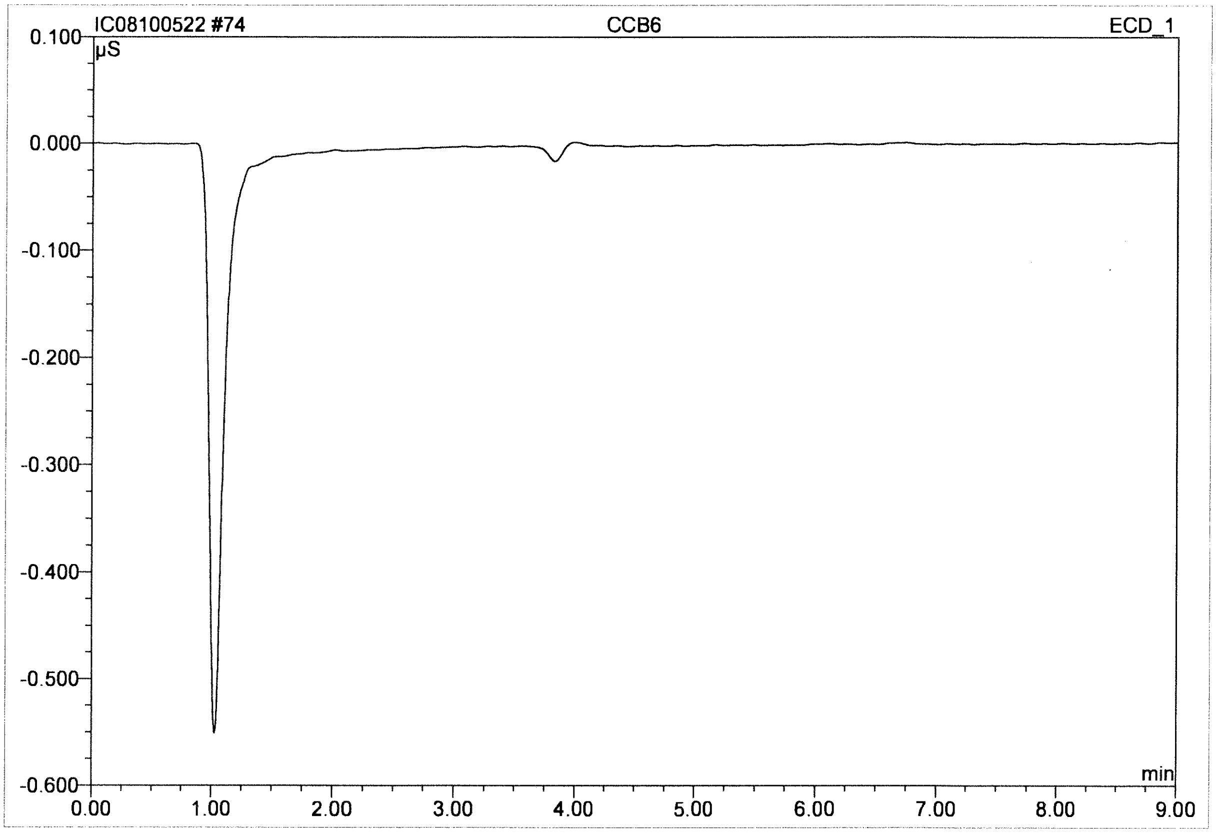
Sample Name:	**CCV6**	*Injection Volume:*	**5.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 2:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	10.005	0.739	28.72	5.142	BMB
2	1.86	Chloride	5.476	0.420	16.33	5.064	BMB
3	2.23	Nitrite	5.257	0.482	18.72	2.555	BMb
4	2.64	Bromide	0.883	0.086	3.33	2.572	bMB
5	2.98	Nitrate	4.782	0.531	20.62	2.562	BMB
6	6.65	Sulfate	1.199	0.316	12.28	5.136	BMB
Total:			27.601	2.574	100.00	23.032	

74 CCB6

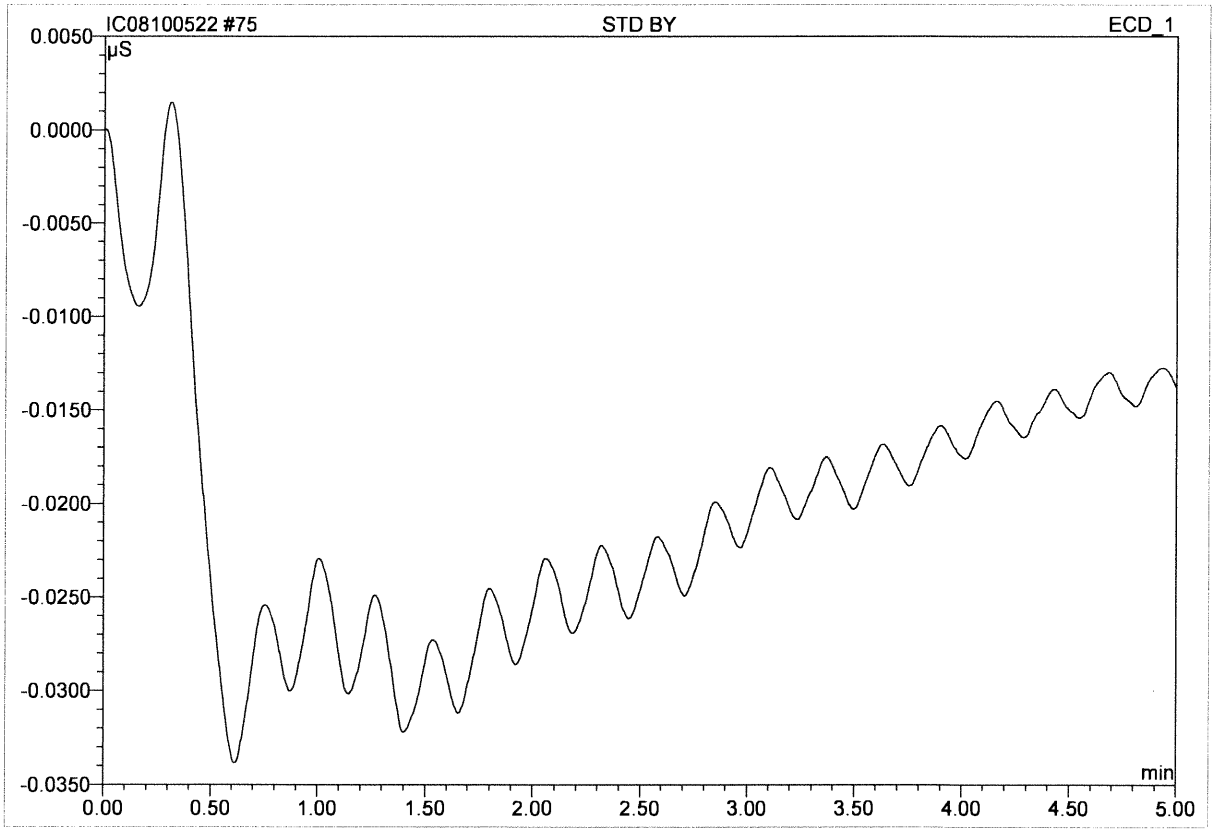
Sample Name:	**CCB6**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 3:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

75 STD BY

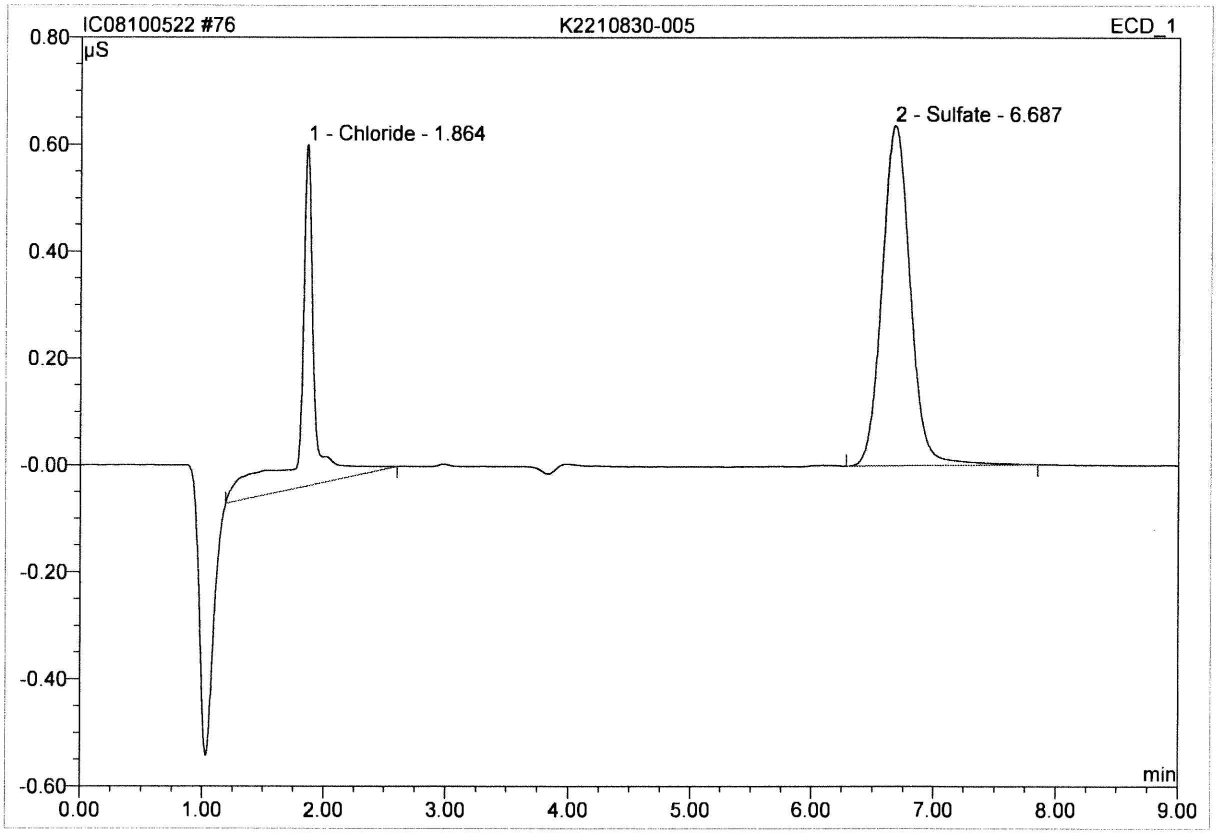
Sample Name:	**STD BY**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**Stand By**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 3:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**5.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

76 K2210830-005

Sample Name:	**K2210830-005**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**250.0000**
Recording Time:	**10/6/2022 9:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



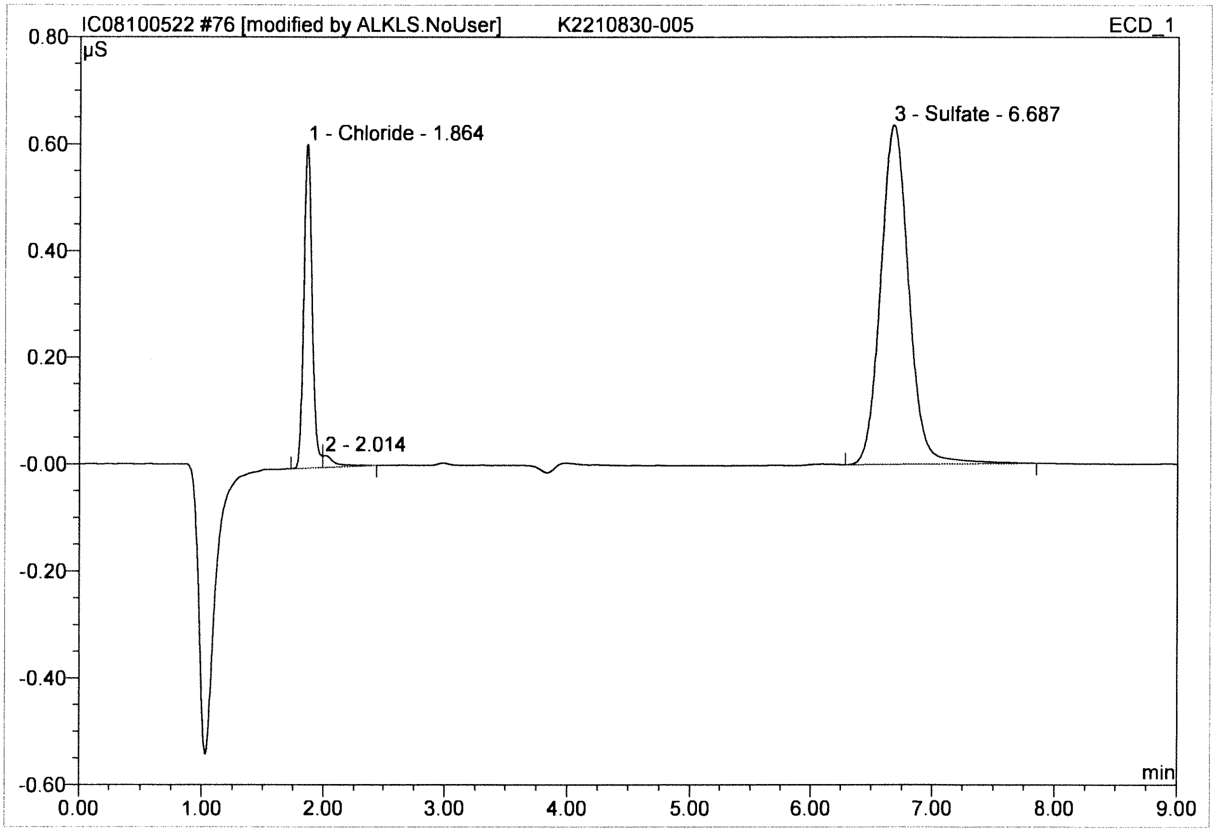
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.638	0.088	34.31	266.265	BMB
2	6.69	Sulfate	0.636	0.169	65.69	687.633	BMB
Total:			1.275	0.258	100.00	953.898	

Before

OCT 07

76 K2210830-005

Sample Name:	**K2210830-005**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**250.0000**
Recording Time:	**10/6/2022 9:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.607	0.048	21.86	144.933	BM *
2	2.01	n.a.	0.022	0.003	1.23	n.a.	MB*
3	6.69	Sulfate	0.636	0.169	76.91	687.633	BMB
Total:			1.266	0.220	100.00	832.566	

After
Initials NF

OCT 07

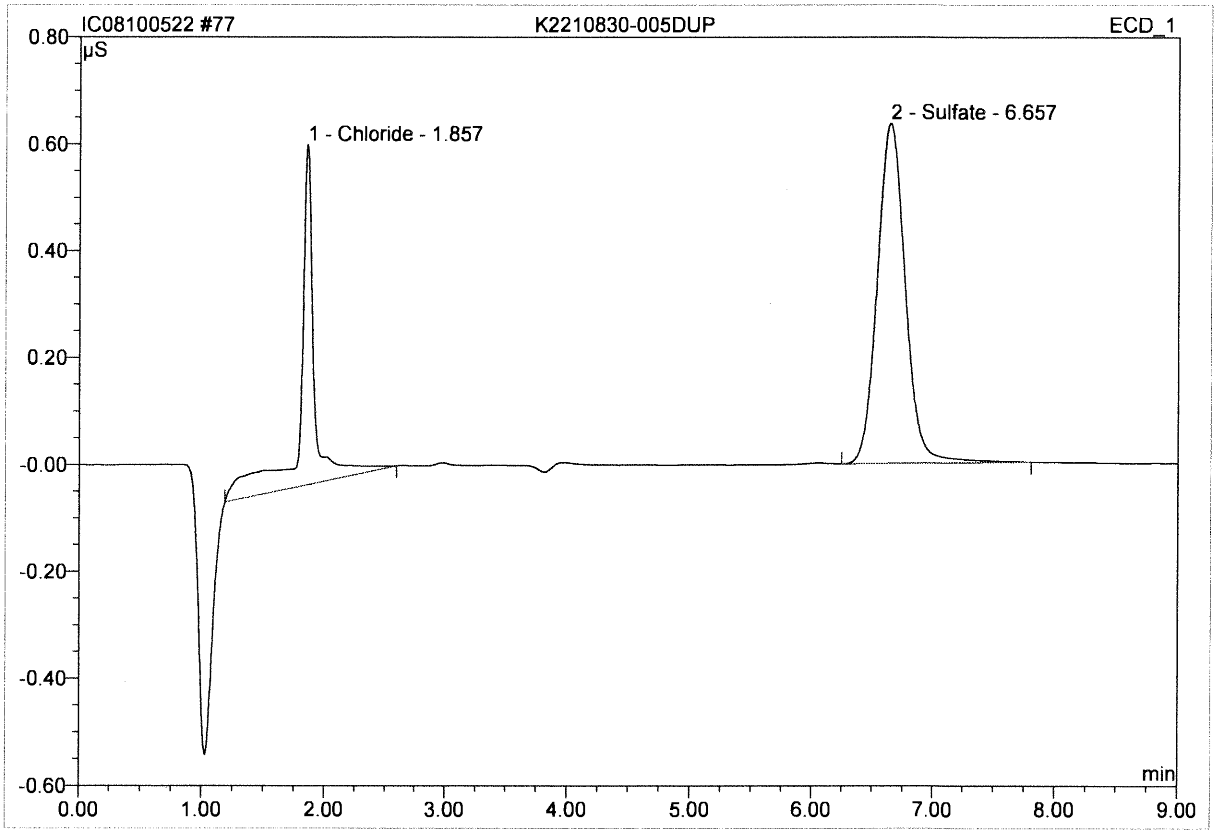
☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

77 K2210830-005DUP

Sample Name:	**K2210830-005DUP**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**250.0000**
Recording Time:	**10/6/2022 9:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



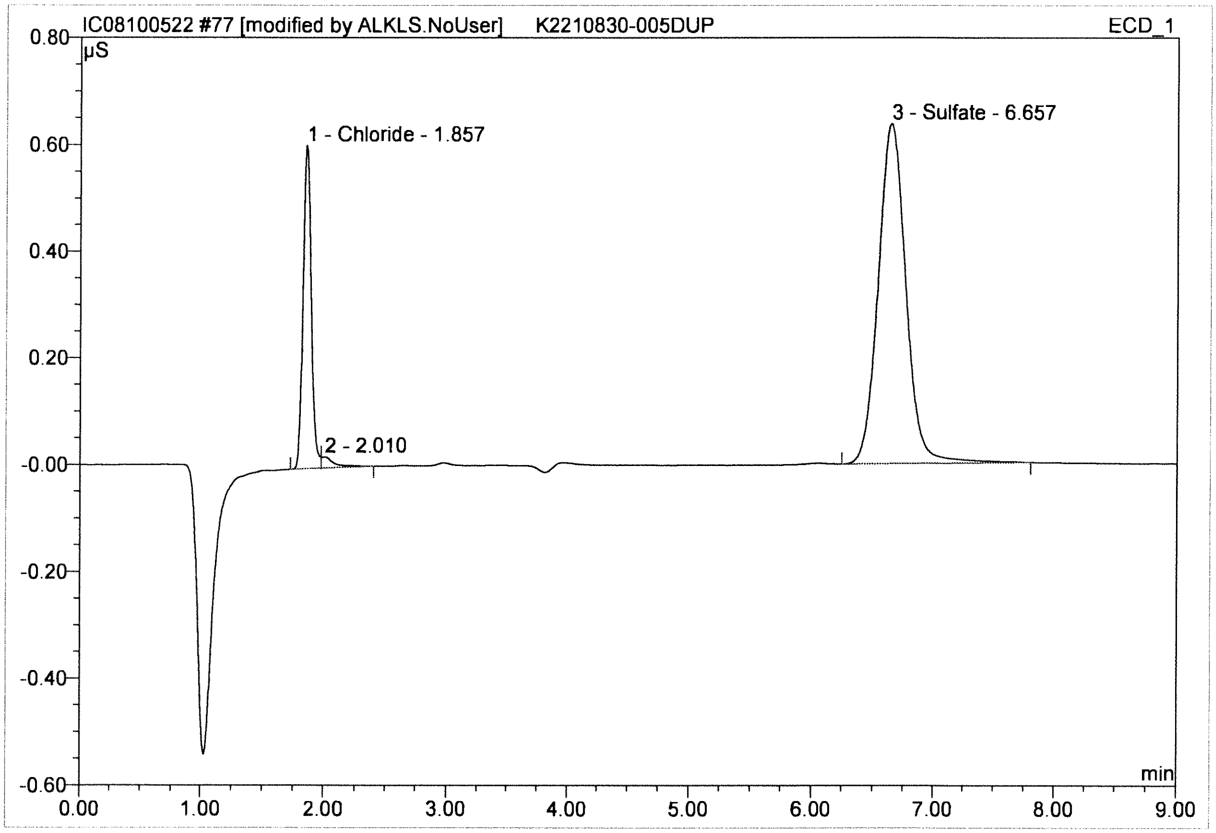
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.636	0.086	33.75	259.280	BMB
2	6.66	Sulfate	0.636	0.169	66.25	686.388	BMB
Total:			1.273	0.255	100.00	945.667	

Before

OCT 07

77 K2210830-005DUP

Sample Name:	**K2210830-005DUP**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**250.0000**
Recording Time:	**10/6/2022 9:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.606	0.048	21.77	143.762	BM *
2	2.01	n.a.	0.020	0.003	1.14	n.a.	MB*
3	6.66	Sulfate	0.636	0.169	77.08	686.388	BMB
Total:			1.263	0.219	100.00	830.150	

After
Initials NF

OCT 07

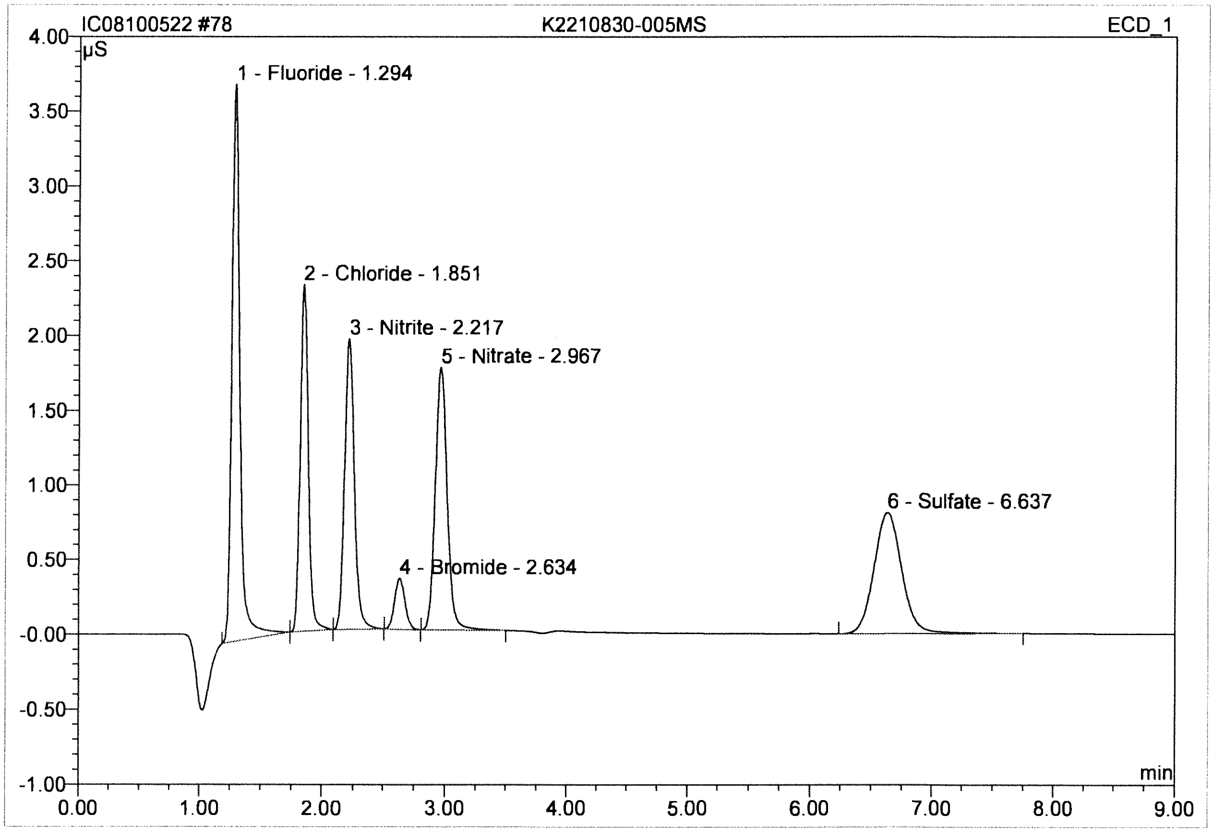
☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

78 K2210830-005MS

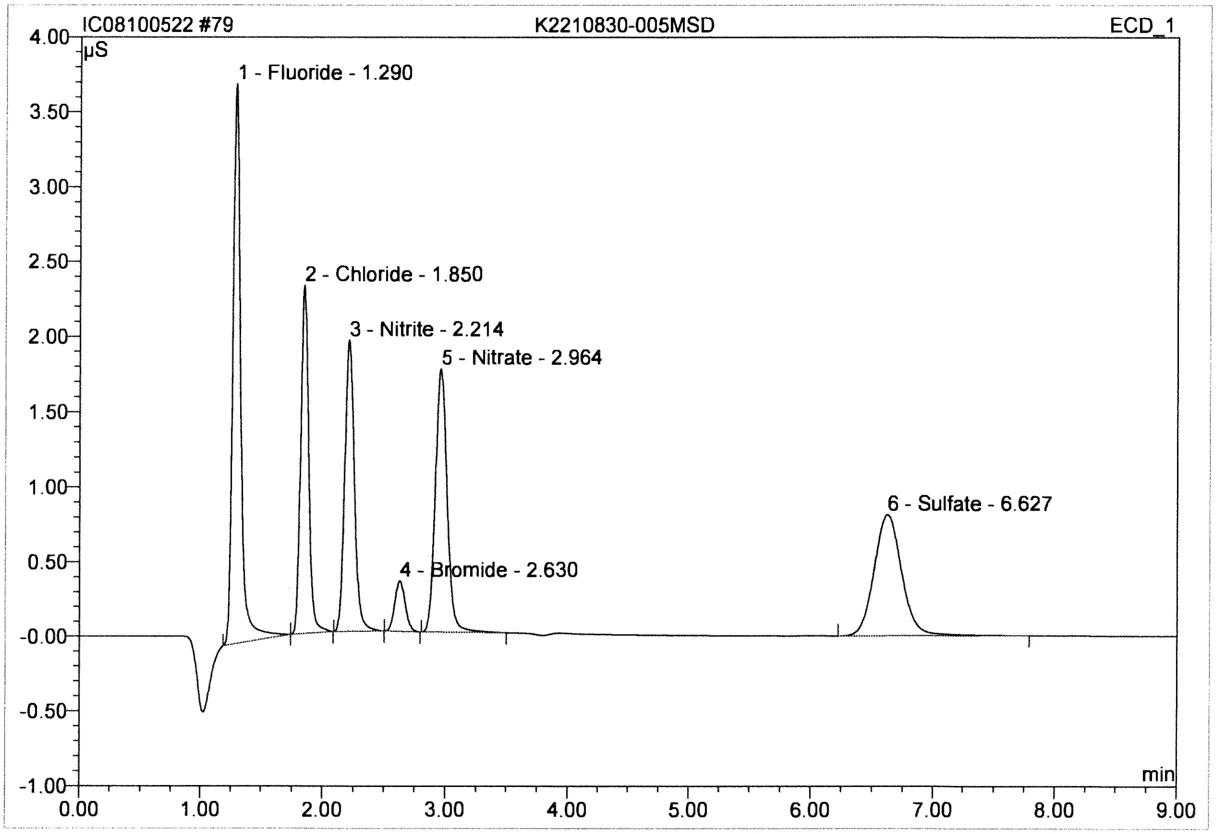
Sample Name:	**K2210830-005MS**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**500.0000**
Recording Time:	**10/6/2022 10:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.728	0.287	26.24	996.807	BMB
2	1.85	Chloride	2.319	0.181	16.58	1090.977	bMB
3	2.22	Nitrite	1.943	0.180	16.45	476.385	BMB
4	2.63	Bromide	0.339	0.033	3.03	496.490	BMB
5	2.97	Nitrate	1.756	0.198	18.14	478.294	BMB
6	6.64	Sulfate	0.808	0.214	19.56	1735.715	BMB
Total:			10.893	1.092	100.00	5274.668	

79 K2210830-005MSD

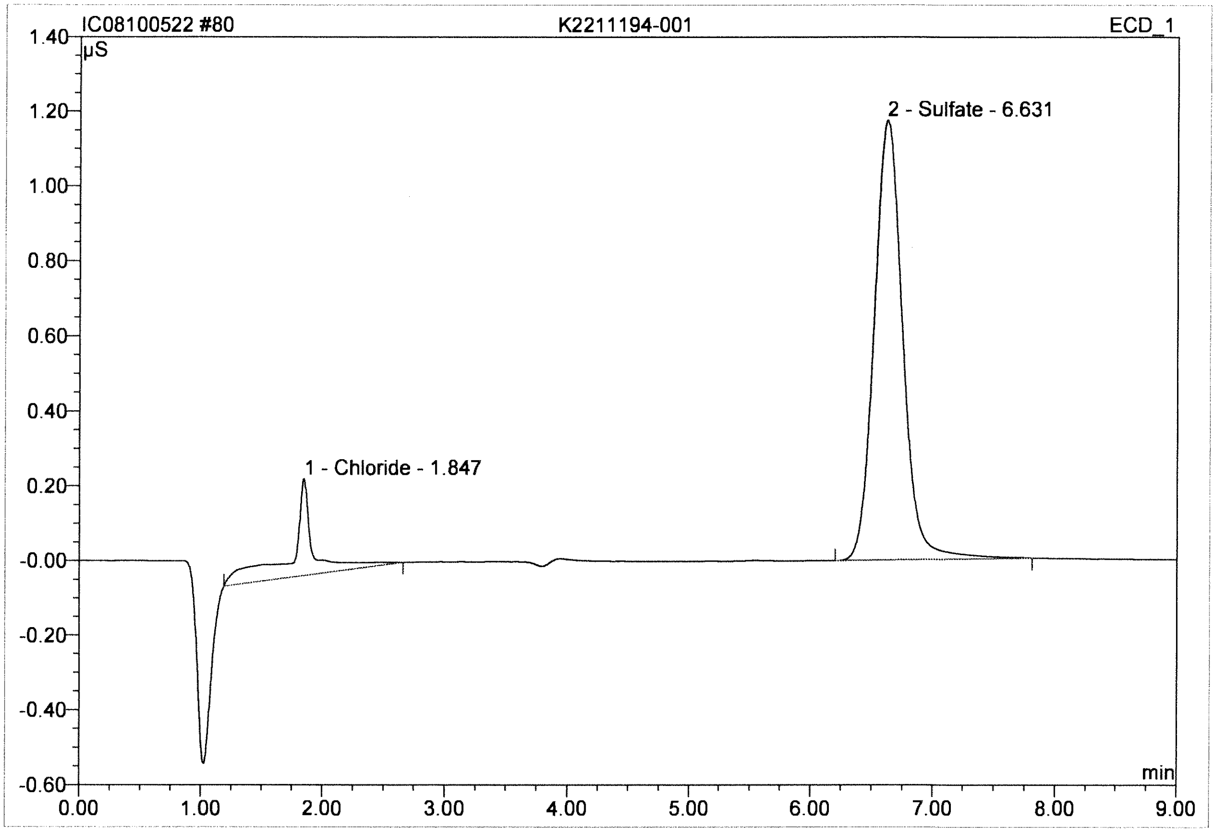
Sample Name:	**K2210830-005MSD**	*Injection Volume:*	**5.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**500.0000**
Recording Time:	**10/6/2022 10:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.736	0.287	26.29	999.702	BMB
2	1.85	Chloride	2.320	0.181	16.55	1089.695	bMB
3	2.21	Nitrite	1.941	0.180	16.42	475.950	BMB
4	2.63	Bromide	0.339	0.033	3.02	496.126	BMB
5	2.96	Nitrate	1.756	0.198	18.12	478.136	BMB
6	6.63	Sulfate	0.810	0.214	19.60	1740.706	BMB
Total:			10.903	1.093	100.00	5280.316	

80 K2211194-001

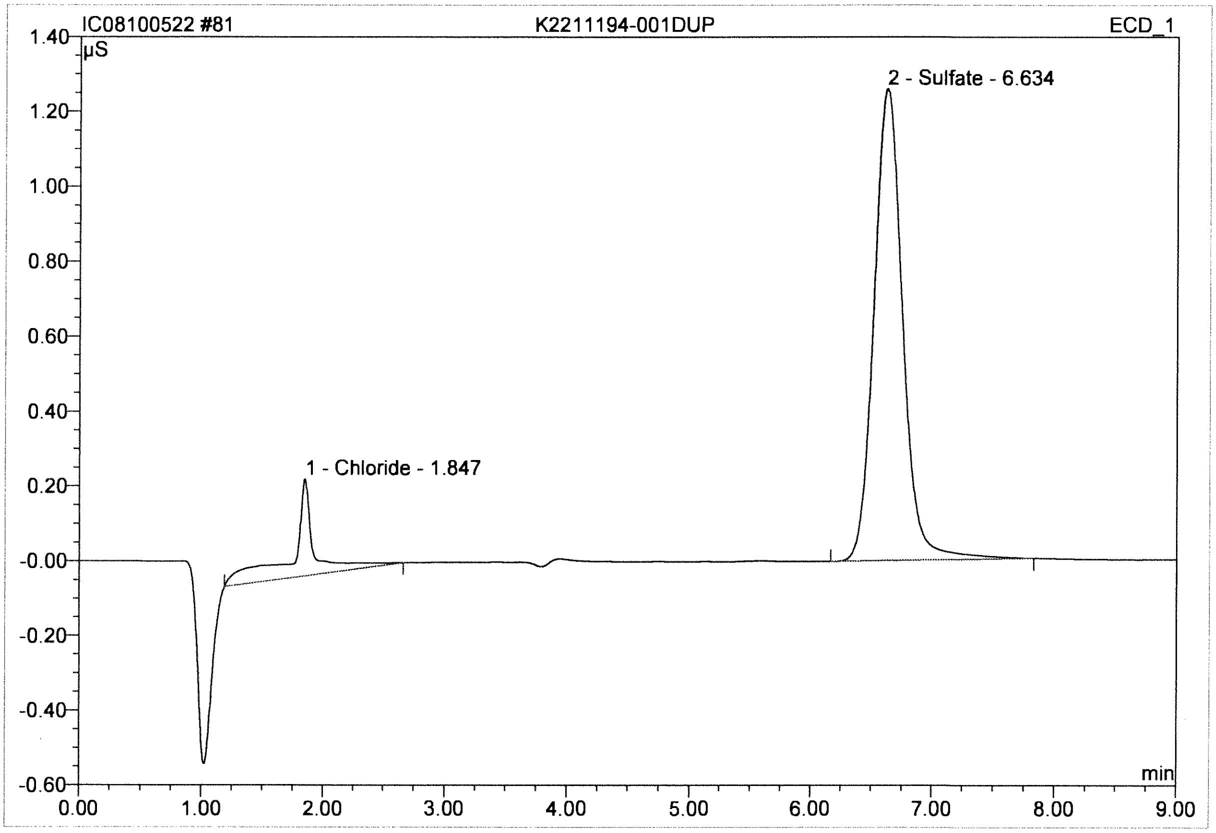
Sample Name:	**K2211194-001**	*Injection Volume:*	**5.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**200.0000**
Recording Time:	**10/6/2022 10:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.258	0.056	14.98	134.497	BMB
2	6.63	Sulfate	1.174	0.317	85.02	1029.694	BMB
Total:			1.432	0.373	100.00	1164.191	

81 K2211194-001DUP

Sample Name:	**K2211194-001DUP**	*Injection Volume:*	**5.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**200.0000**
Recording Time:	**10/6/2022 10:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.258	0.055	13.87	132.966	BMB
2	6.63	Sulfate	1.259	0.343	86.13	1114.025	BMB
Total:			1.516	0.398	100.00	1246.991	

Before

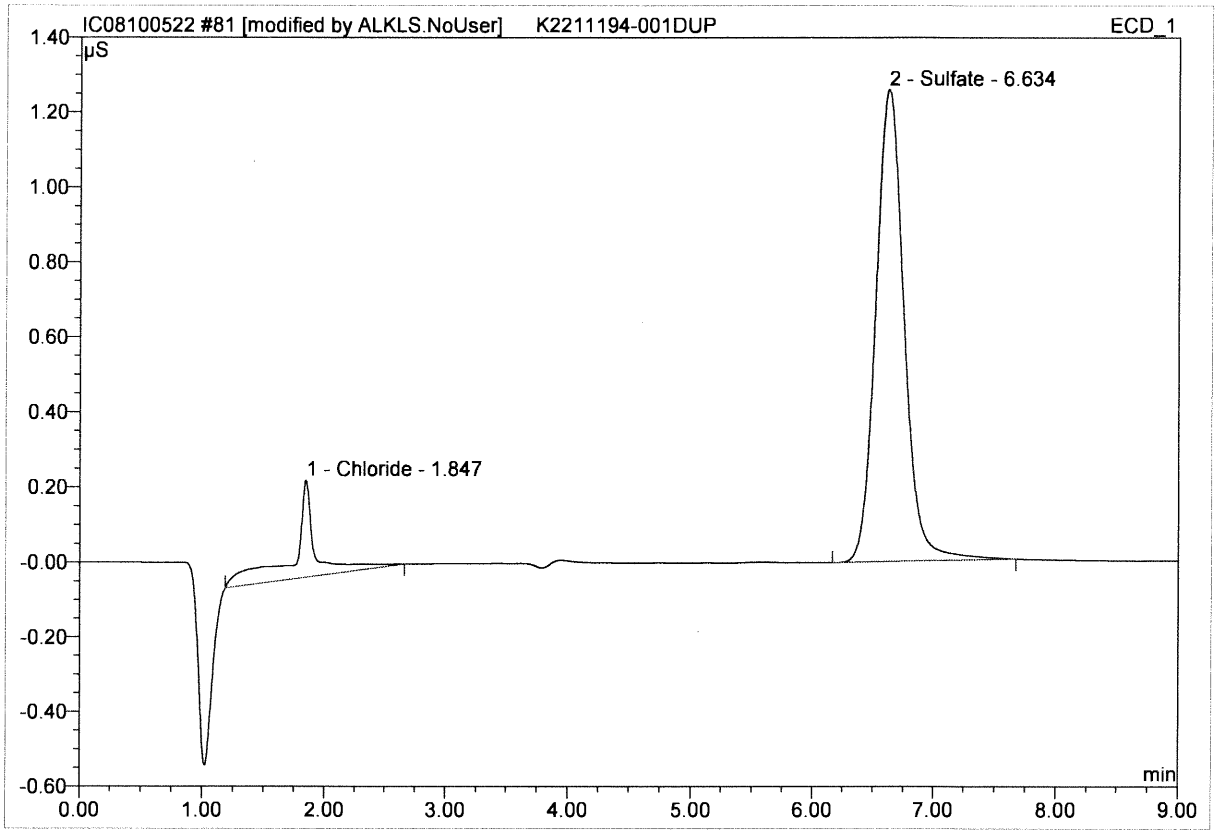
OCT 07

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

81 K2211194-001DUP

Sample Name:	**K2211194-001DUP**	*Injection Volume:*	**5.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**200.0000**
Recording Time:	**10/6/2022 10:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.258	0.055	13.94	132.966	BMB
2	6.63	Sulfate	1.258	0.341	86.06	1106.672	BMB*
Total:			1.516	0.396	100.00	1239.638	

After
Initials NF

OCT 07

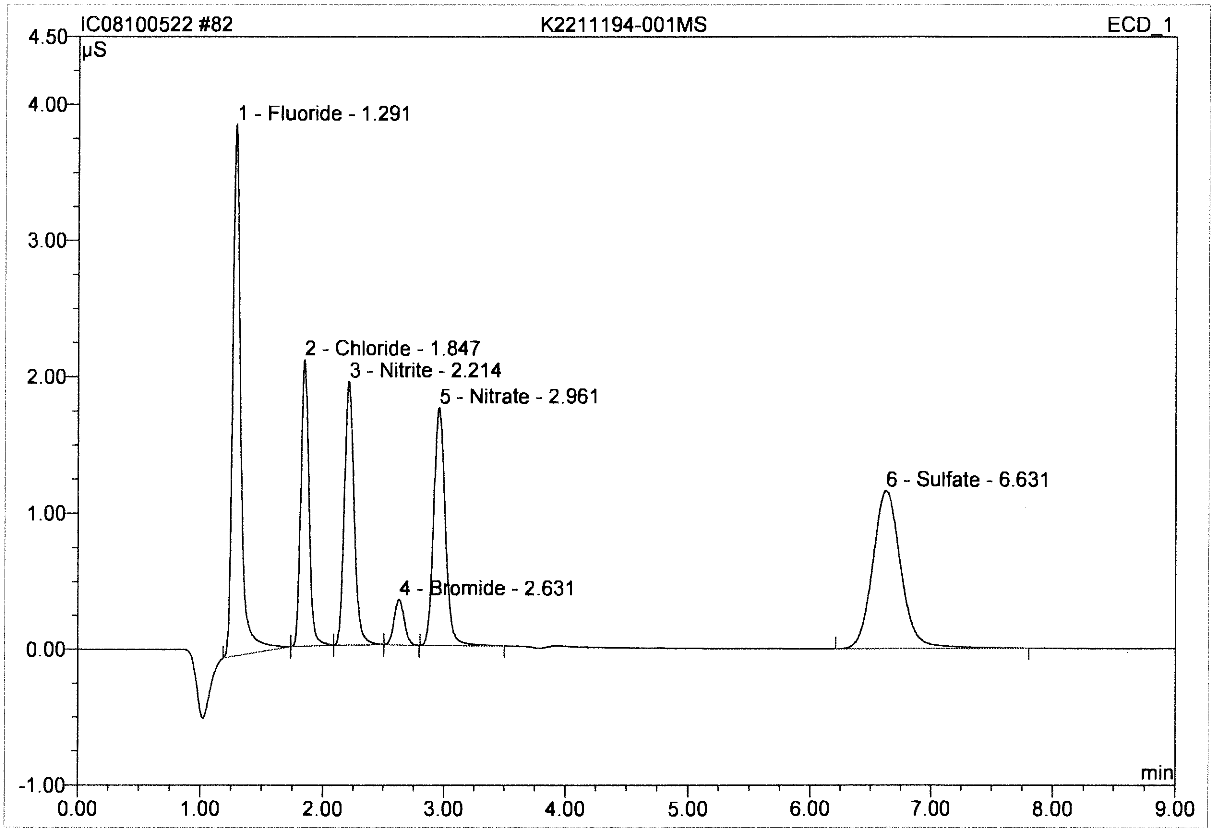
☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

82 K2211194-001MS

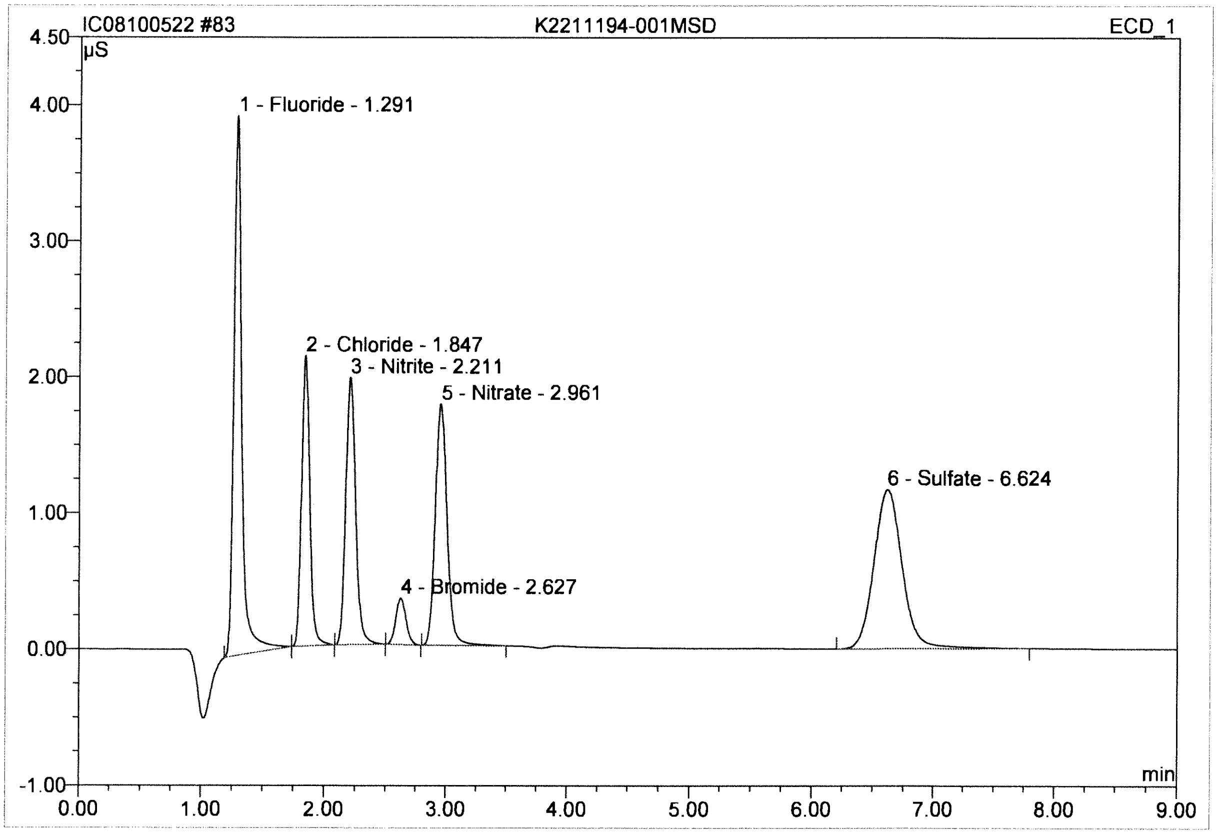
Sample Name:	**K2211194-001MS**	*Injection Volume:*	**5.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**400.0000**
Recording Time:	**10/6/2022 10:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.901	0.307	25.72	853.284	BMB
2	1.85	Chloride	2.102	0.164	13.76	790.299	bMB
3	2.21	Nitrite	1.932	0.179	14.99	378.928	bMB
4	2.63	Bromide	0.337	0.033	2.75	394.443	BMB
5	2.96	Nitrate	1.746	0.197	16.53	380.563	BMB
6	6.63	Sulfate	1.159	0.313	26.25	2033.963	BMB
Total:			11.178	1.192	100.00	4831.480	

83 K2211194-001MSD

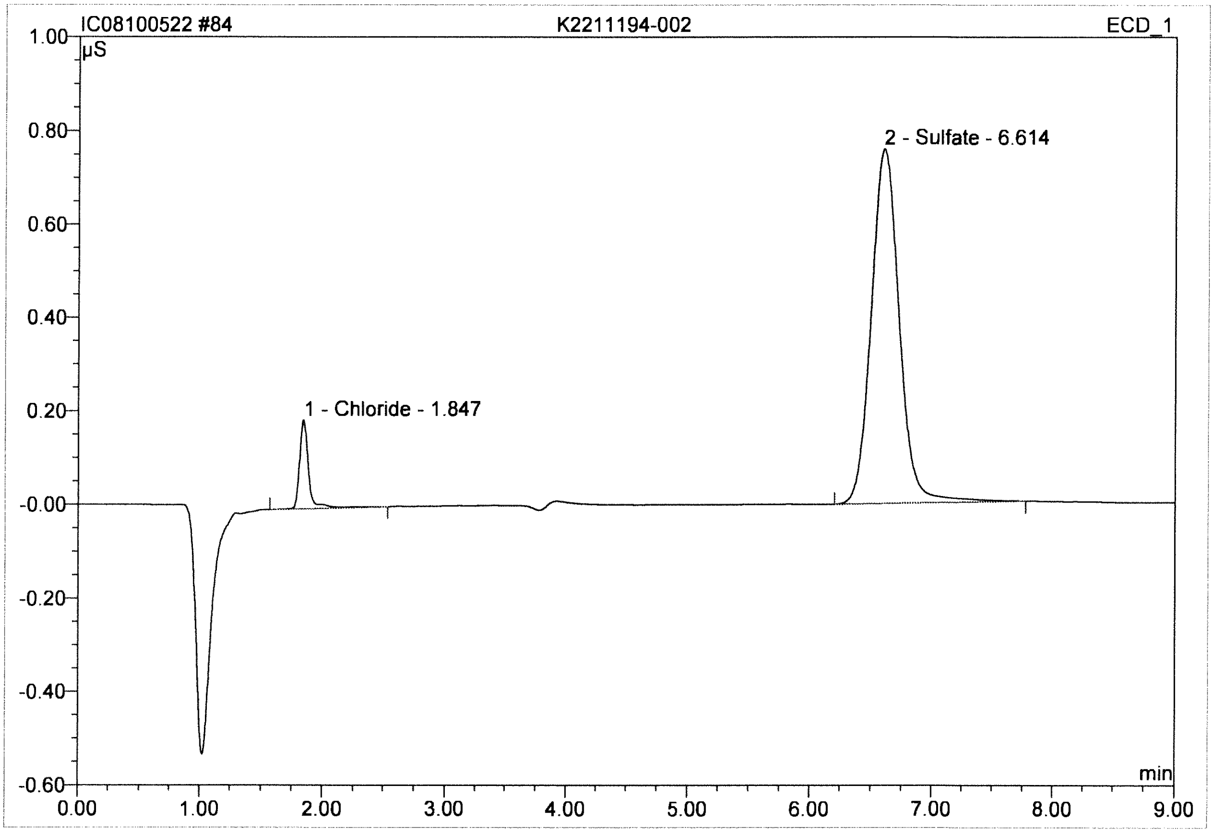
Sample Name:	**K2211194-001MSD**	*Injection Volume:*	**5.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**400.0000**
Recording Time:	**10/6/2022 10:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.968	0.312	25.83	868.177	BMB
2	1.85	Chloride	2.133	0.166	13.77	801.396	bMB
3	2.21	Nitrite	1.964	0.182	15.02	384.962	BMB
4	2.63	Bromide	0.342	0.033	2.76	400.107	BMB
5	2.96	Nitrate	1.773	0.200	16.57	386.615	BMB
6	6.62	Sulfate	1.166	0.315	26.05	2045.343	BMB
Total:			11.346	1.208	100.00	4886.600	

84 K2211194-002

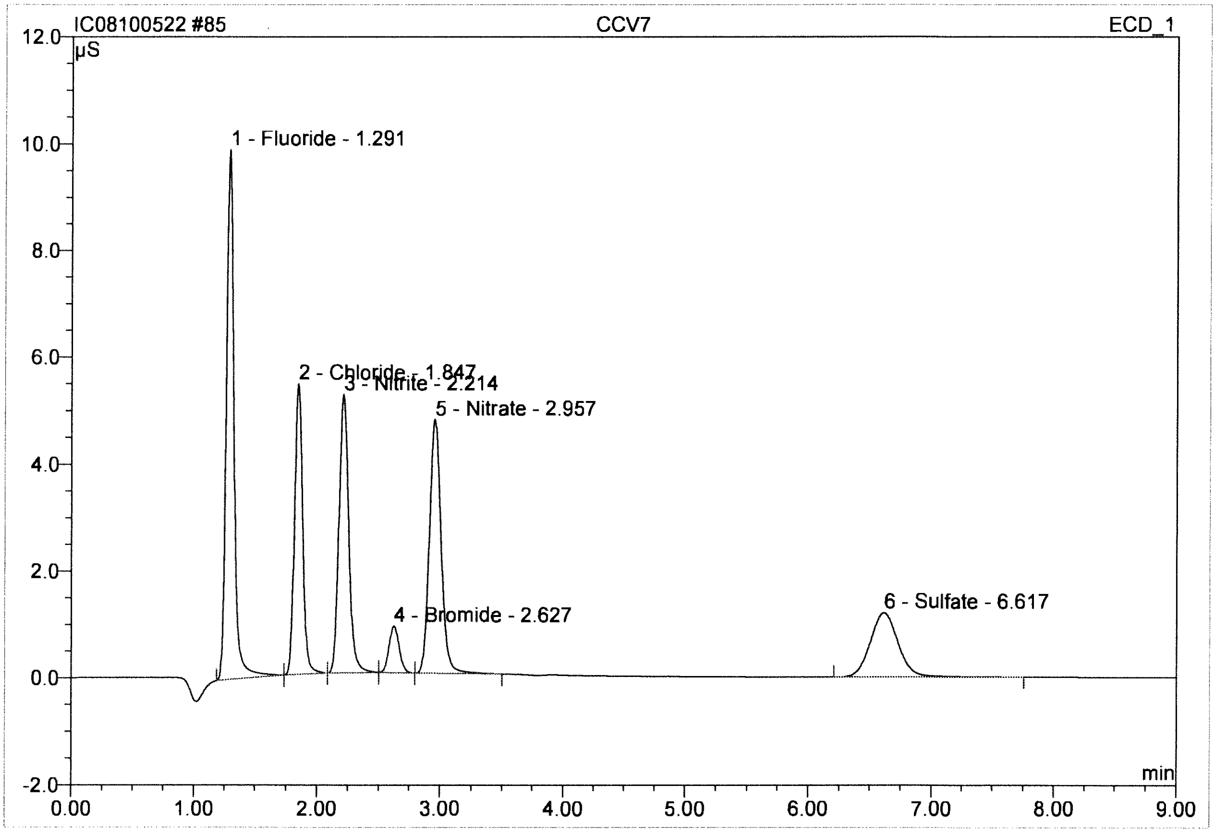
Sample Name:	**K2211194-002**	*Injection Volume:*	**5.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 11:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.190	0.016	7.56	9.930	BMB
2	6.61	Sulfate	0.759	0.202	92.44	163.795	BMB
Total:			0.949	0.218	100.00	173.725	

85 CCV7

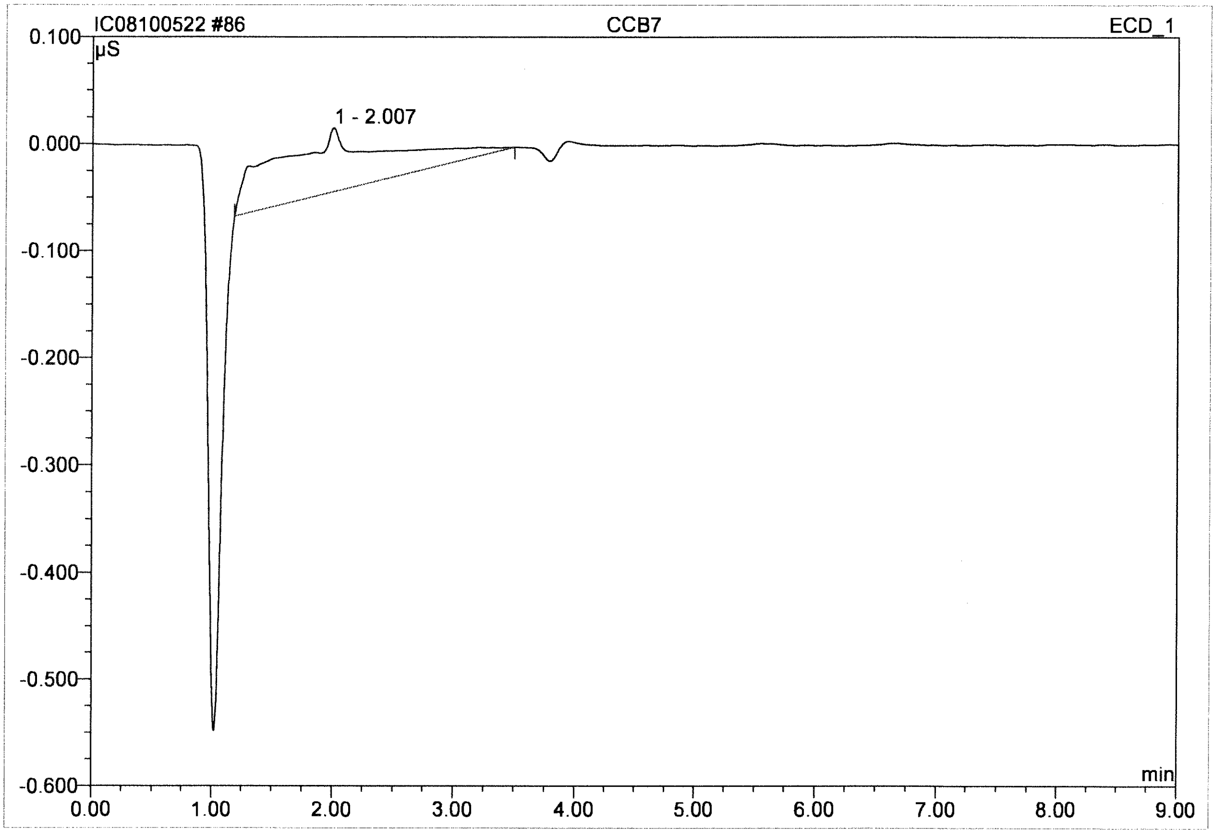
Sample Name:	**CCV7**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 11:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.925	0.734	28.69	5.104	BMB
2	1.85	Chloride	5.442	0.417	16.32	5.028	bMb
3	2.21	Nitrite	5.212	0.478	18.69	2.535	bMb
4	2.63	Bromide	0.878	0.085	3.32	2.554	bMB
5	2.96	Nitrate	4.753	0.527	20.61	2.545	BMB
6	6.62	Sulfate	1.205	0.317	12.37	5.142	BMB
Total:			27.416	2.558	100.00	22.907	

86 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 11:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.01	n.a.	0.059	0.062	100.00	n.a.	BMB
Total:			0.059	0.062	100.00	0.000	

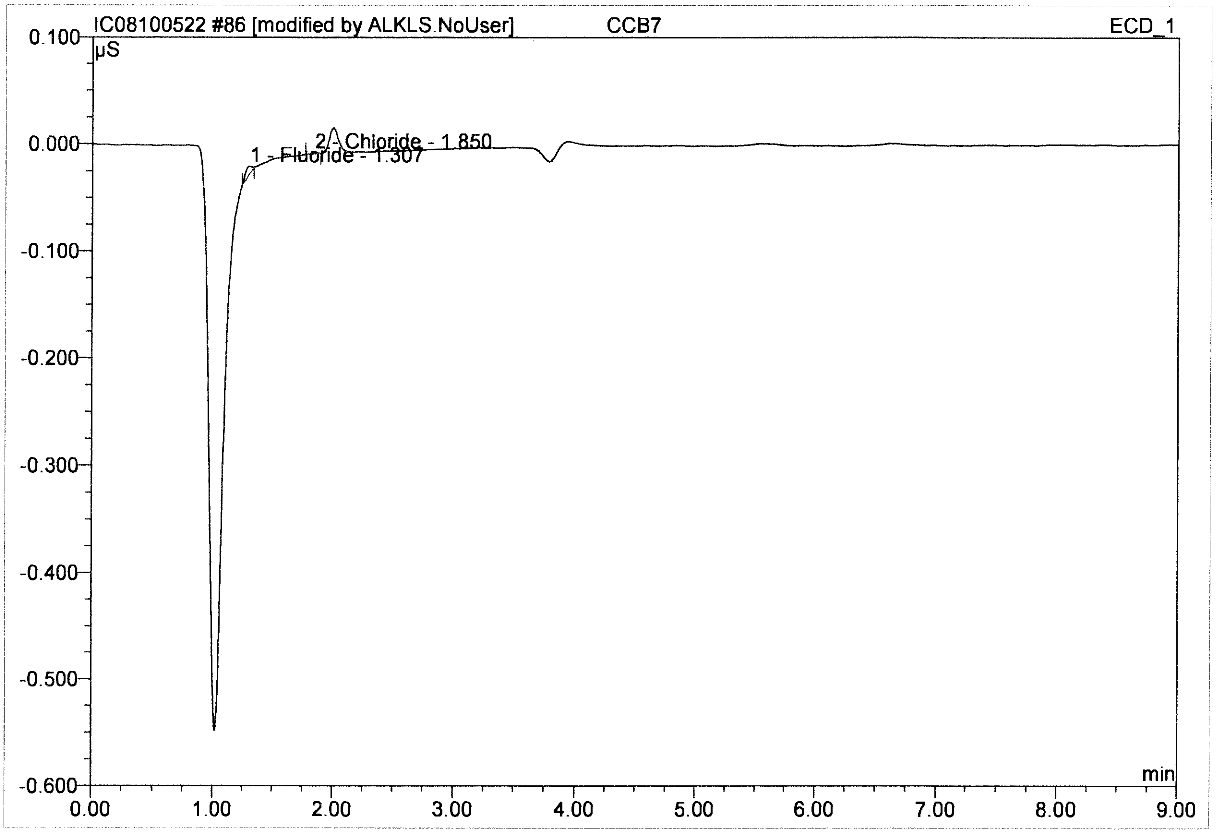
Before

OCT 07

default/Integration

86 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 11:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	0.007	0.001	88.67	0.004	BMB*
2	1.85	Chloride	0.001	0.000	11.33	0.001	BMB*
Total:			0.008	0.001	100.00	0.004	

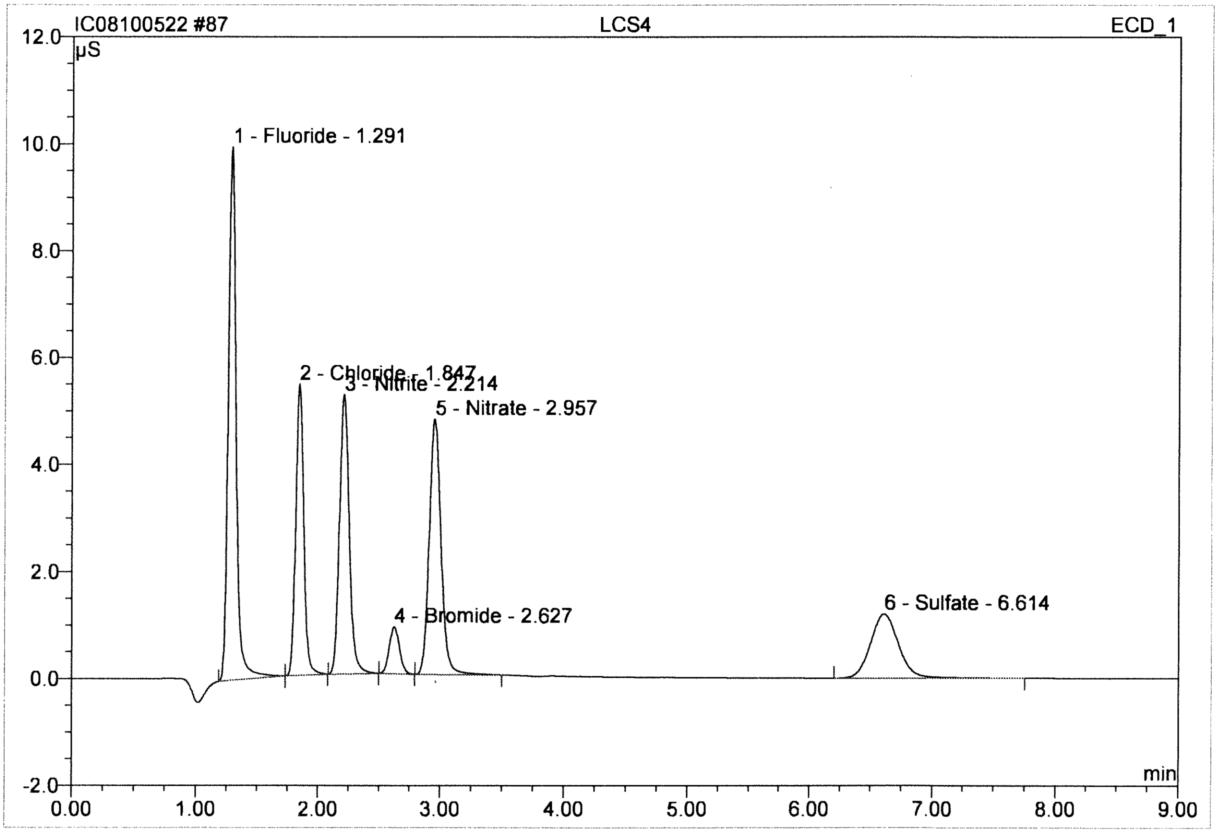
After
Initials NF

OCT 07

☒ Wrong Peak/Peak not Found
☒ Baseline/shoulder Incorrect
☐ Other

87 LCS4

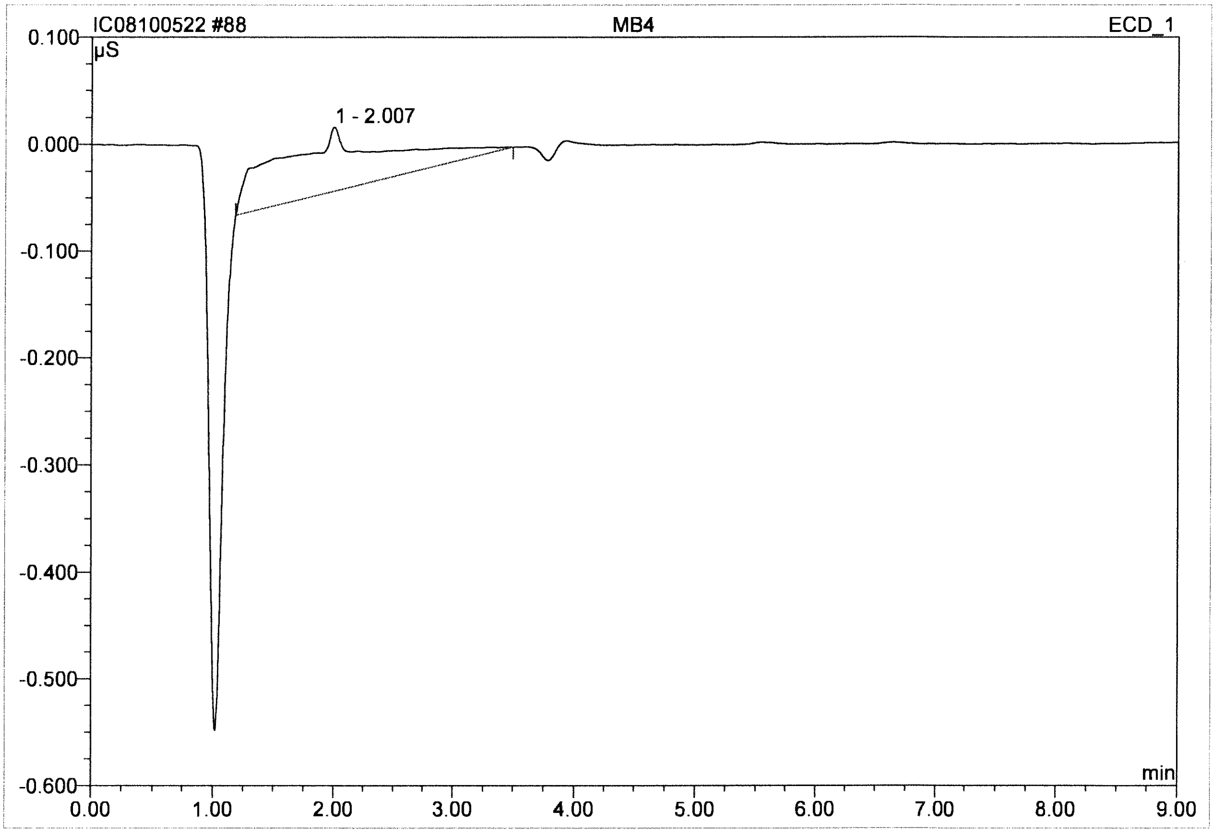
Sample Name:	**LCS4**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 11:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.971	0.738	28.80	5.131	BMB
2	1.85	Chloride	5.437	0.417	16.30	5.028	bMB
3	2.21	Nitrite	5.213	0.479	18.70	2.539	BMB
4	2.63	Bromide	0.877	0.085	3.32	2.555	BMB
5	2.96	Nitrate	4.766	0.528	20.62	2.549	BMB
6	6.61	Sulfate	1.197	0.314	12.27	5.106	BMB
Total:			27.462	2.562	100.00	22.908	

88 MB4

Sample Name:	**MB4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 12:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



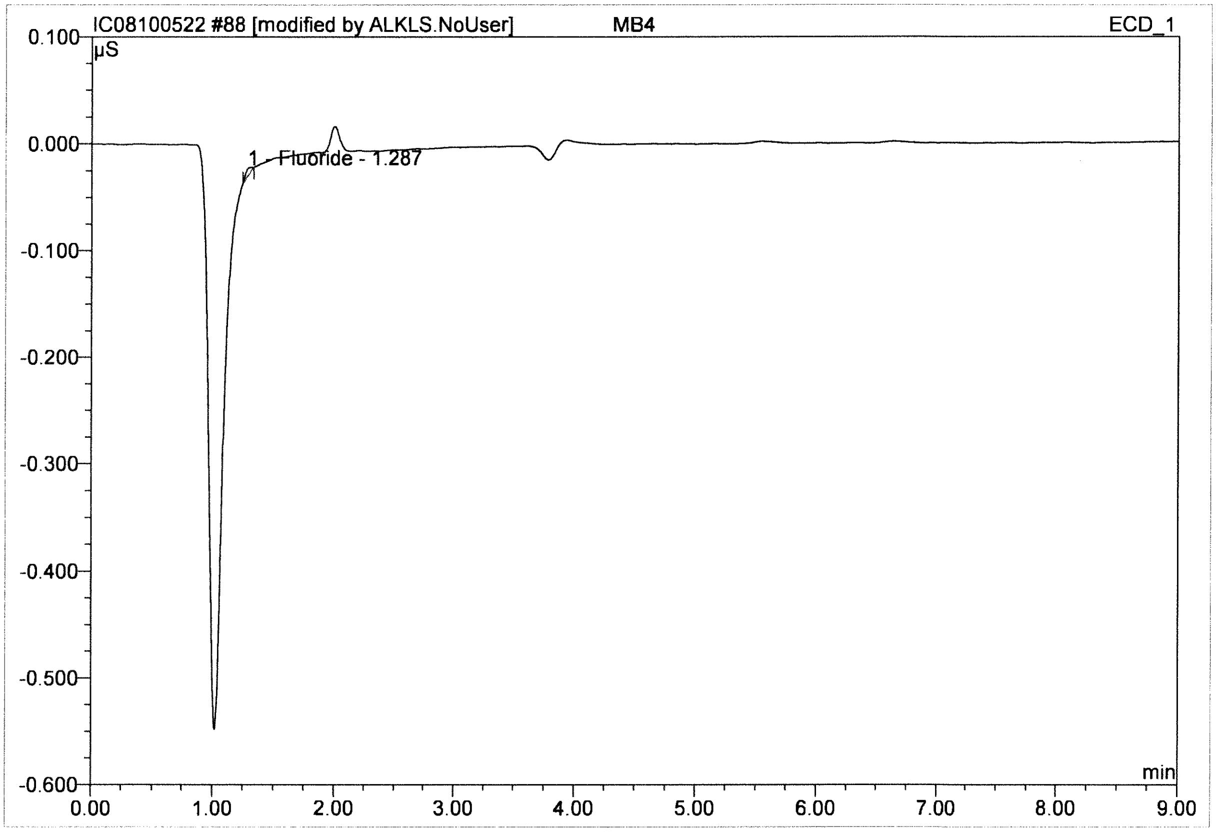
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.01	n.a.	0.060	0.061	100.00	n.a.	BMB
Total:			0.060	0.061	100.00	0.000	

Before

OCT 07

88 MB4

Sample Name:	**MB4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 12:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.007	0.000	100.00	0.003	BMB*
Total:			0.007	0.000	100.00	0.003	

After
Initials NF

OCT 07

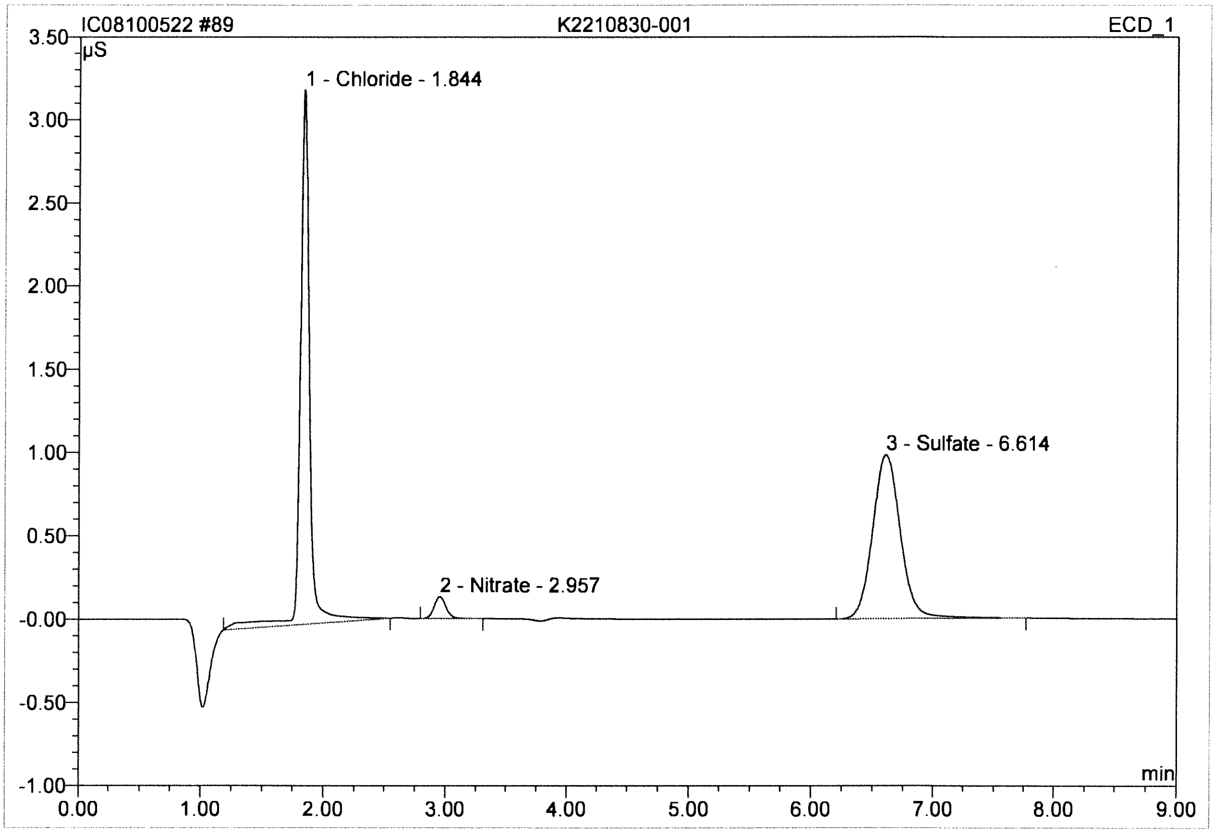
☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

89 K2210830-001

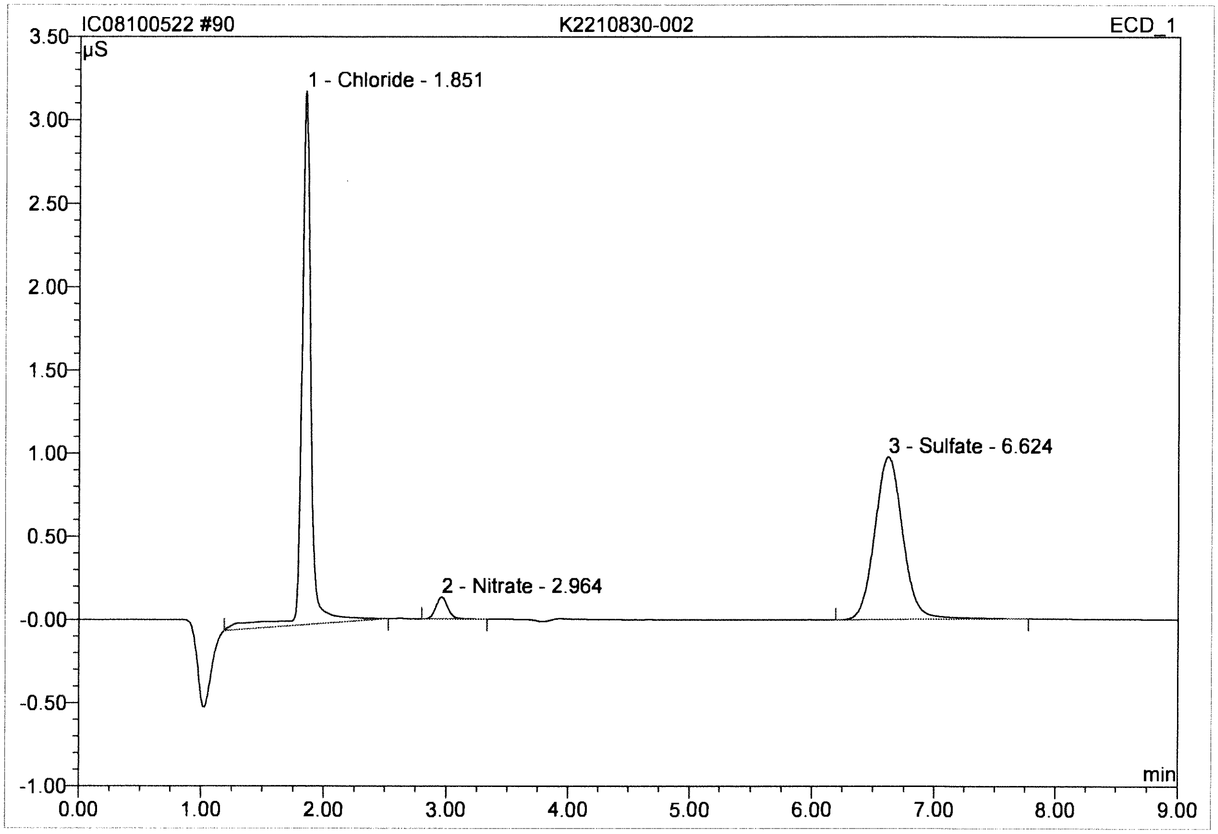
Sample Name:	**K2210830-001**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/6/2022 12:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.84	Chloride	3.208	0.283	50.82	340.983	BMB
2	2.96	Nitrate	0.131	0.015	2.65	7.138	BMB
3	6.61	Sulfate	0.982	0.259	46.53	421.088	BMB
Total:			4.322	0.557	100.00	769.209	

90 K2210830-002

Sample Name:	**K2210830-002**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/6/2022 12:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

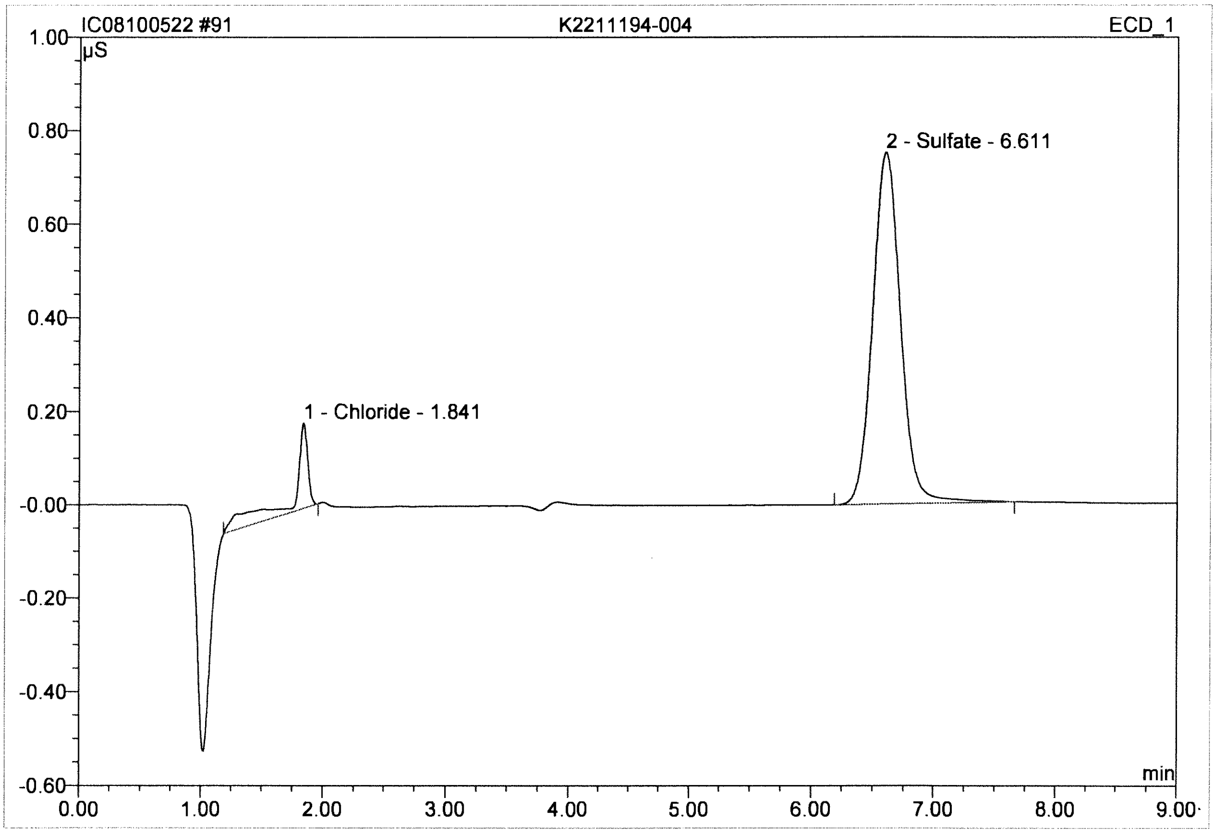


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	3.202	0.283	50.97	341.116	BMB
2	2.96	Nitrate	0.132	0.015	2.70	7.228	BMB
3	6.62	Sulfate	0.976	0.257	46.33	418.203	BMB
Total:			4.309	0.556	100.00	766.548	

91 K2211194-004

F

Sample Name:	**K2211194-004**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 12:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

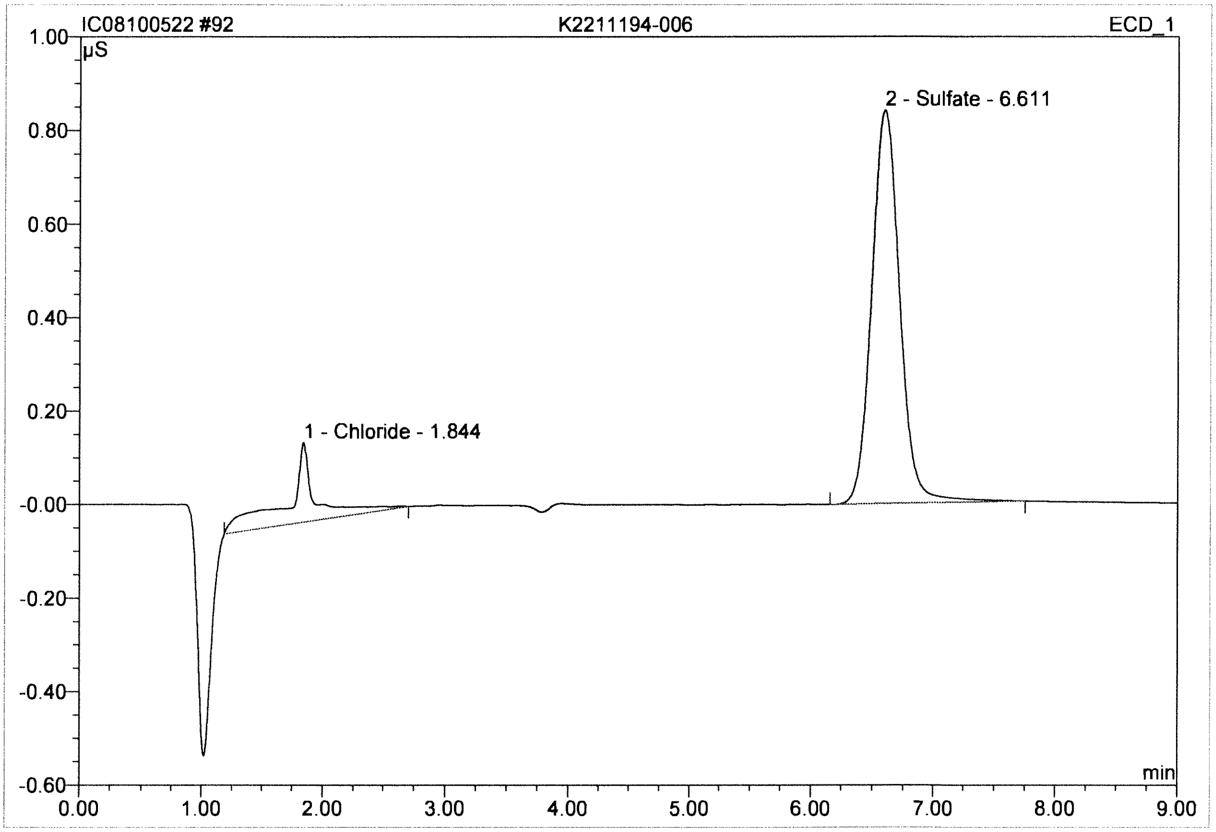


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.84	Chloride	0.183	0.026	11.74	15.877	BMB
2	6.61	Sulfate	0.752	0.198	88.26	160.915	BMB
Total:			0.935	0.224	100.00	176.792	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

92 K2211194-006

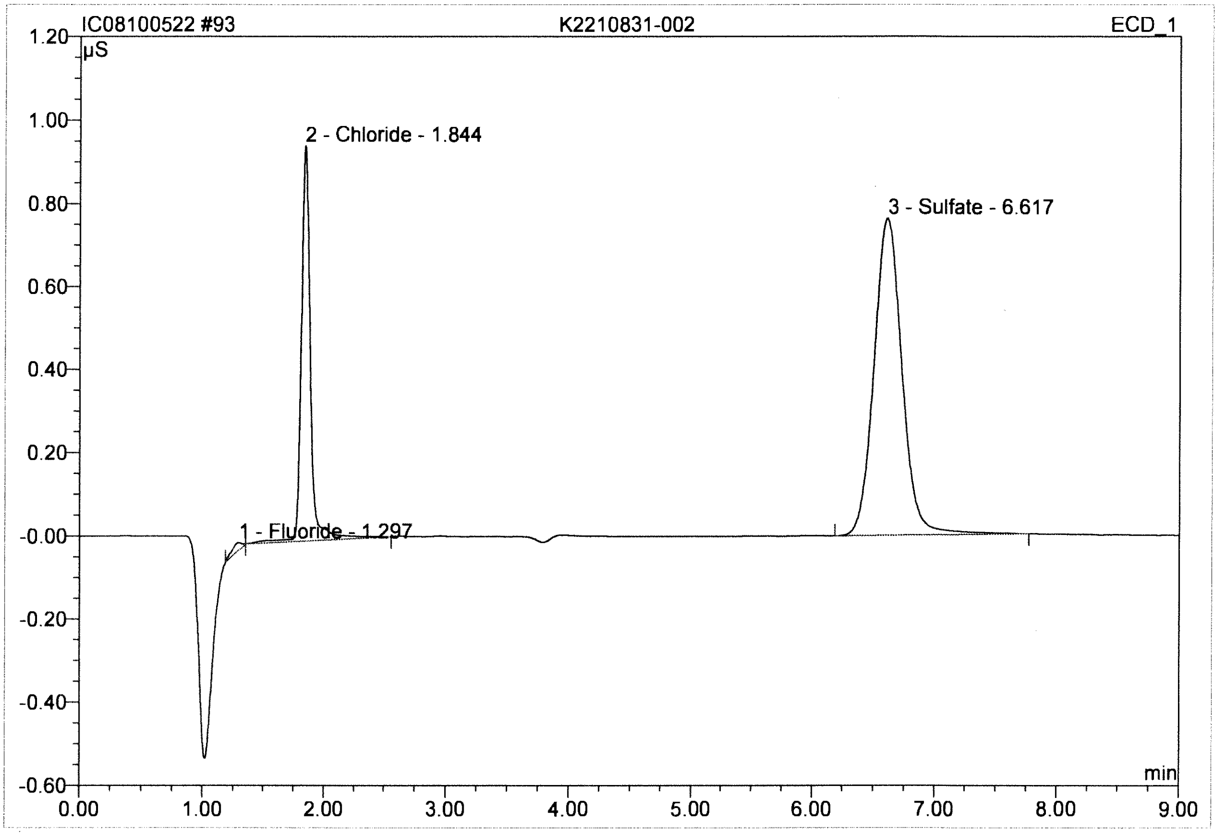
Sample Name:	**K2211194-006**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/6/2022 12:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.84	Chloride	0.170	0.046	17.29	55.952	BMB
2	6.61	Sulfate	0.841	0.222	82.71	361.081	BMB
Total:			1.011	0.269	100.00	417.033	

93 K2210831-002

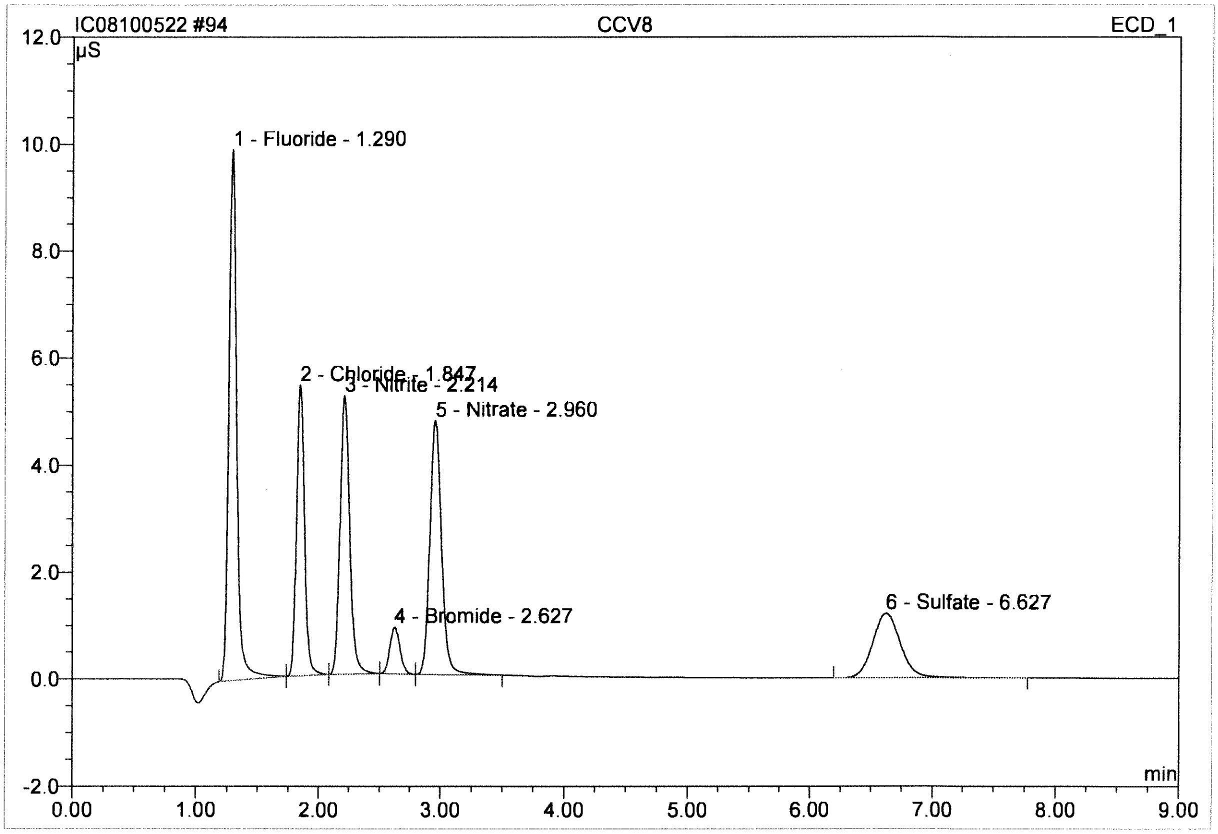
Sample Name:	**K2210831-002**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**200.0000**
Recording Time:	**10/6/2022 12:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.018	0.002	0.67	2.646	BMB
2	1.84	Chloride	0.950	0.082	28.58	196.525	bMB
3	6.62	Sulfate	0.763	0.202	70.75	656.074	BMB
Total:			1.732	0.285	100.00	855.245	

94 CCV8

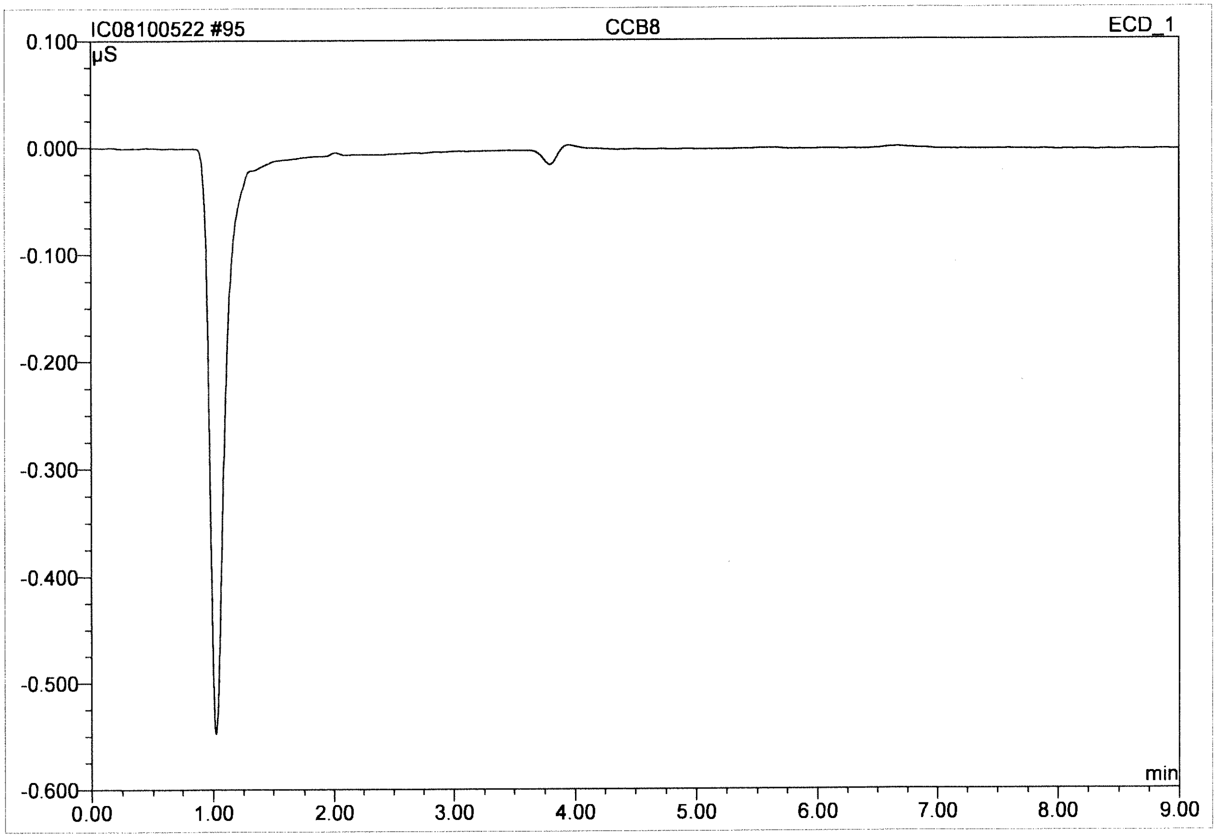
Sample Name:	**CCV8**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 13:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.927	0.735	28.67	5.110	BMB
2	1.85	Chloride	5.434	0.418	16.31	5.033	bMb
3	2.21	Nitrite	5.208	0.479	18.69	2.539	bMB
4	2.63	Bromide	0.877	0.085	3.32	2.555	BMB
5	2.96	Nitrate	4.752	0.527	20.58	2.545	BMB
6	6.63	Sulfate	1.210	0.318	12.43	5.173	BMB
Total:			27.408	2.562	100.00	22.955	

95 CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 13:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Ion Chromatography Data Quality Report

Inorganics

	Yes	No	N/A
1. Holding times met for all samples analyzed?	☑	☐	☐
2. Are dilutions within upper limits of the curve?	☑	☐	☐
3. Were peaks manually integrated?	☑	☐	☐
a.)Does DOD QUAPP apply?	☑	☐	☐
4. Are detection limits reported correctly?	☑	☐	☐
5. Are all quality control criteria met?	☑	☐	☐
a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency?	☑	☐	☐
b. Are CCV's and CCB's all within acceptance limits? All CCBs within limits.	☑	☐	☐
c. Are results for Method Blanks all ND? MB's within limits.	☑	☐	☐
d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.)	☑	☐	☐
e. Are all exceptions explained? ~~90560A F, SO4 PQL values listed as 0.2, Should be 0.1. for dil factor of 1~~. Fixed.	☑	☐	☐
6. Are all samples labelled correctly?	☑	☐	☐

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS	ALS ID# 22-GEN-01- 88A		Expires: 10/6/2022	
Fluoride	True Value=5.0ppm	10K ALS ID#22GEN-01-84C		2/22/2023
Chloride	True Value=5.0ppm	10K ALS ID#22GEN-01-84D		3/21/2023
Nitrite	True Value=2.5ppm	10K ALS ID#22GEN-01-43H		10/26/2022
Bromide	True Value=2.5ppm	10K ALS ID#22GEN-01-84A		3/21/2023
Nitrate	True Value=2.5ppm	10K ALS ID#22GEN-01-84B		3/21/2023
Sulfate	True Value=5.0ppm	10K ALS ID#22GEN-01-84E		3/21/2023
CCV	ALS ID# 22-GEN-01- 88E		Expires: 10/6/2022	
Fluoride	True Value=5.0ppm	10K ALS ID#22GEN-01-82L		3/16/2023
Chloride	True Value=5.0ppm	10K ALS ID#22GEN-01-82M		3/16/2023
Nitrite	True Value=2.5ppm	10K ALS ID#22GEN-01-77I		2/27/2023
Bromide	True Value=2.5ppm	10K ALS ID#22GEN-01-82J		3/16/2023
Nitrate	True Value=2.5ppm	10K ALS ID#22GEN-01-82K		3/16/2023
Sulfate	True Value=5.0ppm	10K ALS ID#22GEN-01-82N		3/16/2023
Spike 100/50 ppm	ALS ID# 22-GEN-01- 88F		Expires: 10/6/2022	
Fluoride	10K ALS ID#22GEN-01-82L			3/16/2023
Chloride	10K ALS ID#22GEN-01-82M			3/16/2023
Nitrite	10K ALS ID#22GEN-01-77I			2/27/2023
Bromide	10K ALS ID#22GEN-01-82J			3/16/2023
Nitrate	10K ALS ID#22GEN-01-82K			3/16/2023
Sulfate	10K ALS ID#22GEN-01-82N			3/16/2023

Pipetes#:

037544E	Mr Burns	IC Not yours	208613Z	18100839	18094324	39487243	41883884	18112947
	People Eater	Purple Papa	IC Mama	J17591H				

Analyst: NF Date: 10/6/2022

First Review: NF Date: 10/7/2022

Final Review: RRM Date: 10/7/22

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2210382-002	Bromide	N/A		Water	0.05 mg/L	5 mL	0.053 mg/L	1	0.006	0.050			10/6/22 20:55:00	N	III
K2210382-002	Bromide	N/A		Water	0.05 mg/L	5 mL	0.05 mg/L J	1	0.004	0.10			10/6/22 20:55:00	N	III
K2210382-002	Chloride	N/A		Water	0.10 mg/L	5 mL	0.10 mg/L J	1	0.007	0.10			10/6/22 20:55:00	N	III
K2210382-002	Chloride	N/A		Water	0.10 mg/L	5 mL	0.10 mg/L J	1	0.03	0.10			10/6/22 20:55:00	N	III
K2210382-002	Fluoride	N/A		Water	0.11 mg/L	5 mL	0.11 mg/L	1	0.005	0.10			10/6/22 20:55:00	N	III
K2210382-002	Fluoride	N/A		Water	0.11 mg/L	5 mL	0.11 mg/L	1	0.003	0.10			10/6/22 20:55:00	N	III
K2210382-002	Nitrate as Nitrogen	N/A		Water	0.05 mg/L	5 mL	0.048 mg/L J	1	0.007	0.050			10/6/22 20:55:00	N	III
K2210382-002	Nitrite as Nitrogen	N/A		Water	0.05 mg/L	5 mL	0.047 mg/L J	1	0.003	0.050			10/6/22 20:55:00	N	III
K2210382-002	Sulfate	N/A		Water	0.11 mg/L	5 mL	0.11 mg/L	1	0.02	0.10			10/6/22 20:55:00	N	III
K2210382-002	Sulfate	N/A		Water	0.11 mg/L	5 mL	0.11 mg/L	1	0.01	0.10			10/6/22 20:55:00	N	III
K2210383-002	Bromide	N/A		Water	0.04 mg/L	5 mL	0.04 mg/L J	1	0.004	0.10			10/6/22 20:44:00	N	III
K2210383-002	Bromide	N/A		Water	0.04 mg/L	5 mL	0.041 mg/L J	1	0.006	0.050			10/6/22 20:44:00	N	III
K2210383-002	Chloride	N/A		Water	0.08 mg/L	5 mL	0.08 mg/L J	1	0.03	0.10			10/6/22 20:44:00	N	III
K2210383-002	Chloride	N/A		Water	0.08 mg/L	5 mL	0.08 mg/L J	1	0.007	0.10			10/6/22 20:44:00	N	III
K2210383-002	Fluoride	N/A		Water	0.05 mg/L	5 mL	0.05 mg/L J	1	0.003	0.10			10/6/22 20:44:00	N	III
K2210383-002	Fluoride	N/A		Water	0.05 mg/L	5 mL	0.05 mg/L J	1	0.005	0.10			10/6/22 20:44:00	N	III
K2210383-002	Nitrate as Nitrogen	N/A		Water	0.02 mg/L	5 mL	0.019 mg/L J	1	0.007	0.050			10/6/22 20:44:00	N	III
K2210383-002	Nitrite as Nitrogen	N/A		Water	0.02 mg/L	5 mL	0.018 mg/L J	1	0.003	0.050			10/6/22 20:44:00	N	III
K2210383-002	Sulfate	N/A		Water	0.07 mg/L	5 mL	0.07 mg/L J	1	0.01	0.10			10/6/22 20:44:00	N	III
K2210383-002	Sulfate	N/A		Water	0.07 mg/L	5 mL	0.07 mg/L J	1	0.02	0.10			10/6/22 20:44:00	N	III
K2210968-001	Chloride	N/A		Ground Water	1.89 mg/L	5 mL	1.9 mg/L	10	0.3	1.0			10/6/22 22:57:00	N	II
K2210968-001	Sulfate	N/A		Ground Water	0.26 mg/L	5 mL	0.26 mg/L	2	0.08	0.20			10/7/22 10:17:00	N	II
K2210968-002	Chloride	N/A		Ground Water	3.82 mg/L	5 mL	3.8 mg/L	10	0.3	1.0			10/6/22 21:06:00	N	II
K2210968-002	Sulfate	N/A		Ground Water	3.71 mg/L	5 mL	3.7 mg/L	10	0.4	1.0			10/6/22 21:06:00	N	II
K2210968-003	Chloride	N/A		Ground Water	2.89 mg/L	5 mL	2.9 mg/L	10	0.3	1.0			10/6/22 21:50:00	N	II
K2210968-003	Sulfate	N/A		Ground Water	1.17 mg/L	5 mL	1.2 mg/L	10	0.4	1.0			10/6/22 21:50:00	N	II
K2210968-004	Chloride	N/A		Ground Water	4.13 mg/L	5 mL	4.1 mg/L	10	0.3	1.0			10/6/22 23:08:00	N	II
K2210968-004	Sulfate	N/A		Ground Water	25.27 mg/L	5 mL	25.3 mg/L	10	0.4	1.0			10/6/22 23:08:00	N	II
K2210968-005	Chloride	N/A		Ground Water	6.00 mg/L	5 mL	6.0 mg/L	10	0.3	1.0			10/6/22 23:19:00	N	II
K2210968-005	Sulfate	N/A		Ground Water	0.06 mg/L	5 mL	0.20 mg/L U	2	0.08	0.20			10/7/22 10:27:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2210968-006	Chloride	N/A		Ground Water	5.69 mg/L	5 mL	5.7 mg/L	10	0.3	1.0			10/6/22 23:30:00	N	II
K2210968-006	Sulfate	N/A		Ground Water	0.10 mg/L	5 mL	0.10 mg/L J	2	0.08	0.20			10/7/22 11:46:00	N	II
K2210968-007	Chloride	N/A		Ground Water	37.68 mg/L	5 mL	37.7 mg/L	50	1.5	5.0			10/6/22 23:41:00	N	II
K2210968-007	Sulfate	N/A		Ground Water	10.61 mg/L	5 mL	10.6 mg/L	50	2.0	5.0			10/6/22 23:41:00	N	II
K2210968-008	Chloride	N/A		Ground Water	405.69 mg/L	5 mL	406 mg/L	100	3	10			10/7/22 11:57:00	N	II
K2210968-008	Sulfate	N/A		Ground Water	0.68 mg/L	5 mL	0.68 mg/L	2	0.08	0.20			10/7/22 12:08:00	N	II
K2210968-009	Chloride	N/A		Ground Water	54.22 mg/L	5 mL	54.2 mg/L	50	1.5	5.0			10/7/22 00:03:00	N	II
K2210968-009	Sulfate	N/A		Ground Water	3.01 mg/L	5 mL	3.01 mg/L	2	0.08	0.20			10/7/22 12:30:00	N	II
K2210968-010	Chloride	N/A		Ground Water	3.90 mg/L	5 mL	3.90 mg/L	2	0.06	0.20			10/7/22 12:40:00	N	II
K2210968-010	Sulfate	N/A		Ground Water	0.35 mg/L	5 mL	0.35 mg/L	2	0.08	0.20			10/7/22 12:40:00	N	II
K2210968-011	Chloride	N/A		Ground Water	2.81 mg/L	5 mL	2.8 mg/L	10	0.3	1.0			10/7/22 13:36:00	N	II
K2210968-011	Sulfate	N/A		Ground Water	17.73 mg/L	5 mL	17.7 mg/L	10	0.4	1.0			10/7/22 13:36:00	N	II
K2211194-001	Sulfate	N/A		Water	862.06 mg/L	5 mL	862 mg/L	250	10	25			10/7/22 14:14:00	N	IV
K2211194-002	Sulfate	N/A		Water	159.94 mg/L	5 mL	160 mg/L	50	2.0	5.0			10/7/22 14:25:00	N	IV
K2211194-003	Sulfate	N/A		Water	117.97 mg/L	5 mL	118 mg/L	50	2.0	5.0			10/7/22 14:36:00	N	IV
K2211194-004	Sulfate	N/A		Water	163.76 mg/L	5 mL	164 mg/L	50	2.0	5.0			10/7/22 14:47:00	N	IV
K2211194-005	Sulfate	N/A		Water	39.59 mg/L	5 mL	39.6 mg/L	50	2.0	5.0			10/7/22 14:58:00	N	IV
K2211194-006	Sulfate	N/A		Water	363.43 mg/L	5 mL	363 mg/L	100	4	10			10/7/22 15:09:00	N	IV
K2211695-001	Chloride	N/A		Drinking Water	11.20 mg/L	5 mL	11.2 mg/L	2	0.06	0.20			10/7/22 13:47:00	N	I
K2211695-001	Nitrate as Nitrogen	N/A		Drinking Water	0.01 mg/L	5 mL	0.10 mg/L U	2	0.02	0.10			10/7/22 13:47:00	N	I
K2211695-001	Sulfate	N/A		Drinking Water	2.30 mg/L	5 mL	2.30 mg/L	2	0.08	0.20			10/7/22 13:47:00	N	I
K2211696-001	Nitrate as Nitrogen	N/A		Drinking Water	0.19 mg/L	5 mL	0.19 mg/L	2	0.02	0.10			10/7/22 13:58:00	N	I
K2211705-001	Nitrate as Nitrogen	N/A		Water	2.77 mg/L	5 mL	2.77 mg/L	2	0.02	0.10			10/7/22 11:03:00	N	I
K2211705-001	Nitrite as Nitrogen	N/A		Water	0.05 mg/L	5 mL	0.05 mg/L J	2	0.01	0.10			10/7/22 11:03:00	N	I
KQ2217427-01	Bromide	CCV		Ground Water	2.56 mg/L	5 mL	2.56 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Bromide	CCV		Ground Water	2.56 mg/L	5 mL	2.56 mg/L	1					10/6/22 20:00:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-01	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Fluoride	CCV		Ground Water	5.18 mg/L	5 mL	5.18 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Fluoride	CCV		Ground Water	5.18 mg/L	5 mL	5.18 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Nitrate as Nitrogen	CCV		Ground Water	2.54 mg/L	5 mL	2.54 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Nitrite as Nitrogen	CCV		Ground Water	2.53 mg/L	5 mL	2.53 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Sulfate	CCV		Ground Water	5.25 mg/L	5 mL	5.25 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-01	Sulfate	CCV		Ground Water	5.25 mg/L	5 mL	5.25 mg/L	1					10/6/22 20:00:00	N	II
KQ2217427-02	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Fluoride	CCV		Ground Water	5.12 mg/L	5 mL	5.12 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Fluoride	CCV		Ground Water	5.12 mg/L	5 mL	5.12 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Nitrate as Nitrogen	CCV		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Nitrite as Nitrogen	CCV		Ground Water	2.53 mg/L	5 mL	2.53 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Sulfate	CCV		Ground Water	5.15 mg/L	5 mL	5.15 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-02	Sulfate	CCV		Ground Water	5.15 mg/L	5 mL	5.15 mg/L	1					10/6/22 22:34:00	N	II
KQ2217427-03	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Fluoride	CCV		Ground Water	5.17 mg/L	5 mL	5.17 mg/L	1					10/7/22 00:47:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 9056A/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-03	Fluoride	CCV		Ground Water	5.17 mg/L	5 mL	5.17 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Nitrate as Nitrogen	CCV		Ground Water	2.54 mg/L	5 mL	2.54 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Nitrite as Nitrogen	CCV		Ground Water	2.53 mg/L	5 mL	2.53 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Sulfate	CCV		Ground Water	5.22 mg/L	5 mL	5.22 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-03	Sulfate	CCV		Ground Water	5.22 mg/L	5 mL	5.22 mg/L	1					10/7/22 00:47:00	N	II
KQ2217427-04	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Fluoride	CCV		Ground Water	5.05 mg/L	5 mL	5.05 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Fluoride	CCV		Ground Water	5.05 mg/L	5 mL	5.05 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Nitrate as Nitrogen	CCV		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Nitrite as Nitrogen	CCV		Ground Water	2.53 mg/L	5 mL	2.53 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Sulfate	CCV		Ground Water	5.05 mg/L	5 mL	5.05 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-04	Sulfate	CCV		Ground Water	5.05 mg/L	5 mL	5.05 mg/L	1					10/7/22 10:38:00	N	II
KQ2217427-05	Bromide	CCV		Ground Water	2.58 mg/L	5 mL	2.58 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Bromide	CCV		Ground Water	2.58 mg/L	5 mL	2.58 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Chloride	CCV		Ground Water	5.04 mg/L	5 mL	5.04 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Chloride	CCV		Ground Water	5.04 mg/L	5 mL	5.04 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Fluoride	CCV		Ground Water	4.99 mg/L	5 mL	4.99 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Fluoride	CCV		Ground Water	4.99 mg/L	5 mL	4.99 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Nitrate as Nitrogen	CCV		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Nitrite as Nitrogen	CCV		Ground Water	2.54 mg/L	5 mL	2.54 mg/L	1					10/7/22 12:51:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-05	Sulfate	CCV		Ground Water	5.04 mg/L	5 mL	5.04 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-05	Sulfate	CCV		Ground Water	5.04 mg/L	5 mL	5.04 mg/L	1					10/7/22 12:51:00	N	II
KQ2217427-06	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Bromide	CCV		Ground Water	2.57 mg/L	5 mL	2.57 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Chloride	CCV		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Fluoride	CCV		Ground Water	5.14 mg/L	5 mL	5.14 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Fluoride	CCV		Ground Water	5.14 mg/L	5 mL	5.14 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Nitrate as Nitrogen	CCV		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Nitrite as Nitrogen	CCV		Ground Water	2.53 mg/L	5 mL	2.53 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Sulfate	CCV		Ground Water	5.20 mg/L	5 mL	5.20 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-06	Sulfate	CCV		Ground Water	5.20 mg/L	5 mL	5.20 mg/L	1					10/7/22 15:20:00	N	II
KQ2217427-07	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/6/22 20:11:00	N	II
KQ2217427-07	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/6/22 20:11:00	N	II
KQ2217427-07	Chloride	CCB		Ground Water	0.01 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 20:11:00	N	II
KQ2217427-07	Chloride	CCB		Ground Water	0.01 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 20:11:00	N	II
KQ2217427-07	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 20:11:00	N	II
KQ2217427-07	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/6/22 20:11:00	N	II
KQ2217427-07	Nitrate as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/6/22 20:11:00	N	II
KQ2217427-07	Nitrite as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/6/22 20:11:00	N	II
KQ2217427-07	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 20:11:00	N	II
KQ2217427-07	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/6/22 20:11:00	N	II
KQ2217427-08	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/6/22 22:46:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 9056A/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-08	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/6/22 22:46:00	N	II
KQ2217427-08	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 22:46:00	N	II
KQ2217427-08	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 22:46:00	N	II
KQ2217427-08	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 22:46:00	N	II
KQ2217427-08	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/6/22 22:46:00	N	II
KQ2217427-08	Nitrate as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/6/22 22:46:00	N	II
KQ2217427-08	Nitrite as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/6/22 22:46:00	N	II
KQ2217427-08	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 22:46:00	N	II
KQ2217427-08	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/6/22 22:46:00	N	II
KQ2217427-09	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/7/22 00:59:00	N	II
KQ2217427-09	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/7/22 00:59:00	N	II
KQ2217427-09	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 00:59:00	N	II
KQ2217427-09	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 00:59:00	N	II
KQ2217427-09	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/7/22 00:59:00	N	II
KQ2217427-09	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/7/22 00:59:00	N	II
KQ2217427-09	Nitrate as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/7/22 00:59:00	N	II
KQ2217427-09	Nitrite as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/7/22 00:59:00	N	II
KQ2217427-09	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/7/22 00:59:00	N	II
KQ2217427-09	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/7/22 00:59:00	N	II
KQ2217427-10	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/7/22 10:49:00	N	II
KQ2217427-10	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/7/22 10:49:00	N	II
KQ2217427-10	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 10:49:00	N	II
KQ2217427-10	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 10:49:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-10	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/7/22 10:49:00	N	II
KQ2217427-10	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/7/22 10:49:00	N	II
KQ2217427-10	Nitrate as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/7/22 10:49:00	N	II
KQ2217427-10	Nitrite as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/7/22 10:49:00	N	II
KQ2217427-10	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/7/22 10:49:00	N	II
KQ2217427-10	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/7/22 10:49:00	N	II
KQ2217427-11	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/7/22 13:03:00	N	II
KQ2217427-11	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/7/22 13:03:00	N	II
KQ2217427-11	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 13:03:00	N	II
KQ2217427-11	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 13:03:00	N	II
KQ2217427-11	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/7/22 13:03:00	N	II
KQ2217427-11	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/7/22 13:03:00	N	II
KQ2217427-11	Nitrate as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/7/22 13:03:00	N	II
KQ2217427-11	Nitrite as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/7/22 13:03:00	N	II
KQ2217427-11	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/7/22 13:03:00	N	II
KQ2217427-11	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/7/22 13:03:00	N	II
KQ2217427-12	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/7/22 15:32:00	N	II
KQ2217427-12	Bromide	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/7/22 15:32:00	N	II
KQ2217427-12	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 15:32:00	N	II
KQ2217427-12	Chloride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 15:32:00	N	II
KQ2217427-12	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/7/22 15:32:00	N	II
KQ2217427-12	Fluoride	CCB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/7/22 15:32:00	N	II
KQ2217427-12	Nitrate as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/7/22 15:32:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/NO2

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-12	Nitrite as Nitrogen	CCB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/7/22 15:32:00	N	II
KQ2217427-12	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/7/22 15:32:00	N	II
KQ2217427-12	Sulfate	CCB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/7/22 15:32:00	N	II
KQ2217427-13	Bromide	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.020	0.050	102		10/6/22 20:22:00	N	II
KQ2217427-13	Bromide	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.004	0.10	102		10/6/22 20:22:00	N	II
KQ2217427-13	Chloride	LCS		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1	0.03	0.10	100		10/6/22 20:22:00	N	II
KQ2217427-13	Chloride	LCS		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1	0.03	0.10	100		10/6/22 20:22:00	N	II
KQ2217427-13	Fluoride	LCS		Ground Water	5.14 mg/L	5 mL	5.14 mg/L	1	0.02	0.10	103		10/6/22 20:22:00	N	II
KQ2217427-13	Fluoride	LCS		Ground Water	5.14 mg/L	5 mL	5.14 mg/L	1	0.003	0.20	103		10/6/22 20:22:00	N	II
KQ2217427-13	Nitrate as Nitrogen	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.008	0.050	102		10/6/22 20:22:00	N	II
KQ2217427-13	Nitrite as Nitrogen	LCS		Ground Water	2.54 mg/L	5 mL	2.54 mg/L	1	0.005	0.050	102		10/6/22 20:22:00	N	II
KQ2217427-13	Sulfate	LCS		Ground Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.04	0.10	102		10/6/22 20:22:00	N	II
KQ2217427-13	Sulfate	LCS		Ground Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.01	0.10	102		10/6/22 20:22:00	N	II
KQ2217427-14	Bromide	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.020	0.050	102		10/7/22 01:11:00	N	II
KQ2217427-14	Bromide	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.004	0.10	102		10/7/22 01:11:00	N	II
KQ2217427-14	Chloride	LCS		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1	0.03	0.10	100		10/7/22 01:11:00	N	II
KQ2217427-14	Chloride	LCS		Ground Water	5.02 mg/L	5 mL	5.02 mg/L	1	0.03	0.10	100		10/7/22 01:11:00	N	II
KQ2217427-14	Fluoride	LCS		Ground Water	5.14 mg/L	5 mL	5.14 mg/L	1	0.02	0.10	103		10/7/22 01:11:00	N	II
KQ2217427-14	Fluoride	LCS		Ground Water	5.14 mg/L	5 mL	5.14 mg/L	1	0.003	0.20	103		10/7/22 01:11:00	N	II
KQ2217427-14	Nitrate as Nitrogen	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.008	0.050	102		10/7/22 01:11:00	N	II
KQ2217427-14	Nitrite as Nitrogen	LCS		Ground Water	2.54 mg/L	5 mL	2.54 mg/L	1	0.005	0.050	102		10/7/22 01:11:00	N	II
KQ2217427-14	Sulfate	LCS		Ground Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.04	0.10	102		10/7/22 01:11:00	N	II
KQ2217427-14	Sulfate	LCS		Ground Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.01	0.10	102		10/7/22 01:11:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-15	Bromide	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.020	0.050	102		10/7/22 13:14:00	N	II
KQ2217427-15	Bromide	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.004	0.10	102		10/7/22 13:14:00	N	II
KQ2217427-15	Chloride	LCS		Ground Water	5.03 mg/L	5 mL	5.03 mg/L	1	0.03	0.10	101		10/7/22 13:14:00	N	II
KQ2217427-15	Chloride	LCS		Ground Water	5.03 mg/L	5 mL	5.03 mg/L	1	0.03	0.10	101		10/7/22 13:14:00	N	II
KQ2217427-15	Fluoride	LCS		Ground Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.02	0.10	102		10/7/22 13:14:00	N	II
KQ2217427-15	Fluoride	LCS		Ground Water	5.11 mg/L	5 mL	5.11 mg/L	1	0.003	0.20	102		10/7/22 13:14:00	N	II
KQ2217427-15	Nitrate as Nitrogen	LCS		Ground Water	2.55 mg/L	5 mL	2.55 mg/L	1	0.008	0.050	102		10/7/22 13:14:00	N	II
KQ2217427-15	Nitrite as Nitrogen	LCS		Ground Water	2.54 mg/L	5 mL	2.54 mg/L	1	0.005	0.050	101		10/7/22 13:14:00	N	II
KQ2217427-15	Sulfate	LCS		Ground Water	5.07 mg/L	5 mL	5.07 mg/L	1	0.04	0.10	101		10/7/22 13:14:00	N	II
KQ2217427-15	Sulfate	LCS		Ground Water	5.07 mg/L	5 mL	5.07 mg/L	1	0.01	0.10	101		10/7/22 13:14:00	N	II
KQ2217427-16	Bromide	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/6/22 20:33:00	N	II
KQ2217427-16	Bromide	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/6/22 20:33:00	N	II
KQ2217427-16	Chloride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 20:33:00	N	II
KQ2217427-16	Chloride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/6/22 20:33:00	N	II
KQ2217427-16	Fluoride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/6/22 20:33:00	N	II
KQ2217427-16	Fluoride	MB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/6/22 20:33:00	N	II
KQ2217427-16	Nitrate as Nitrogen	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/6/22 20:33:00	N	II
KQ2217427-16	Nitrite as Nitrogen	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/6/22 20:33:00	N	II
KQ2217427-16	Sulfate	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/6/22 20:33:00	N	II
KQ2217427-16	Sulfate	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/6/22 20:33:00	N	II
KQ2217427-17	Bromide	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/7/22 01:23:00	N	II
KQ2217427-17	Bromide	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/7/22 01:23:00	N	II
KQ2217427-17	Chloride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 01:23:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 9056A/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-17	Chloride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 01:23:00	N	II
KQ2217427-17	Fluoride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/7/22 01:23:00	N	II
KQ2217427-17	Fluoride	MB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/7/22 01:23:00	N	II
KQ2217427-17	Nitrate as Nitrogen	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/7/22 01:23:00	N	II
KQ2217427-17	Nitrite as Nitrogen	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/7/22 01:23:00	N	II
KQ2217427-17	Sulfate	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/7/22 01:23:00	N	II
KQ2217427-17	Sulfate	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/7/22 01:23:00	N	II
KQ2217427-18	Bromide	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			10/7/22 13:25:00	N	II
KQ2217427-18	Bromide	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.004	0.10			10/7/22 13:25:00	N	II
KQ2217427-18	Chloride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 13:25:00	N	II
KQ2217427-18	Chloride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.03	0.10			10/7/22 13:25:00	N	II
KQ2217427-18	Fluoride	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			10/7/22 13:25:00	N	II
KQ2217427-18	Fluoride	MB		Ground Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			10/7/22 13:25:00	N	II
KQ2217427-18	Nitrate as Nitrogen	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.008	0.050			10/7/22 13:25:00	N	II
KQ2217427-18	Nitrite as Nitrogen	MB		Ground Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			10/7/22 13:25:00	N	II
KQ2217427-18	Sulfate	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.04	0.10			10/7/22 13:25:00	N	II
KQ2217427-18	Sulfate	MB		Ground Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.01	0.10			10/7/22 13:25:00	N	II
KQ2217427-19	Chloride	DUP	K2210968-002	Ground Water	3.72 mg/L	5 mL	3.7 mg/L	10	0.3	1.0		3	10/6/22 21:17:00	N	II
KQ2217427-19	Sulfate	DUP	K2210968-002	Ground Water	3.64 mg/L	5 mL	3.6 mg/L	10	0.4	1.0		2	10/6/22 21:17:00	N	II
KQ2217427-20	Chloride	MS	K2210968-002	Ground Water	42.26 mg/L	5 mL	42.3 mg/L	20	0.6	2.0	96		10/6/22 21:28:00	N	II
KQ2217427-20	Sulfate	MS	K2210968-002	Ground Water	43.51 mg/L	5 mL	43.5 mg/L	20	0.8	2.0	99		10/6/22 21:28:00	N	II
KQ2217427-21	Chloride	DMS	K2210968-002	Ground Water	42.26 mg/L	5 mL	42.3 mg/L	20	0.6	2.0	96	<1	10/6/22 21:39:00	N	II
KQ2217427-21	Sulfate	DMS	K2210968-002	Ground Water	43.70 mg/L	5 mL	43.7 mg/L	20	0.8	2.0	100	<1	10/6/22 21:39:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: K-IC-08 **Analyst:** NFOTH **Analysis Lot:** 780389 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2217427-22	Chloride	DUP	K2210968-003	Ground Water	2.82 mg/L	5 mL	2.8 mg/L	10	0.3	1.0		2	10/6/22 22:01:00	N	II
KQ2217427-22	Sulfate	DUP	K2210968-003	Ground Water	1.14 mg/L	5 mL	1.1 mg/L	10	0.4	1.0		2	10/6/22 22:01:00	N	II
KQ2217427-23	Chloride	MS	K2210968-003	Ground Water	41.28 mg/L	5 mL	41.3 mg/L	20	0.6	2.0	96		10/6/22 22:12:00	N	II
KQ2217427-23	Sulfate	MS	K2210968-003	Ground Water	39.99 mg/L	5 mL	40.0 mg/L	20	0.8	2.0	97		10/6/22 22:12:00	N	II
KQ2217427-24	Chloride	DMS	K2210968-003	Ground Water	41.19 mg/L	5 mL	41.2 mg/L	20	0.6	2.0	96	<1	10/6/22 22:23:00	N	II
KQ2217427-24	Sulfate	DMS	K2210968-003	Ground Water	40.03 mg/L	5 mL	40.0 mg/L	20	0.8	2.0	97	<1	10/6/22 22:23:00	N	II
KQ2217427-25	Nitrate as Nitrogen	DUP	K2211705-001	Water	2.77 mg/L	5 mL	2.77 mg/L	2	0.02	0.10		<1	10/7/22 11:13:00	N	I
KQ2217427-25	Nitrite as Nitrogen	DUP	K2211705-001	Water	0.05 mg/L	5 mL	0.05 mg/L J	2	0.01	0.10		1	10/7/22 11:13:00	N	I
KQ2217427-26	Nitrate as Nitrogen	MS	K2211705-001	Water	6.72 mg/L	5 mL	6.72 mg/L	4	0.04	0.20	99		10/7/22 11:24:00	N	I
KQ2217427-26	Nitrite as Nitrogen	MS	K2211705-001	Water	3.84 mg/L	5 mL	3.84 mg/L	4	0.02	0.20	95		10/7/22 11:24:00	N	I
KQ2217427-27	Nitrate as Nitrogen	DMS	K2211705-001	Water	6.72 mg/L	5 mL	6.72 mg/L	4	0.04	0.20	99	<1	10/7/22 11:35:00	N	I
KQ2217427-27	Nitrite as Nitrogen	DMS	K2211705-001	Water	3.85 mg/L	5 mL	3.85 mg/L	4	0.02	0.20	95	<1	10/7/22 11:35:00	N	I

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

ALS ENVIRONMENTAL, INC.

Ion Chromatography Calibration Data

Sequence: IC08072922 CAL **Date:** 07/29/22

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope	Residuals
F	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.9677	0.1438	
Cl	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.9389	0.083	
NO2	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9669	0.1886	
Br	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9967	0.0333	
NO3	0.0	0.05	0.1	0.25	0.5	2.5	3.75	99.9535	0.2072	
SO4	0.0	0.1	0.2	0.5	1.0	5.0	7.5	99.998	0.0616	
								99.9703	0.1196	

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

No.	Peak Name	Cal.Type	#Points	Rel.Std.Dev. %	Corr.Coeff. %	Offset	Slope		Curve
1	Fluoride	Lin	6	2.3723	99.9677	0	0.1438	0	0
2	Chloride	Lin	6	3.2972	99.9389	0	0.083	0	0
3	Nitrite	Lin	6	2.4214	99.9669	0	0.1886	0.0000	0
4	Bromide	Lin	6	0.7498	99.9967	0	0.0333	0	0
5	Nitrate	Lin	6	2.8736	99.9535	0	0.2072	0	0
6	Sulfate	Lin	6	0.5841	99.998	0	0.0616	0	0
Average:			6	2.0497	99.9703	0	0.1196	0	0

	0.5mL	22-GEN-01-71E	1.0mL	22-GEN-01-71E	to 100 mL flask
	50ppm	NO2, BR, NO3	100ppm	F, CL, SO4	

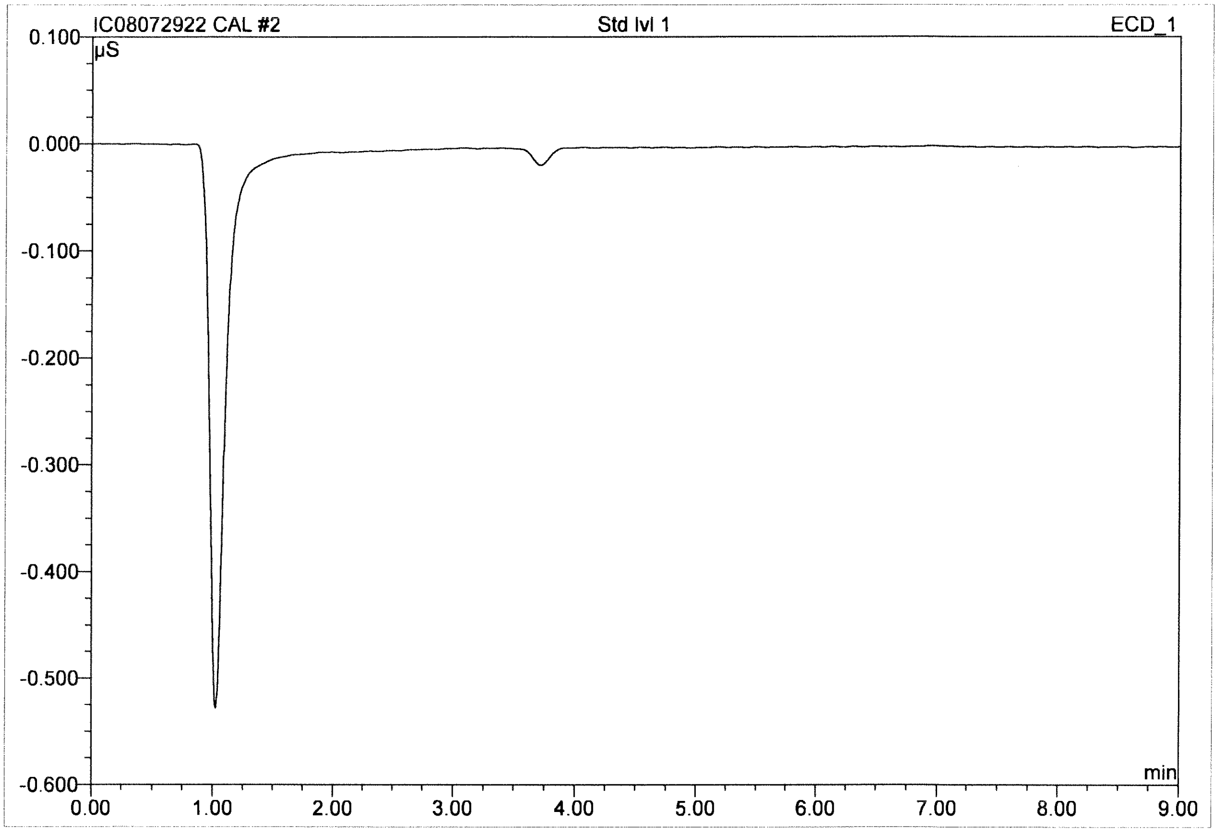
mL added (100mL)

	22-GEN-01-71-K	22-GEN-01-71-J	22-GEN-01-71-I	22-GEN-01-71-H	22-GEN-01-71-G	22-GEN-01-71-F	DIW
	STD2	STD3	STD4	STD5	STD6	STD7	STD1
F	0.100	0.200	0.500	1.000	5.00	7.50	0
CL	0.100	0.200	0.500	1.000	5.00	7.50	0
SO4	0.100	0.200	0.500	1.000	5.00	3.75	0
NO2	0.050	0.100	0.250	0.500	2.50	3.75	0
NO3	0.050	0.100	0.250	0.500	2.50	3.75	0
BR	0.050	0.100	0.250	0.500	2.50	7.50	0

Eluent: 22-GEN-01-71A
ICV: 22-GEN-01-71B

2 Std lvl 1

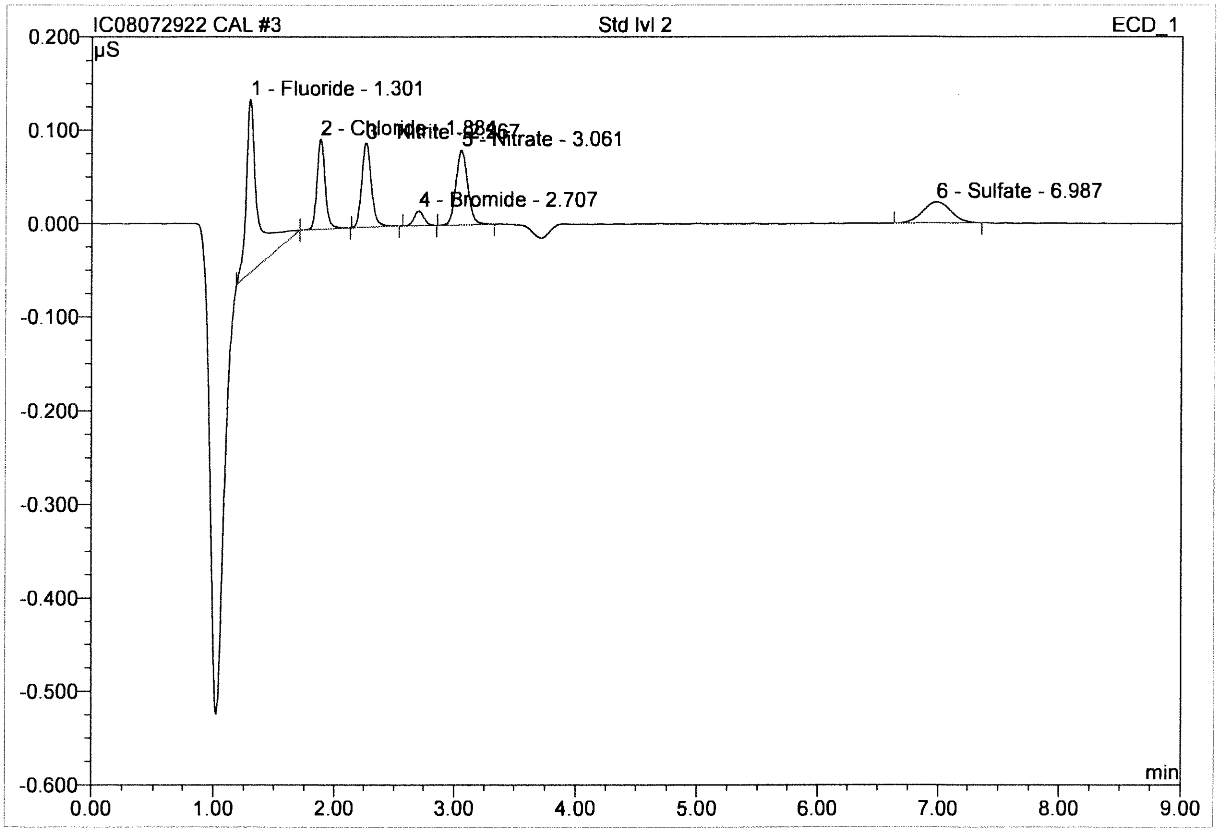
Sample Name:	**Std lvl 1**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

3 Std lvl 2

Sample Name:	**Std lvl 2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



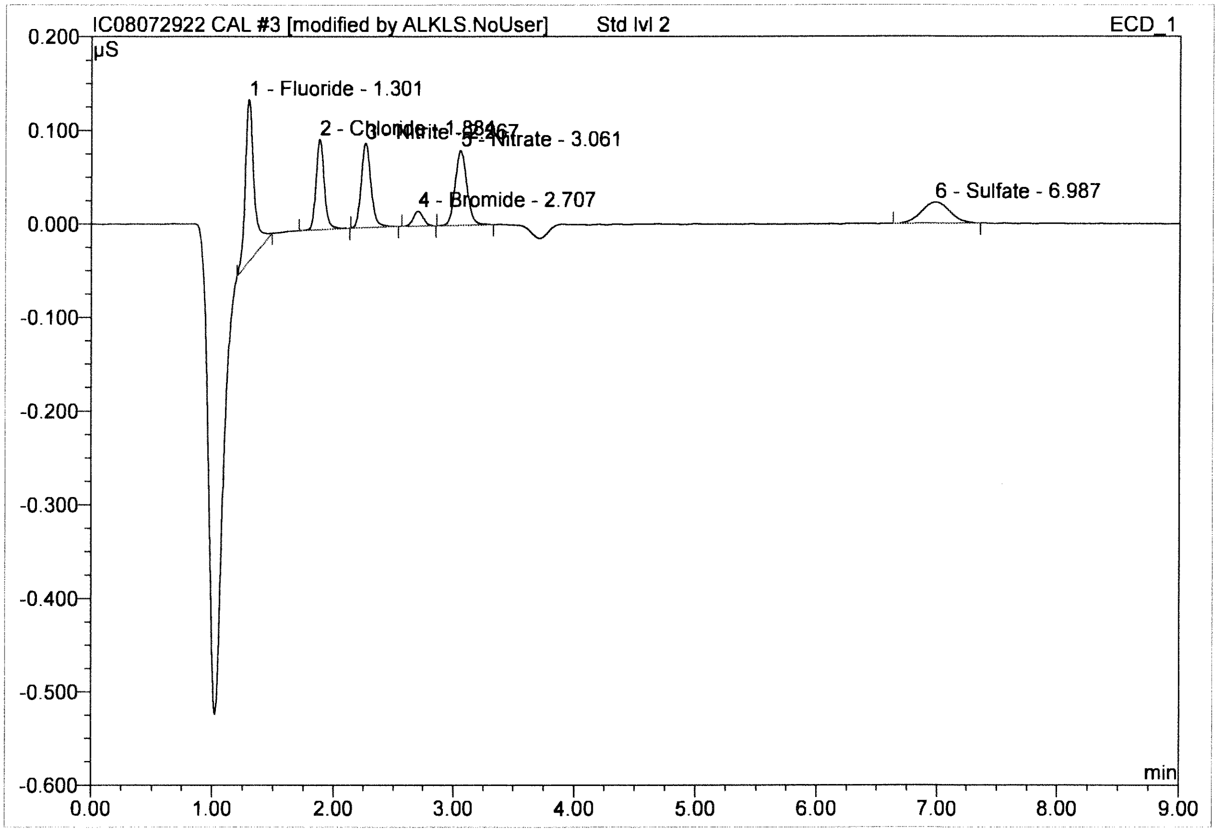
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.185	0.021	39.12	0.149	BMB
2	1.88	Chloride	0.096	0.008	14.26	0.094	bMB
3	2.27	Nitrite	0.090	0.008	15.56	0.045	BMB
4	2.71	Bromide	0.016	0.002	2.87	0.047	BMB
5	3.06	Nitrate	0.080	0.009	16.95	0.045	BMB
6	6.99	Sulfate	0.023	0.006	11.24	0.100	BMB
Total:			0.490	0.055	100.00	0.479	

Before

AUG 1 8

3 Std lvl 2

Sample Name:	**Std lvl 2**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.173	0.015	30.59	0.102	BMB*
2	1.88	Chloride	0.096	0.008	16.26	0.094	BMB*
3	2.27	Nitrite	0.090	0.008	17.74	0.045	BMB
4	2.71	Bromide	0.016	0.002	3.27	0.047	BMB
5	3.06	Nitrate	0.080	0.009	19.32	0.045	BMB
6	6.99	Sulfate	0.023	0.006	12.82	0.100	BMB
Total:			0.477	0.048	100.00	0.432	

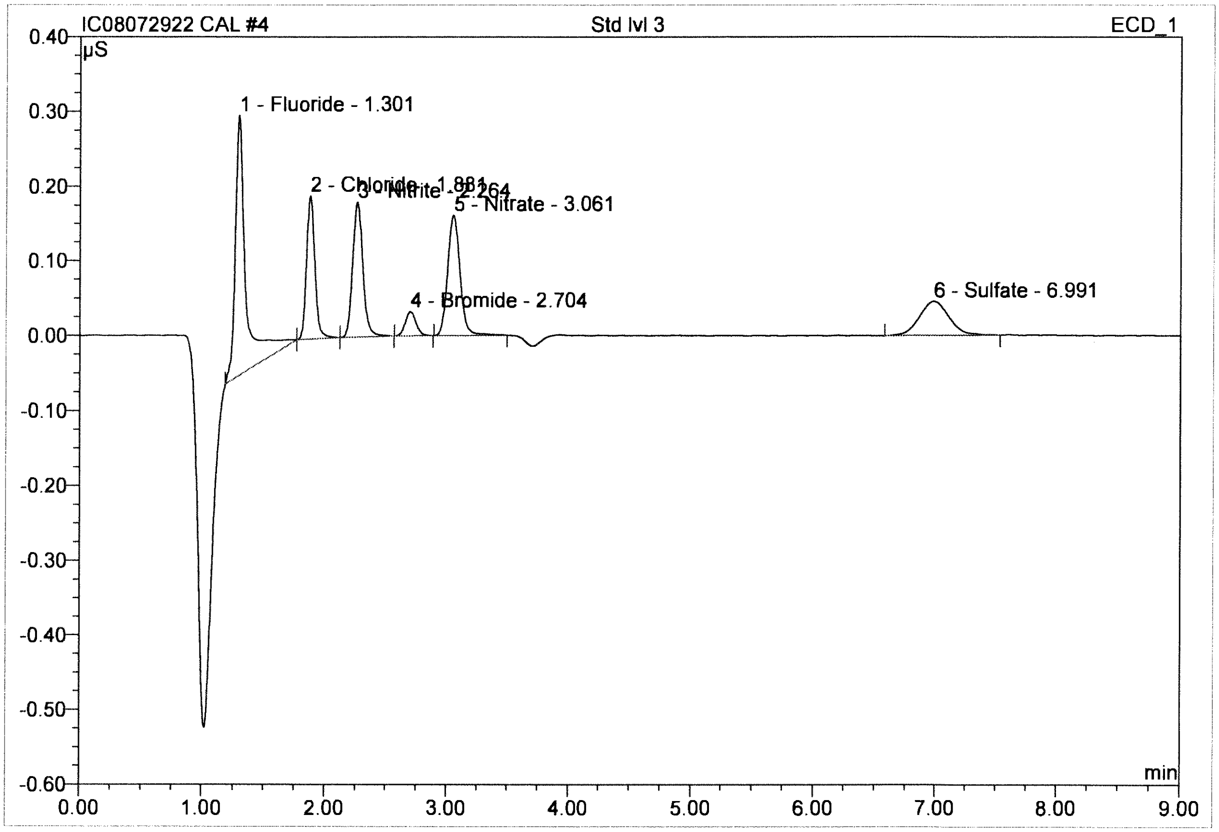
After
Initials NP

AUG 18

☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder Incorrect
☐ Other

4 Std lvl 3

Sample Name:	**Std lvl 3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



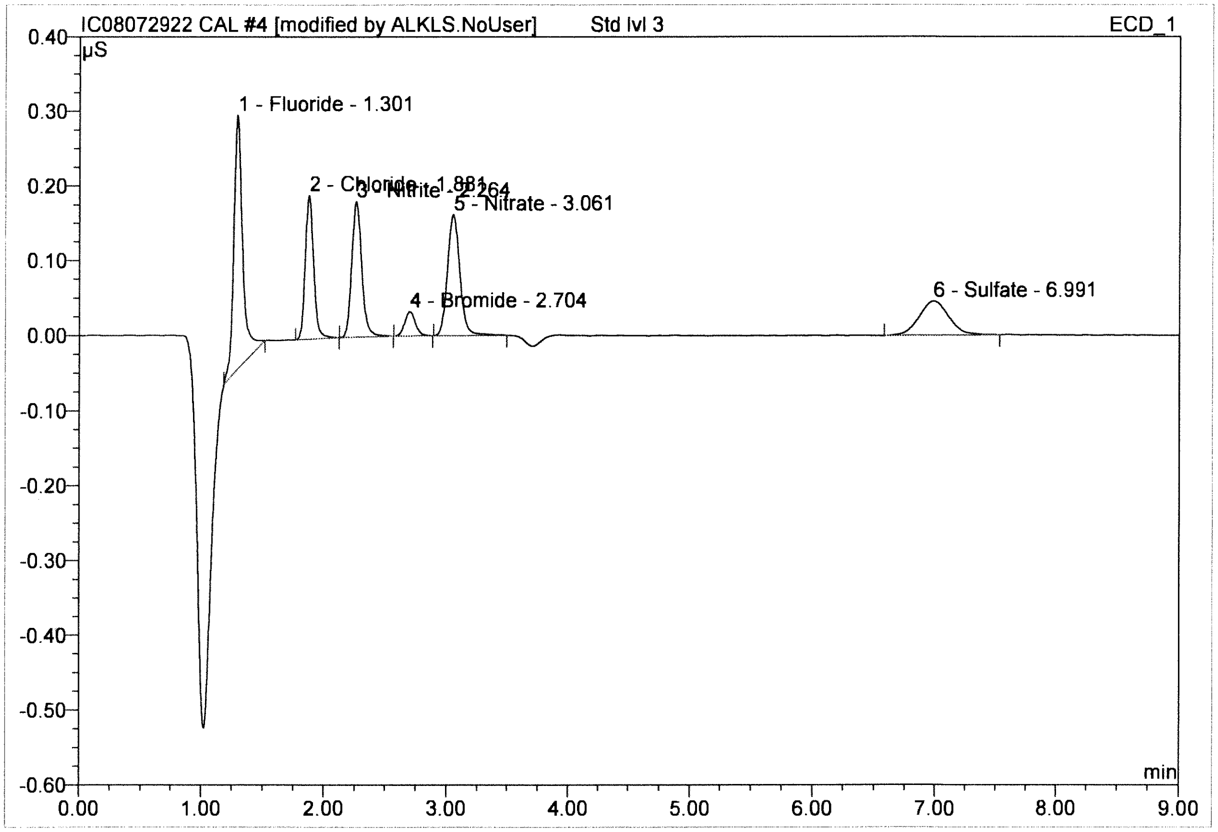
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.348	0.036	34.33	0.247	BMB
2	1.88	Chloride	0.192	0.015	14.87	0.185	bMB
3	2.26	Nitrite	0.181	0.017	16.73	0.092	BMB
4	2.70	Bromide	0.032	0.003	3.19	0.099	BMB
5	3.06	Nitrate	0.162	0.019	18.48	0.092	BMB
6	6.99	Sulfate	0.046	0.013	12.40	0.208	BMB
Total:			0.960	0.103	100.00	0.924	

Before

AUG 18

4 Std lvl 3

Sample Name:	**Std lvl 3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.339	0.028	29.54	0.198	BMB*
2	1.88	Chloride	0.192	0.015	15.96	0.185	BMB*
3	2.26	Nitrite	0.181	0.017	17.94	0.092	BMB
4	2.70	Bromide	0.032	0.003	3.42	0.099	BMB
5	3.06	Nitrate	0.162	0.019	19.83	0.092	BMB
6	6.99	Sulfate	0.046	0.013	13.30	0.208	BMB
Total:			0.952	0.096	100.00	0.875	

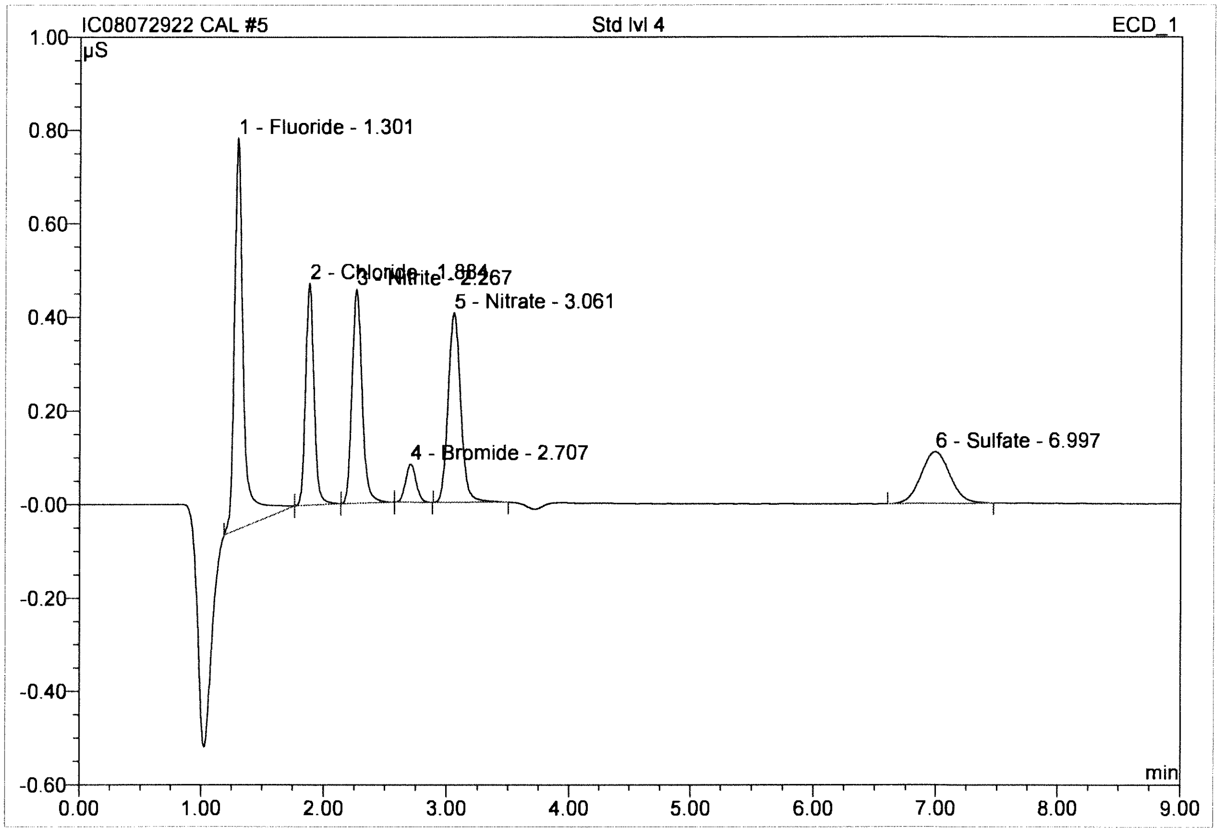
After
Initials NF

AUG 18

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

5 Std lvl 4

Sample Name:	**Std lvl 4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



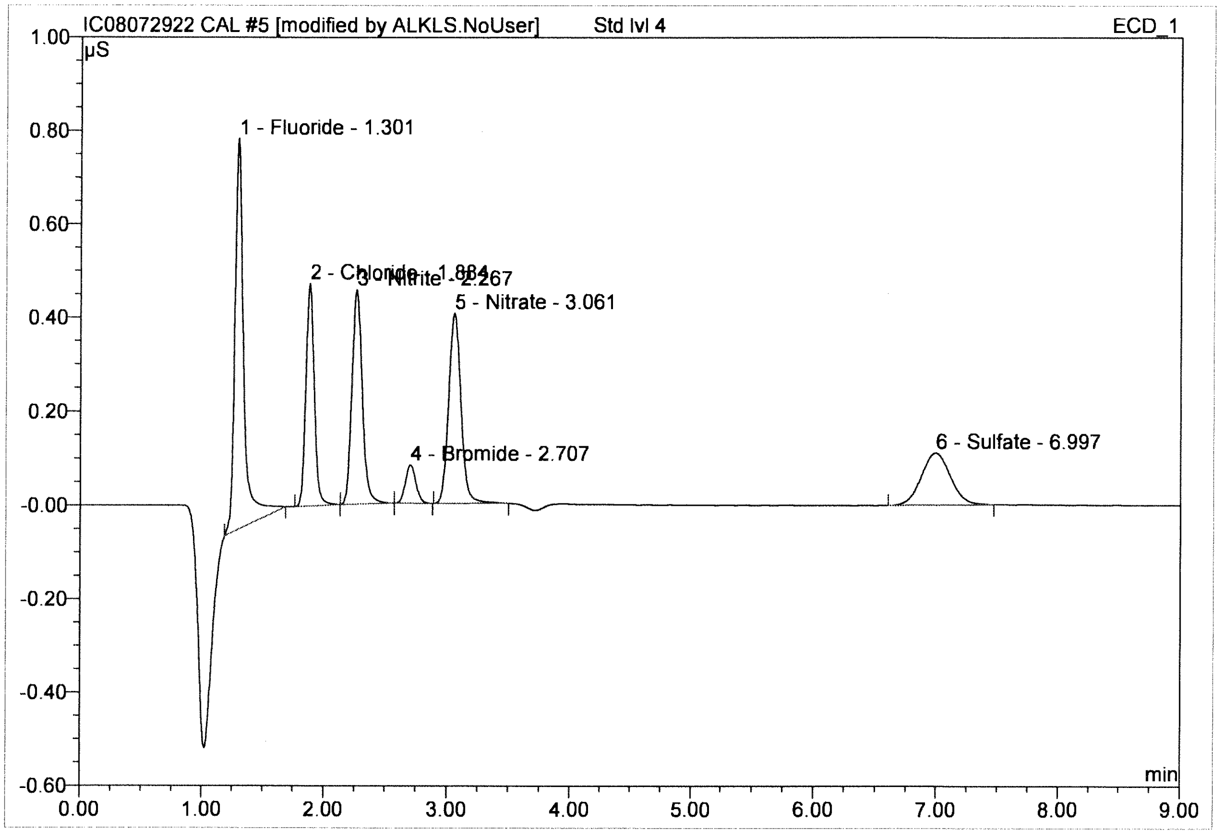
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.836	0.073	30.45	0.508	BMB
2	1.88	Chloride	0.474	0.038	15.72	0.454	bMB
3	2.27	Nitrite	0.457	0.043	18.11	0.230	BMB
4	2.71	Bromide	0.081	0.008	3.38	0.244	bMB
5	3.06	Nitrate	0.405	0.047	19.76	0.229	BMB
6	7.00	Sulfate	0.110	0.030	12.58	0.490	BMB
Total:			2.364	0.240	100.00	2.154	

Before

AUG 18

5 Std lvl 4

Sample Name:	**Std lvl 4**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.834	0.071	29.76	0.491	BMB*
2	1.88	Chloride	0.474	0.038	15.88	0.454	BMB*
3	2.27	Nitrite	0.457	0.043	18.29	0.230	BMb*
4	2.71	Bromide	0.081	0.008	3.41	0.244	bMB
5	3.06	Nitrate	0.405	0.047	19.95	0.229	BMB
6	7.00	Sulfate	0.110	0.030	12.70	0.490	BMB
Total:			2.362	0.237	100.00	2.138	

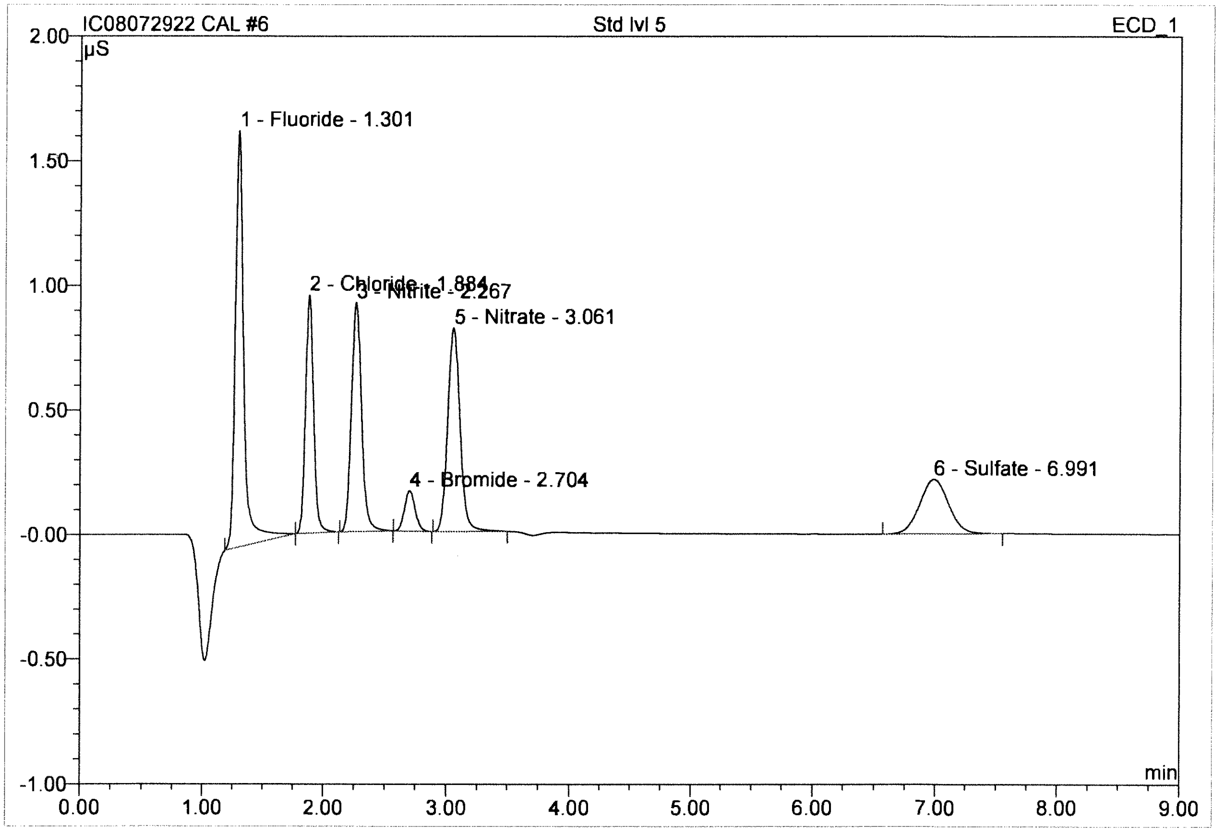
After
Initials NF

AUG 18

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

6 Std lvl 5

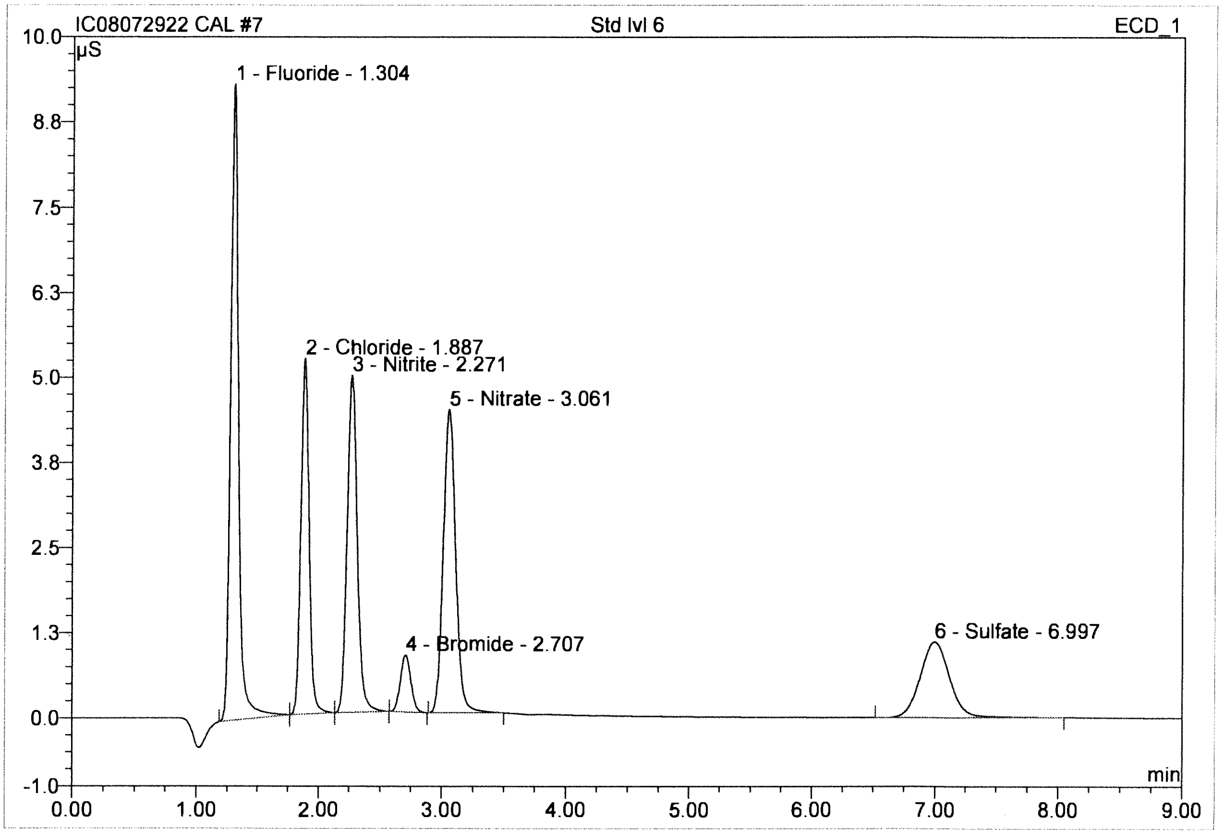
Sample Name:	**Std lvl 5**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	1.670	0.137	29.00	0.951	BMB
2	1.88	Chloride	0.956	0.076	16.07	0.912	bMB
3	2.27	Nitrite	0.920	0.087	18.51	0.463	BMB
4	2.70	Bromide	0.162	0.016	3.46	0.489	BMB
5	3.06	Nitrate	0.818	0.096	20.26	0.461	BMB
6	6.99	Sulfate	0.219	0.060	12.71	0.973	BMB
Total:			4.745	0.471	100.00	4.249	

7 Std lvl 6

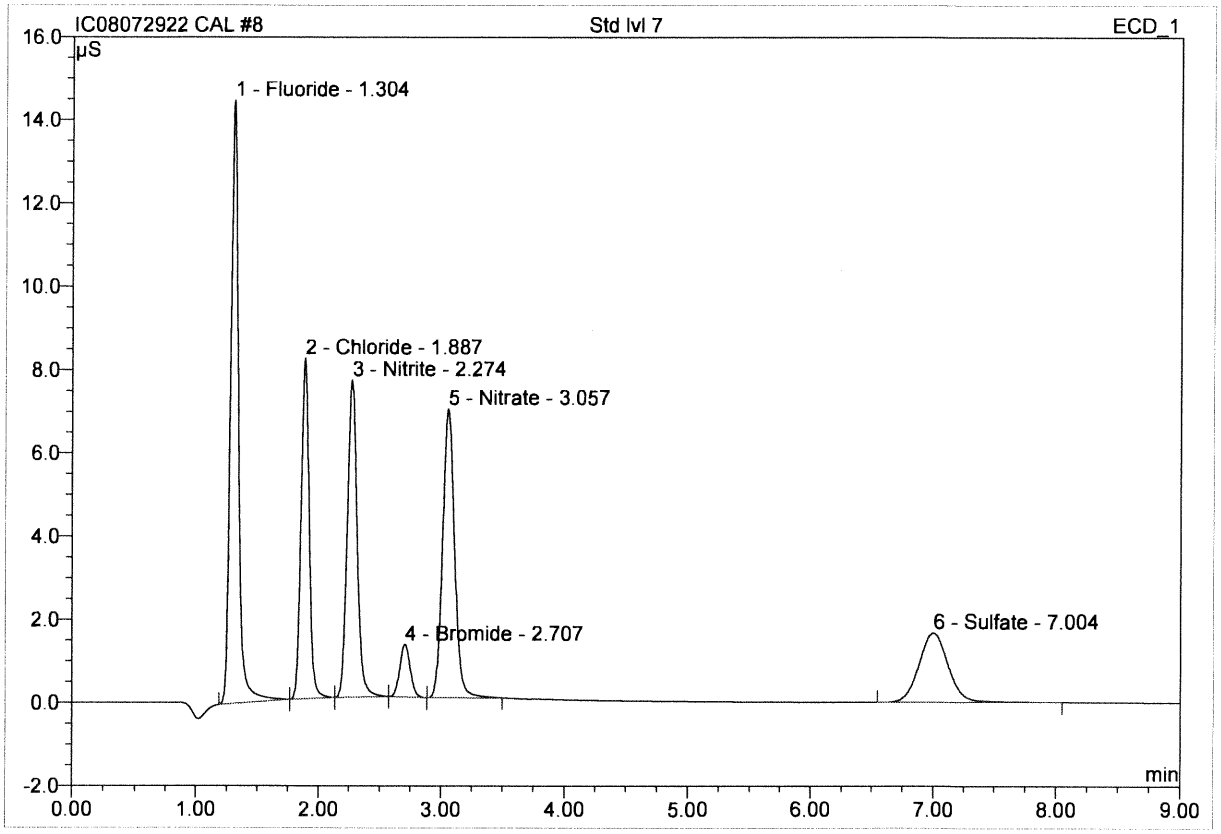
Sample Name:	**Std lvl 6**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.332	0.706	28.51	4.907	BMB
2	1.89	Chloride	5.224	0.406	16.40	4.890	bMb
3	2.27	Nitrite	4.949	0.465	18.78	2.464	bMB
4	2.71	Bromide	0.833	0.083	3.35	2.488	BMB
5	3.06	Nitrate	4.452	0.508	20.54	2.453	BMB
6	7.00	Sulfate	1.106	0.308	12.43	4.996	BMB
Total:			25.896	2.475	100.00	22.198	

8 Std lvl 7

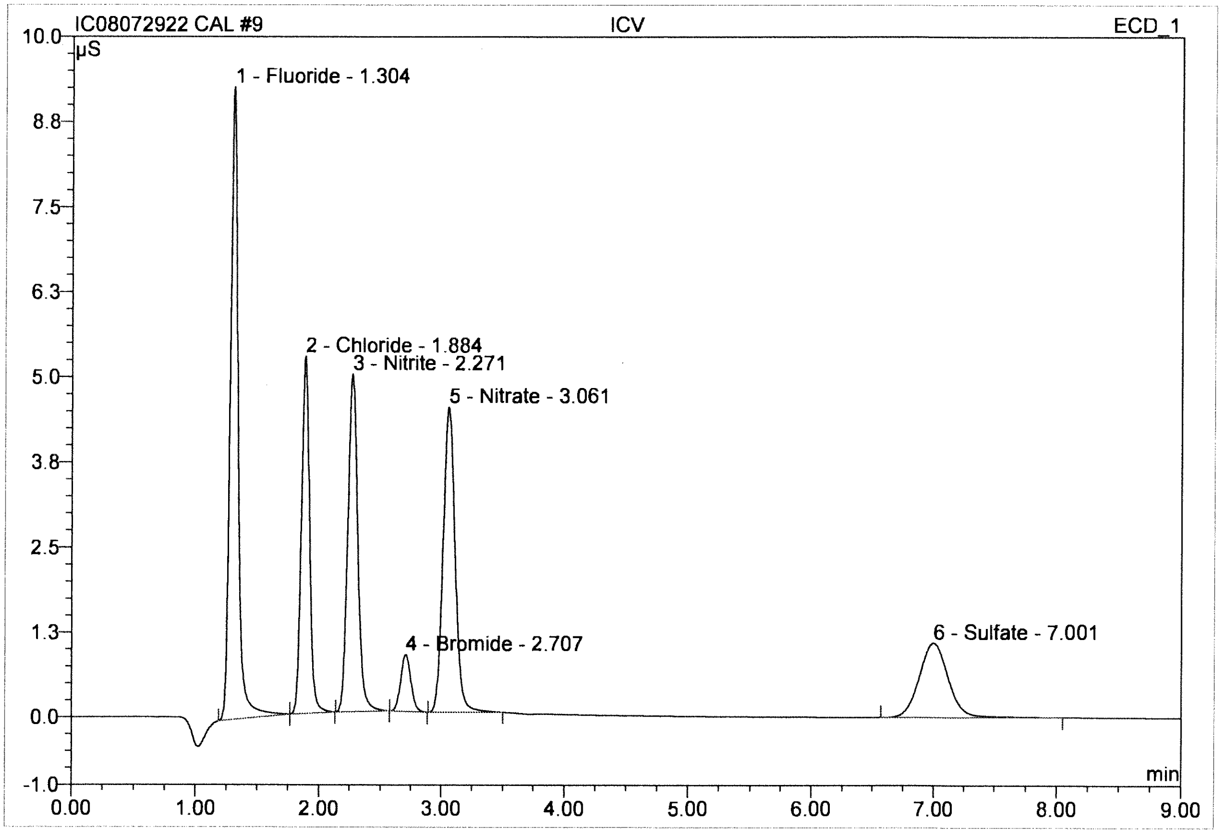
Sample Name:	**Std lvl 7**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	14.491	1.088	28.61	7.569	BMB
2	1.89	Chloride	8.191	0.630	16.56	7.589	bMB
3	2.27	Nitrite	7.627	0.713	18.75	3.780	bMb
4	2.71	Bromide	1.261	0.125	3.29	3.760	bMB
5	3.06	Nitrate	6.948	0.785	20.64	3.788	BMB
6	7.00	Sulfate	1.669	0.462	12.15	7.507	BMB
Total:			40.188	3.804	100.00	33.993	

9 ICV

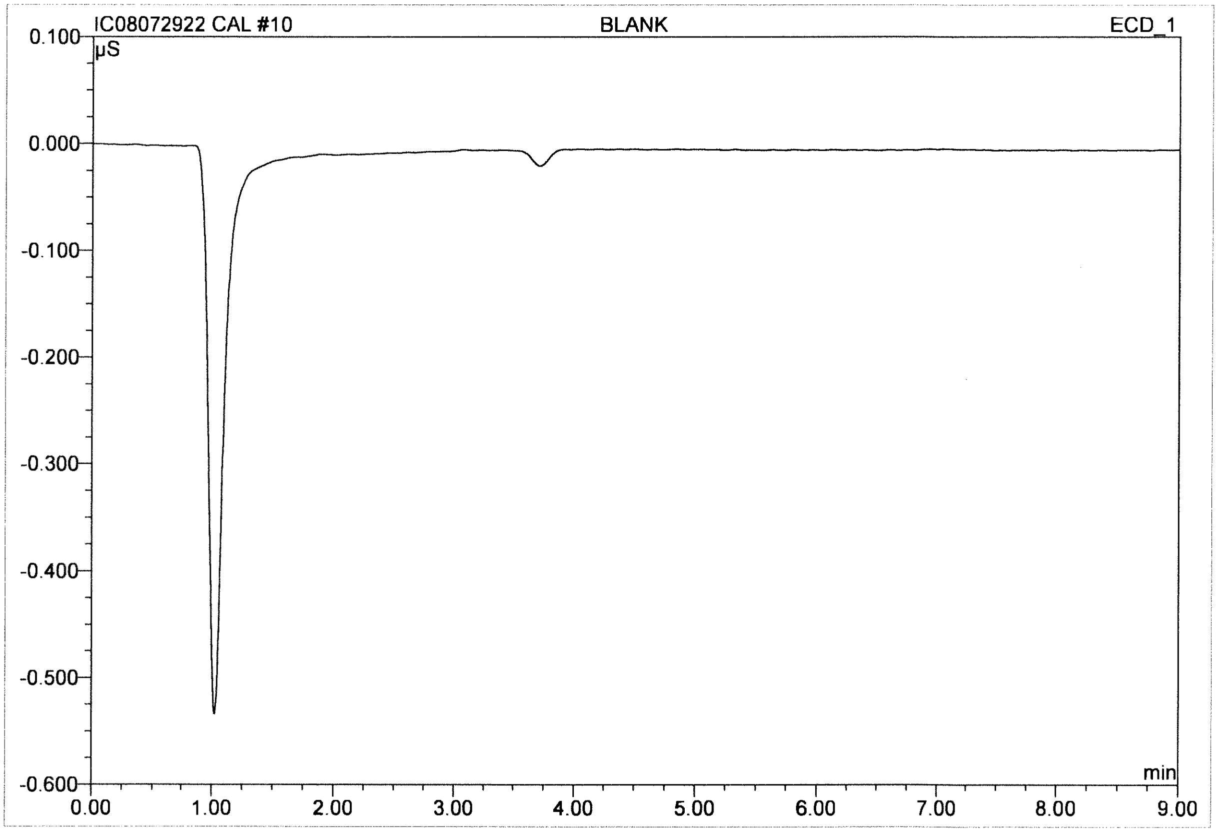
Sample Name:	**ICV**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.294	0.699	28.32	4.864	BMB
2	1.88	Chloride	5.247	0.407	16.48	4.902	bMB
3	2.27	Nitrite	4.962	0.465	18.84	2.466	BMB
4	2.71	Bromide	0.838	0.083	3.37	2.503	BMB
5	3.06	Nitrate	4.485	0.511	20.69	2.466	BMB
6	7.00	Sulfate	1.096	0.304	12.30	4.936	BMB
Total:			25.922	2.470	100.00	22.137	

10 BLANK

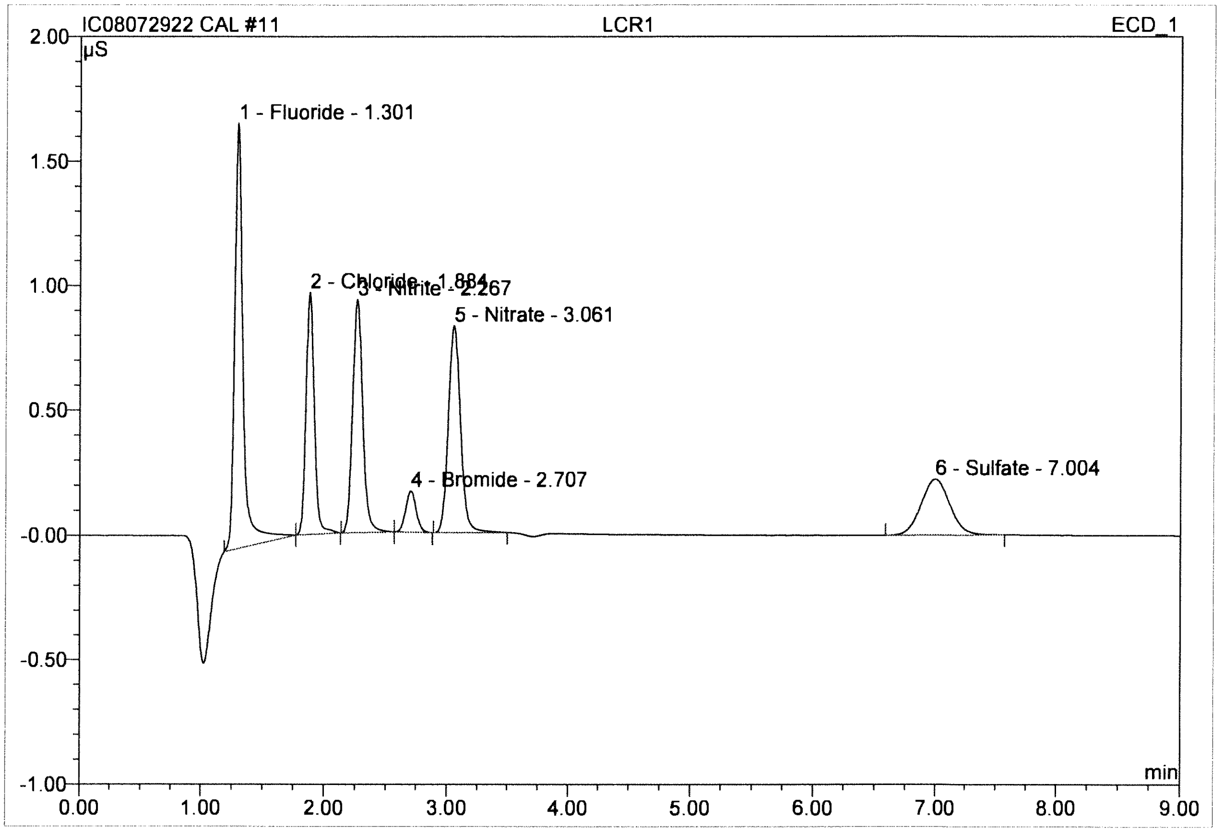
Sample Name:	**BLANK**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 19:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

11 LCR1

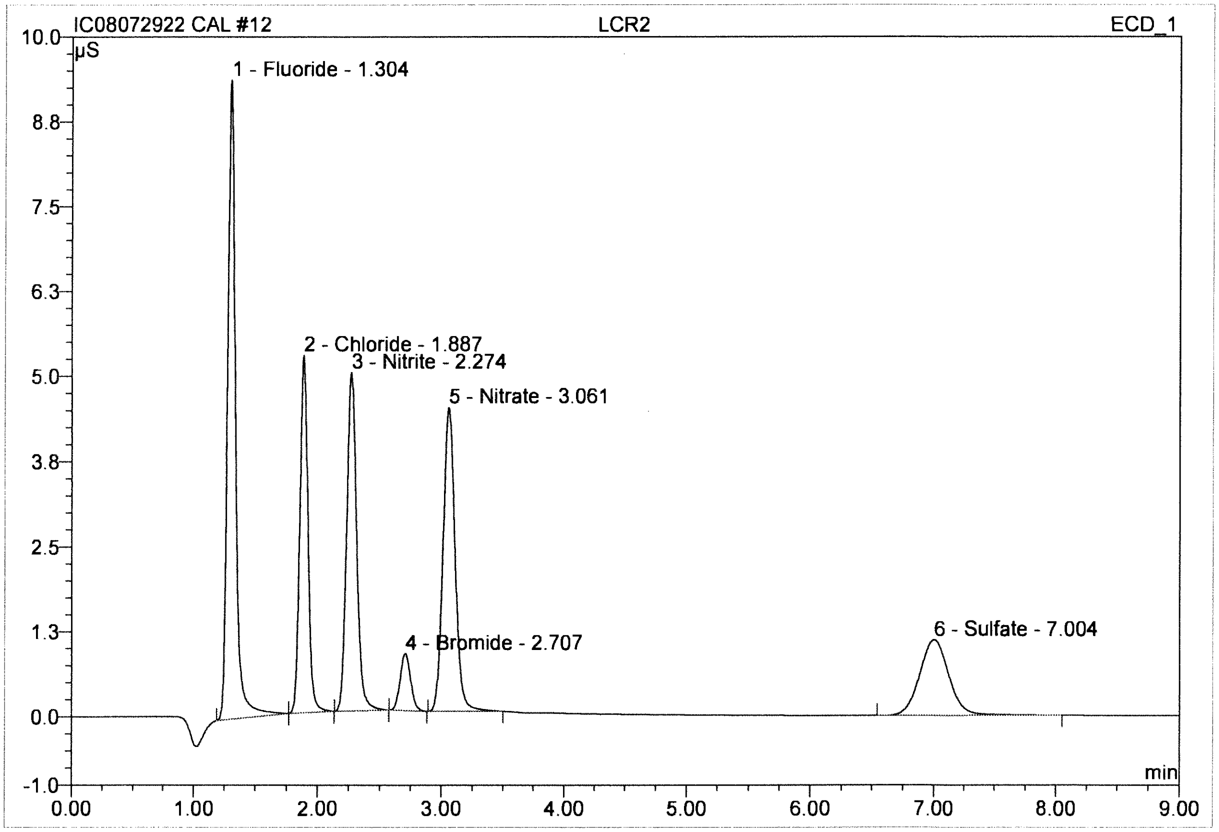
Sample Name:	**LCR1**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	1.705	0.139	29.06	0.966	BMB
2	1.88	Chloride	0.968	0.077	16.11	0.928	bMB
3	2.27	Nitrite	0.933	0.088	18.41	0.467	BMb
4	2.71	Bromide	0.164	0.016	3.44	0.494	bMB
5	3.06	Nitrate	0.828	0.096	20.16	0.465	BMB
6	7.00	Sulfate	0.223	0.061	12.82	0.996	BMB
Total:			4.820	0.478	100.00	4.315	

12 LCR2

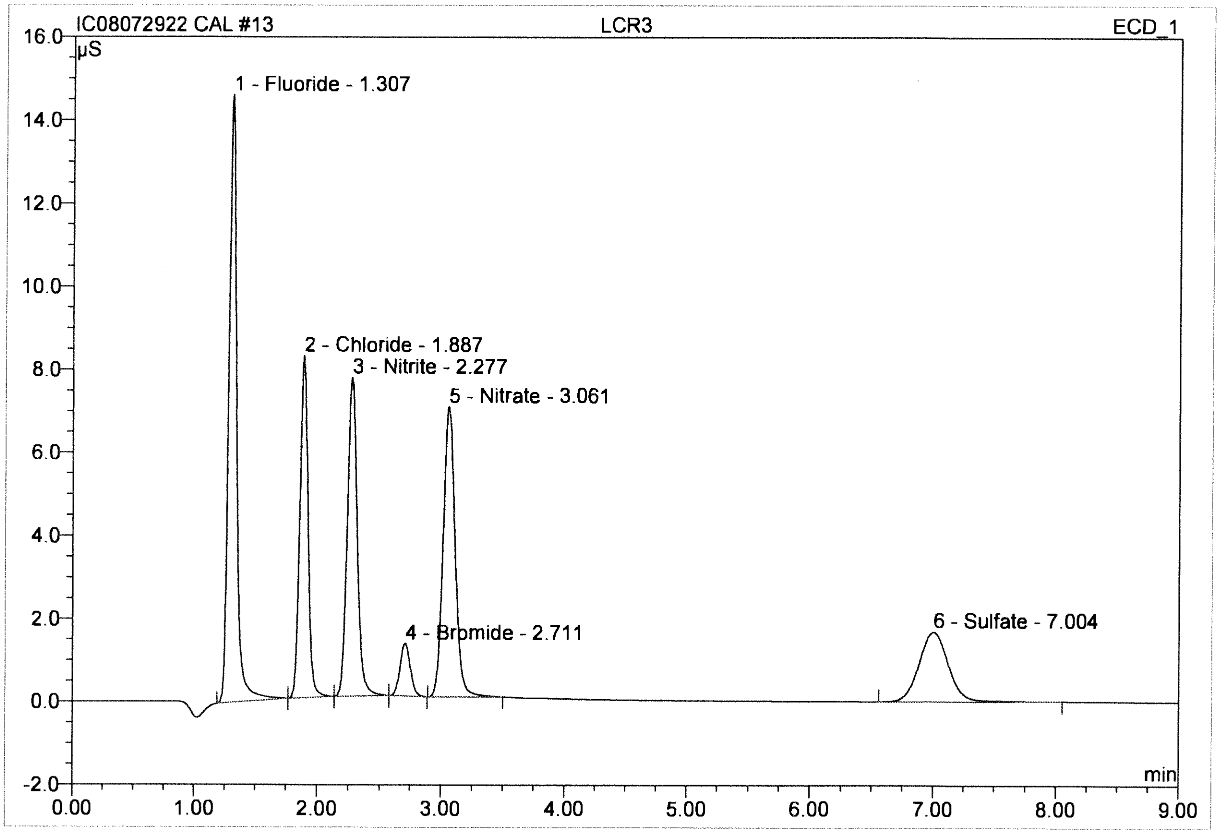
Sample Name:	**LCR2**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.395	0.708	28.56	4.925	BMB
2	1.89	Chloride	5.247	0.407	16.39	4.896	bMB
3	2.27	Nitrite	4.968	0.465	18.76	2.467	BMB
4	2.71	Bromide	0.835	0.083	3.34	2.488	BMB
5	3.06	Nitrate	4.462	0.508	20.50	2.453	BMB
6	7.00	Sulfate	1.110	0.309	12.45	5.015	BMB
Total:			26.017	2.480	100.00	22.245	

13 LCR3

Sample Name:	**LCR3**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/29/2022 20:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

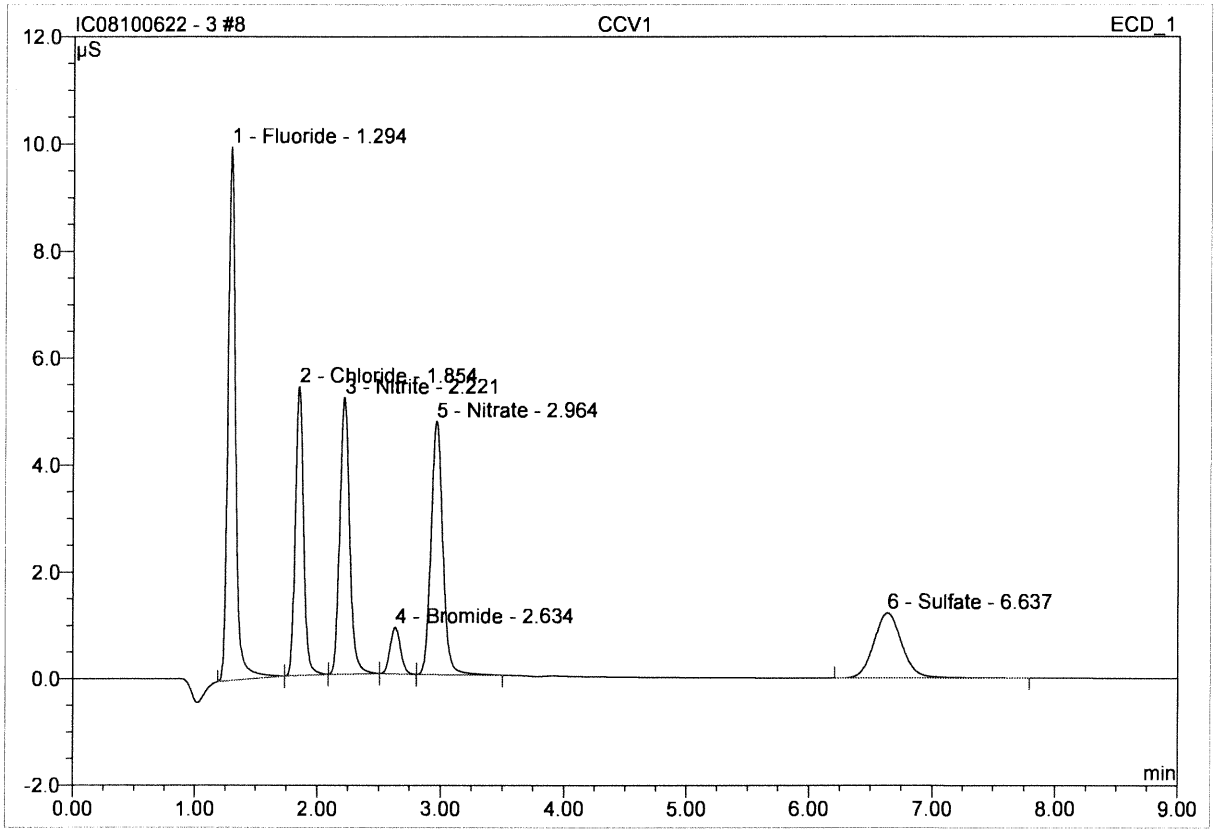


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	14.626	1.097	28.65	7.633	BMB
2	1.89	Chloride	8.240	0.635	16.56	7.643	bMB
3	2.28	Nitrite	7.677	0.718	18.75	3.808	bMb
4	2.71	Bromide	1.269	0.126	3.29	3.782	bMB
5	3.06	Nitrate	6.992	0.790	20.62	3.812	BMB
6	7.00	Sulfate	1.683	0.465	12.14	7.557	BMB
Total:			40.486	3.831	100.00	34.234	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

8 CCV1

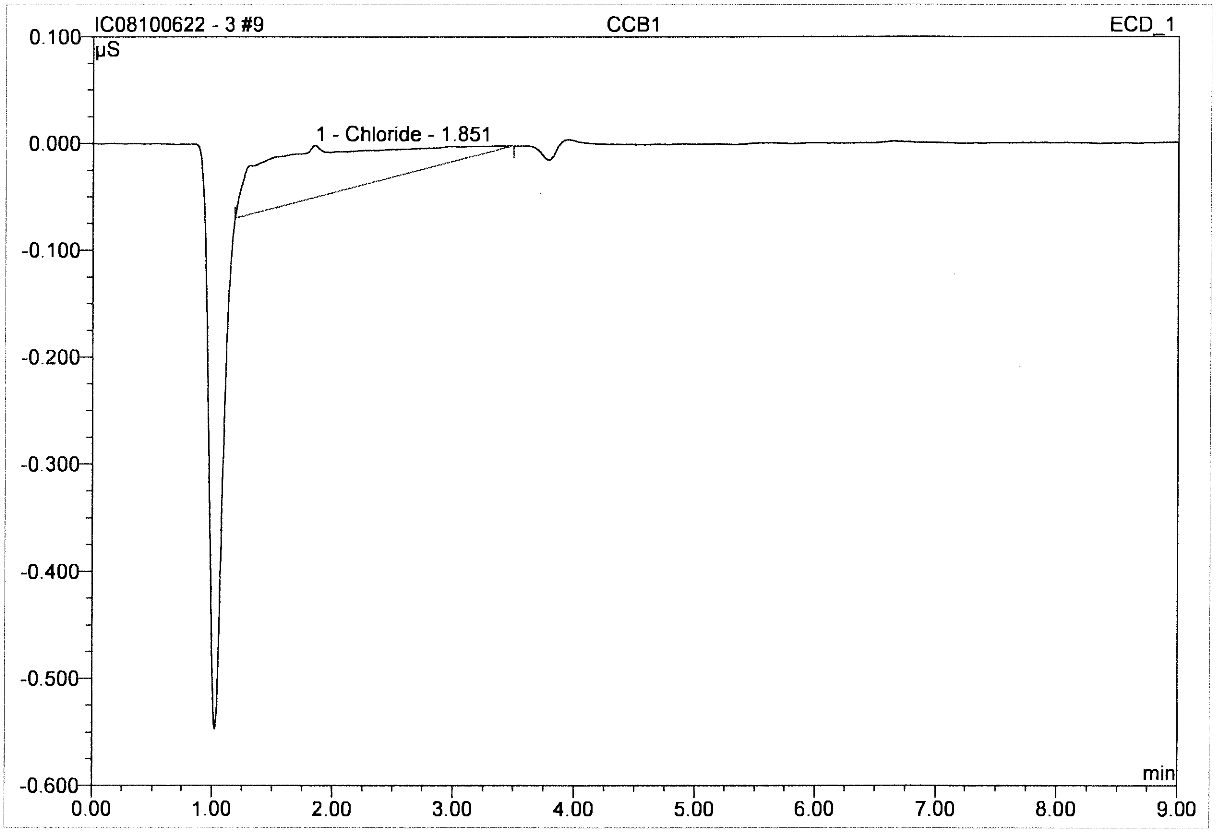
Sample Name:	**CCV1**	*Injection Volume:*	**5.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.972	0.744	28.93	5.177	BMB
2	1.85	Chloride	5.398	0.417	16.19	5.018	bMB
3	2.22	Nitrite	5.171	0.477	18.55	2.531	BMb
4	2.63	Bromide	0.879	0.085	3.32	2.565	bMB
5	2.96	Nitrate	4.734	0.526	20.46	2.540	BMB
6	6.64	Sulfate	1.222	0.323	12.55	5.247	BMB
Total:			27.377	2.573	100.00	23.077	

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



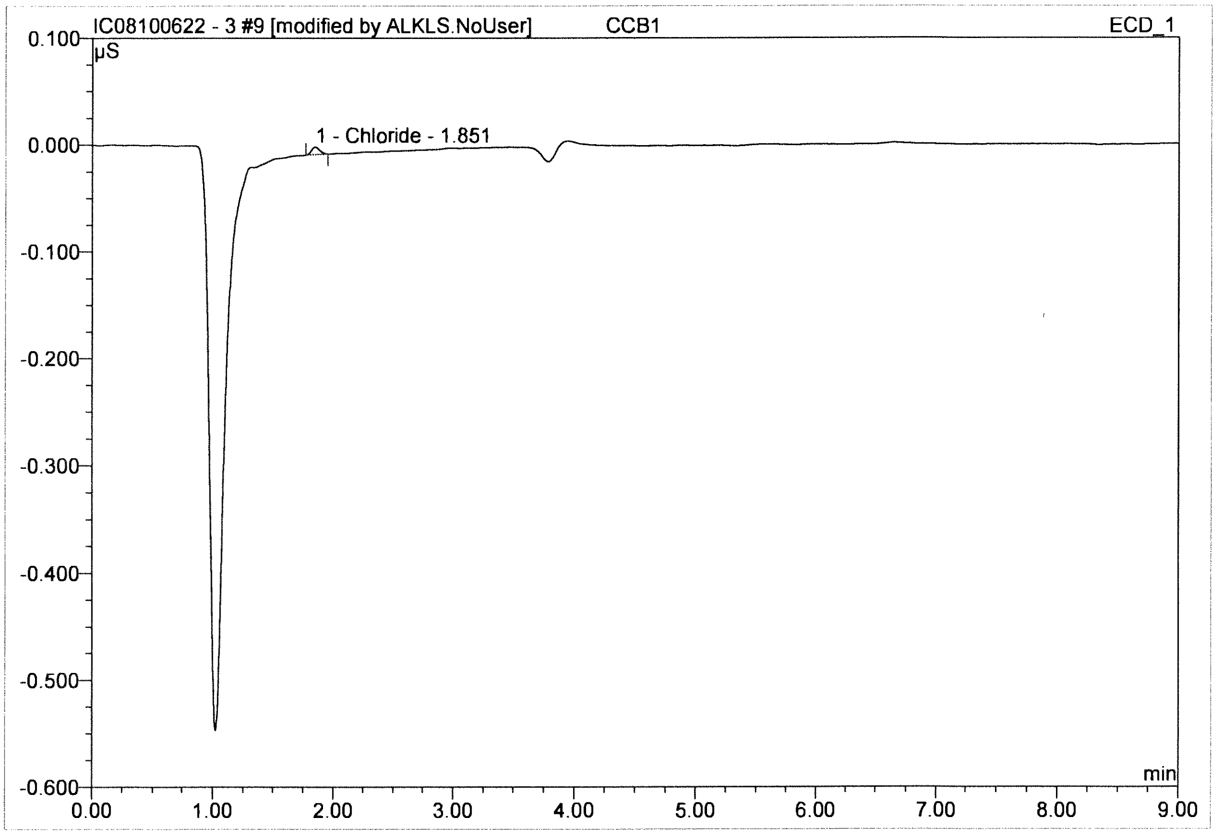
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.049	0.064	100.00	0.768	BMB
Total:			0.049	0.064	100.00	0.768	

Before

OCT 07

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.007	0.001	100.00	0.006	BMB*
Total:			0.007	0.001	100.00	0.006	

After
Initials NP

OCT 07

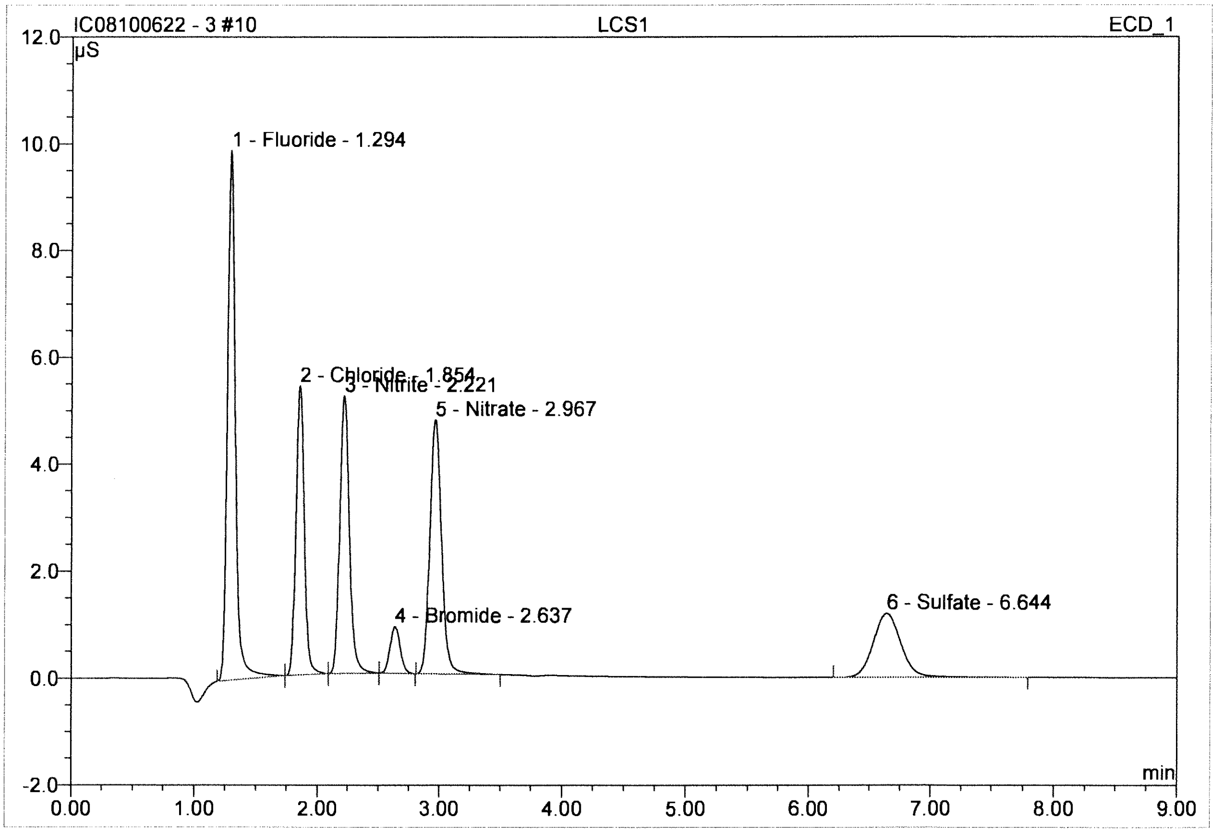
☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

10 LCS1

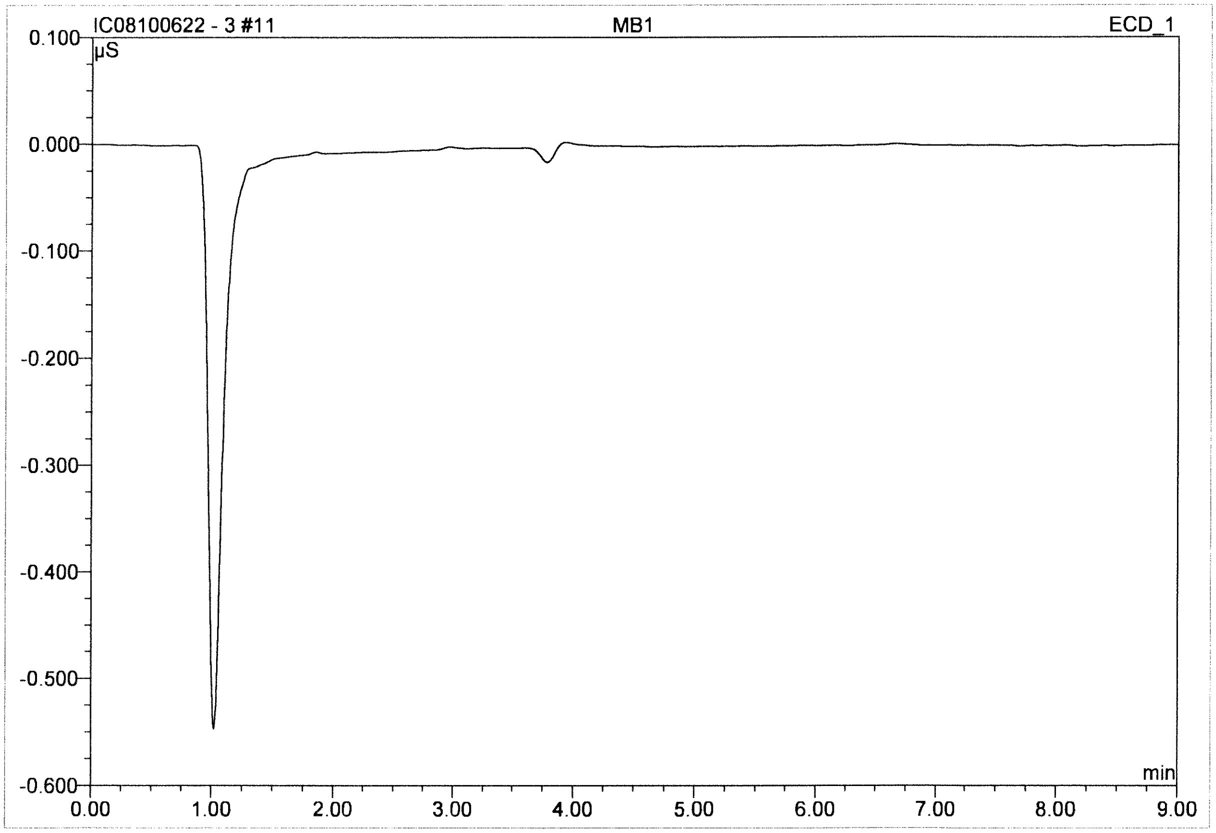
Sample Name:	**LCS1**	*Injection Volume:*	**5.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.906	0.738	28.82	5.135	BMB
2	1.85	Chloride	5.401	0.417	16.29	5.025	bMb
3	2.22	Nitrite	5.186	0.479	18.69	2.538	bMB
4	2.64	Bromide	0.873	0.085	3.31	2.548	BMB
5	2.97	Nitrate	4.745	0.528	20.61	2.548	BMB
6	6.64	Sulfate	1.192	0.315	12.28	5.110	BMB
Total:			27.304	2.562	100.00	22.904	

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**5.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



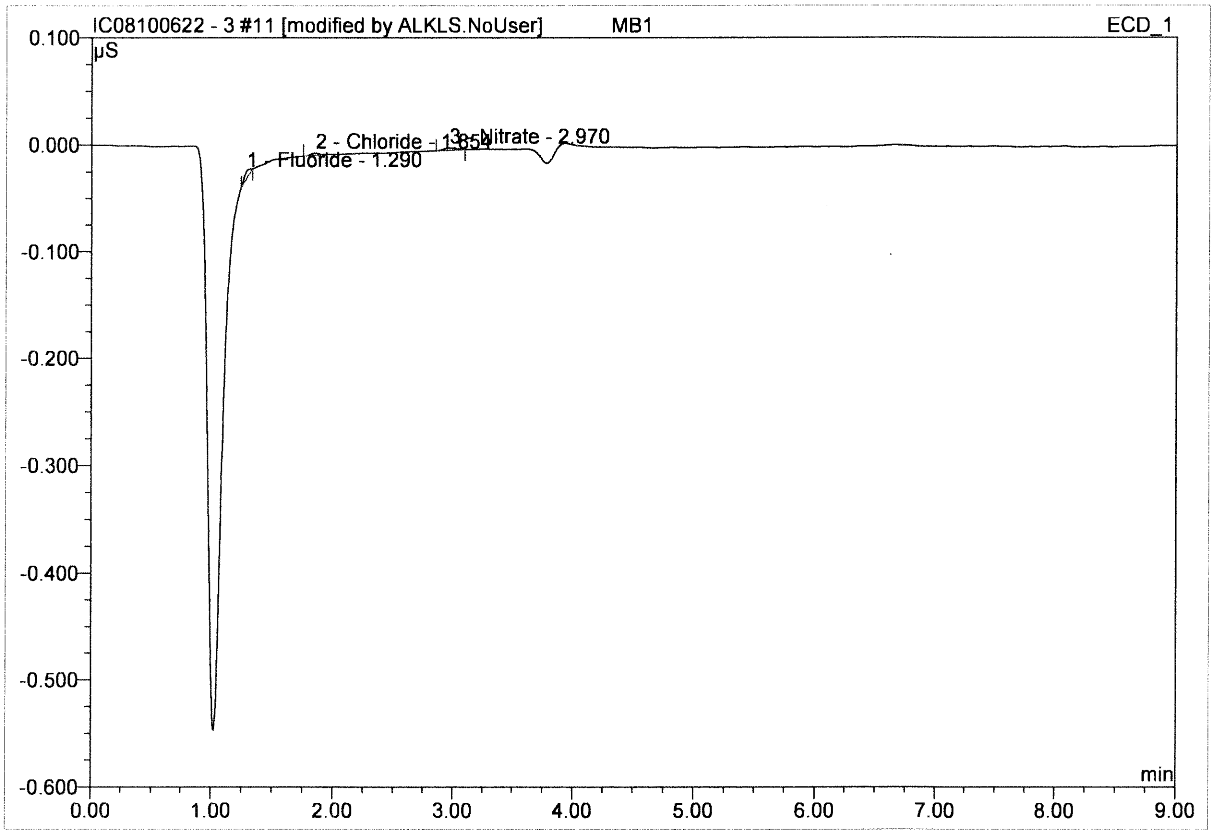
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Before

OCT 07

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**5.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.007	0.000	49.00	0.003	BMB*
2	1.85	Chloride	0.002	0.000	20.39	0.002	BMB*
3	2.97	Nitrate	0.002	0.000	30.62	0.001	BMB*
Total:			0.011	0.001	100.00	0.006	

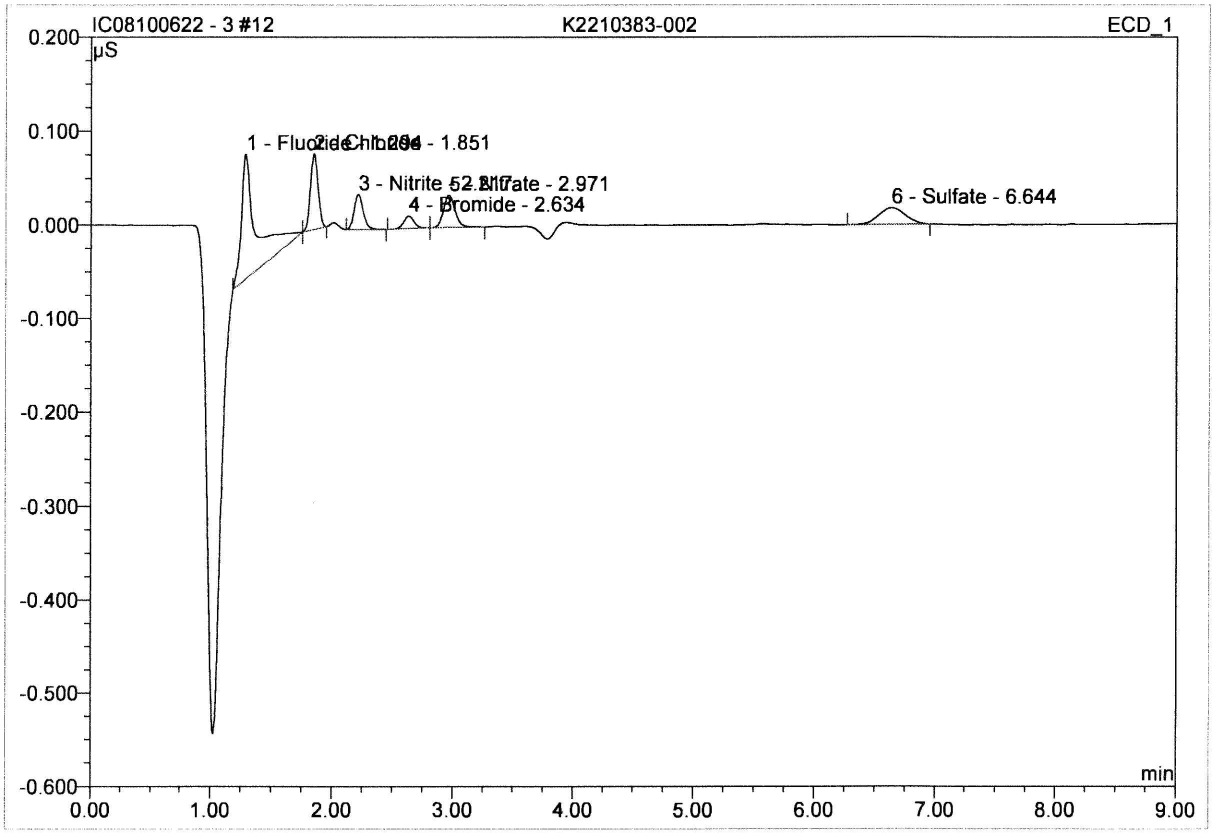
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

12 K2210383-002

Sample Name:	**K2210383-002**	*Injection Volume:*	**5.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



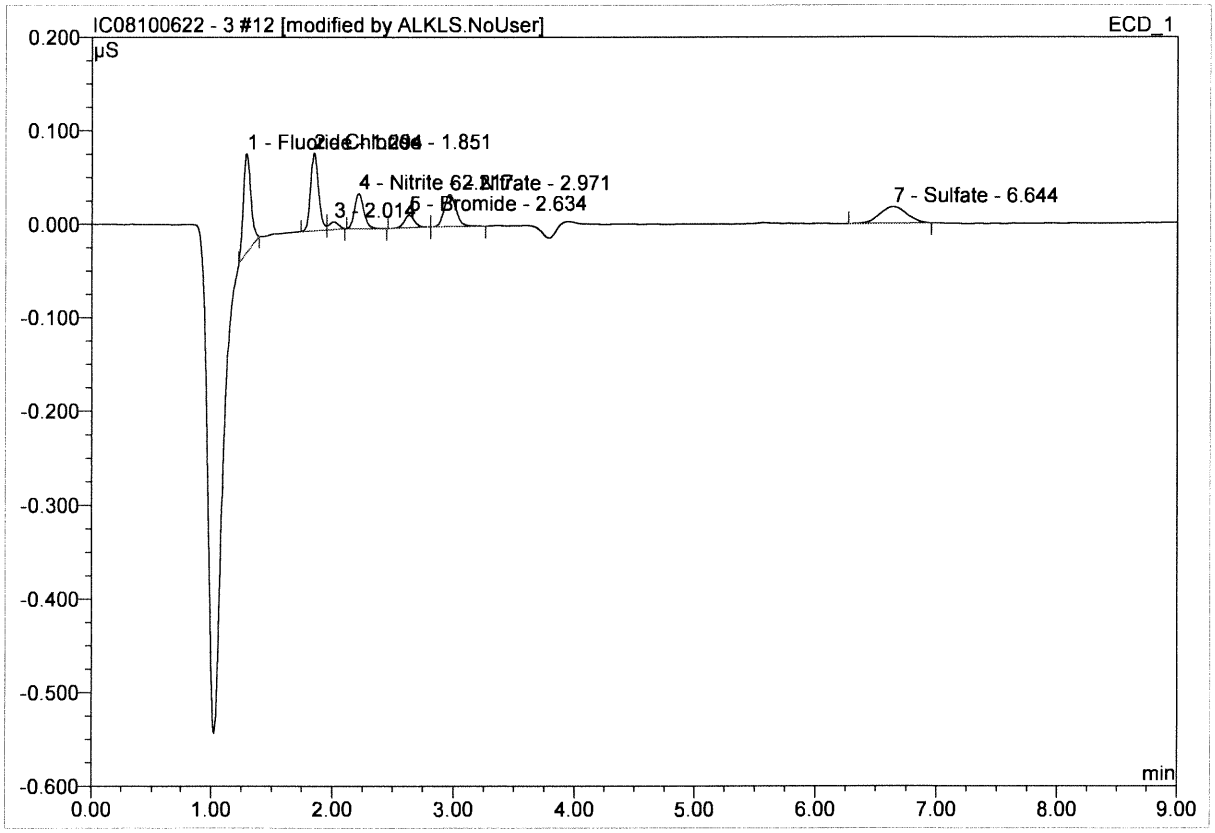
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.133	0.019	49.48	0.131	BMB
2	1.85	Chloride	0.081	0.006	15.79	0.073	bMB
3	2.22	Nitrite	0.037	0.003	8.92	0.018	BMB
4	2.63	Bromide	0.014	0.001	3.57	0.041	BMB
5	2.97	Nitrate	0.035	0.004	10.39	0.019	bMB
6	6.64	Sulfate	0.018	0.005	11.85	0.073	BMB
Total:			0.317	0.038	100.00	0.356	

Before

OCT 07

12 K2210383-002

Sample Name:	**K2210383-002**	*Injection Volume:*	**5.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.106	0.008	26.97	0.053	BMB*
2	1.85	Chloride	0.083	0.006	23.09	0.078	BM *
3	2.01	n.a.	0.008	0.001	2.66	n.a.	MB*
4	2.22	Nitrite	0.037	0.003	12.14	0.018	BMB
5	2.63	Bromide	0.014	0.001	4.86	0.041	BMb*
6	2.97	Nitrate	0.035	0.004	14.14	0.019	bMB
7	6.64	Sulfate	0.018	0.005	16.13	0.073	BMB
Total:			0.300	0.028	100.00	0.282	

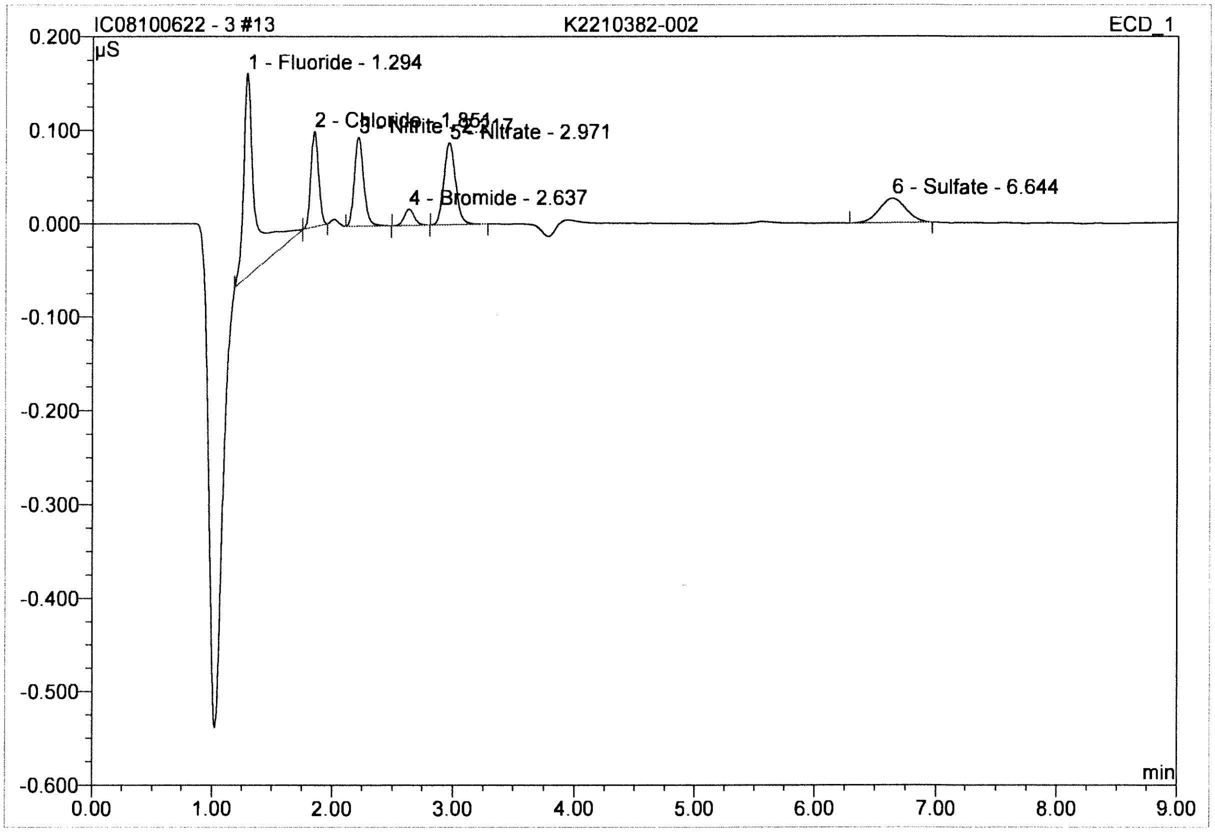
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

13 K2210382-002

Sample Name:	**K2210382-002**	*Injection Volume:*	**5.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



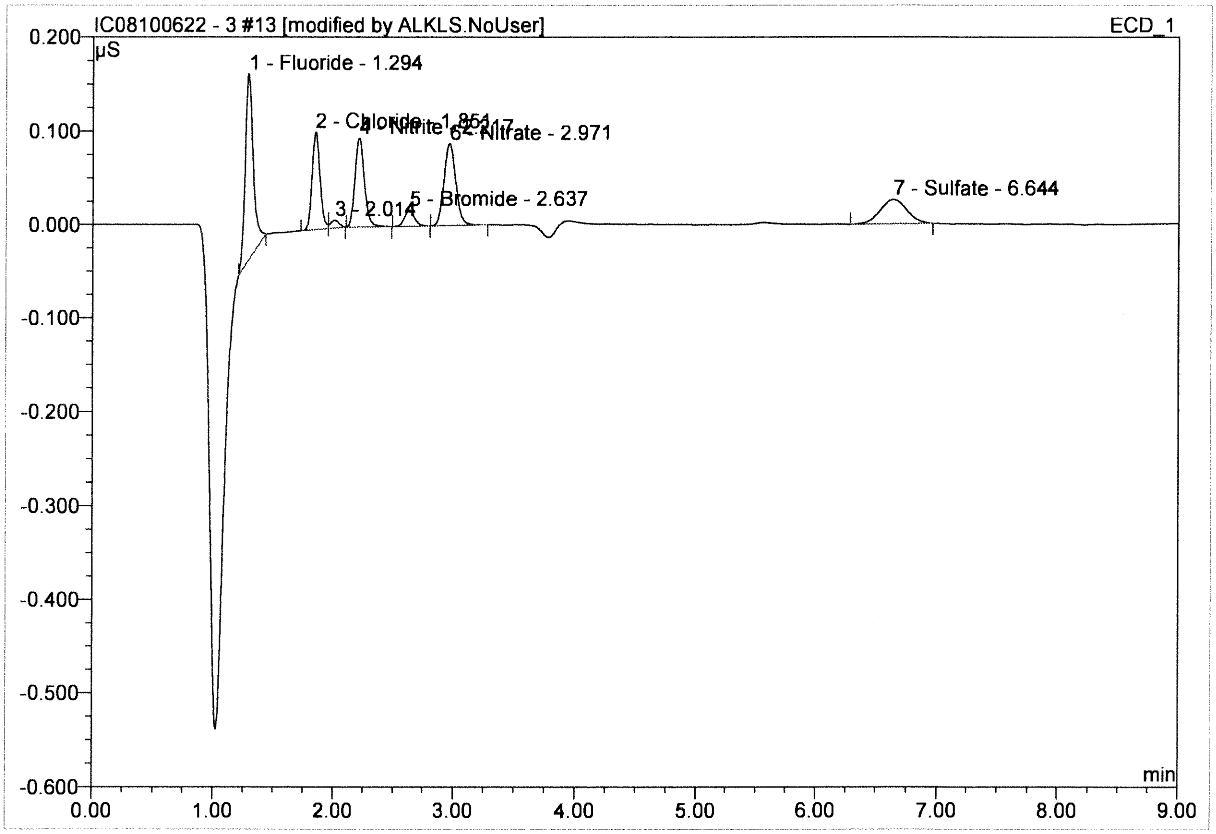
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.217	0.025	42.22	0.176	BMB
2	1.85	Chloride	0.102	0.008	12.72	0.092	bMB
3	2.22	Nitrite	0.095	0.009	14.65	0.047	BMB
4	2.64	Bromide	0.018	0.002	2.94	0.053	BMB
5	2.97	Nitrate	0.087	0.010	16.50	0.048	BMB
6	6.64	Sulfate	0.026	0.007	10.98	0.107	BMB
Total:			0.545	0.060	100.00	0.522	

Before

OCT 07

13 K2210382-002

Sample Name:	**K2210382-002**	*Injection Volume:*	**5.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 20:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.198	0.016	30.19	0.108	BMB*
2	1.85	Chloride	0.104	0.008	15.81	0.098	BM *
3	2.01	n.a.	0.009	0.001	1.45	n.a.	MB*
4	2.22	Nitrite	0.095	0.009	17.08	0.047	BMB
5	2.64	Bromide	0.018	0.002	3.42	0.053	BMB
6	2.97	Nitrate	0.087	0.010	19.24	0.048	BMB
7	6.64	Sulfate	0.026	0.007	12.80	0.107	BMB
Total:			0.537	0.051	100.00	0.460	

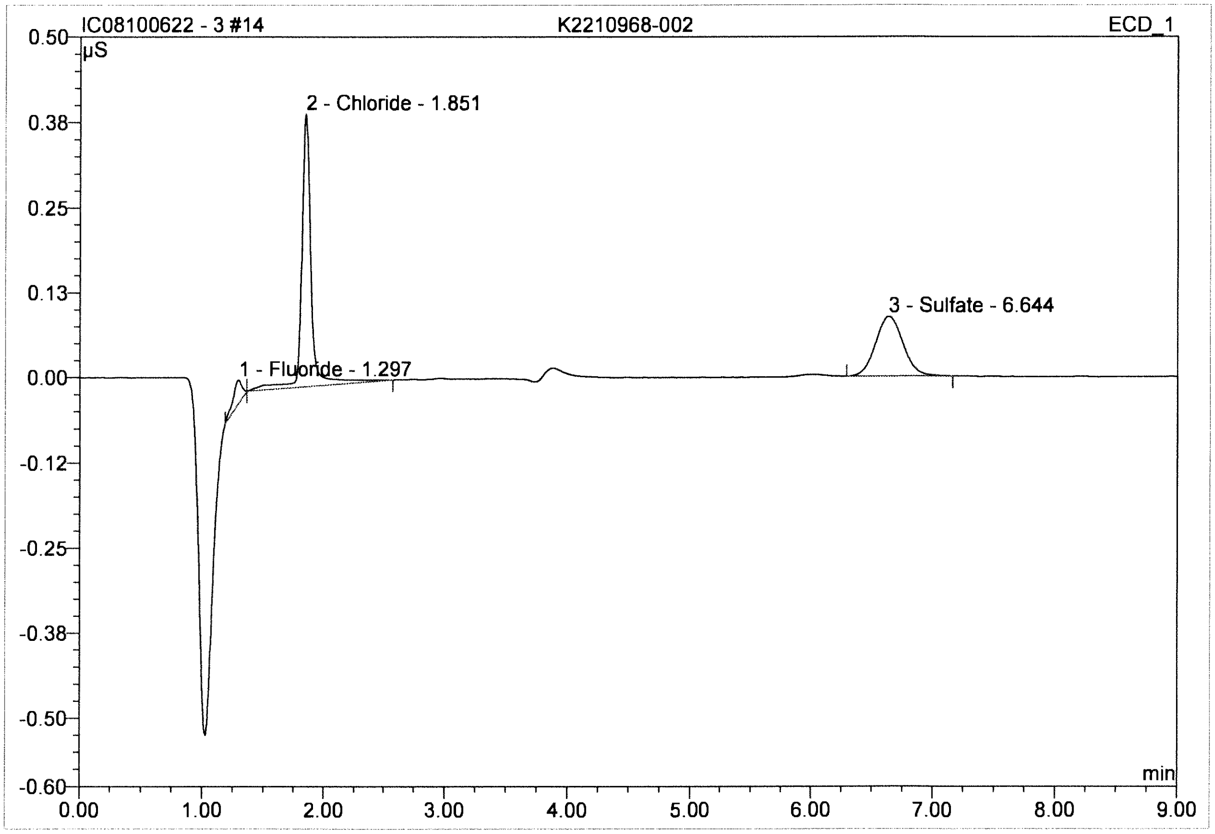
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

14 K2210968-002

Sample Name:	**K2210968-002**	*Injection Volume:*	**5.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 21:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



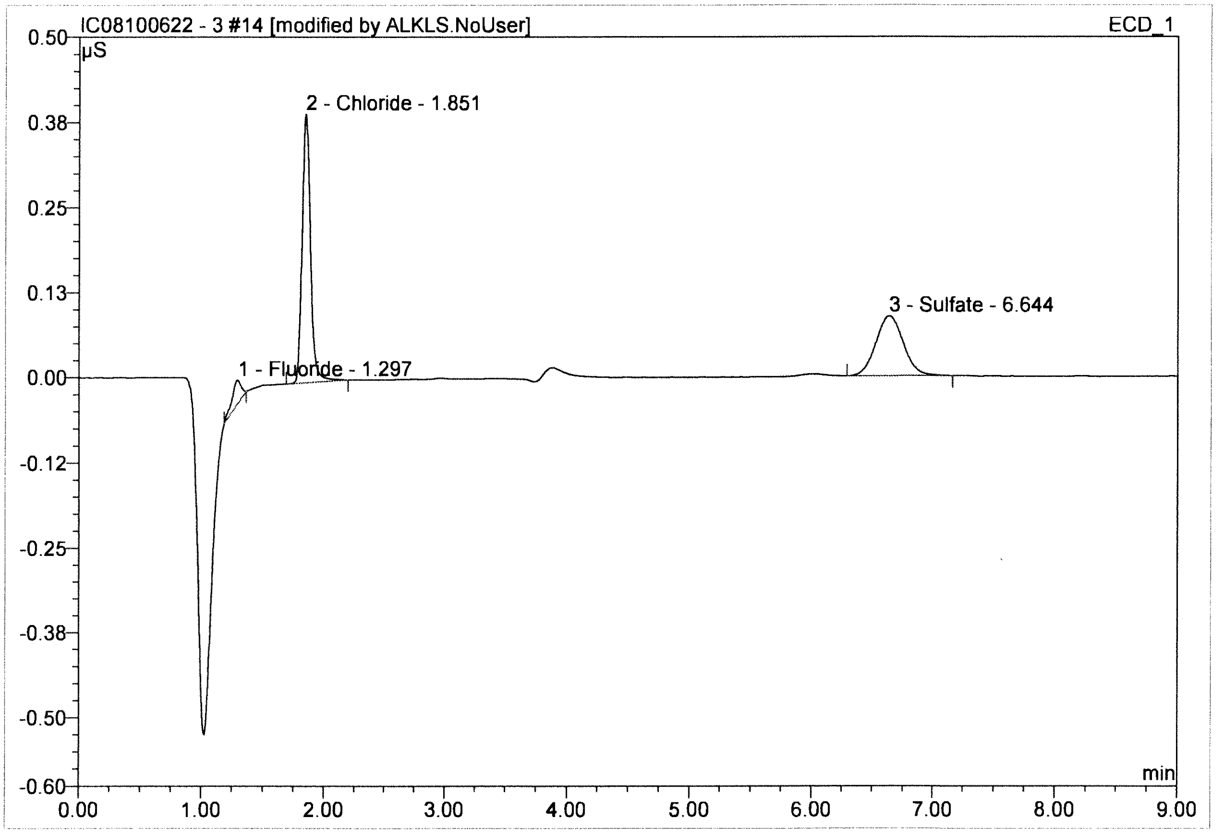
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.034	0.003	4.79	0.209	BMB
2	1.85	Chloride	0.400	0.037	58.90	4.465	bMB
3	6.64	Sulfate	0.088	0.023	36.32	3.713	BMB
Total:			0.522	0.063	100.00	8.388	

Before

OCT 07

14 K2210968-002

Sample Name:	**K2210968-002**	*Injection Volume:*	**5.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 21:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.034	0.003	5.23	0.209	BMB
2	1.85	Chloride	0.394	0.032	55.09	3.821	BMB*
3	6.64	Sulfate	0.088	0.023	39.69	3.713	BMB
Total:			0.517	0.058	100.00	7.744	

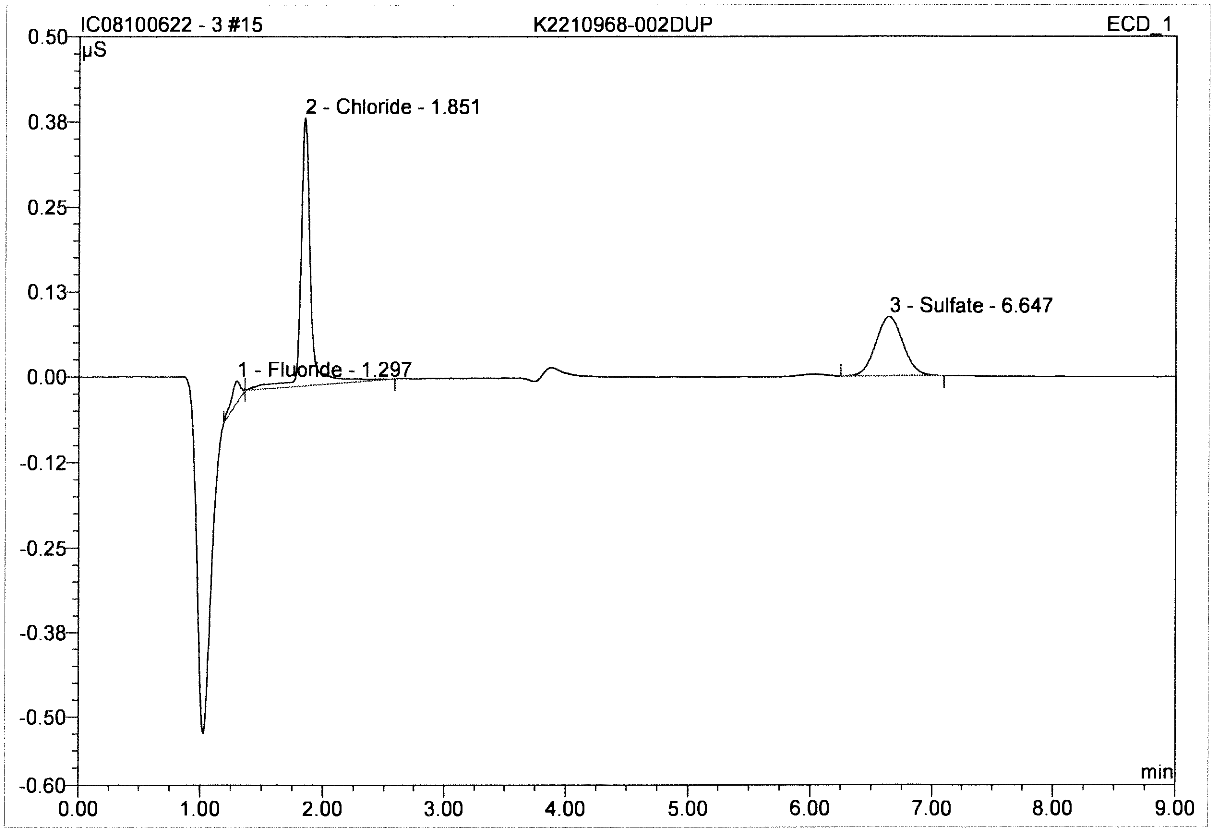
After
Initials ɥF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

15 K2210968-002DUP

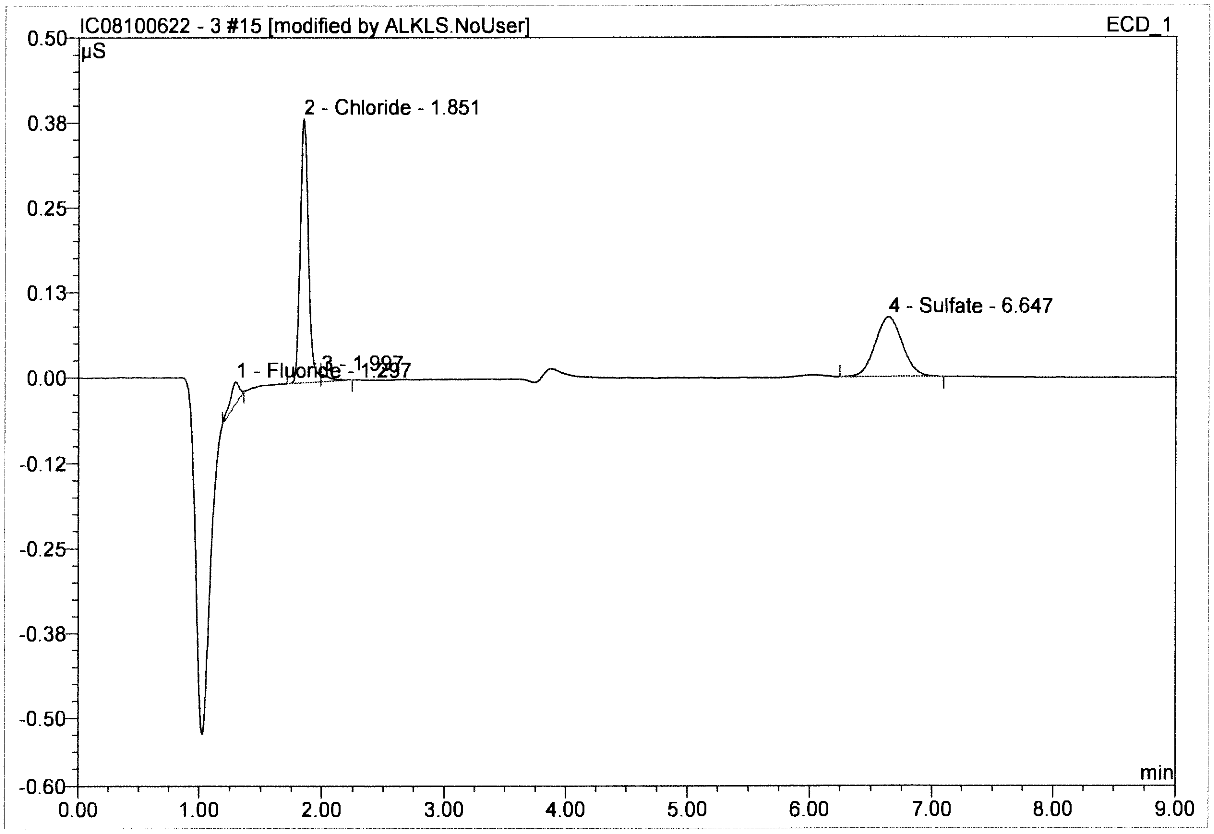
Sample Name:	**K2210968-002DUP**	*Injection Volume:*	**5.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 21:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.031	0.003	4.45	0.193	BMB
2	1.85	Chloride	0.394	0.037	59.57	4.471	bMB
3	6.65	Sulfate	0.087	0.022	35.98	3.642	BMB
Total:			0.512	0.062	100.00	8.305	

15 K2210968-002DUP

Sample Name:	**K2210968-002DUP**	*Injection Volume:*	**5.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 21:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.031	0.003	4.87	0.193	BMB
2	1.85	Chloride	0.388	0.031	54.21	3.718	BM *
3	2.00	n.a.	0.010	0.001	1.56	n.a.	MB*
4	6.65	Sulfate	0.087	0.022	39.37	3.642	BMB
Total:			0.517	0.057	100.00	7.553	

After
Initials NF

OCT 07

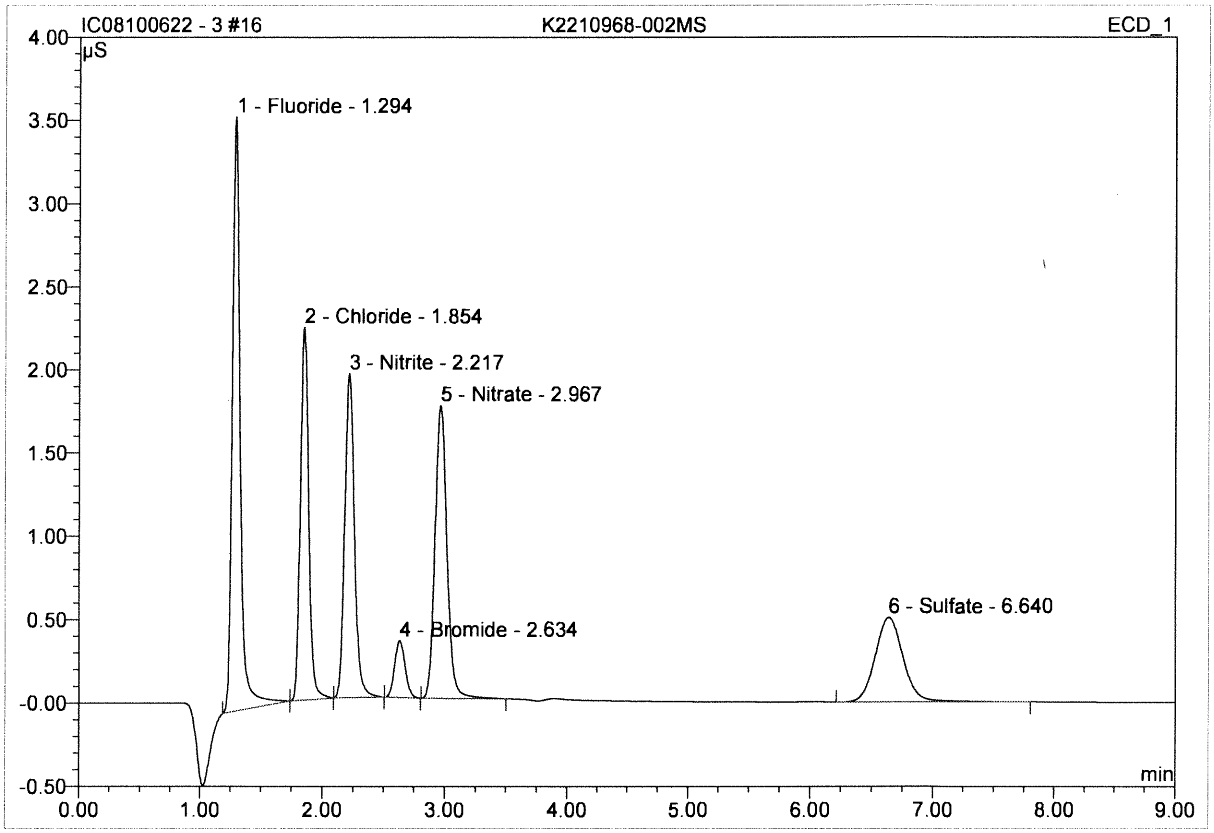
default/Integration

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

16 K2210968-002MS

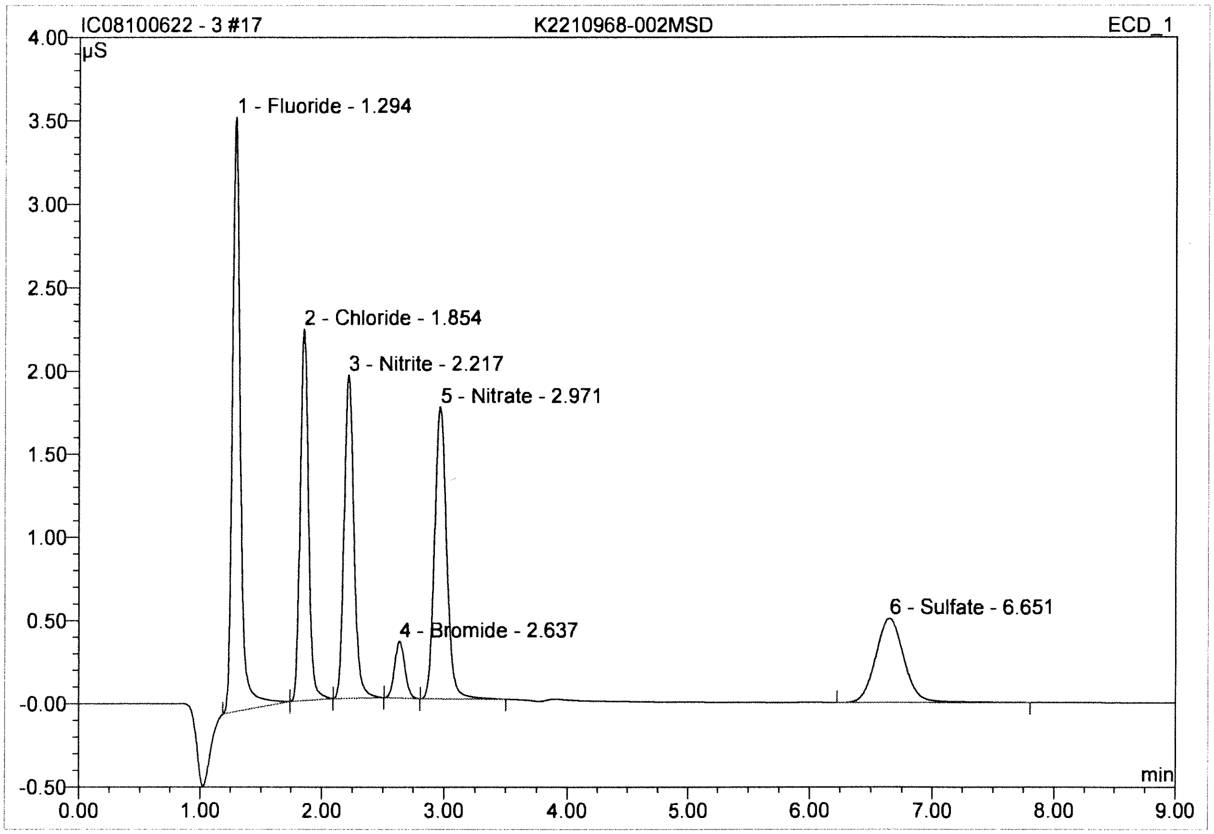
Sample Name:	**K2210968-002MS**	*Injection Volume:*	**5.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 21:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.567	0.273	27.43	37.966	BMB
2	1.85	Chloride	2.236	0.175	17.63	42.257	bMB
3	2.22	Nitrite	1.945	0.181	18.17	19.171	BMB
4	2.63	Bromide	0.340	0.033	3.33	19.924	BMB
5	2.97	Nitrate	1.756	0.199	19.96	19.172	BMB
6	6.64	Sulfate	0.506	0.134	13.46	43.511	BMB
Total:			10.350	0.995	100.00	182.002	

17 K2210968-002MSD

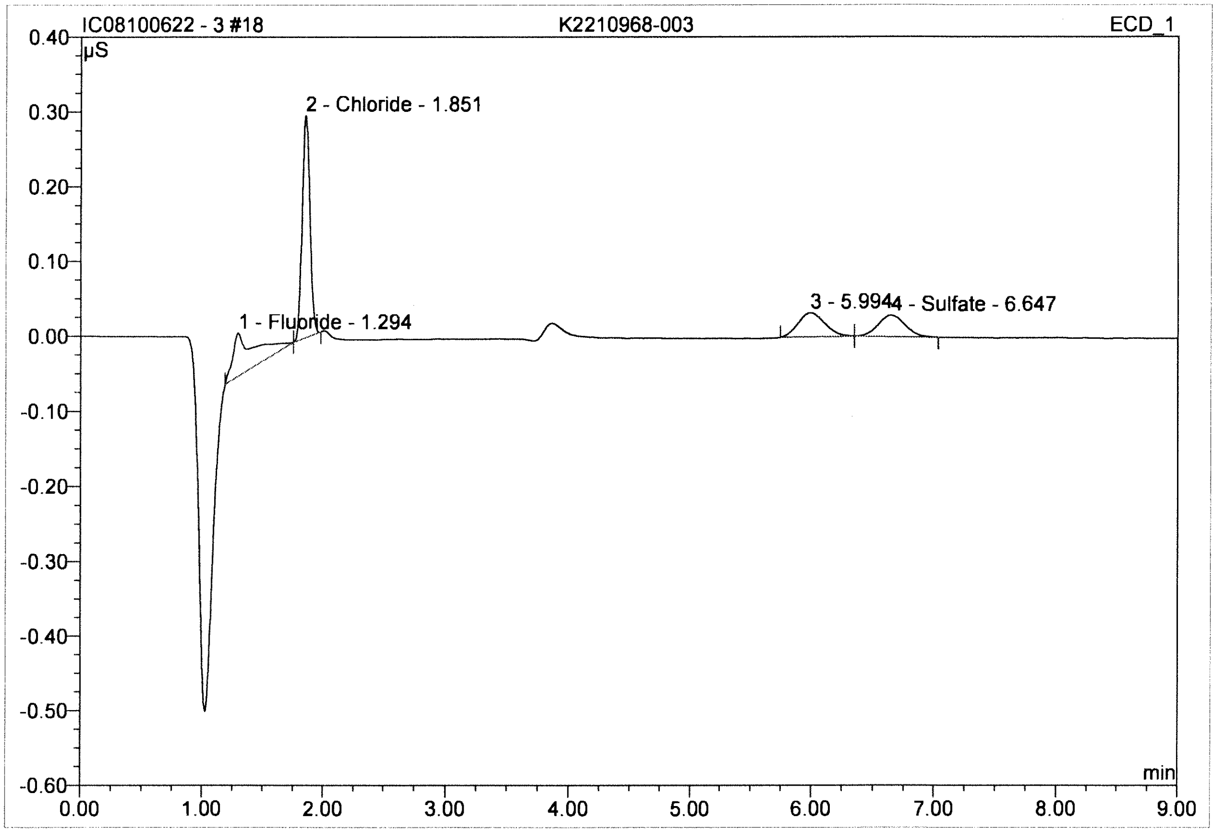
Sample Name:	**K2210968-002MSD**	*Injection Volume:*	**5.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 21:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.569	0.273	27.42	38.018	BMB
2	1.85	Chloride	2.233	0.175	17.60	42.255	bMB
3	2.22	Nitrite	1.944	0.181	18.18	19.218	BMB
4	2.64	Bromide	0.341	0.033	3.34	20.012	BMB
5	2.97	Nitrate	1.756	0.199	19.97	19.220	BMB
6	6.65	Sulfate	0.505	0.135	13.49	43.703	BMB
Total:			10.348	0.997	100.00	182.427	

18 K2210968-003

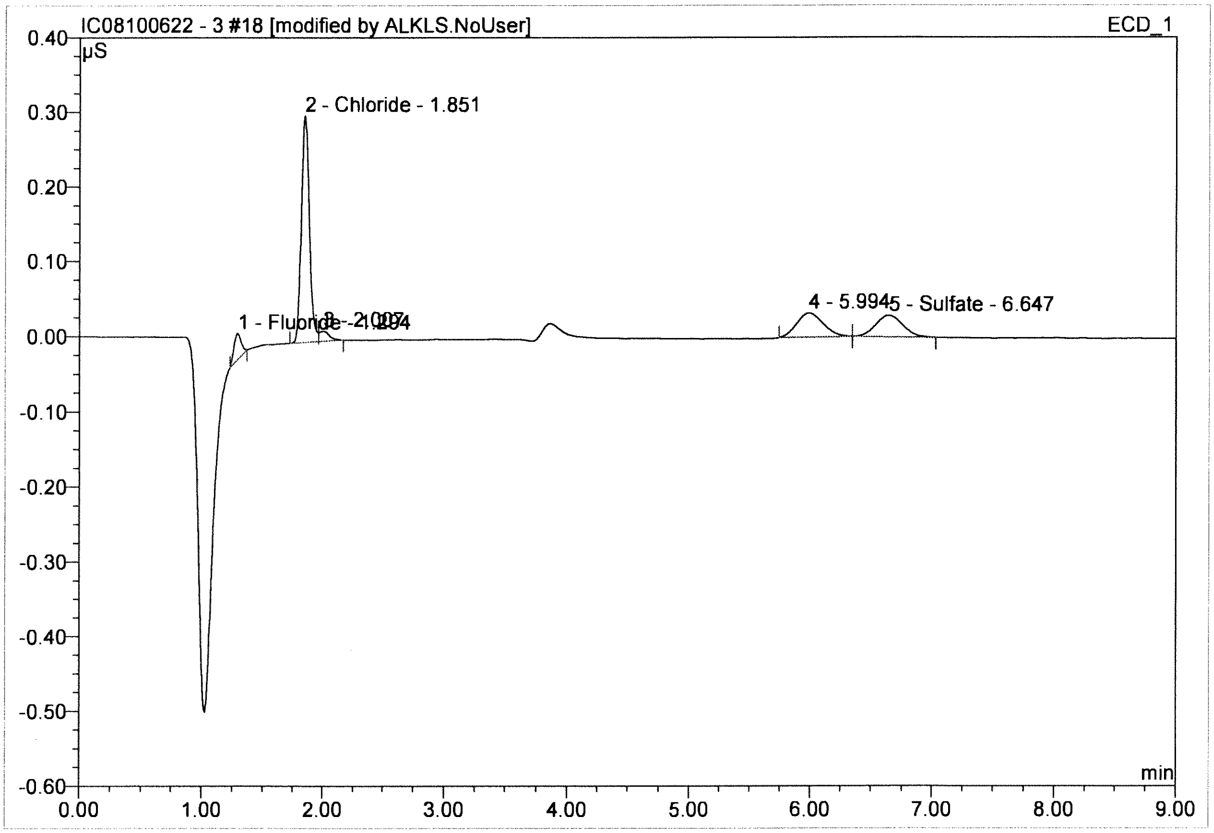
Sample Name:	**K2210968-003**	*Injection Volume:*	**5.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 21:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.058	0.012	24.15	0.839	BMB
2	1.85	Chloride	0.297	0.023	45.29	2.725	bMB
3	5.99	n.a.	0.032	0.008	16.15	n.a.	BMb
4	6.65	Sulfate	0.028	0.007	14.41	1.170	bMB
Total:			0.416	0.050	100.00	4.734	

18 K2210968-003

Sample Name:	**K2210968-003**	*Injection Volume:*	**5.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 21:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.034	0.002	5.43	0.162	BMB*
2	1.85	Chloride	0.303	0.024	55.95	2.889	BM *
3	2.01	n.a.	0.013	0.001	3.00	n.a.	MB*
4	5.99	n.a.	0.032	0.008	18.82	n.a.	BMb
5	6.65	Sulfate	0.028	0.007	16.80	1.170	bMB
Total:			0.411	0.043	100.00	4.220	

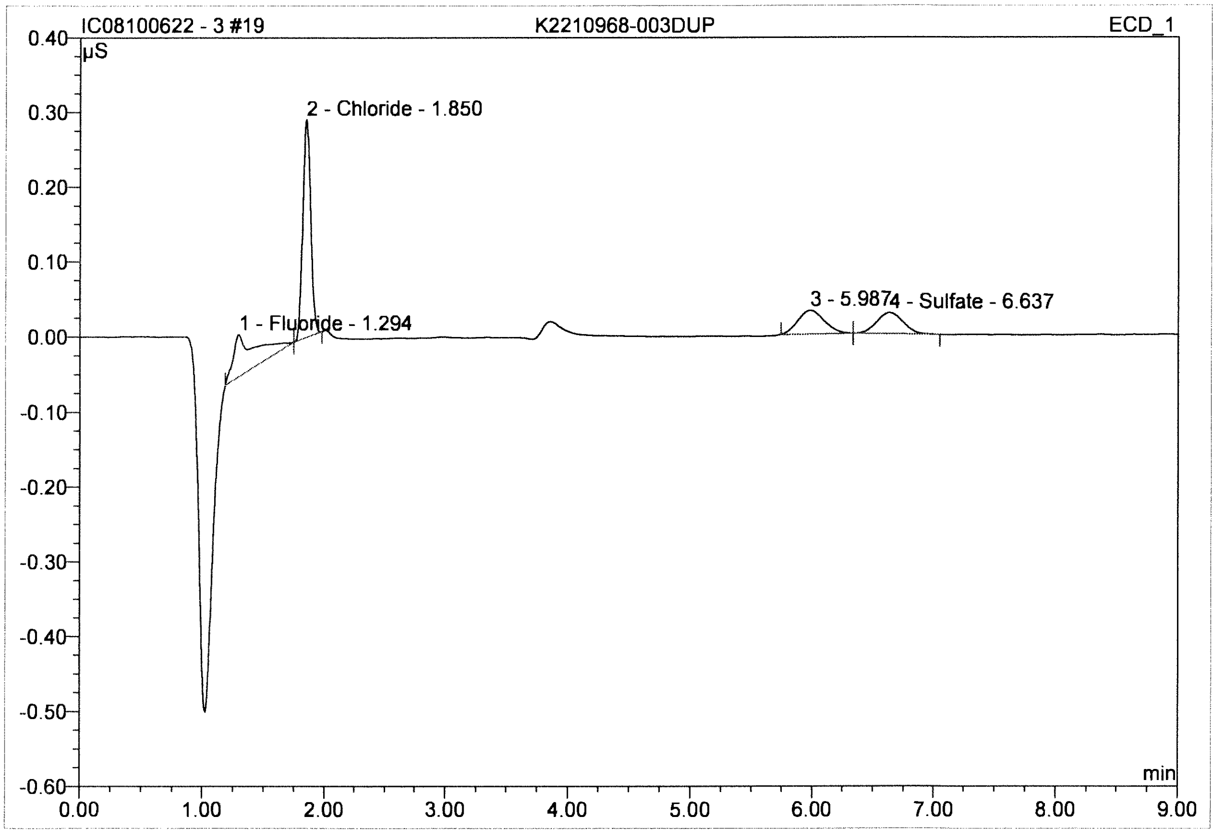
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

19 K2210968-003DUP

Sample Name:	**K2210968-003DUP**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 22:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



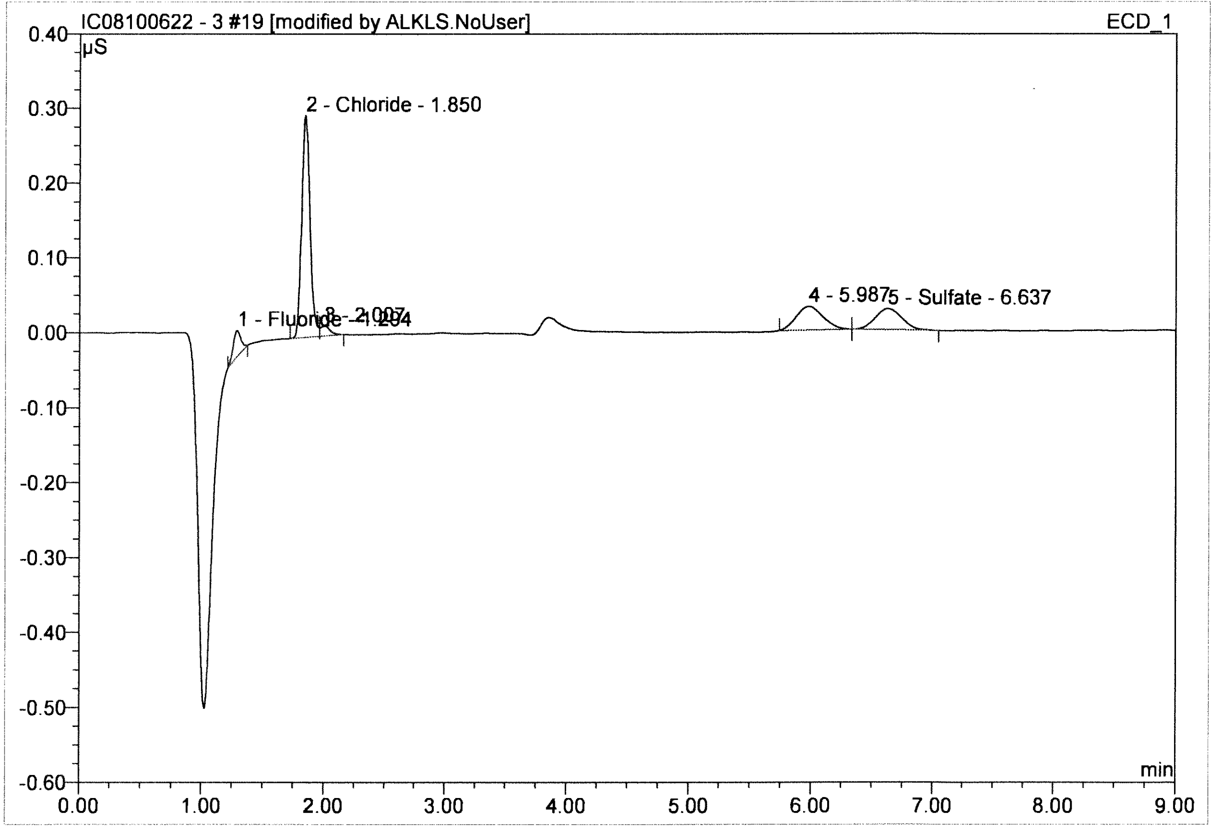
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.056	0.012	24.26	0.825	BMB
2	1.85	Chloride	0.291	0.022	45.19	2.664	bMB
3	5.99	n.a.	0.031	0.008	16.18	n.a.	BMb
4	6.64	Sulfate	0.028	0.007	14.36	1.142	bMB
Total:			0.407	0.049	100.00	4.631	

Before

OCT 07

19 K2210968-003DUP

Sample Name:	**K2210968-003DUP**	*Injection Volume:*	**5.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 22:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.035	0.003	6.20	0.182	BMB*
2	1.85	Chloride	0.297	0.023	55.45	2.818	BM *
3	2.01	n.a.	0.013	0.001	2.93	n.a.	MB*
4	5.99	n.a.	0.031	0.008	18.77	n.a.	BMb
5	6.64	Sulfate	0.028	0.007	16.66	1.142	bMB
Total:			0.405	0.042	100.00	4.141	

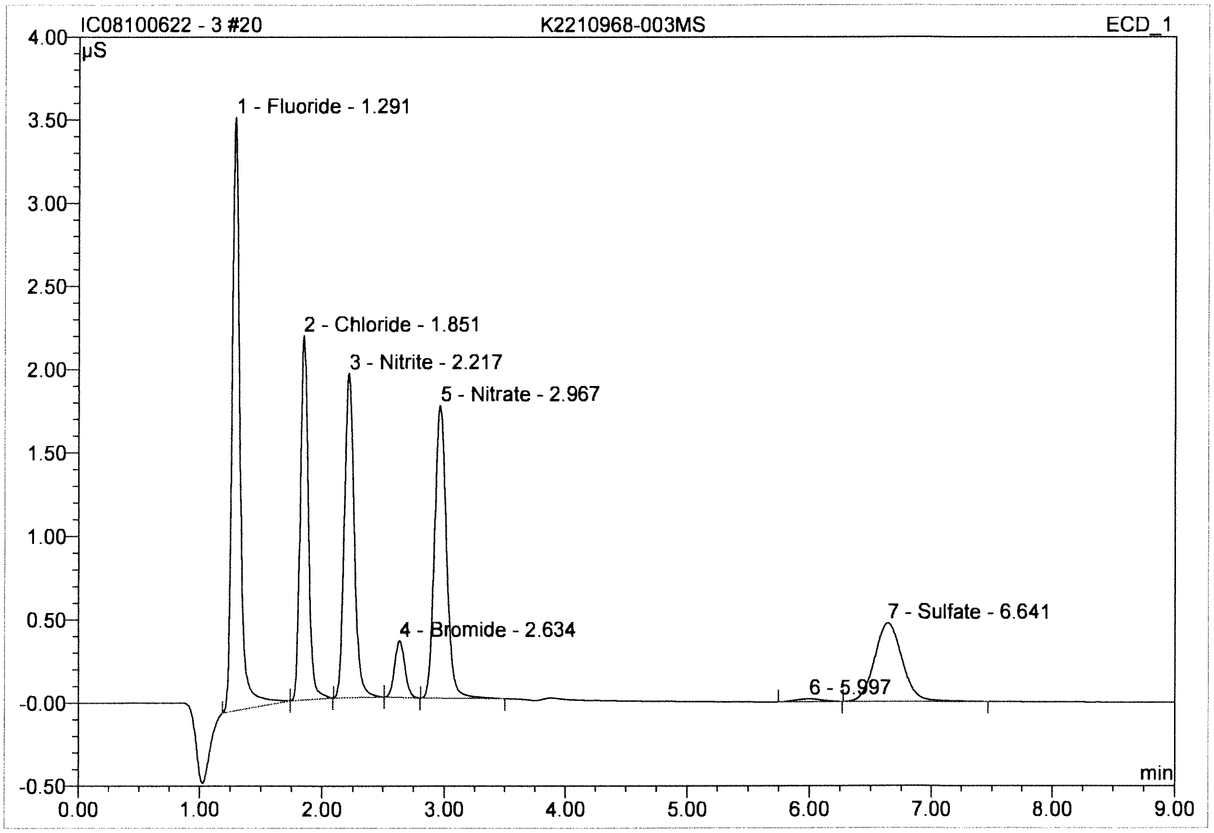
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/Shoulder Incorrect
☐Other

20 K2210968-003MS

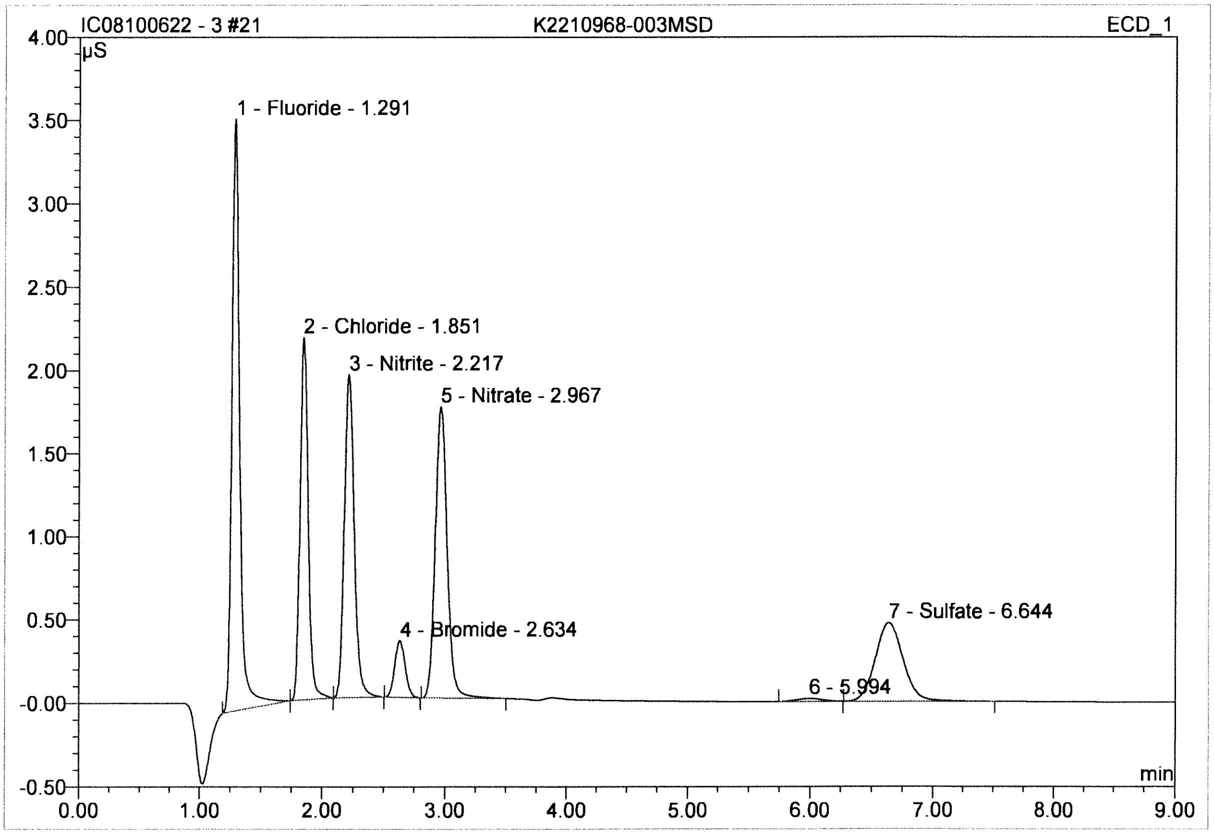
Sample Name:	**K2210968-003MS**	*Injection Volume:*	**5.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.561	0.272	27.69	37.874	BMB
2	1.85	Chloride	2.184	0.171	17.43	41.282	bMB
3	2.22	Nitrite	1.946	0.181	18.38	19.168	BMb
4	2.63	Bromide	0.340	0.033	3.37	19.926	bMB
5	2.97	Nitrate	1.755	0.199	20.20	19.174	BMB
6	6.00	n.a.	0.017	0.004	0.42	n.a.	BMB
7	6.64	Sulfate	0.471	0.123	12.52	39.990	BMB
Total:			10.274	0.983	100.00	177.414	

21 K2210968-003MSD

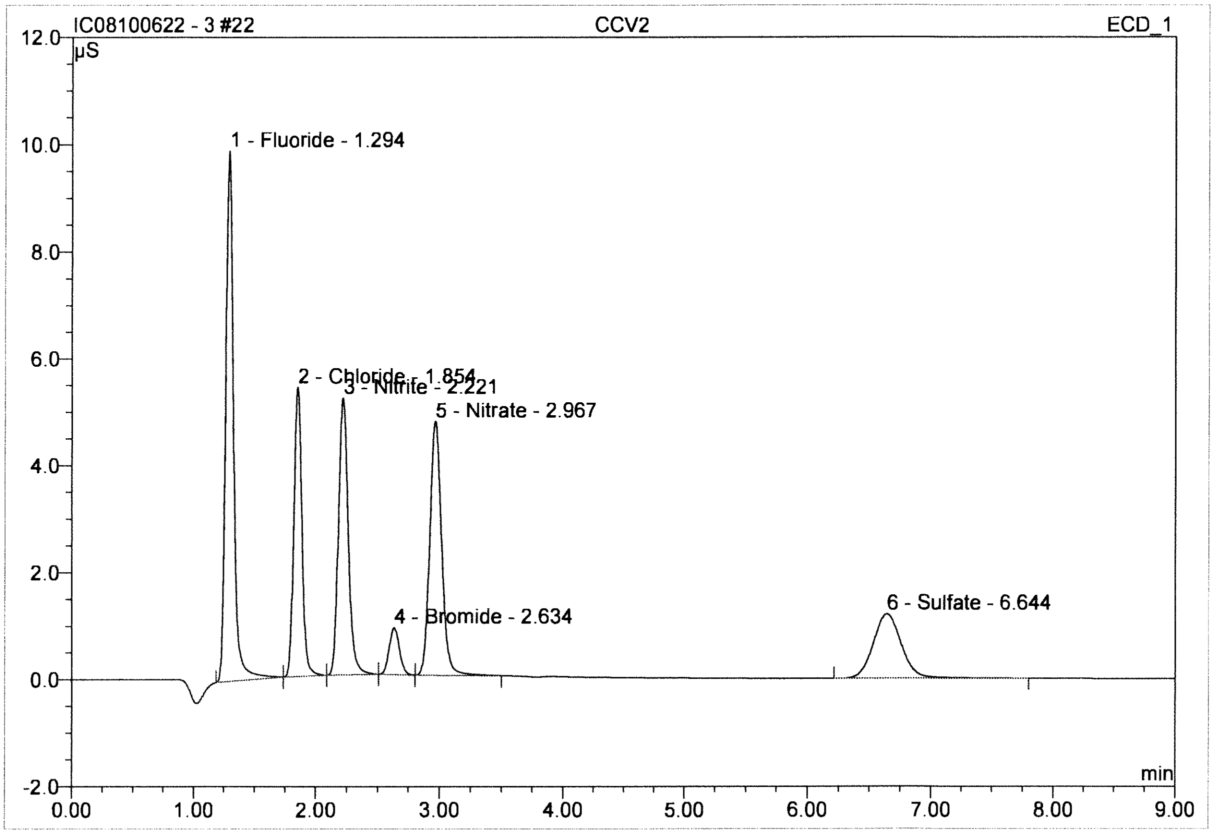
Sample Name:	**K2210968-003MSD**	*Injection Volume:*	**5.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**20.0000**
Recording Time:	**10/6/2022 22:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.554	0.272	27.68	37.814	BMB
2	1.85	Chloride	2.178	0.171	17.41	41.193	bMB
3	2.22	Nitrite	1.942	0.181	18.40	19.159	BMB
4	2.63	Bromide	0.339	0.033	3.37	19.906	BMB
5	2.97	Nitrate	1.752	0.198	20.18	19.130	BMB
6	5.99	n.a.	0.017	0.004	0.42	n.a.	BMB
7	6.64	Sulfate	0.471	0.123	12.54	40.032	BMB
Total:			10.254	0.982	100.00	177.234	

22 CCV2

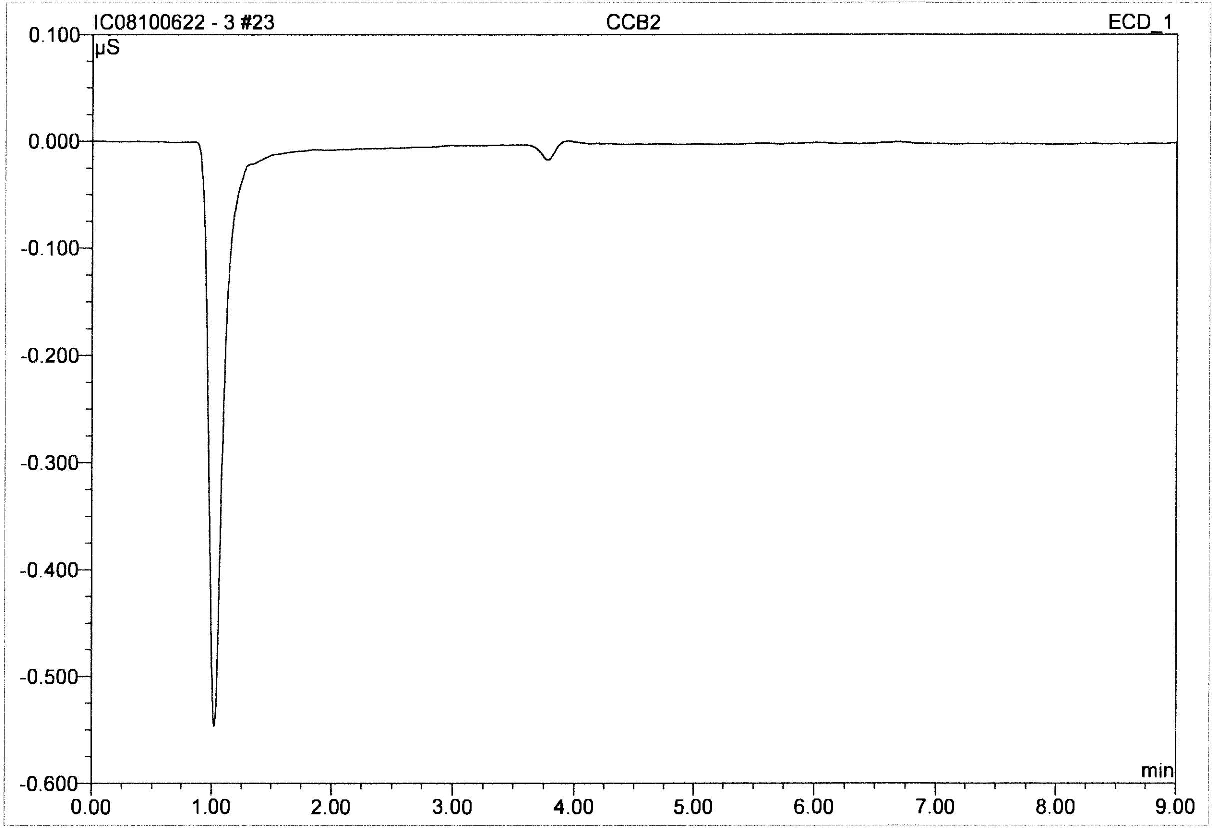
Sample Name:	**CCV2**	*Injection Volume:*	**5.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 22:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.912	0.737	28.75	5.123	BMB
2	1.85	Chloride	5.402	0.417	16.27	5.022	bMb
3	2.22	Nitrite	5.177	0.478	18.66	2.534	bMb
4	2.63	Bromide	0.879	0.086	3.34	2.569	bMB
5	2.97	Nitrate	4.741	0.528	20.60	2.547	BMB
6	6.64	Sulfate	1.202	0.317	12.38	5.151	BMB
Total:			27.313	2.562	100.00	22.945	

23 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/6/2022 22:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



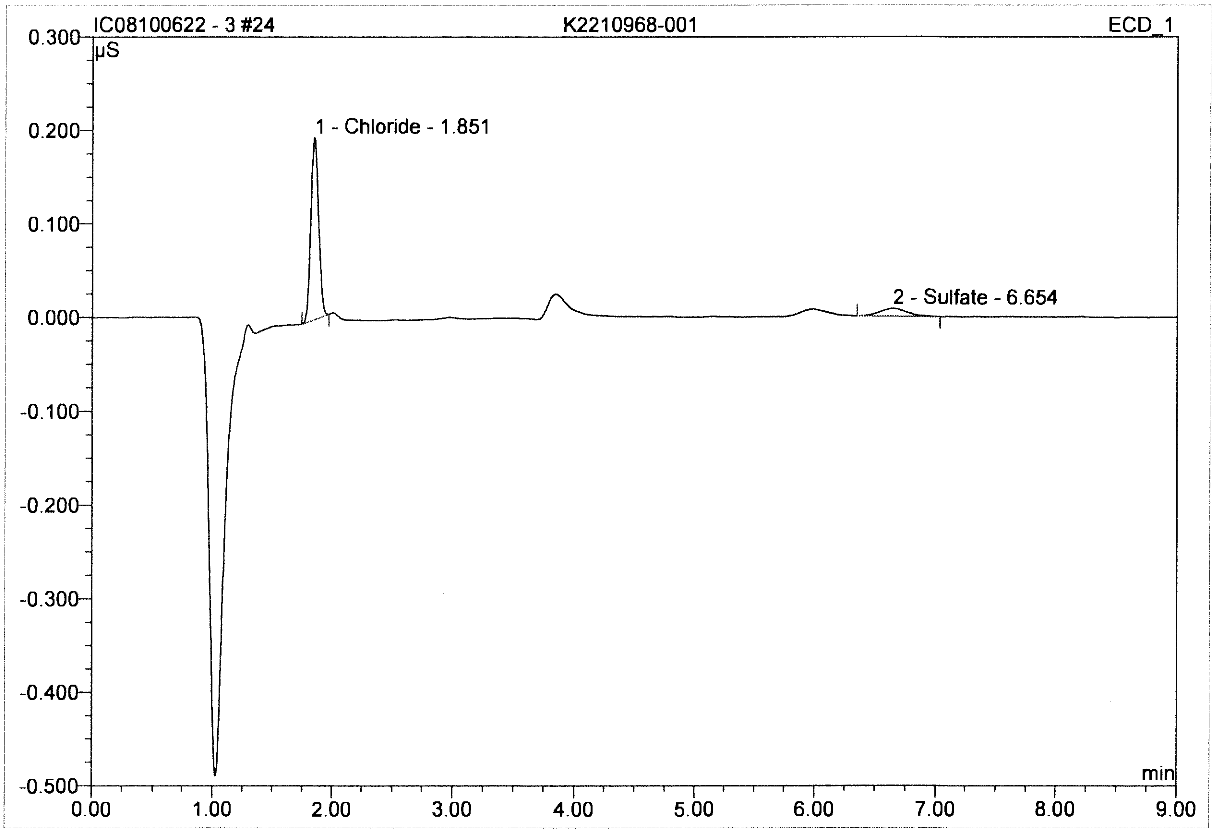
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

24 K2210968-001

Sample Name:	**K2210968-001**	*Injection Volume:*	**5.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 22:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



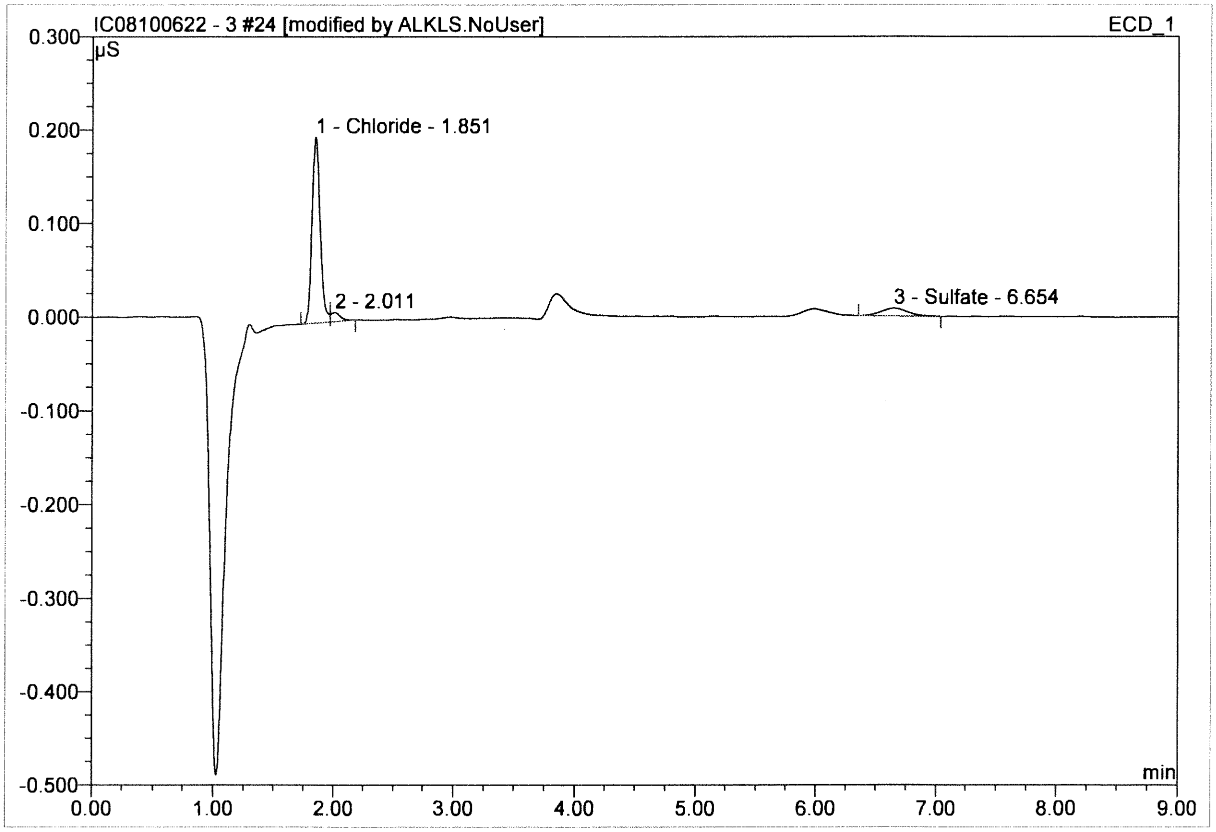
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.194	0.015	87.59	1.782	BMB
2	6.65	Sulfate	0.008	0.002	12.41	0.341	BMB
Total:			0.203	0.017	100.00	2.122	

Before

OCT 07

24 K2210968-001

Sample Name:	**K2210968-001**	*Injection Volume:*	**5.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 22:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.198	0.016	84.01	1.894	BM *
2	2.01	n.a.	0.010	0.001	4.78	n.a.	MB*
3	6.65	Sulfate	0.008	0.002	11.20	0.341	BMB
Total:			0.216	0.019	100.00	2.234	

After
Initials NF

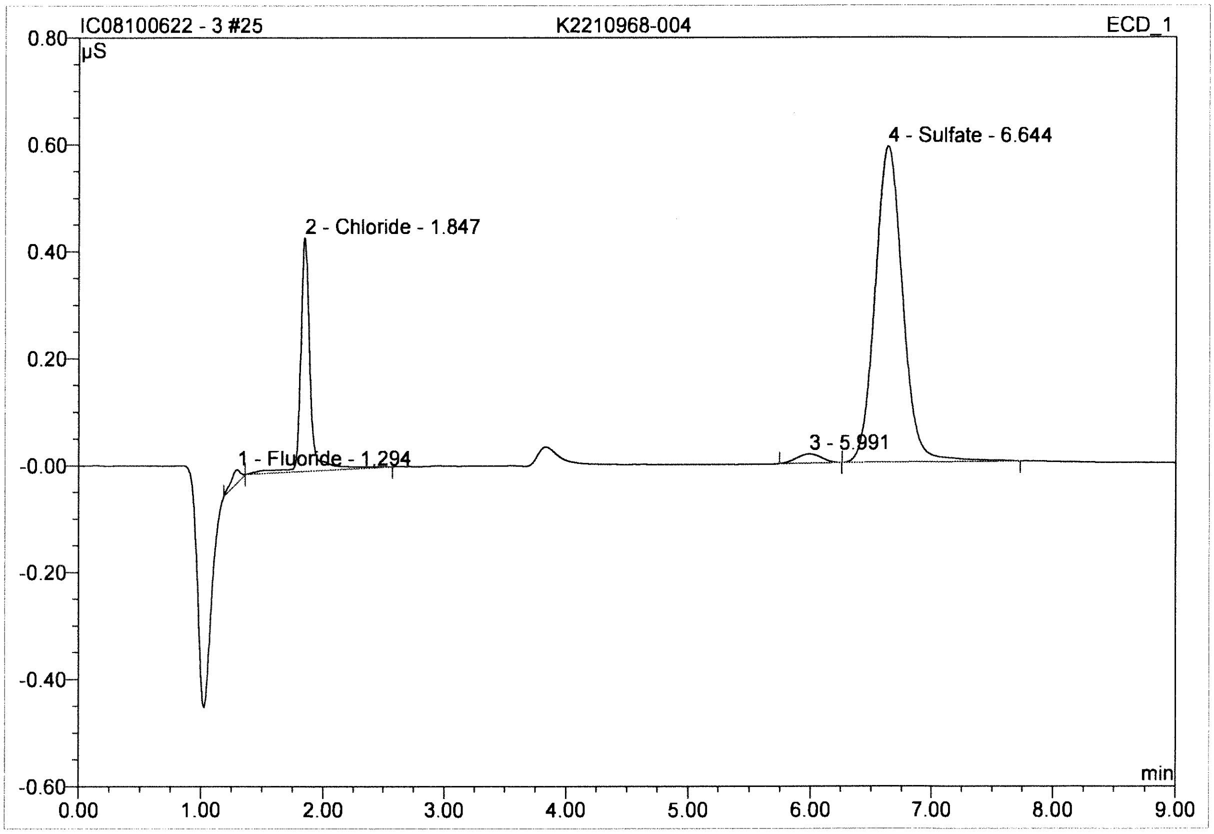
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

25 K2210968-004

F

Sample Name:	**K2210968-004**	*Injection Volume:*	**5.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 23:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.025	0.002	1.12	0.157	BMB
2	1.85	Chloride	0.436	0.040	19.88	4.835	bMB
3	5.99	n.a.	0.017	0.004	1.96	n.a.	BMB
4	6.64	Sulfate	0.590	0.156	77.04	25.265	BMB
Total:			1.068	0.202	100.00	30.257	

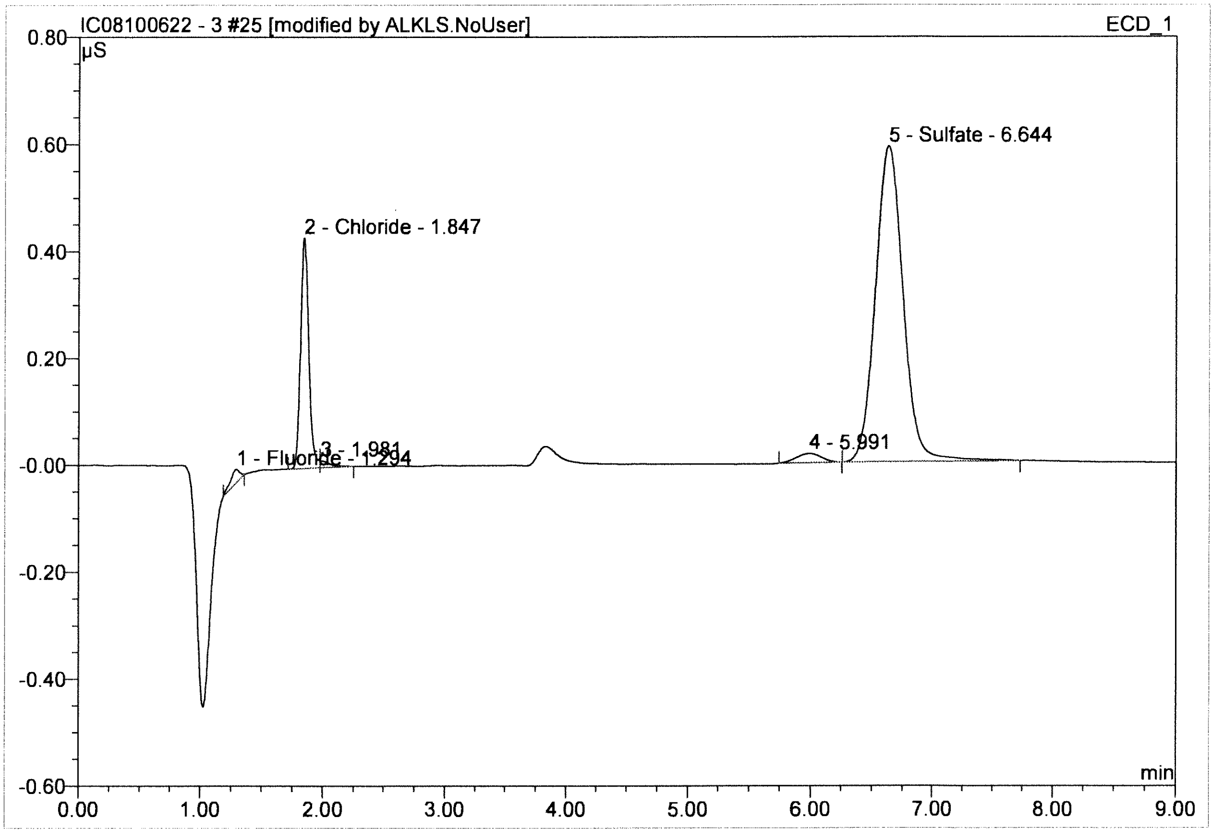
Before

OCT 07

25 K2210968-004

F

Sample Name:	**K2210968-004**	*Injection Volume:*	**5.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 23:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.025	0.002	1.15	0.157	BMB
2	1.85	Chloride	0.432	0.034	17.38	4.129	BM *
3	1.98	n.a.	0.013	0.001	0.61	n.a.	MB*
4	5.99	n.a.	0.017	0.004	2.00	n.a.	BMB
5	6.64	Sulfate	0.590	0.156	78.86	25.265	BMB
Total:			1.076	0.197	100.00	29.552	

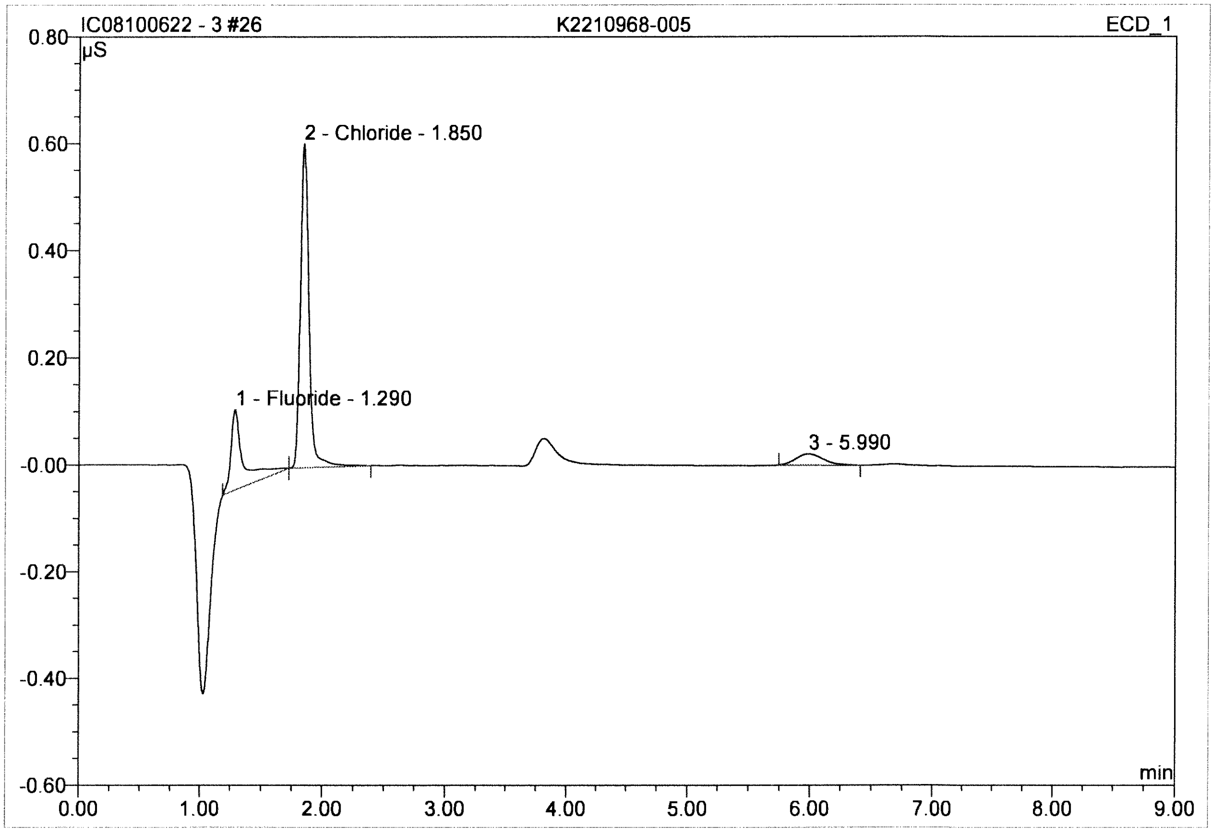
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

26 K2210968-005

Sample Name:	**K2210968-005**	*Injection Volume:*	**5.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 23:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

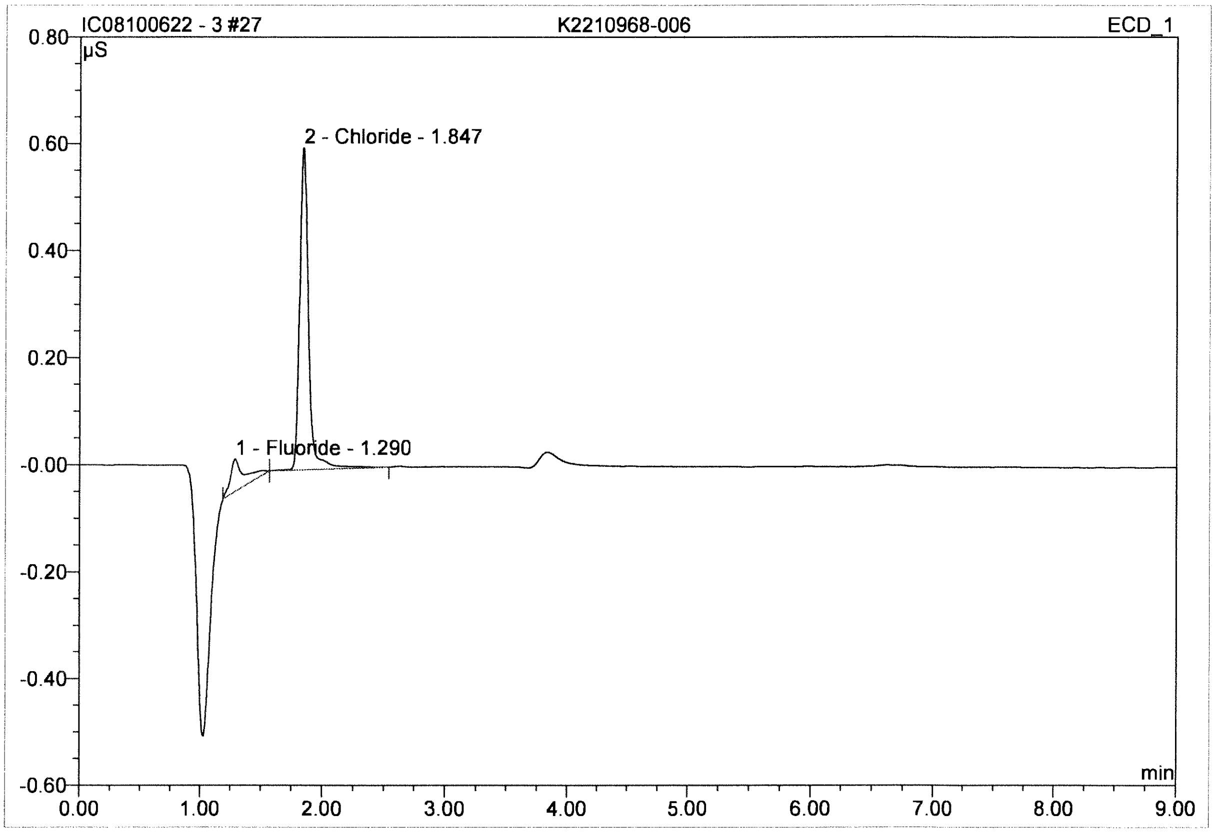


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.150	0.018	24.41	1.242	BMB
2	1.85	Chloride	0.604	0.050	68.11	6.002	bMB
3	5.99	n.a.	0.021	0.005	7.48	n.a.	BMB
Total:			0.775	0.073	100.00	7.244	

27 K2210968-006

F

Sample Name:	**K2210968-006**	*Injection Volume:*	**5.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 23:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.060	0.008	13.74	0.558	BMB
2	1.85	Chloride	0.602	0.050	86.26	6.063	bMB
Total:			0.662	0.058	100.00	6.621	

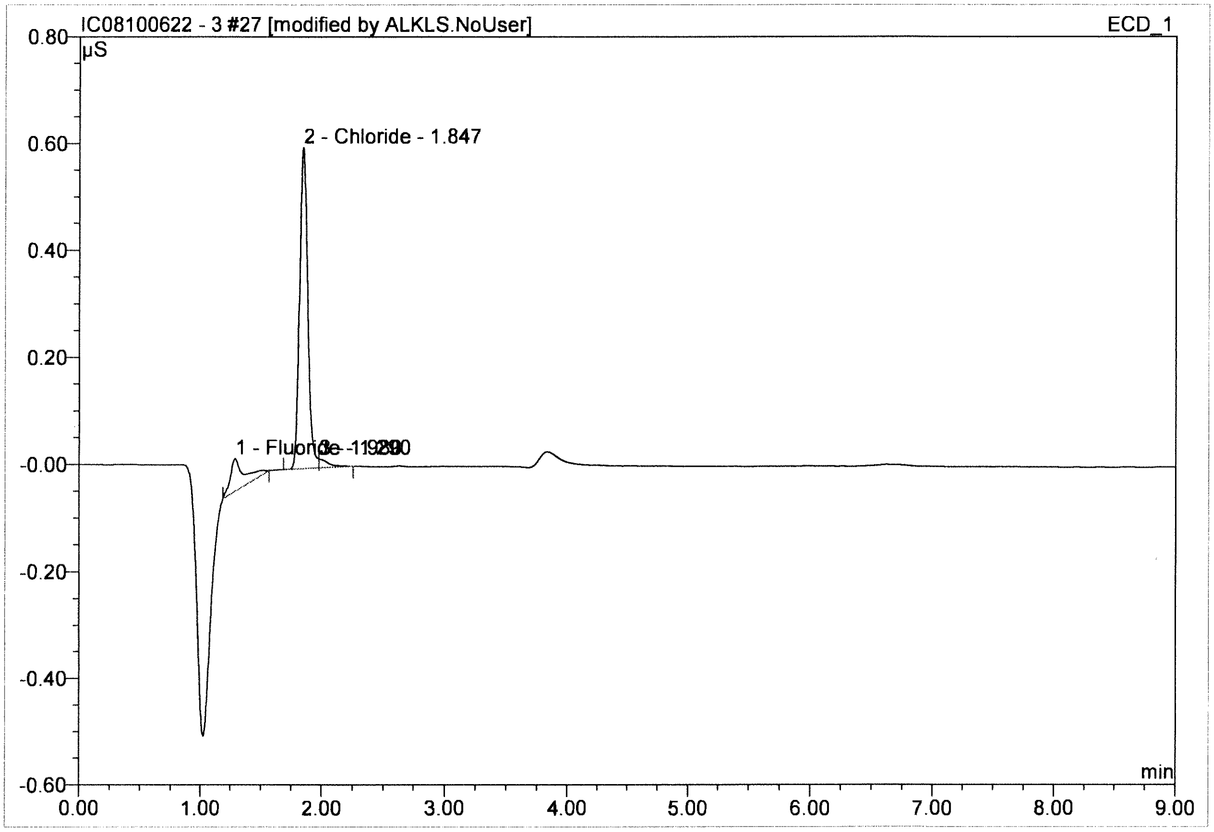
Before

OCT 07

27 K2210968-006

F

Sample Name:	**K2210968-006**	*Injection Volume:*	**5.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/6/2022 23:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.060	0.008	14.12	0.558	BMB
2	1.85	Chloride	0.600	0.047	83.24	5.693	BM *
3	1.98	n.a.	0.016	0.001	2.64	n.a.	MB*
Total:			0.677	0.057	100.00	6.250	

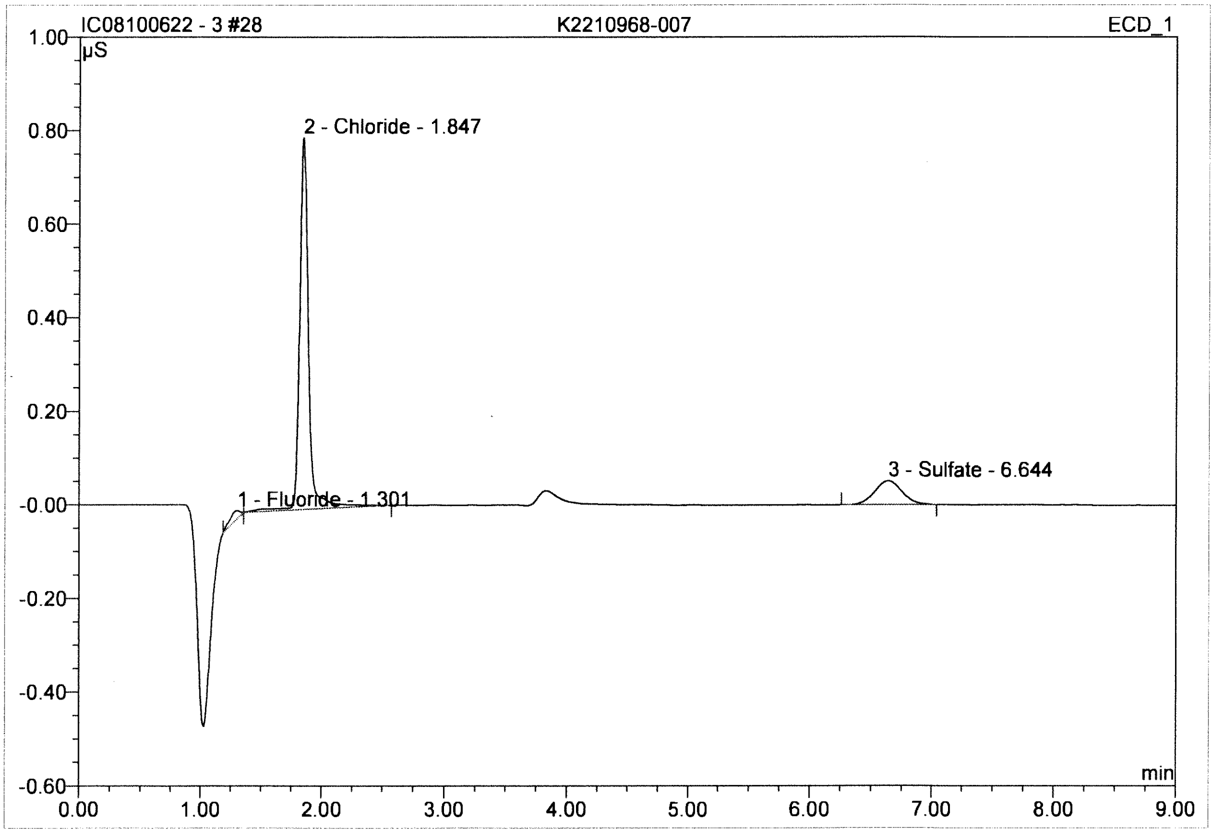
After
Initials NE

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

28 K2210968-007

Sample Name:	**K2210968-007**	*Injection Volume:*	**5.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 23:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



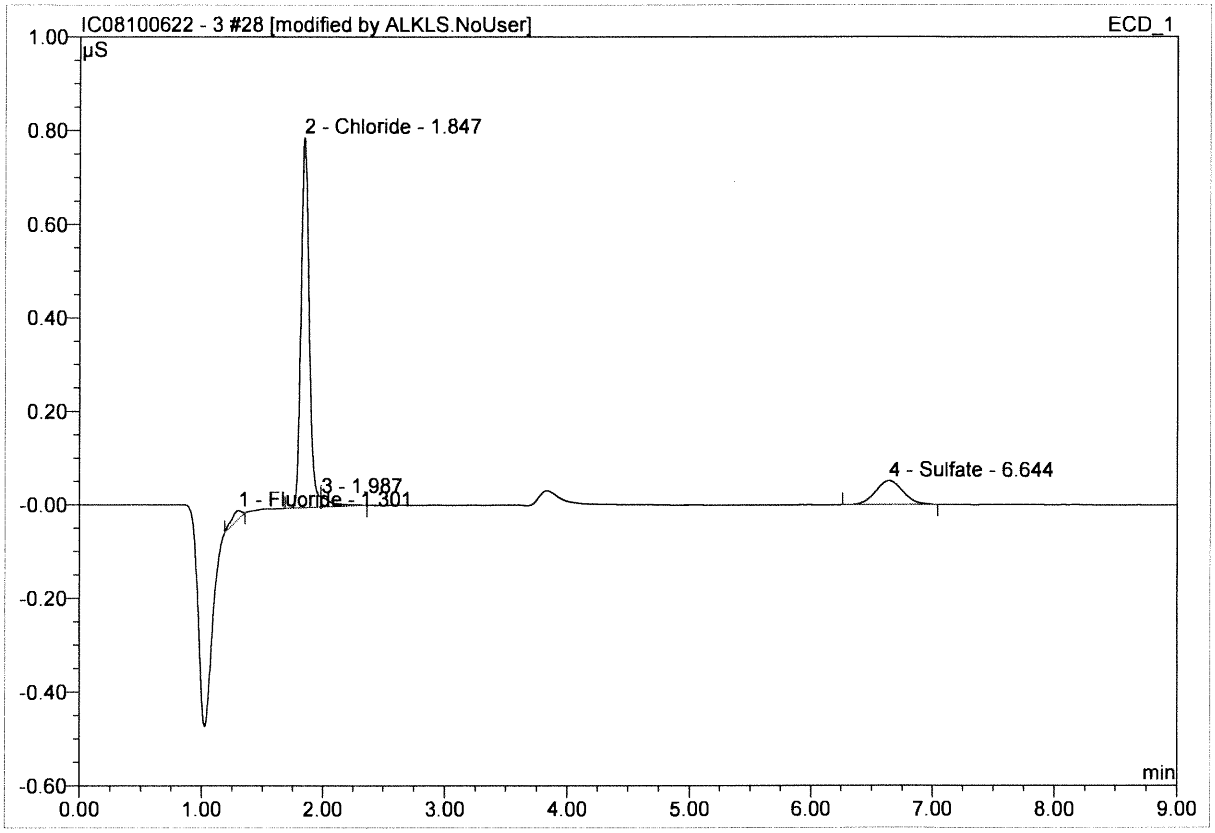
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.018	0.002	2.25	0.654	BMB
2	1.85	Chloride	0.795	0.069	82.15	41.429	bMB
3	6.64	Sulfate	0.051	0.013	15.60	10.610	BMB
Total:			0.863	0.084	100.00	52.693	

Before

OCT 07

28 K2210968-007

Sample Name:	**K2210968-007**	*Injection Volume:*	**5.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 23:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.018	0.002	2.36	0.654	BMB
2	1.85	Chloride	0.791	0.063	78.44	37.676	BM *
3	1.99	n.a.	0.021	0.002	2.83	n.a.	MB*
4	6.64	Sulfate	0.051	0.013	16.38	10.610	BMB
Total:			0.880	0.080	100.00	48.940	

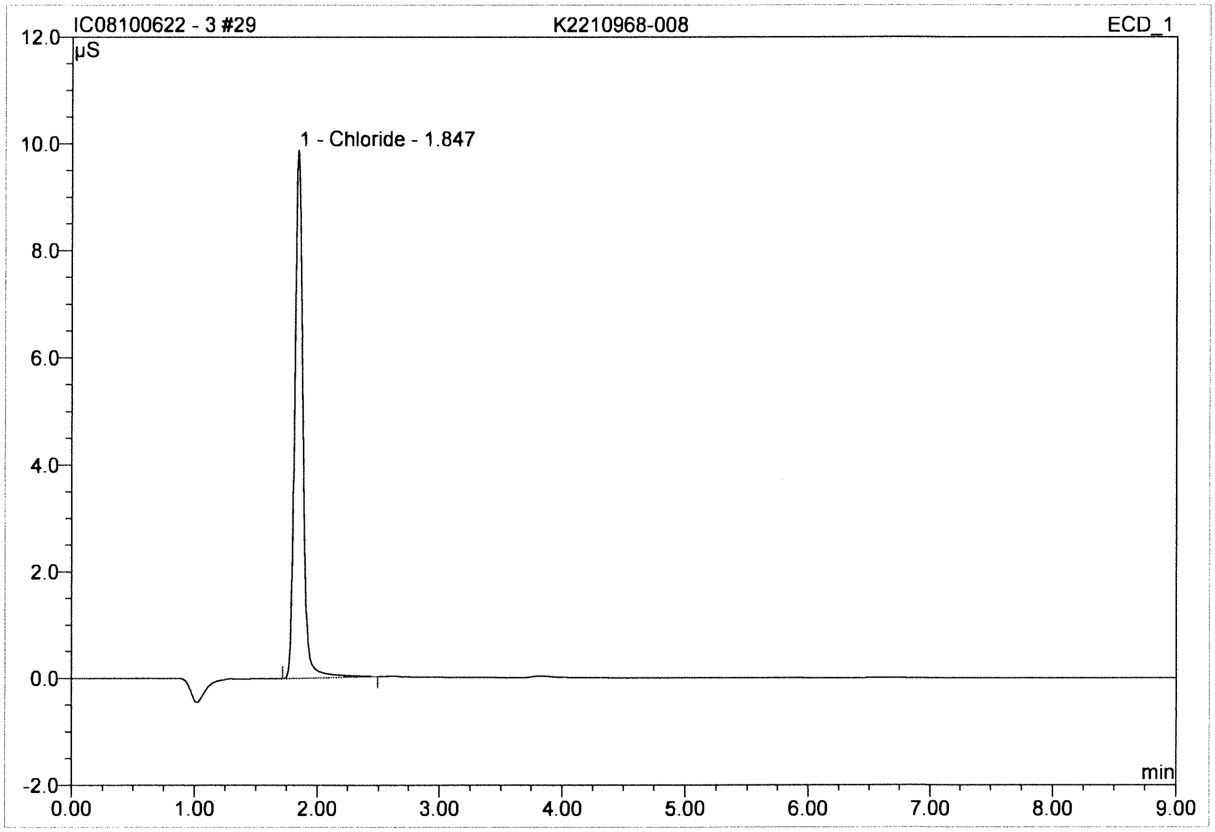
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

29 K2210968-008

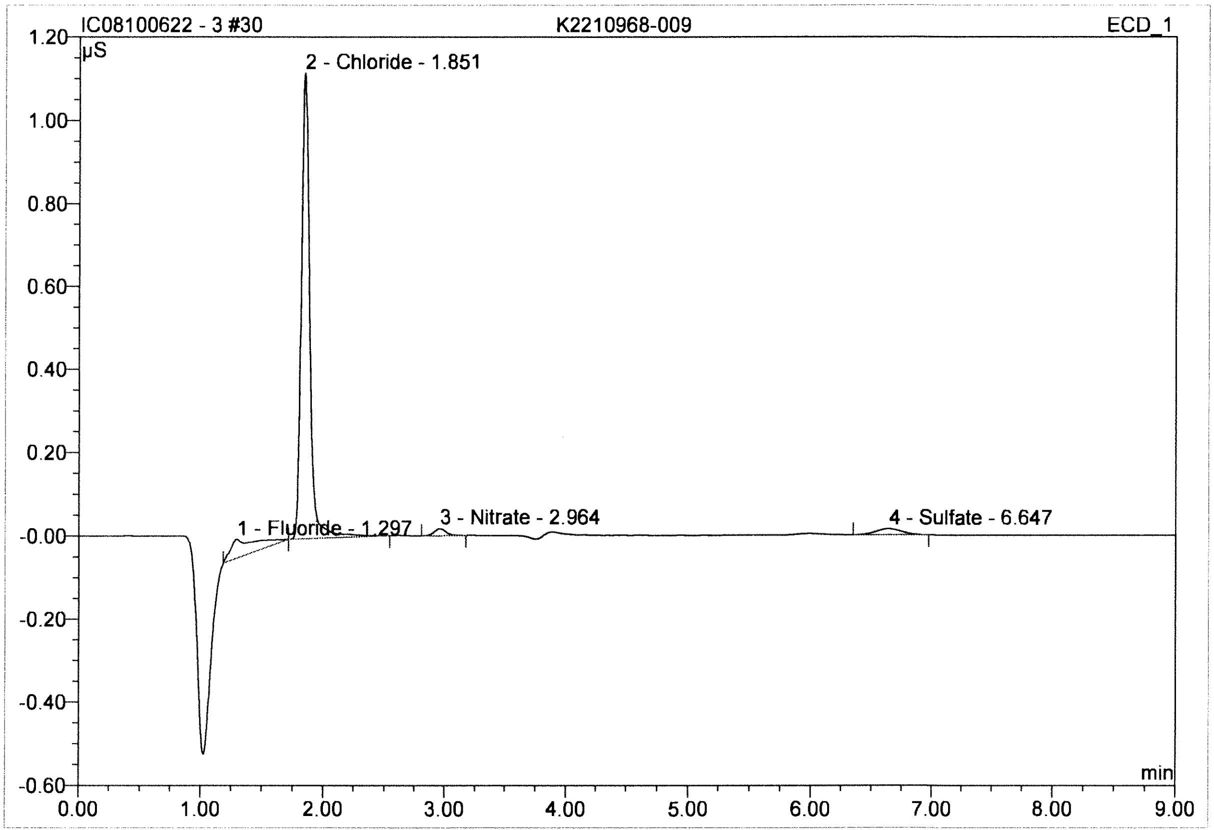
Sample Name:	**K2210968-008**	*Injection Volume:*	**5.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/6/2022 23:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	9.876	0.769	100.00	463.311	BMB
Total:			9.876	0.769	100.00	463.311	

30 K2210968-009

Sample Name:	**K2210968-009**	*Injection Volume:*	**5.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 0:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



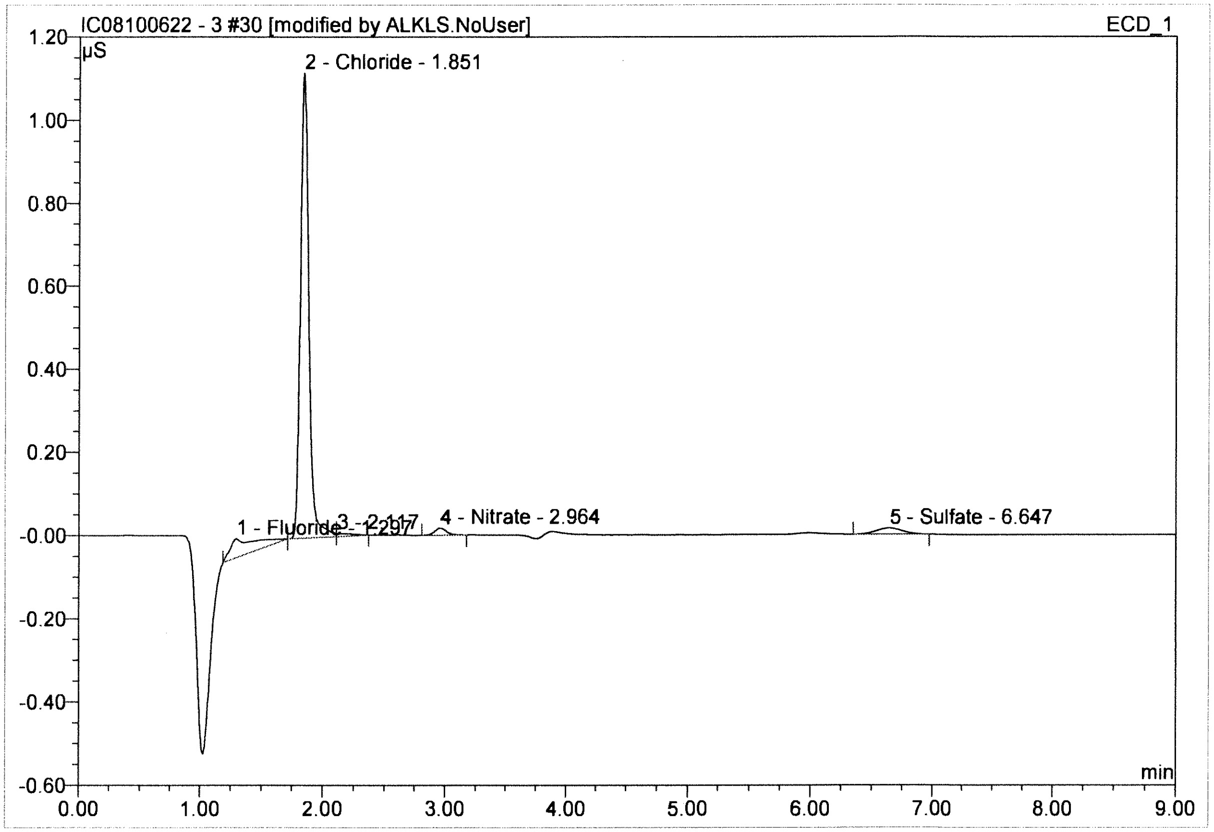
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.045	0.011	9.98	3.758	BMB
2	1.85	Chloride	1.120	0.092	84.92	55.365	bMB
3	2.96	Nitrate	0.017	0.002	1.72	0.450	BMB
4	6.65	Sulfate	0.015	0.004	3.38	2.970	BMB
Total:			1.196	0.108	100.00	62.542	

Before

OCT 07

30 K2210968-009

Sample Name:	**K2210968-009**	*Injection Volume:*	**5.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 0:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	0.045	0.011	10.06	3.758	BMb*
2	1.85	Chloride	1.119	0.090	83.85	54.224	bM *
3	2.12	n.a.	0.008	0.001	0.94	n.a.	MB*
4	2.96	Nitrate	0.017	0.002	1.74	0.450	BMB
5	6.65	Sulfate	0.015	0.004	3.41	2.970	BMB
Total:			1.203	0.107	100.00	61.402	

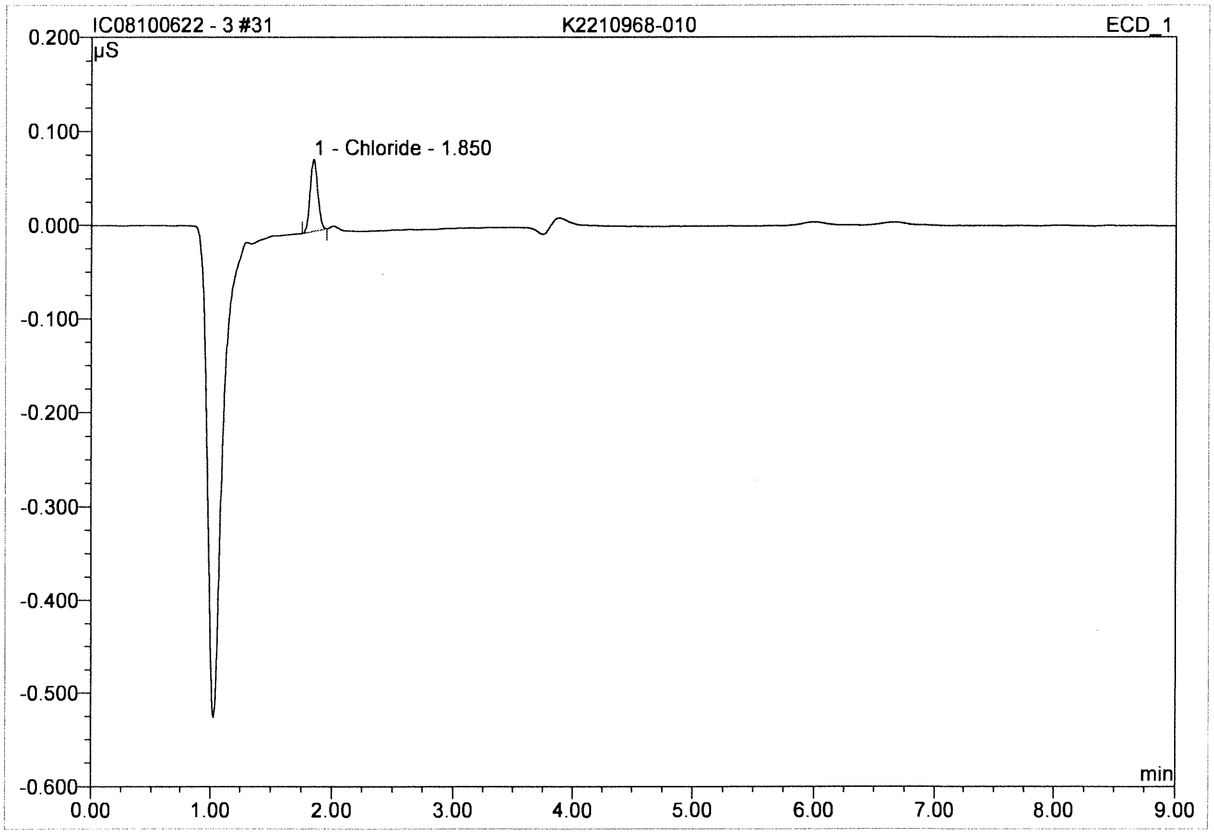
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

31 K2210968-010

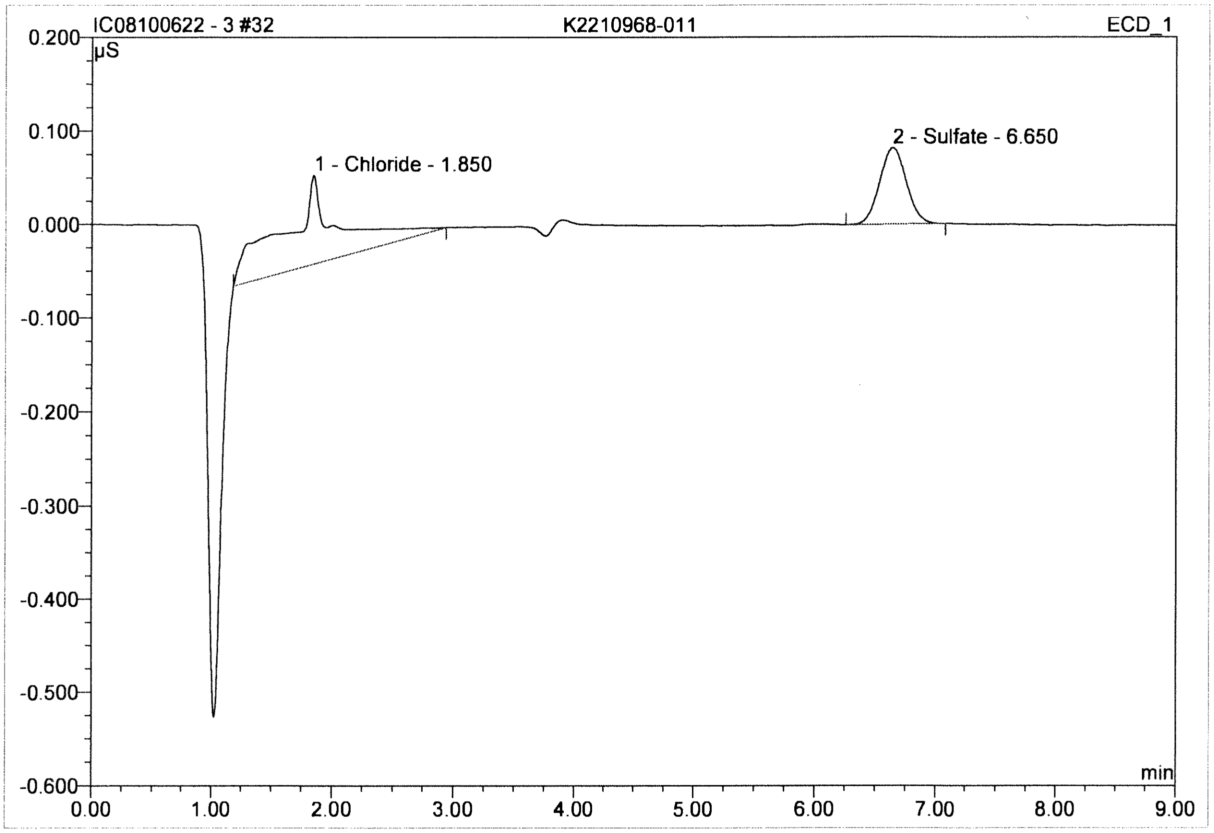
Sample Name:	**K2210968-010**	*Injection Volume:*	**5.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 0:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.077	0.006	100.00	3.463	BMB
Total:			0.077	0.006	100.00	3.463	

32 K2210968-011

Sample Name:	**K2210968-011**	*Injection Volume:*	**5.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 0:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



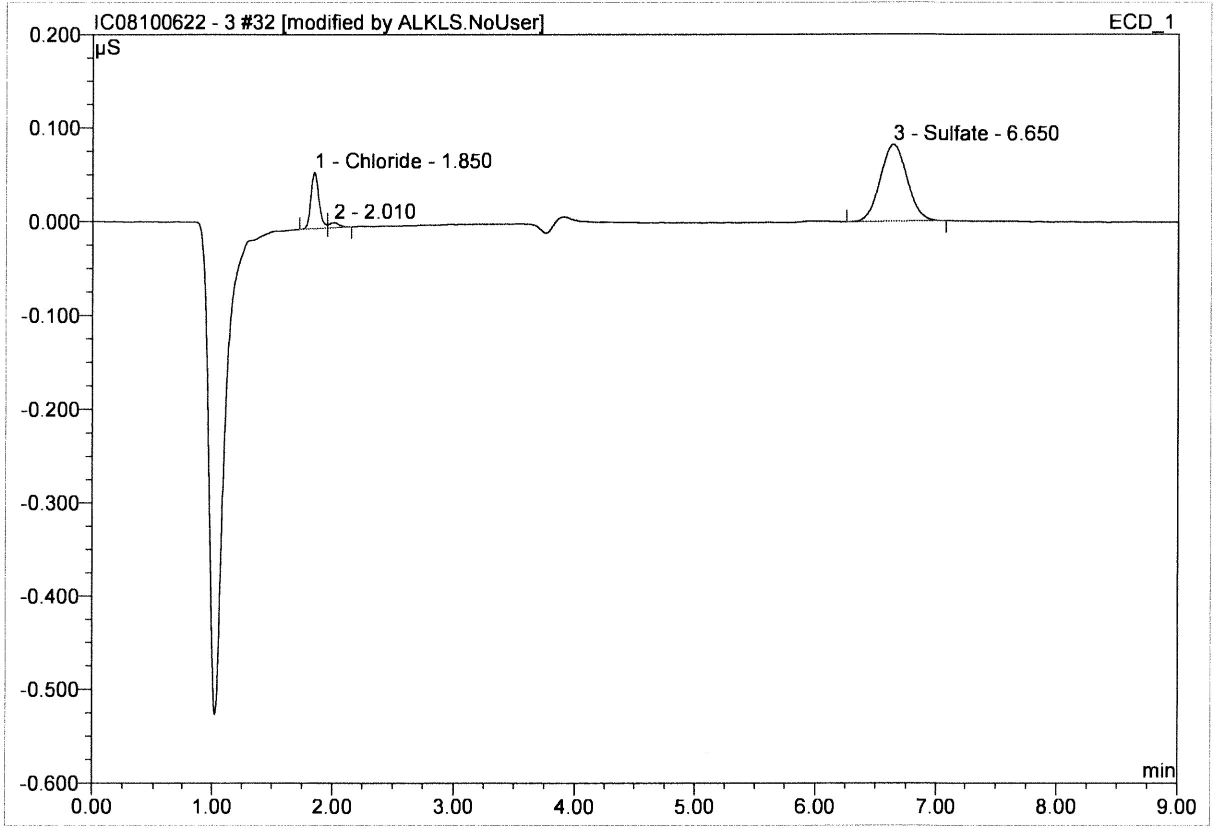
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.095	0.050	70.31	29.838	BMB
2	6.65	Sulfate	0.082	0.021	29.69	16.992	BMB
Total:			0.176	0.070	100.00	46.830	

Before

OCT 07

32 K2210968-011

Sample Name:	**K2210968-011**	*Injection Volume:*	**5.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 0:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.060	0.005	18.12	2.856	BM *
2	2.01	n.a.	0.005	0.001	1.96	n.a.	MB*
3	6.65	Sulfate	0.082	0.021	79.92	16.992	BMB
Total:			0.147	0.026	100.00	19.848	

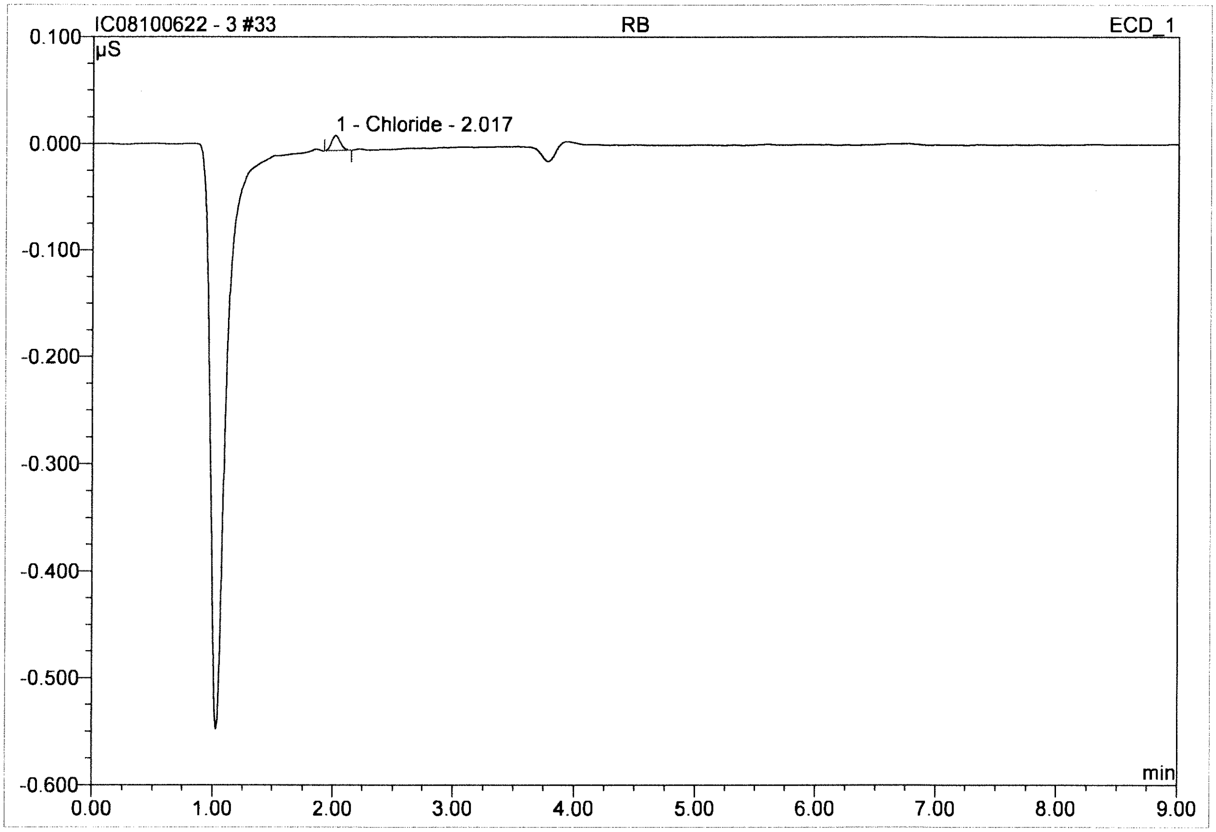
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

33 RB

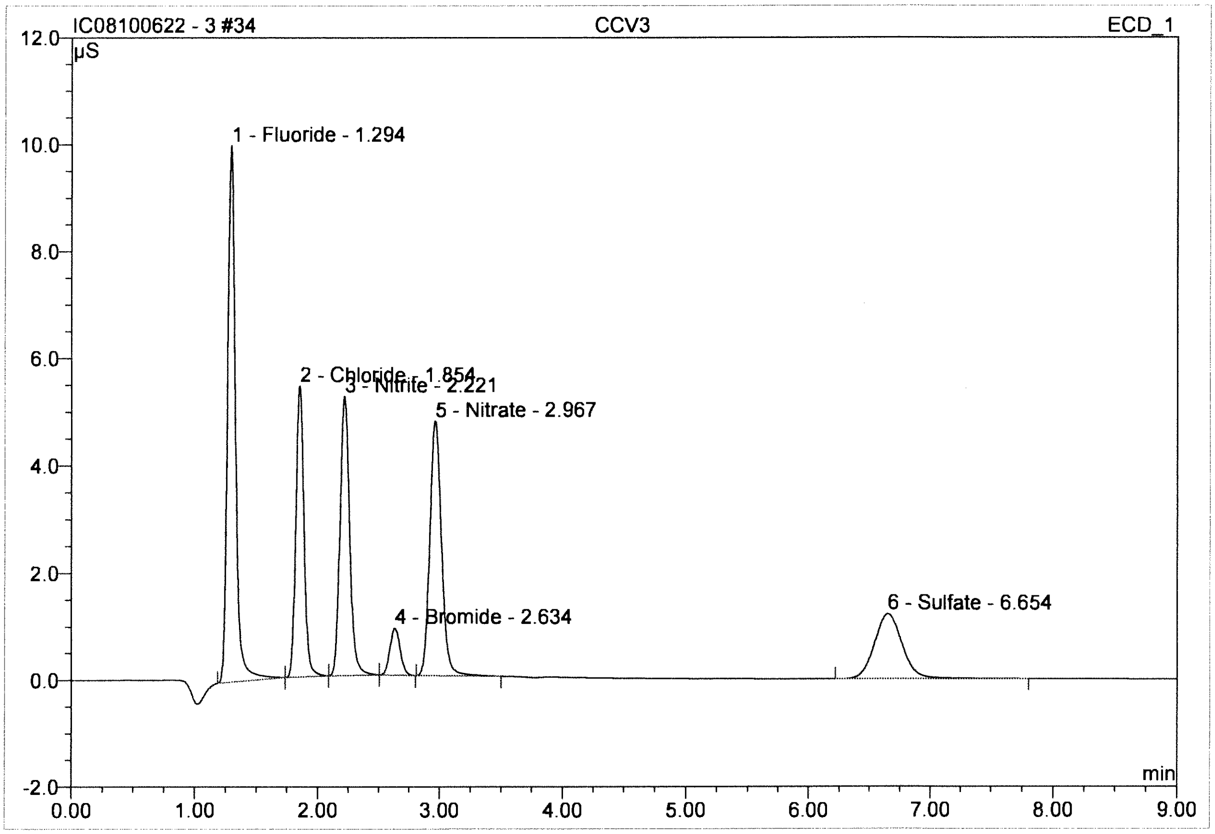
Sample Name:	**RB**	*Injection Volume:*	**5.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 0:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	Chloride	0.014	0.001	100.00	0.014	BMB
Total:			0.014	0.001	100.00	0.014	

34 CCV3

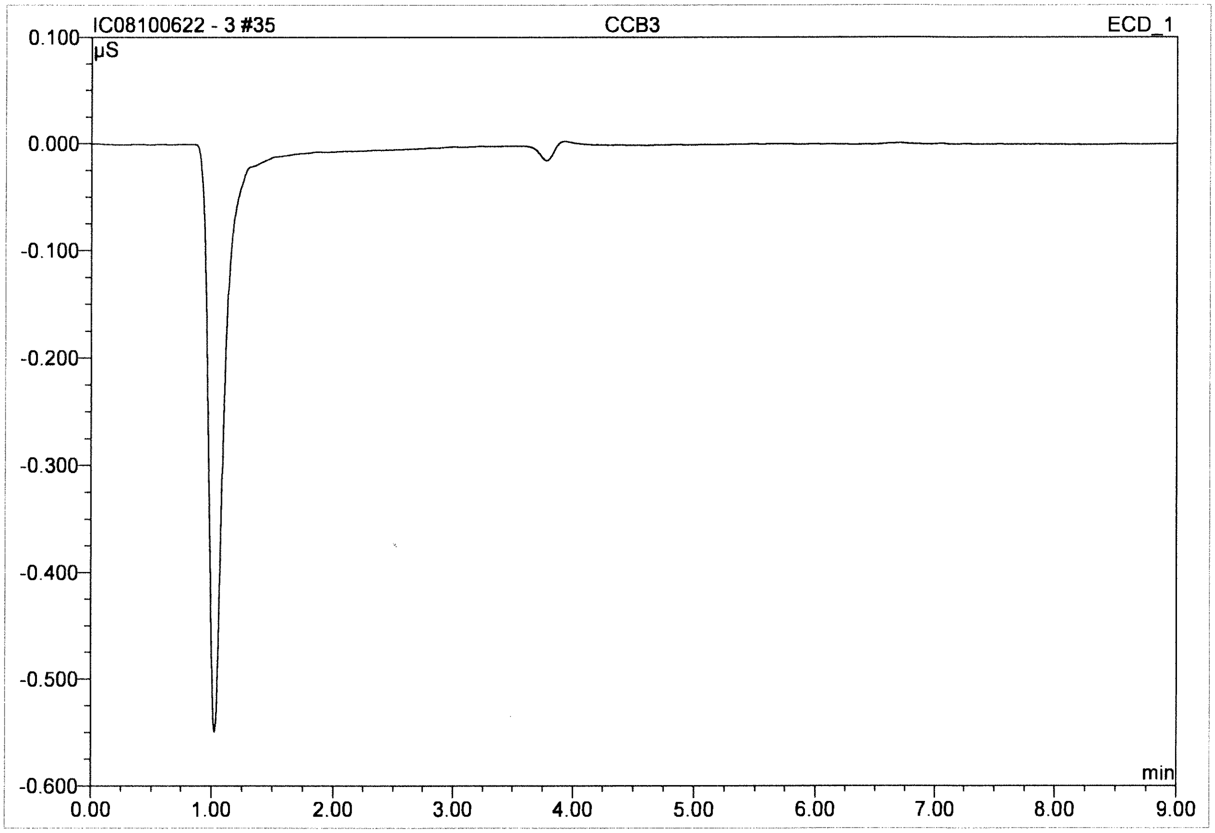
Sample Name:	**CCV3**	*Injection Volume:*	**5.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 0:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	10.012	0.743	28.91	5.166	BMB
2	1.85	Chloride	5.421	0.417	16.22	5.020	bMB
3	2.22	Nitrite	5.199	0.477	18.57	2.529	BMb
4	2.63	Bromide	0.881	0.086	3.33	2.571	bMB
5	2.97	Nitrate	4.744	0.526	20.49	2.541	BMB
6	6.65	Sulfate	1.214	0.321	12.49	5.216	BMB
Total:			27.472	2.570	100.00	23.043	

35 CCB3

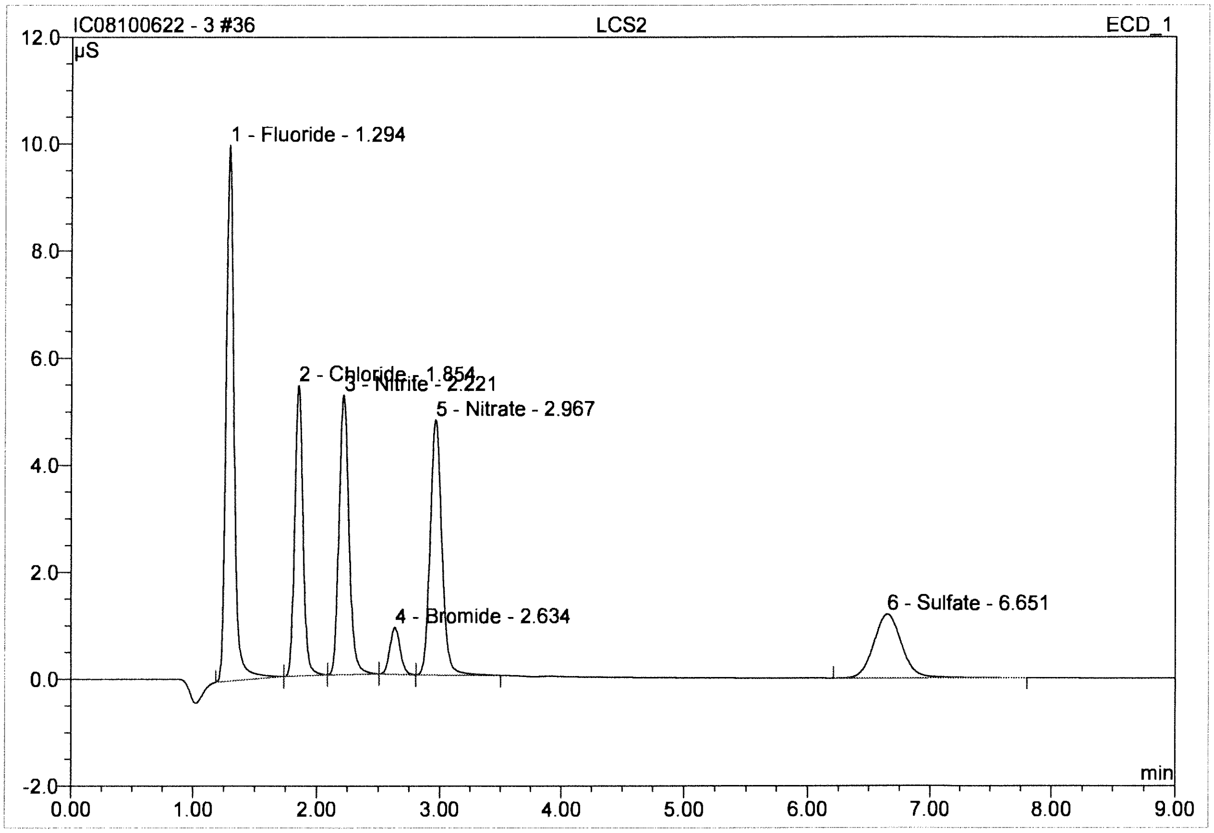
Sample Name:	**CCB3**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 0:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

36 LCS2

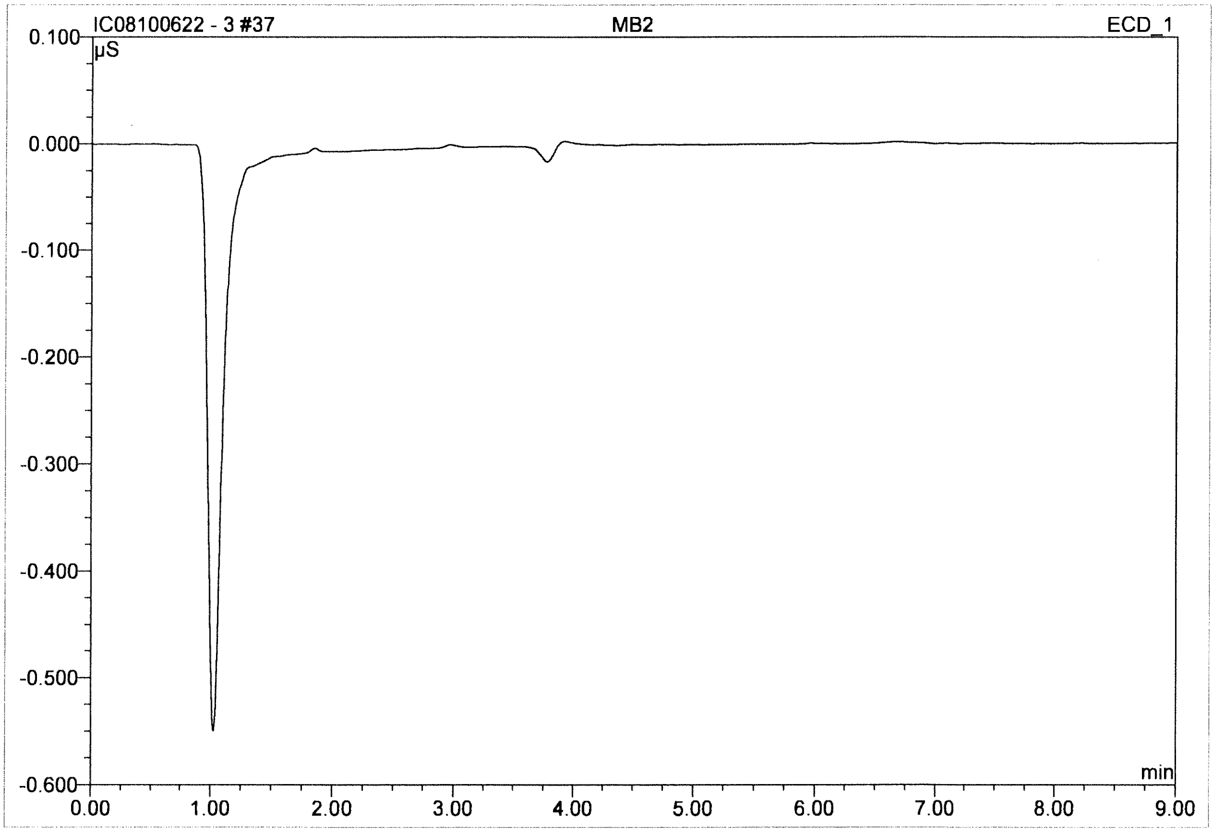
Sample Name:	**LCS2**	*Injection Volume:*	**5.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 1:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	10.001	0.739	28.84	5.143	BMB
2	1.85	Chloride	5.431	0.417	16.27	5.024	bMB
3	2.22	Nitrite	5.224	0.479	18.69	2.541	BMb
4	2.63	Bromide	0.877	0.085	3.32	2.554	bMB
5	2.97	Nitrate	4.764	0.529	20.61	2.551	BMB
6	6.65	Sulfate	1.192	0.315	12.27	5.111	BMB
Total:			27.488	2.564	100.00	22.924	

37 MB2

Sample Name:	**MB2**	*Injection Volume:*	**5.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 1:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



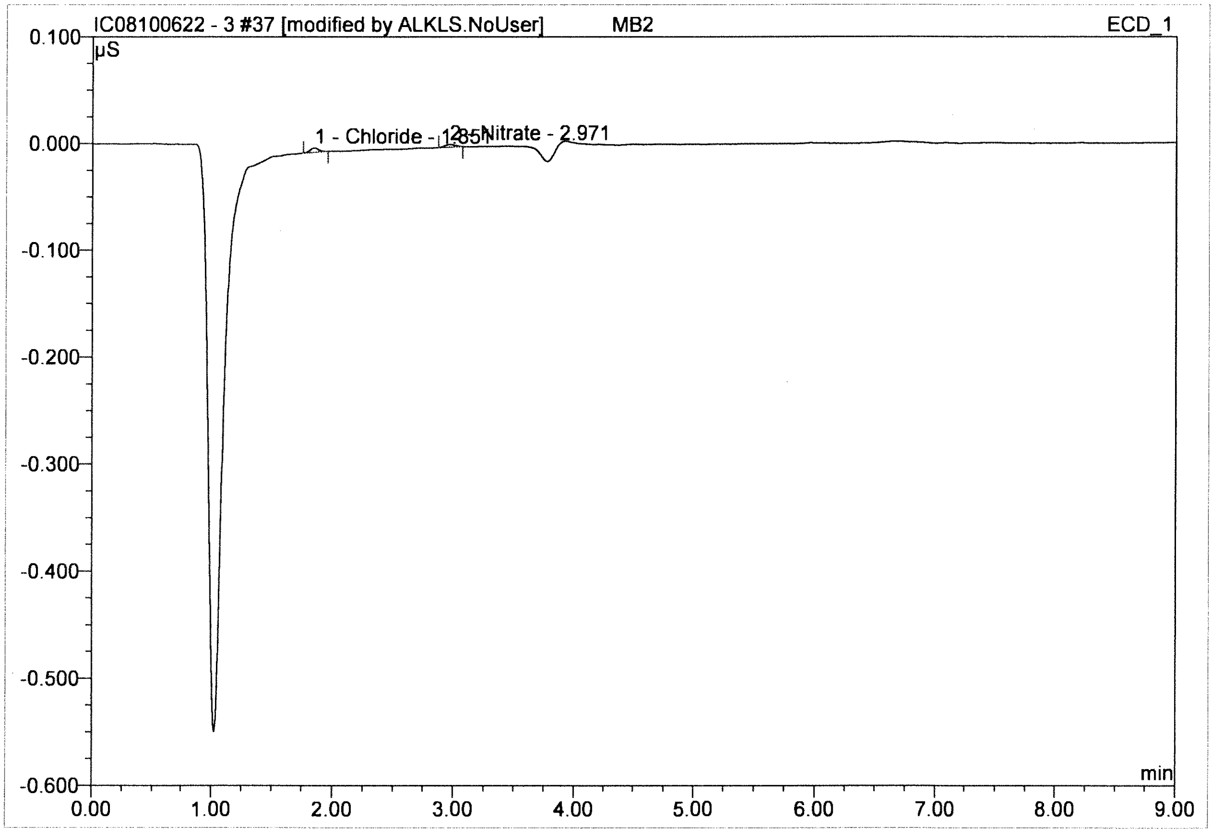
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Before

OCT 07

37 MB2

Sample Name:	**MB2**	*Injection Volume:*	**5.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 1:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.004	0.000	56.06	0.004	BMB*
2	2.97	Nitrate	0.002	0.000	43.94	0.001	BMB*
Total:			0.006	0.001	100.00	0.005	

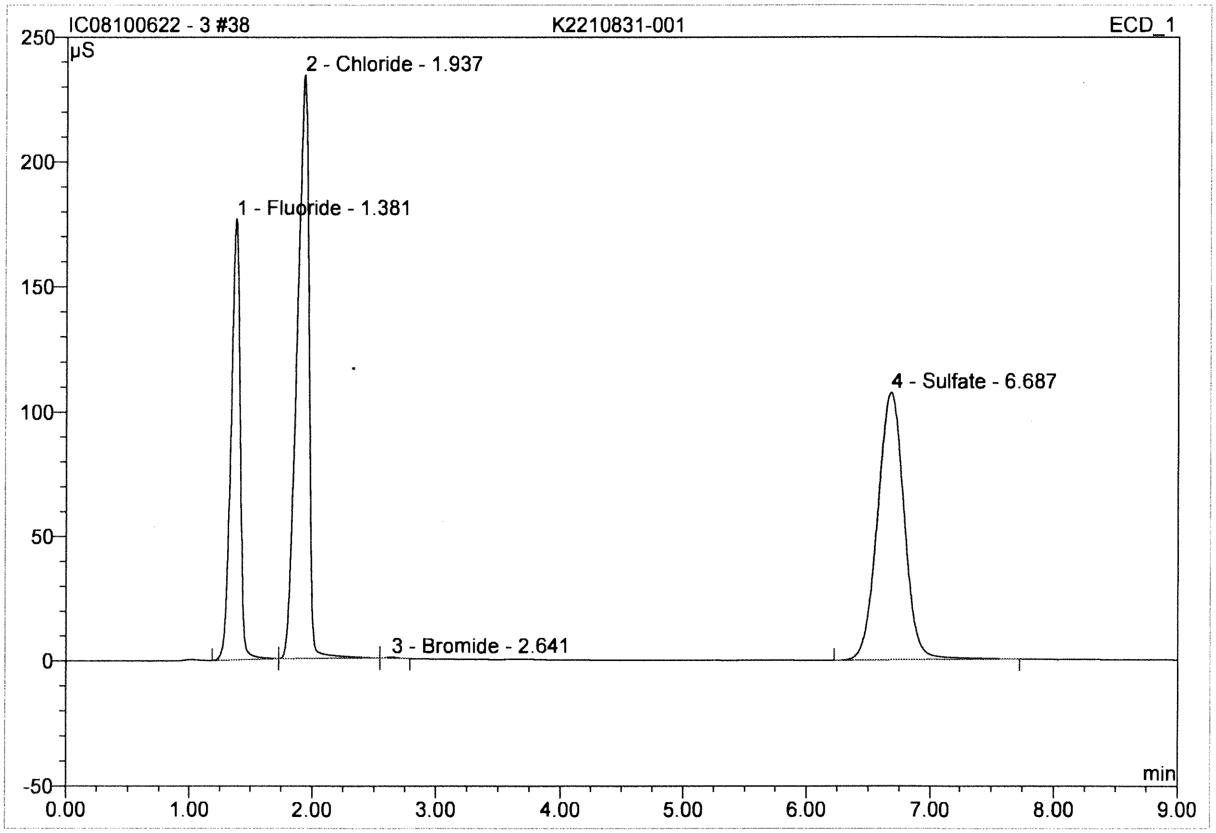
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

38 K2210831-001

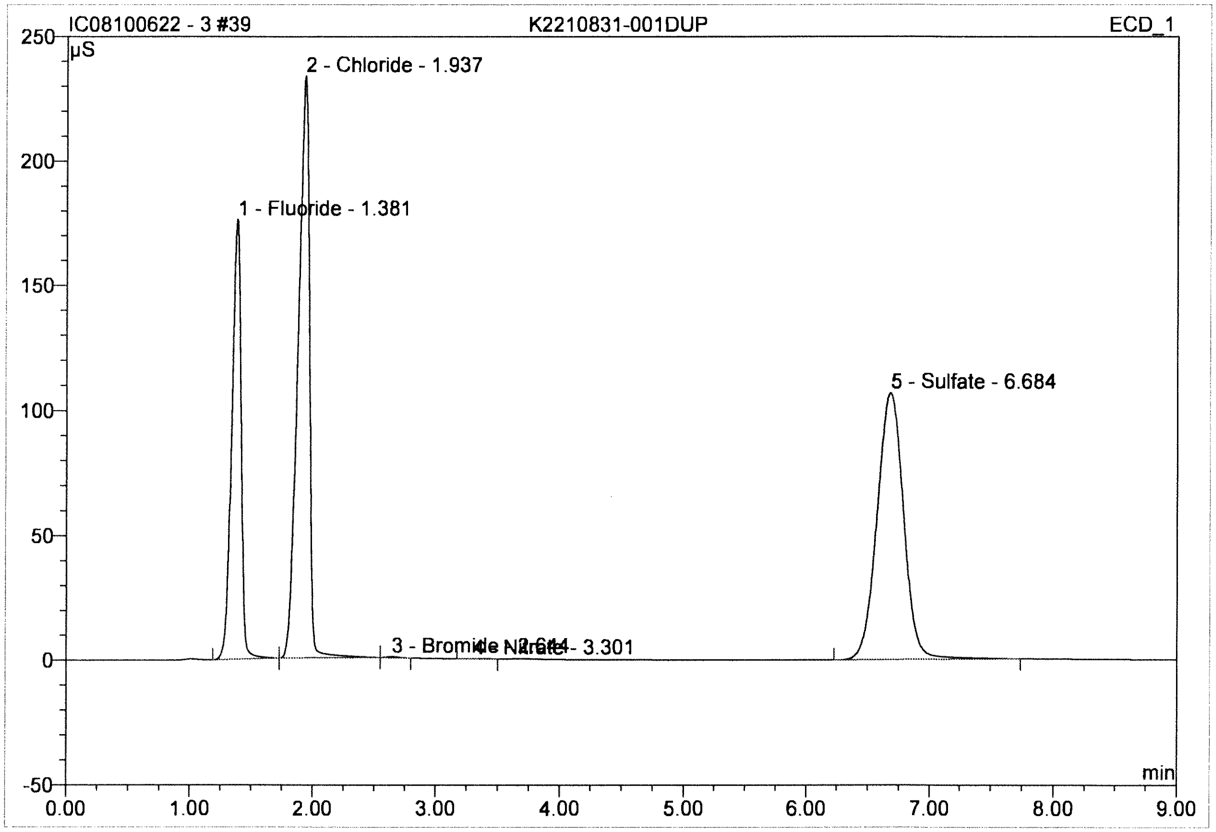
Sample Name:	**K2210831-001**	*Injection Volume:*	**5.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 1:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.38	Fluoride	176.704	15.536	22.87	216.101	BMB
2	1.94	Chloride	233.785	25.531	37.59	615.029	bMb
3	2.64	Bromide	0.416	0.042	0.06	2.526	bMB
4	6.69	Sulfate	107.377	26.815	39.48	871.200	BMB
Total:			518.283	67.925	100.00	1704.856	

39 K2210831-001DUP

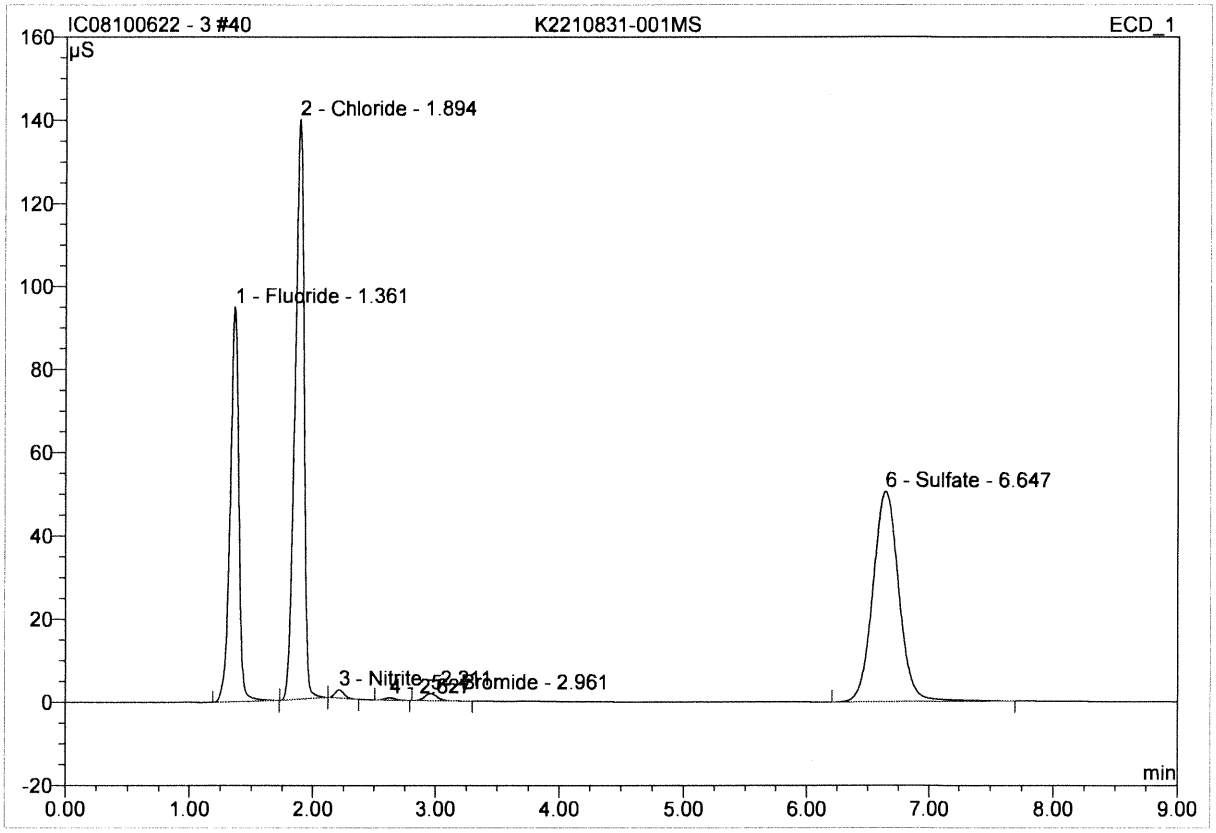
Sample Name:	**K2210831-001DUP**	*Injection Volume:*	**1.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 1:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.38	Fluoride	176.281	15.471	22.89	215.190	BMB
2	1.94	Chloride	233.162	25.424	37.61	612.439	bMb
3	2.64	Bromide	0.420	0.042	0.06	2.534	bMB
4	3.30	Nitrate	0.053	0.009	0.01	0.089	BMB
5	6.68	Sulfate	106.689	26.645	39.42	865.678	BMB
Total:			516.605	67.591	100.00	1695.930	

40 K2210831-001MS

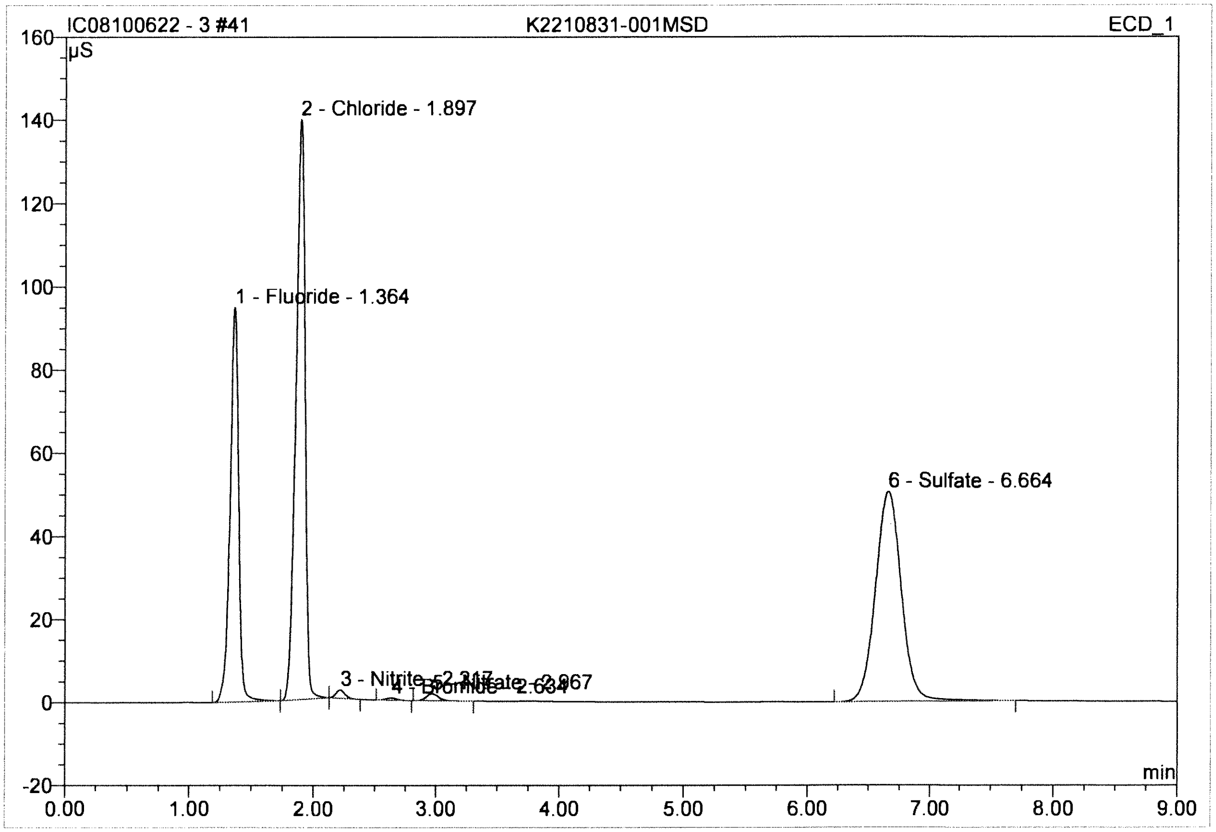
Sample Name:	**K2210831-001MS**	*Injection Volume:*	**1.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**4.0000**
Recording Time:	**10/7/2022 1:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.36	Fluoride	94.923	7.572	23.39	210.658	BMB
2	1.89	Chloride	139.439	12.062	37.26	581.124	BMb
3	2.21	Nitrite	1.960	0.169	0.52	3.590	bMB
4	2.63	n.a.	0.560	0.055	0.17	n.a.	BMB
5	2.96	Bromide	1.692	0.196	0.61	23.591	BMB
6	6.65	Sulfate	50.509	12.320	38.05	800.530	BMB
Total:			289.083	32.375	100.00	1619.492	

41 K2210831-001MSD

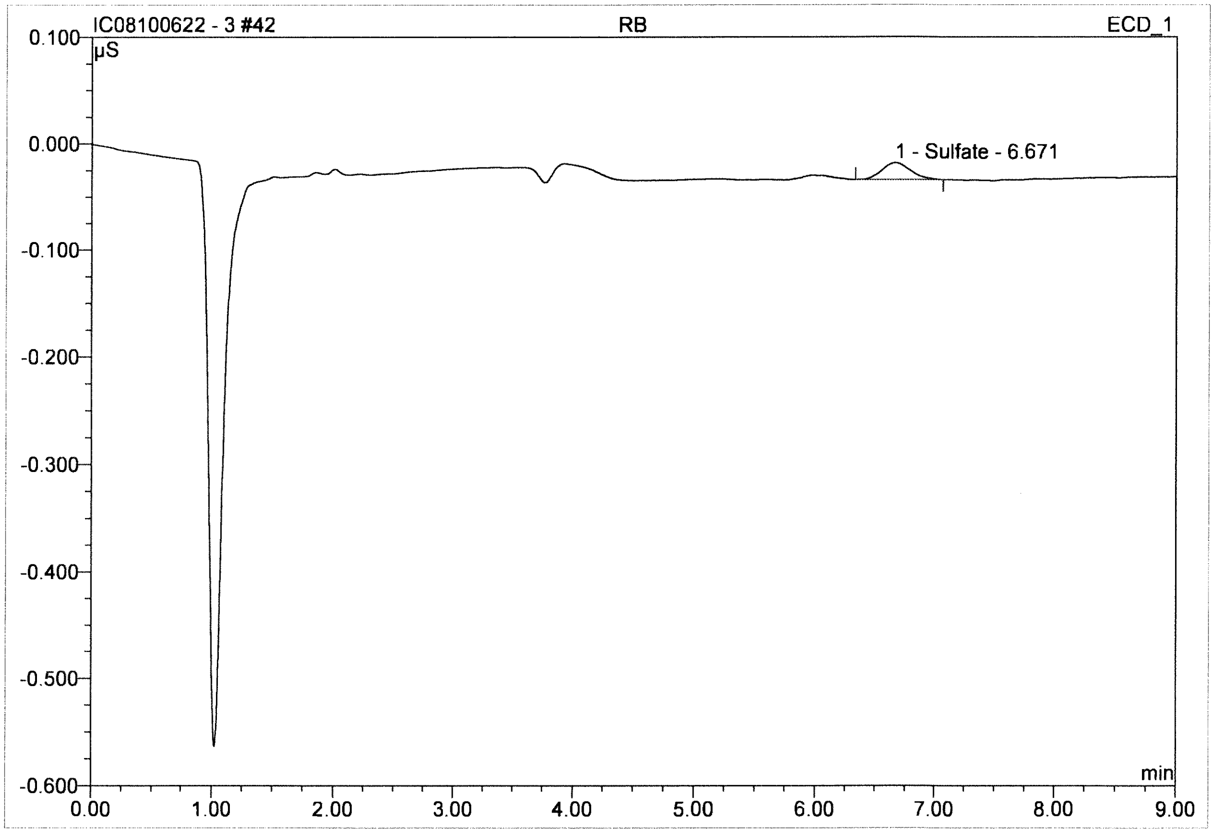
Sample Name:	**K2210831-001MSD**	*Injection Volume:*	**1.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**4.0000**
Recording Time:	**10/7/2022 2:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.36	Fluoride	94.888	7.584	23.40	210.985	BMB
2	1.90	Chloride	139.357	12.079	37.27	581.957	BMb
3	2.22	Nitrite	1.973	0.170	0.52	3.608	bMB
4	2.63	Bromide	0.561	0.055	0.17	6.654	BMB
5	2.97	Nitrate	1.697	0.197	0.61	3.809	BMB
6	6.66	Sulfate	50.477	12.328	38.03	801.036	BMB
Total:			288.953	32.414	100.00	1608.050	

42 RB

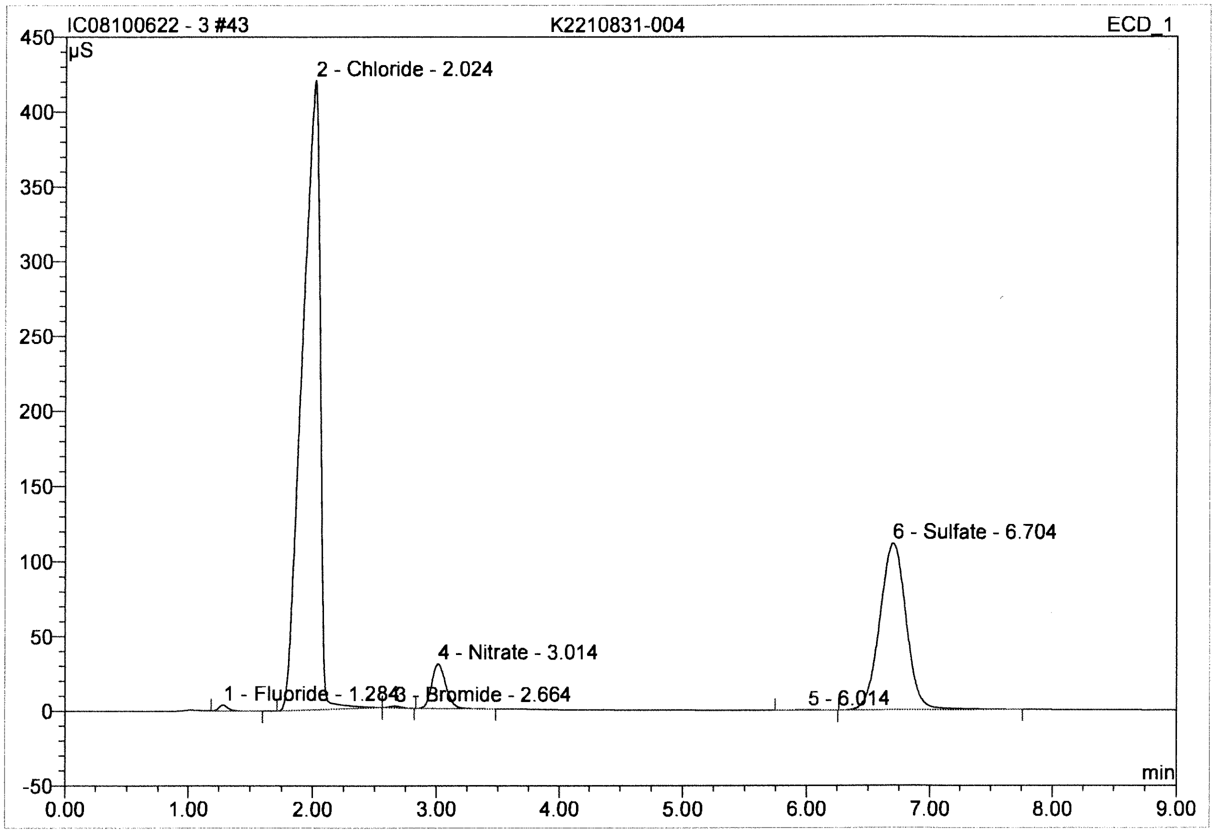
Sample Name:	**RB**	*Injection Volume:*	**1.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 2:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	6.67	Sulfate	0.016	0.004	100.00	0.071	BMB
Total:			0.016	0.004	100.00	0.071	

43 K2210831-004

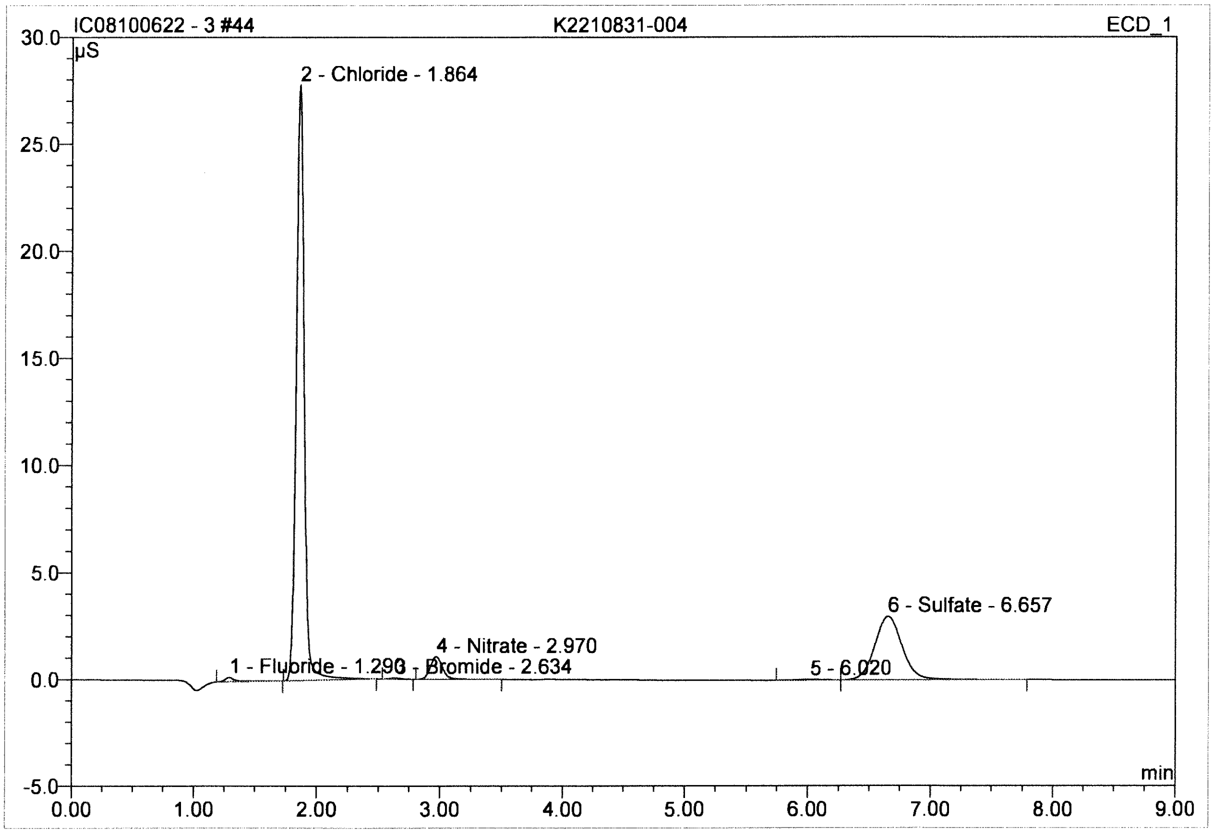
Sample Name:	**K2210831-004**	*Injection Volume:*	**1.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 2:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.28	Fluoride	3.920	0.328	0.32	4.560	BMB
2	2.02	Chloride	420.066	70.016	68.45	1686.632	BMb
3	2.66	Bromide	1.222	0.122	0.12	7.331	bMB
4	3.01	Nitrate	29.844	3.936	3.85	37.992	BMB
5	6.01	n.a.	0.234	0.054	0.05	n.a.	BMB
6	6.70	Sulfate	111.352	27.836	27.21	904.367	BMB
Total:			566.638	102.292	100.00	2640.883	

44 K2210831-004

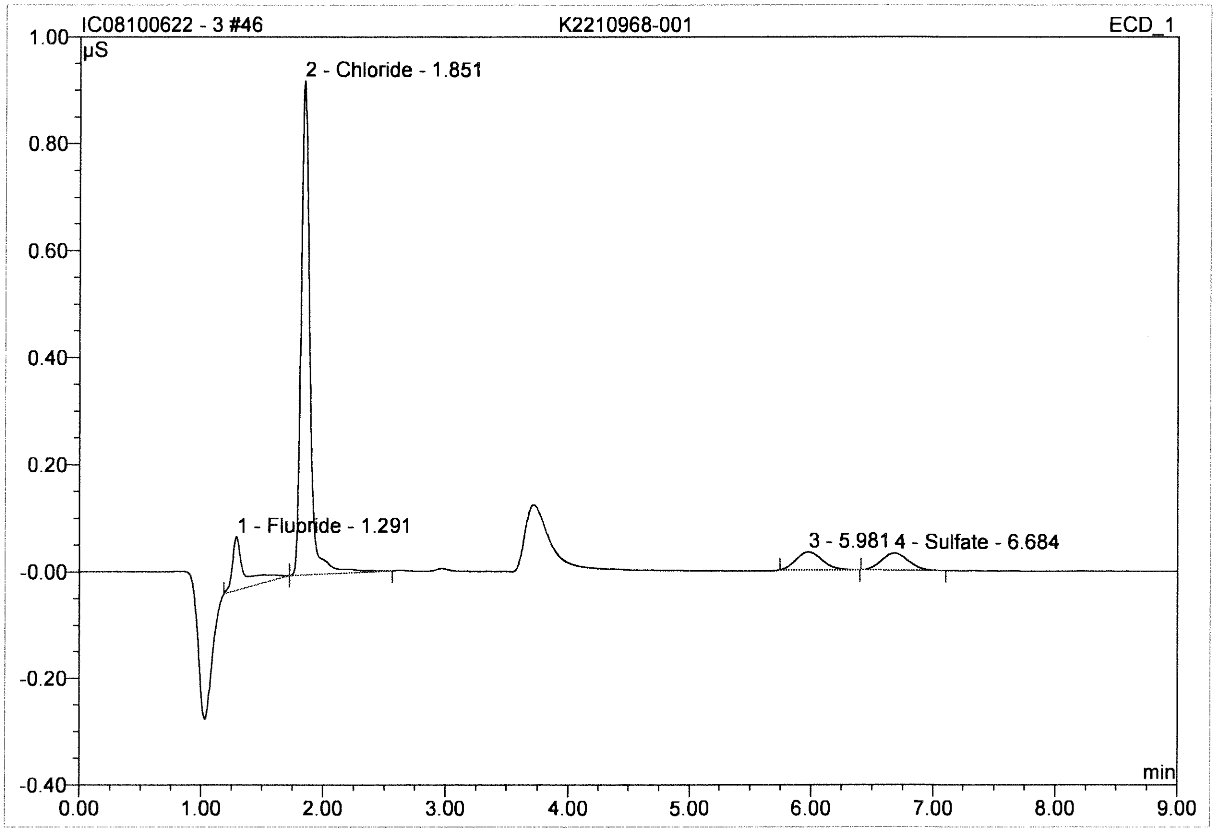
Sample Name:	**K2210831-004**	*Injection Volume:*	**1.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 2:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.199	0.022	0.72	7.636	BMB
2	1.86	Chloride	27.799	2.108	69.57	1269.641	BMB
3	2.63	Bromide	0.044	0.004	0.14	6.315	BMB
4	2.97	Nitrate	1.045	0.119	3.93	28.741	BMB
5	6.02	n.a.	0.031	0.007	0.25	n.a.	BMB
6	6.66	Sulfate	2.963	0.770	25.39	625.084	bMB
Total:			32.082	3.031	100.00	1937.417	

46 K2210968-001

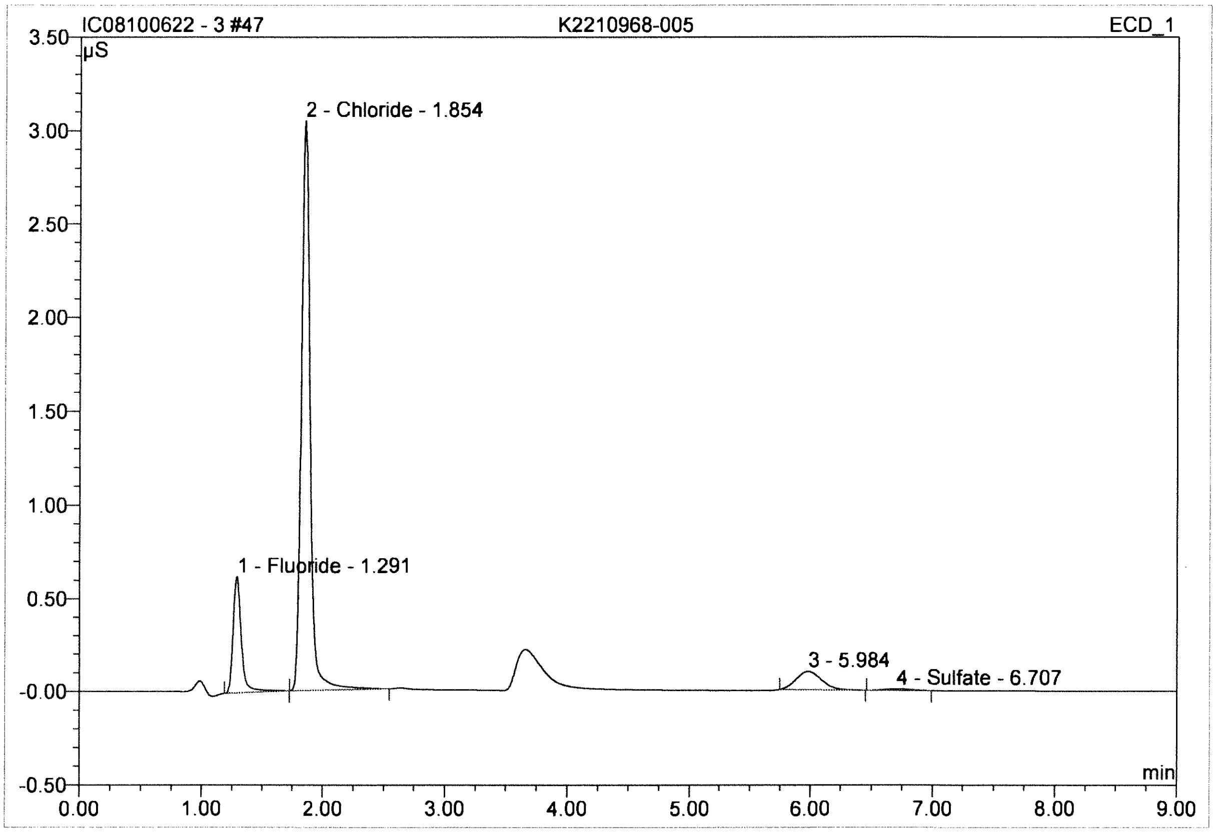
Sample Name:	**K2210968-001**	*Injection Volume:*	**5.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.100	0.012	11.44	0.170	BMB
2	1.85	Chloride	0.923	0.078	73.31	1.881	bMB
3	5.98	n.a.	0.033	0.008	7.77	n.a.	BMB
4	6.68	Sulfate	0.032	0.008	7.48	0.259	BMB
Total:			1.088	0.107	100.00	2.310	

47 K2210968-005

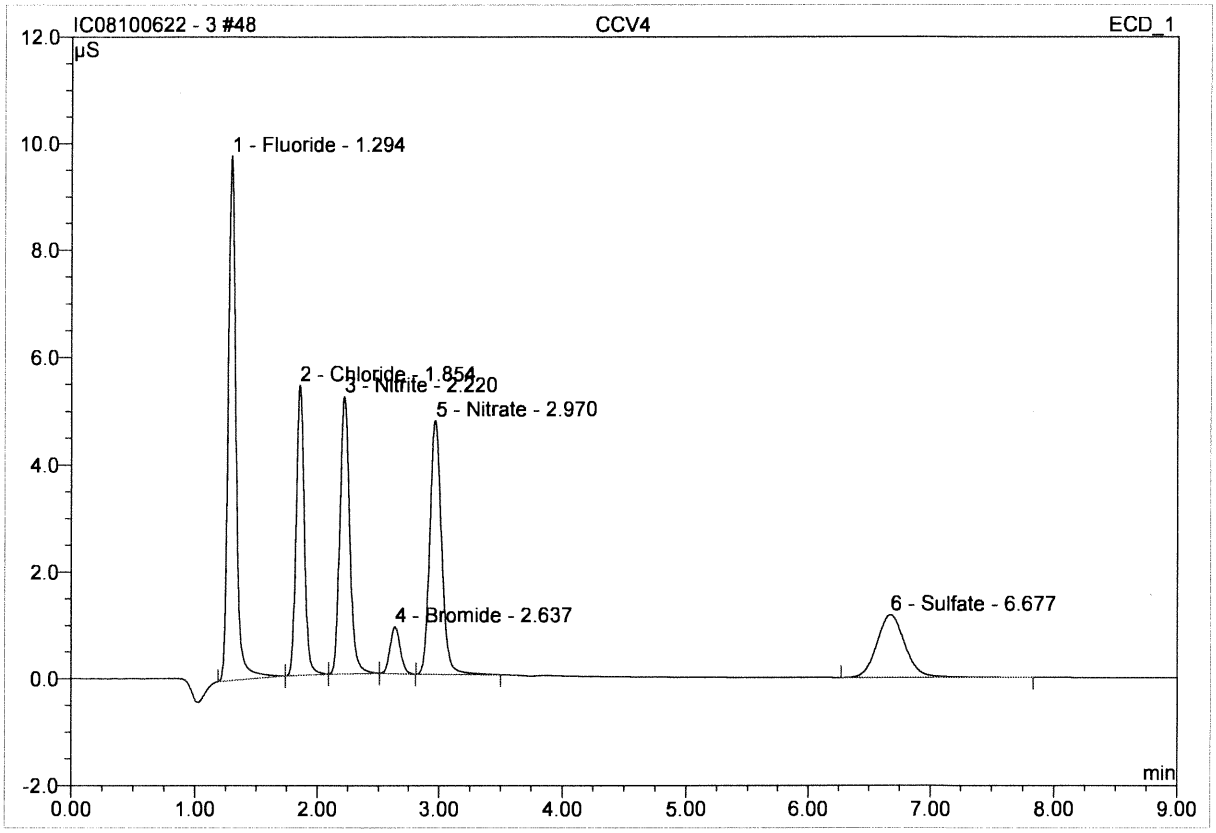
Sample Name:	**K2210968-005**	*Injection Volume:*	**5.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 10:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.625	0.050	15.03	0.698	BMB
2	1.85	Chloride	3.046	0.258	77.19	6.204	BMB
3	5.98	n.a.	0.098	0.024	7.20	n.a.	BMB
4	6.71	Sulfate	0.008	0.002	0.58	0.063	BMB
Total:			3.776	0.334	100.00	6.964	

48 CCV4

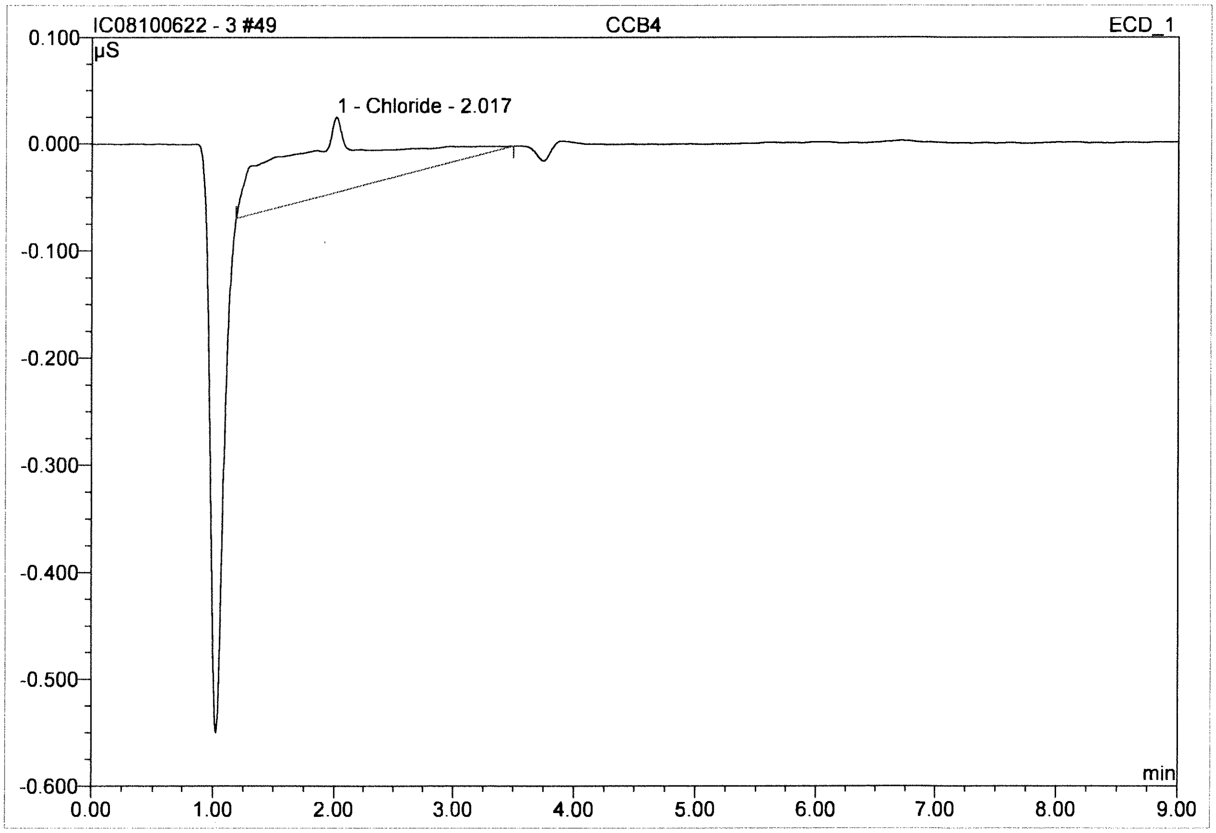
Sample Name:	**CCV4**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 10:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.801	0.726	28.53	5.047	BMB
2	1.85	Chloride	5.420	0.417	16.39	5.023	bMB
3	2.22	Nitrite	5.185	0.477	18.75	2.529	BMb
4	2.64	Bromide	0.880	0.086	3.36	2.569	bMB
5	2.97	Nitrate	4.745	0.528	20.75	2.547	BMB
6	6.68	Sulfate	1.173	0.311	12.22	5.050	BMB
Total:			27.204	2.544	100.00	22.765	

49 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 10:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	Chloride	0.070	0.066	100.00	0.801	BMB
Total:			0.070	0.066	100.00	0.801	

Before

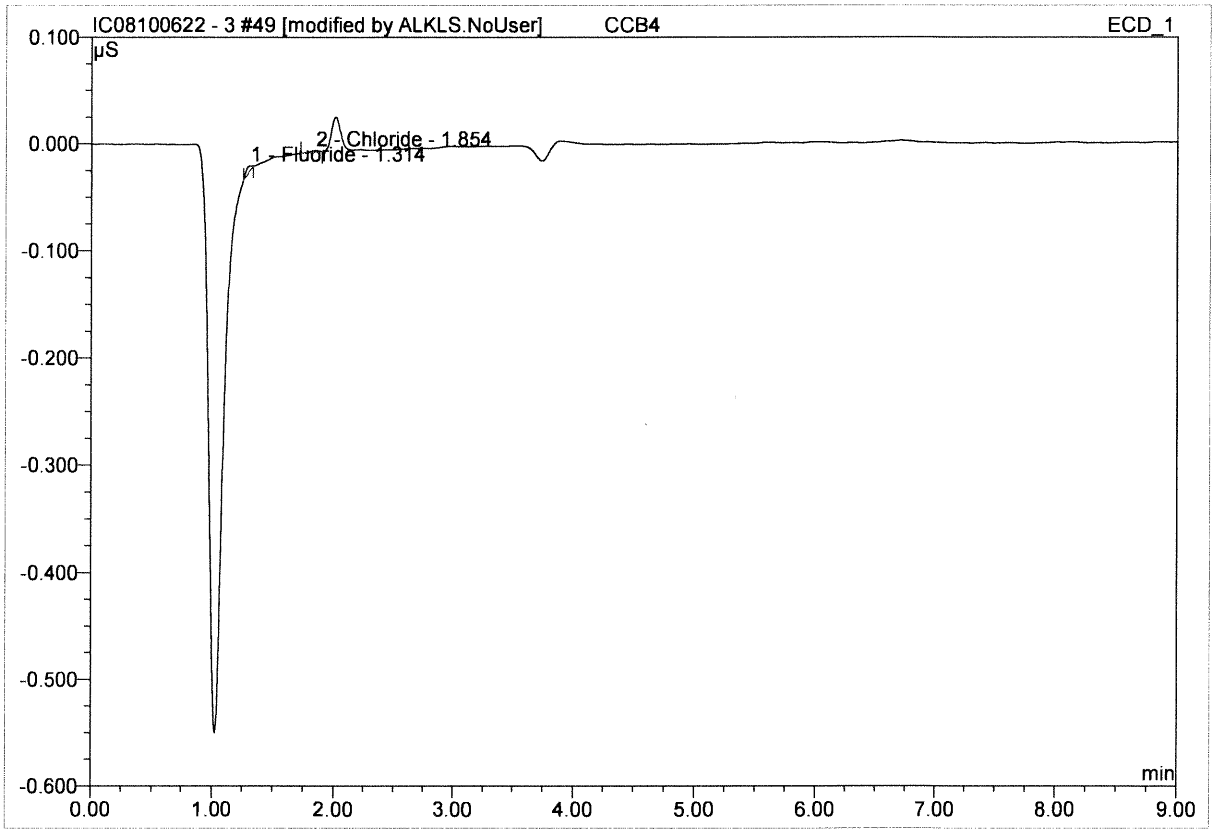
OCT 07

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

49 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 10:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.31	Fluoride	0.004	0.000	70.58	0.002	BMB*
2	1.85	Chloride	0.001	0.000	29.42	0.002	BMB*
Total:			0.006	0.000	100.00	0.004	

After
Initials NF

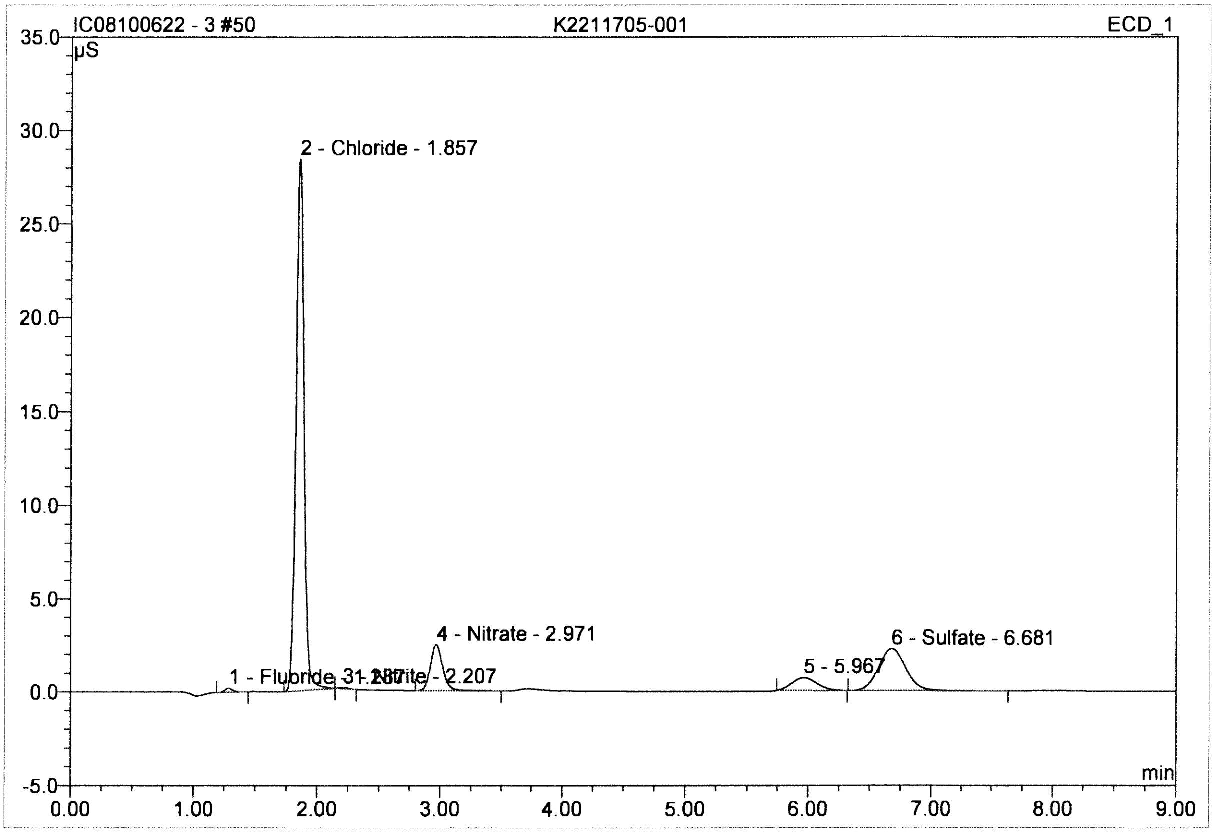
OCT 07

☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other large peak not Cl

50 K2211705-001

F

Sample Name:	**K2211705-001**	*Injection Volume:*	**5.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 11:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

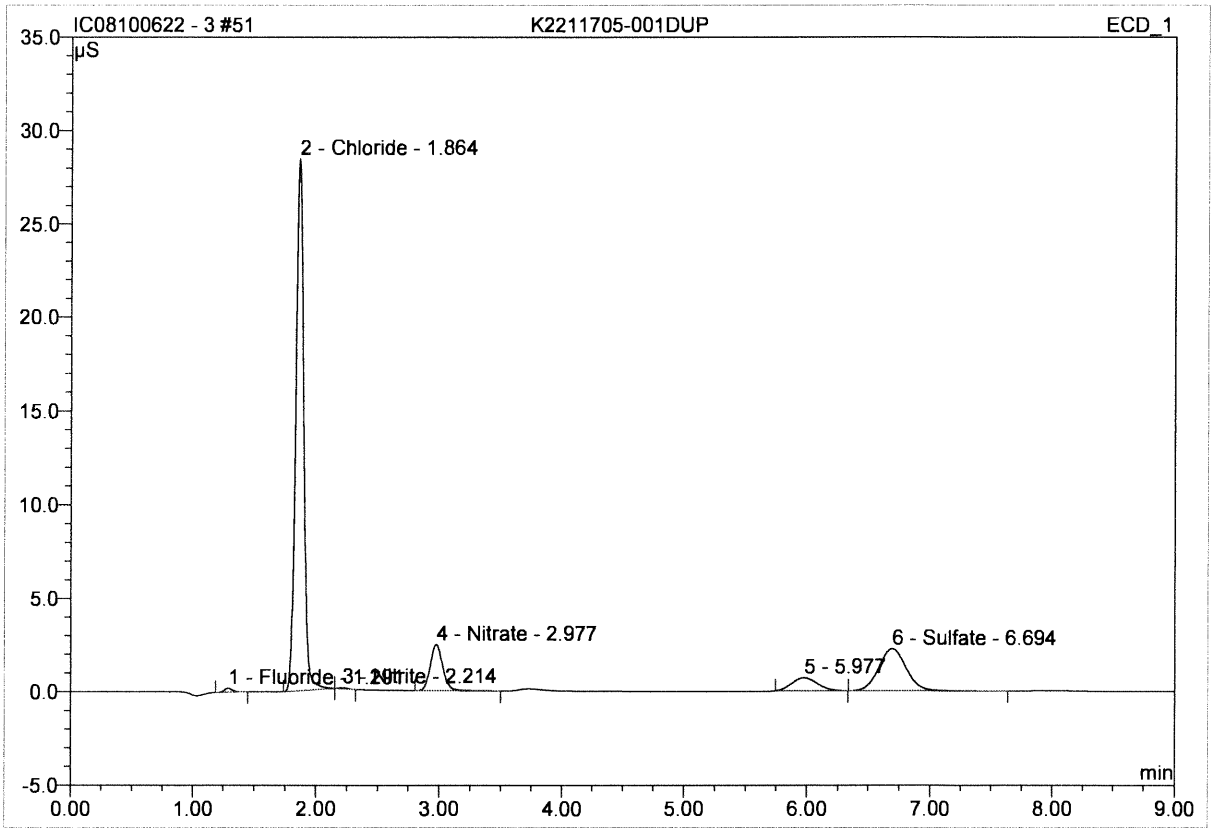


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.212	0.016	0.50	0.223	BMB
2	1.86	Chloride	28.400	2.154	67.31	51.881	BMb
3	2.21	Nitrite	0.056	0.005	0.14	0.048	bMB
4	2.97	Nitrate	2.451	0.286	8.95	2.765	BMB
5	5.97	n.a.	0.685	0.162	5.08	n.a.	BMB
6	6.68	Sulfate	2.248	0.576	18.02	18.730	BMB
Total:			34.052	3.200	100.00	73.647	

51 K2211705-001DUP

F

Sample Name:	**K2211705-001DUP**	*Injection Volume:*	**5.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 11:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

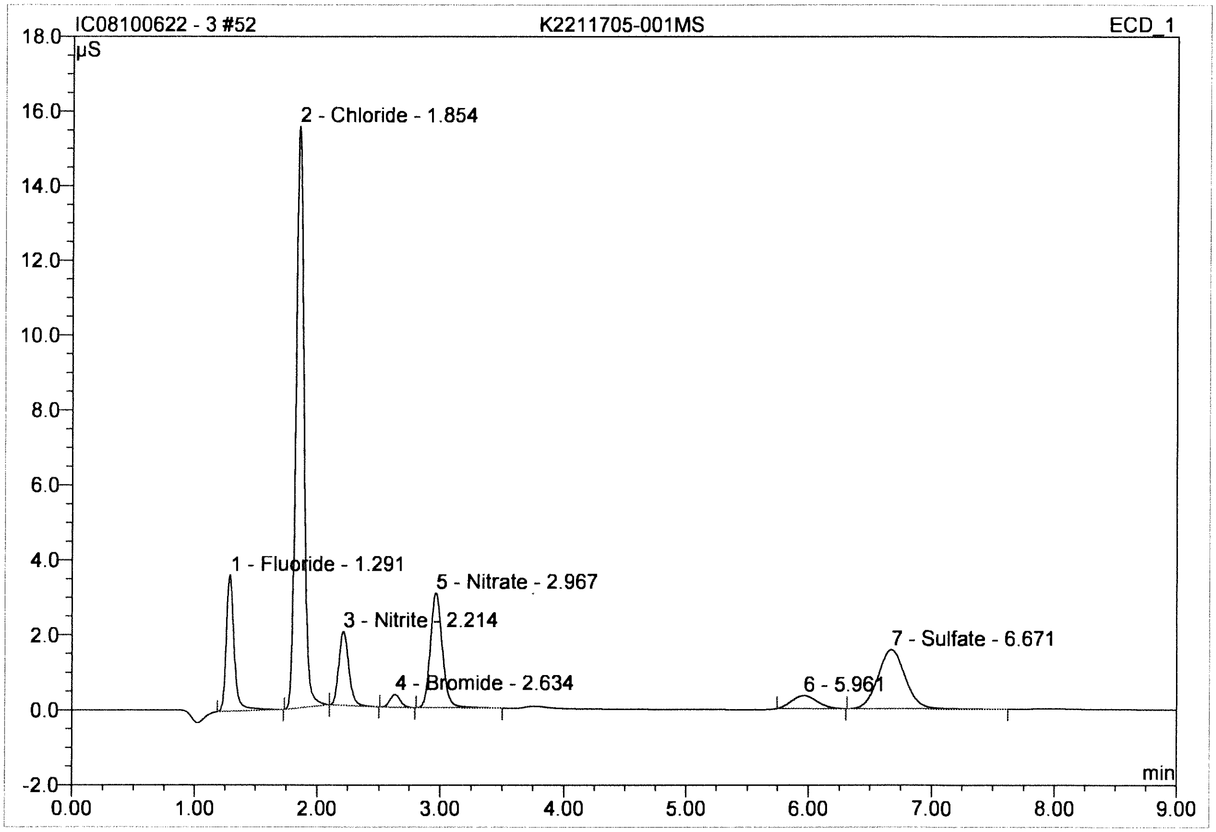


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.212	0.016	0.50	0.223	BMB
2	1.86	Chloride	28.426	2.156	67.25	51.944	BMb
3	2.21	Nitrite	0.056	0.004	0.14	0.048	bMB
4	2.98	Nitrate	2.452	0.287	8.94	2.766	BMB
5	5.98	n.a.	0.695	0.167	5.21	n.a.	BMB
6	6.69	Sulfate	2.245	0.576	17.96	18.713	BMB
Total:			34.086	3.206	100.00	73.693	

52 K2211705-001MS

F

Sample Name:	**K2211705-001MS**	*Injection Volume:*	**5.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**4.0000**
Recording Time:	**10/7/2022 11:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

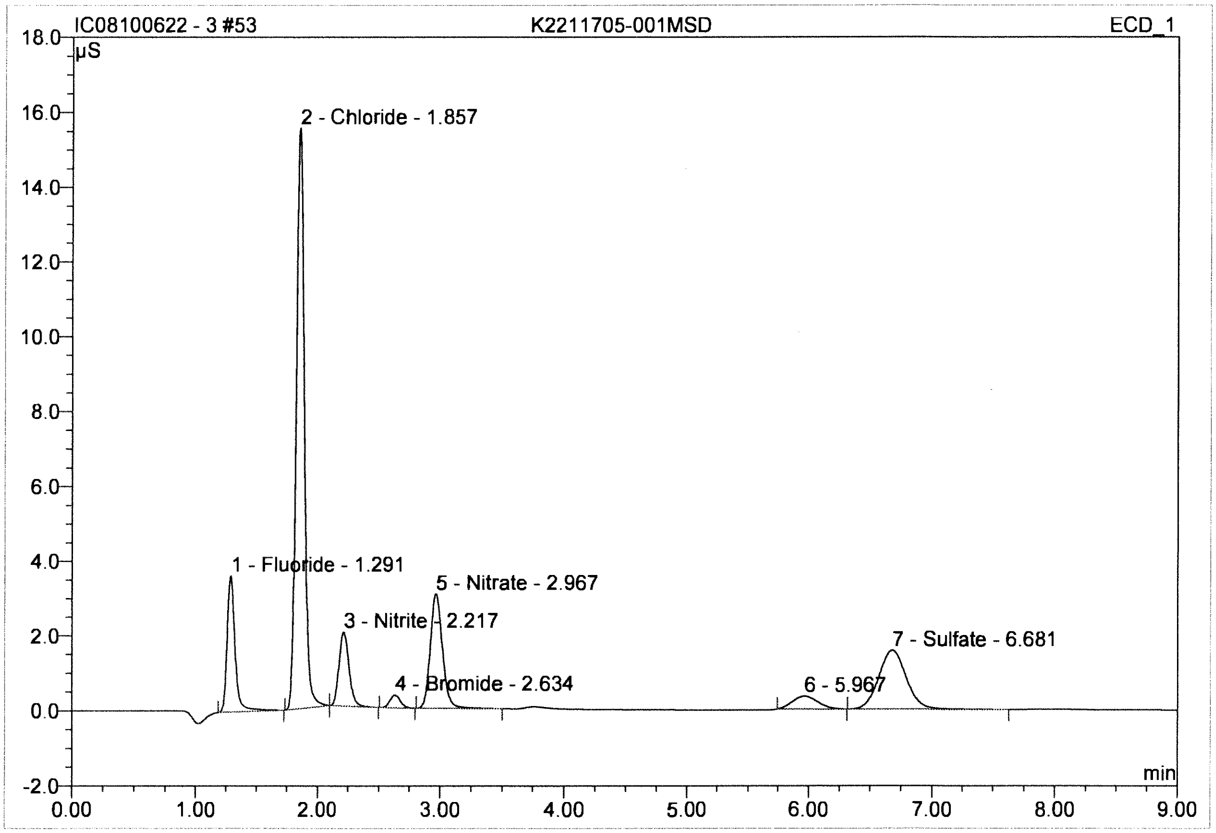


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.631	0.279	11.14	7.755	BMB
2	1.85	Chloride	15.536	1.174	46.89	56.542	BMb
3	2.21	Nitrite	1.971	0.181	7.24	3.842	bMB
4	2.63	Bromide	0.341	0.033	1.34	4.020	BMB
5	2.97	Nitrate	3.058	0.348	13.90	6.716	BMB
6	5.96	n.a.	0.344	0.082	3.26	n.a.	BMB
7	6.67	Sulfate	1.572	0.406	16.24	26.403	BMB
Total:			26.454	2.503	100.00	105.278	

53 K2211705-001MSD

F

Sample Name:	**K2211705-001MSD**	*Injection Volume:*	**5.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**4.0000**
Recording Time:	**10/7/2022 11:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

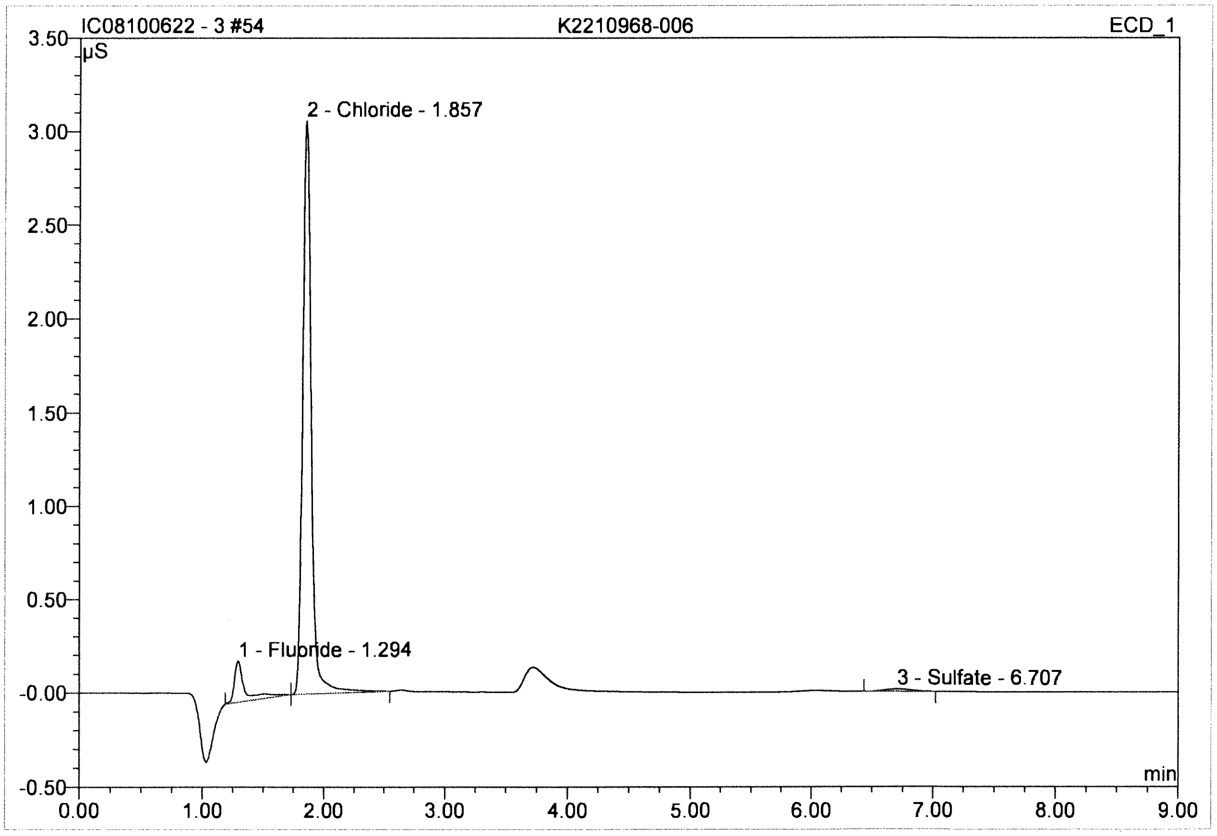


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	3.643	0.279	11.15	7.767	BMB
2	1.86	Chloride	15.522	1.173	46.85	56.515	BMb
3	2.22	Nitrite	1.975	0.181	7.24	3.847	bMB
4	2.63	Bromide	0.341	0.033	1.34	4.024	BMB
5	2.97	Nitrate	3.062	0.348	13.90	6.721	BMB
6	5.97	n.a.	0.344	0.082	3.28	n.a.	BMB
7	6.68	Sulfate	1.571	0.407	16.24	26.419	BMB
Total:			26.458	2.504	100.00	105.293	

54 K2210968-006

F

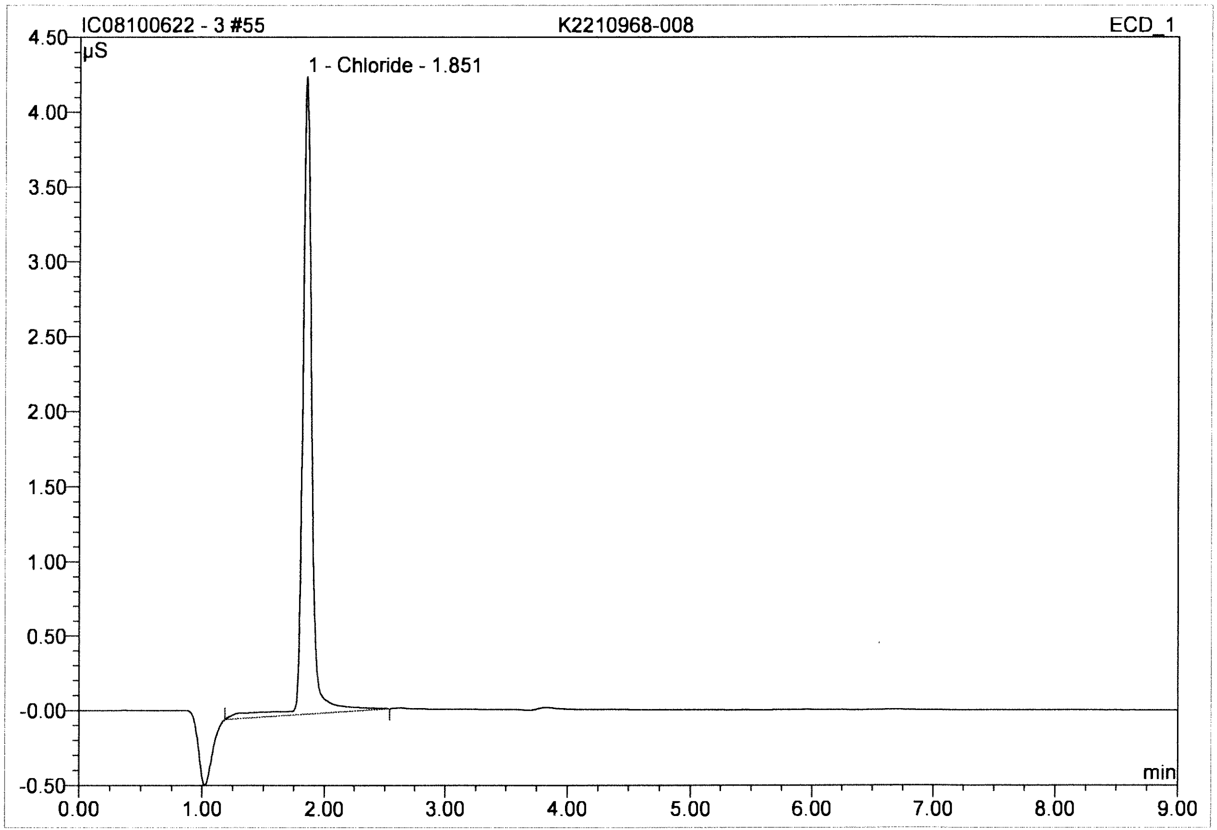
Sample Name:	**K2210968-006**	*Injection Volume:*	**5.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 11:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.219	0.022	7.94	0.306	BMB
2	1.86	Chloride	3.062	0.251	90.91	6.056	bMB
3	6.71	Sulfate	0.013	0.003	1.15	0.103	BMB
Total:			3.294	0.277	100.00	6.465	

55 K2210968-008

Sample Name:	**K2210968-008**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/7/2022 11:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



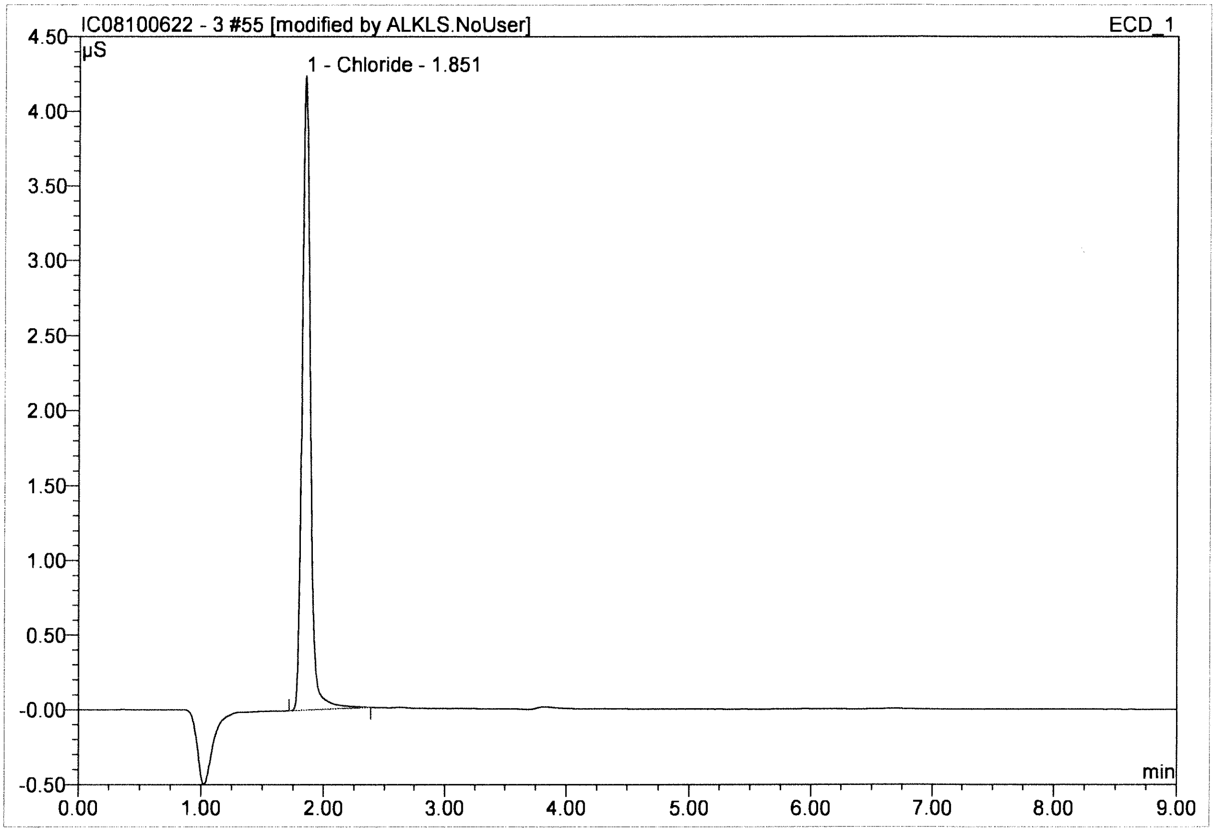
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	4.263	0.365	100.00	439.475	BMB
Total:			4.263	0.365	100.00	439.475	

Before

OCT 07

55 K2210968-008

Sample Name:	**K2210968-008**	*Injection Volume:*	**5.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/7/2022 11:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	4.242	0.337	100.00	405.695	BMB*
Total:			4.242	0.337	100.00	405.695	

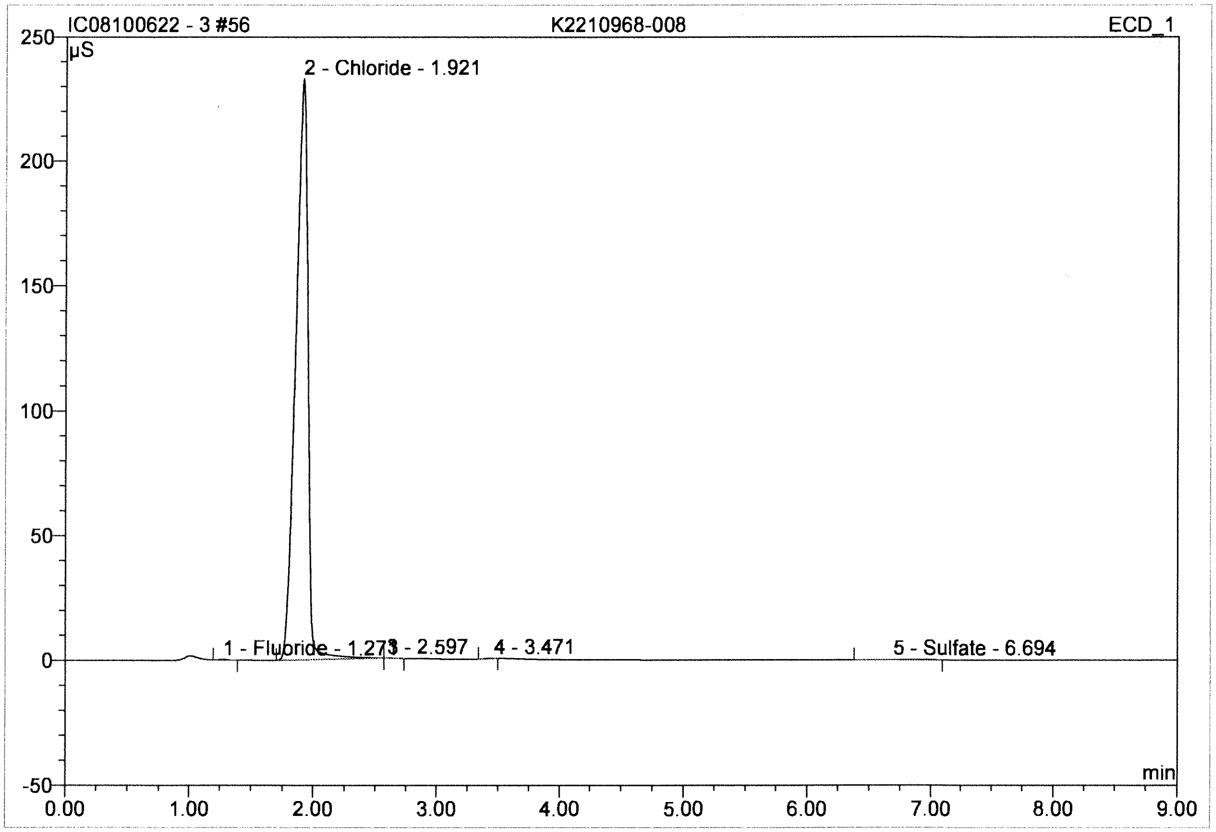
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

56 K2210968-008

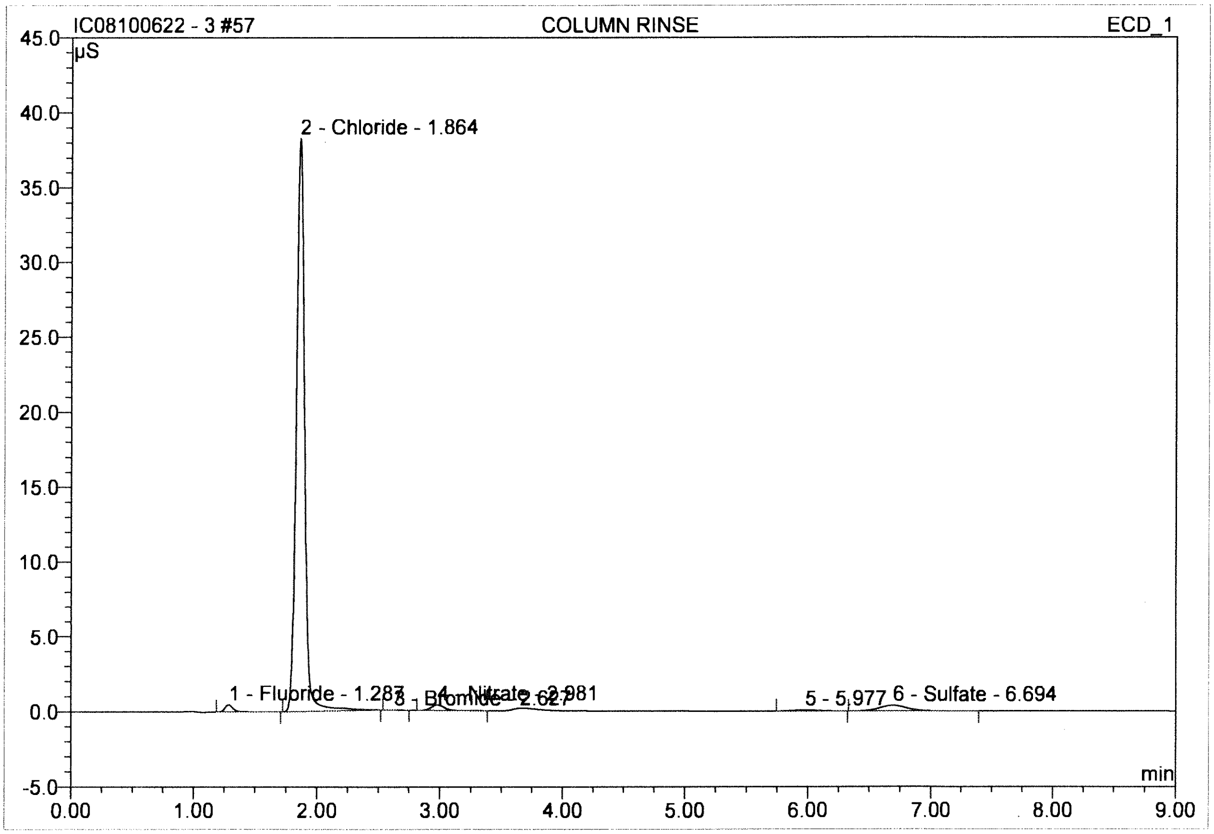
Sample Name:	**K2210968-008**	*Injection Volume:*	**5.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 12:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.27	Fluoride	0.225	0.018	0.07	0.249	BMB
2	1.92	Chloride	232.806	27.051	99.79	651.630	BMb
3	2.60	n.a.	0.028	0.004	0.01	n.a.	bMB
4	3.47	n.a.	0.095	0.013	0.05	n.a.	BMB
5	6.69	Sulfate	0.083	0.021	0.08	0.678	BMB
Total:			233.238	27.107	100.00	652.557	

57 COLUMN RINSE

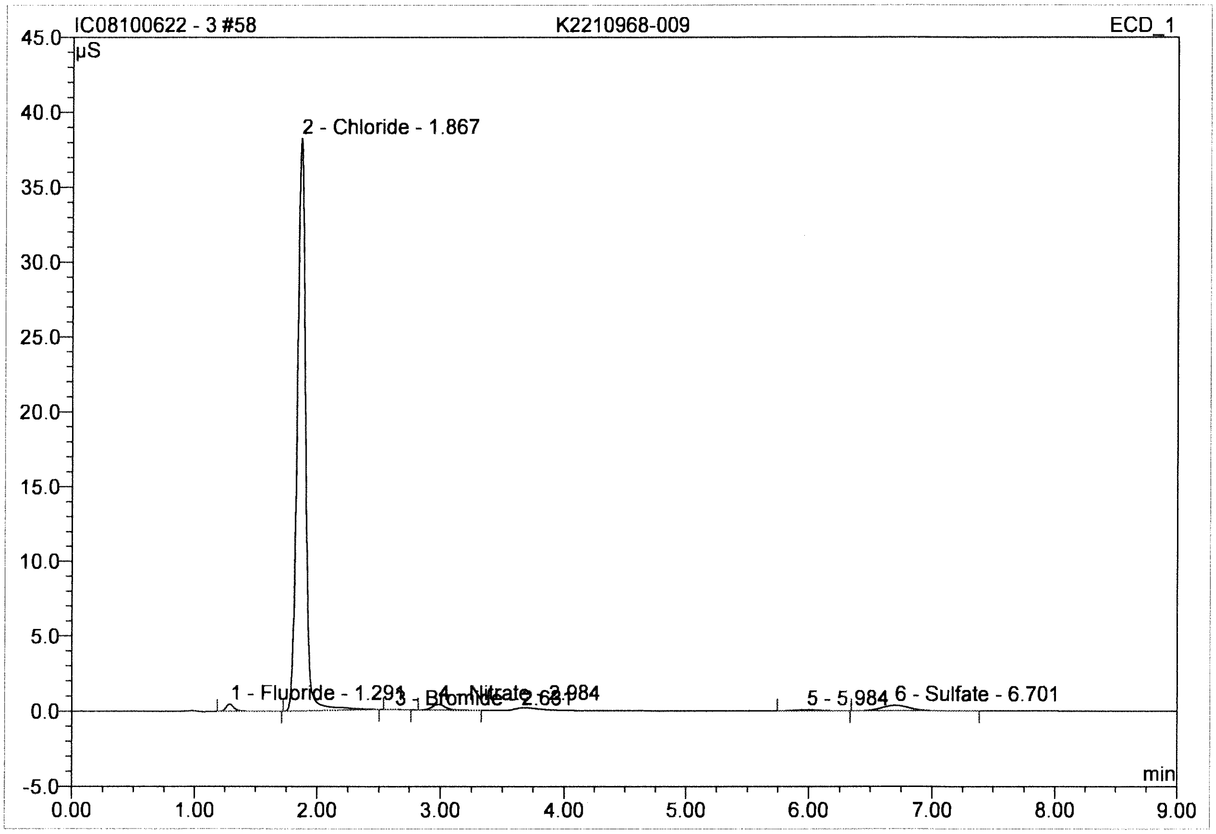
Sample Name:	**COLUMN RINSE**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 12:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.472	0.039	1.21	0.270	BMB
2	1.86	Chloride	38.255	3.019	93.98	36.358	BMB
3	2.63	Bromide	0.012	0.001	0.04	0.036	BMB
4	2.98	Nitrate	0.366	0.045	1.39	0.216	BMB
5	5.98	n.a.	0.065	0.016	0.49	n.a.	BMB
6	6.69	Sulfate	0.360	0.093	2.90	1.511	BMB
Total:			39.530	3.212	100.00	38.391	

58 K2210968-009

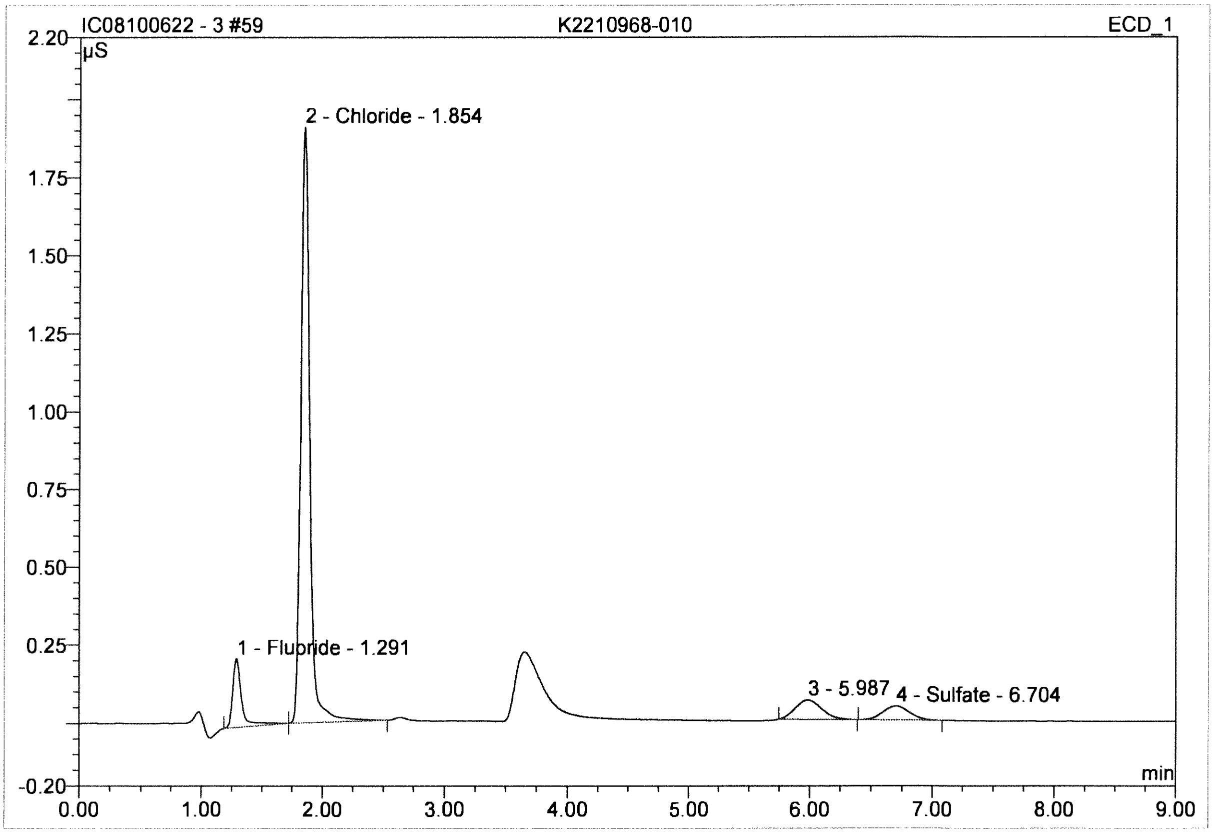
Sample Name:	**K2210968-009**	*Injection Volume:*	**5.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 12:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.469	0.038	1.19	0.530	BMB
2	1.87	Chloride	38.265	3.020	94.00	72.742	BMB
3	2.63	Bromide	0.012	0.001	0.04	0.072	BMB
4	2.98	Nitrate	0.365	0.045	1.39	0.430	BMB
5	5.98	n.a.	0.067	0.016	0.51	n.a.	BMB
6	6.70	Sulfate	0.359	0.093	2.89	3.012	BMB
Total:			39.536	3.212	100.00	76.785	

59 K2210968-010

Sample Name:	**K2210968-010**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 12:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



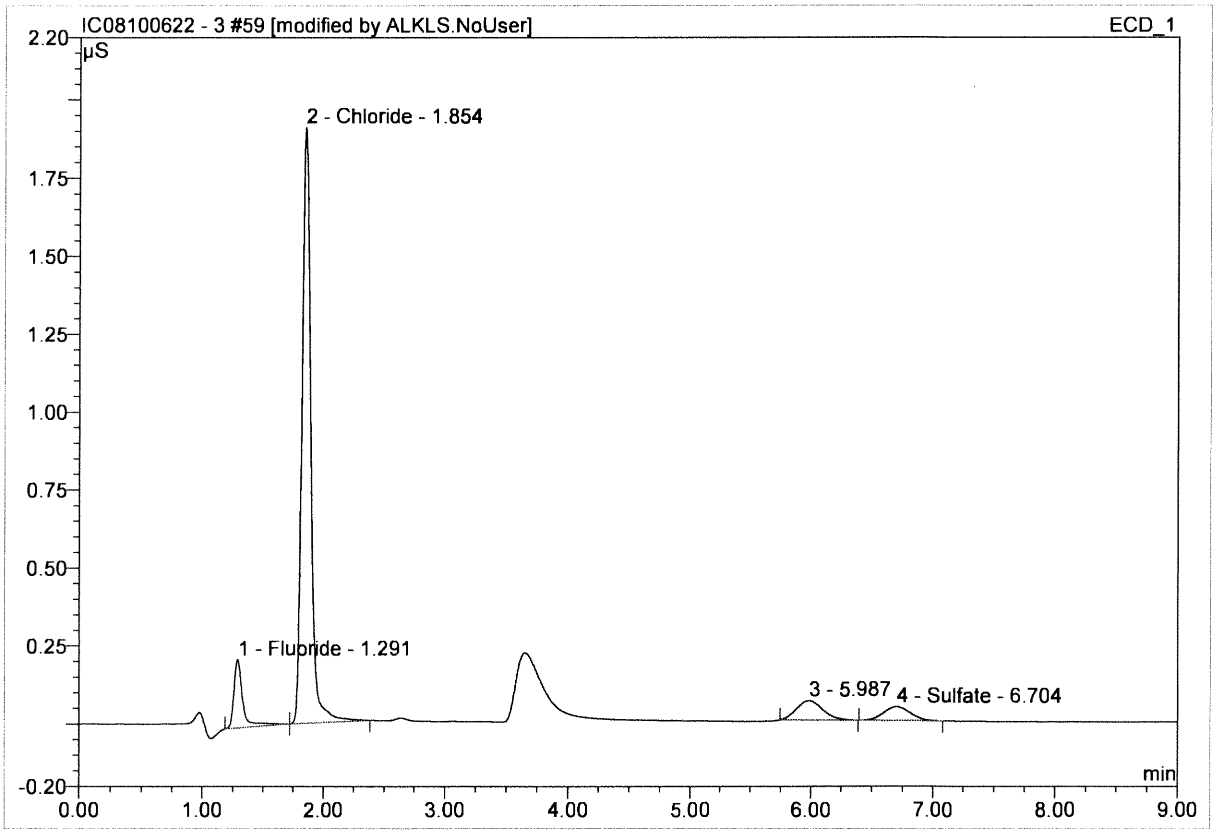
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.218	0.019	8.94	0.259	BMb
2	1.85	Chloride	1.909	0.163	78.41	3.931	bMB
3	5.99	n.a.	0.062	0.015	7.41	n.a.	BMB
4	6.70	Sulfate	0.044	0.011	5.24	0.354	BMB
Total:			2.232	0.208	100.00	4.544	

Before

OCT 07

59 K2210968-010

Sample Name:	**K2210968-010**	*Injection Volume:*	**5.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 12:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.218	0.019	9.00	0.259	BMb
2	1.85	Chloride	1.908	0.162	78.28	3.901	bMB*
3	5.99	n.a.	0.062	0.015	7.45	n.a.	BMB
4	6.70	Sulfate	0.044	0.011	5.27	0.354	BMB
Total:			2.232	0.207	100.00	4.514	

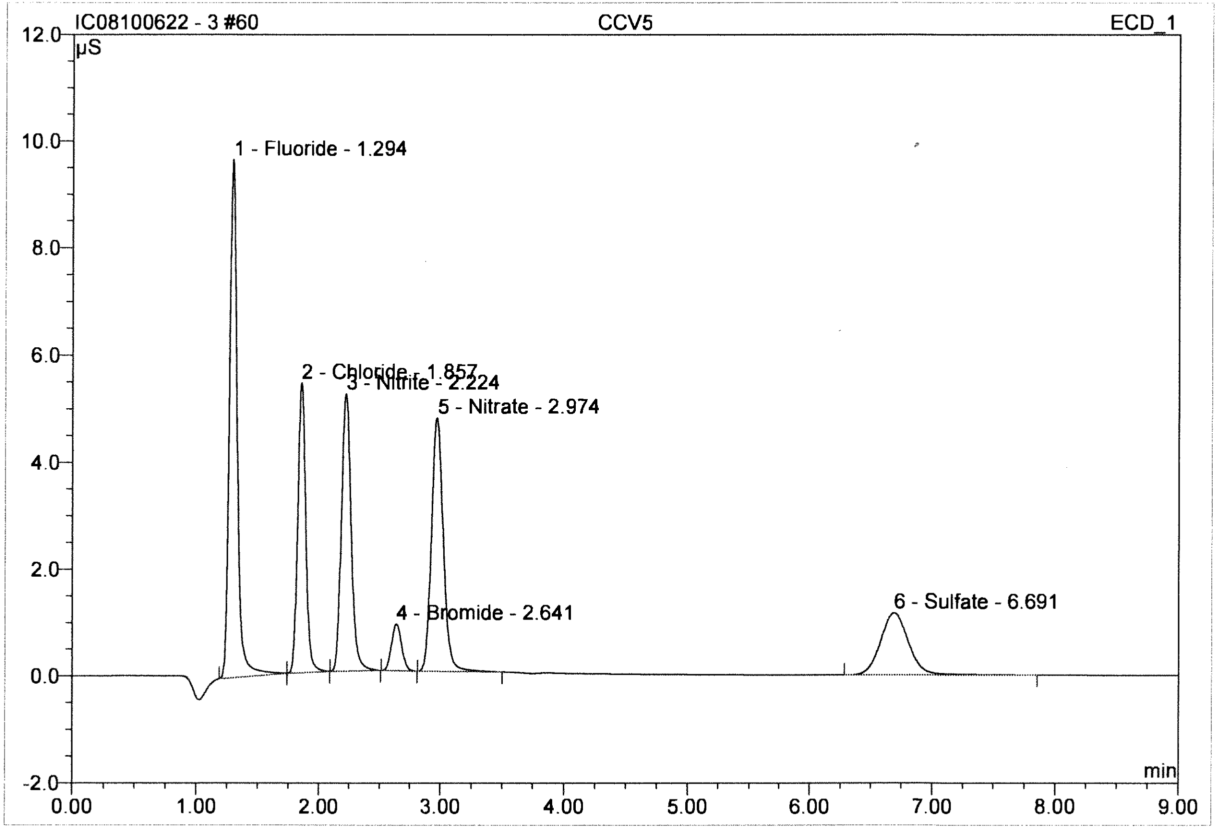
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

60 CCV5

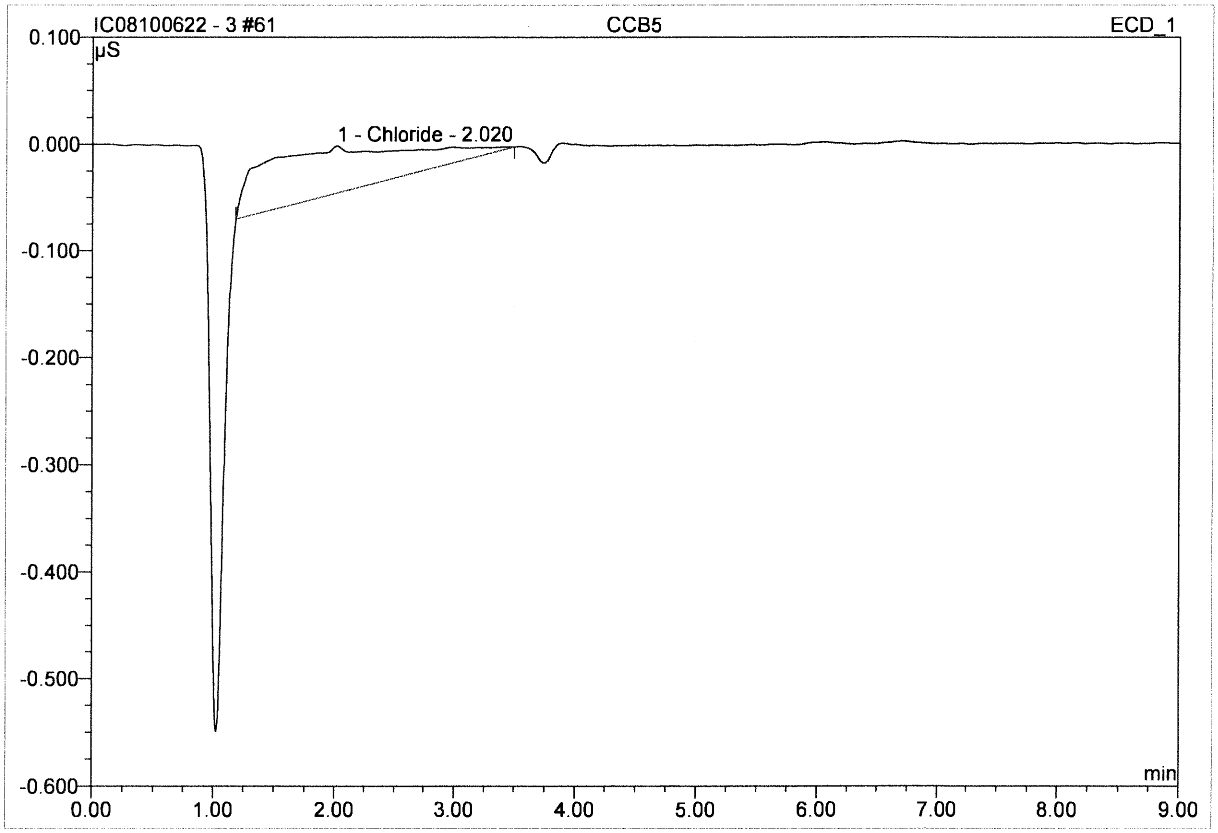
Sample Name:	**CCV5**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 12:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.682	0.717	28.25	4.990	BMB
2	1.86	Chloride	5.420	0.418	16.46	5.035	bMB
3	2.22	Nitrite	5.191	0.479	18.85	2.537	BMB
4	2.64	Bromide	0.881	0.086	3.38	2.575	BMB
5	2.97	Nitrate	4.749	0.529	20.84	2.555	BMB
6	6.69	Sulfate	1.166	0.310	12.22	5.041	BMB
Total:			27.089	2.539	100.00	22.733	

61 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 13:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



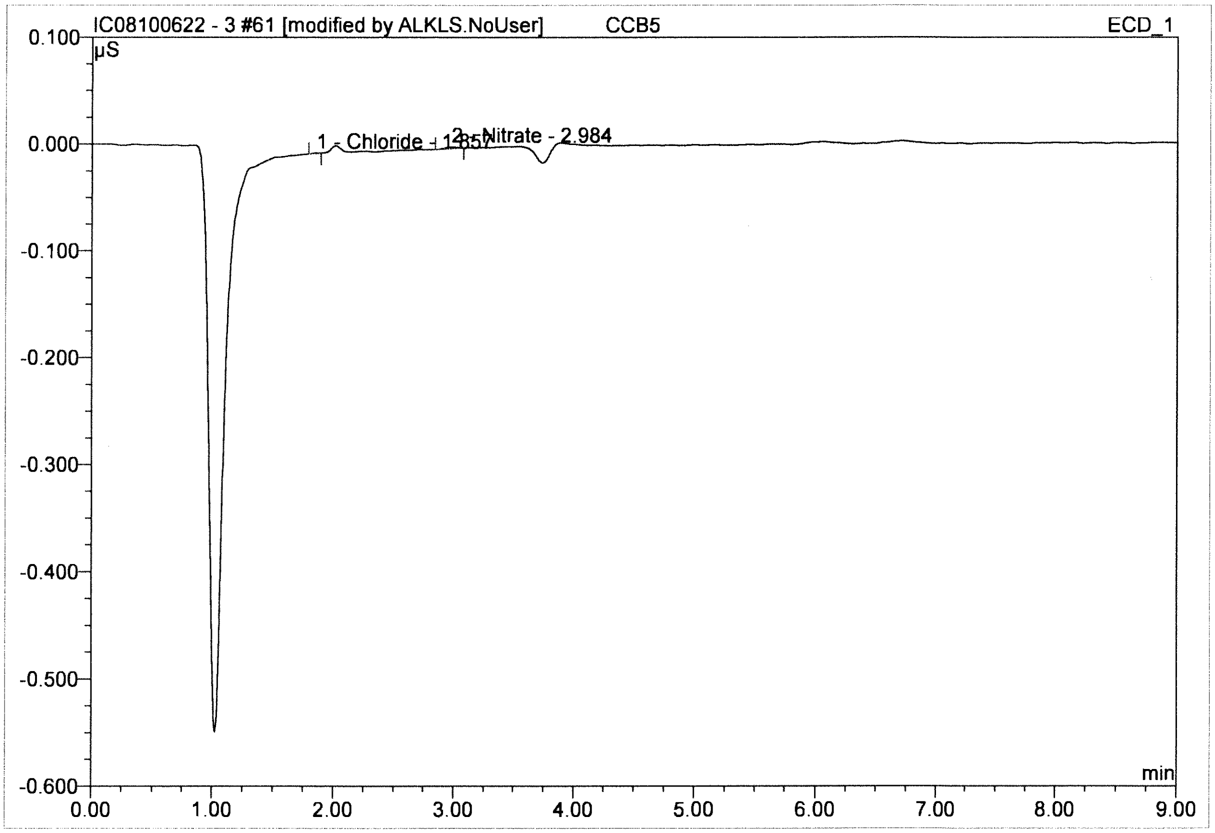
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	Chloride	0.044	0.064	100.00	0.766	BMB
Total:			0.044	0.064	100.00	0.766	

Before

OCT 07

61 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 13:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.86	Chloride	0.000	0.000	13.13	0.000	BMB*
2	2.98	Nitrate	0.001	0.000	86.87	0.001	BMB*
Total:			0.002	0.000	100.00	0.001	

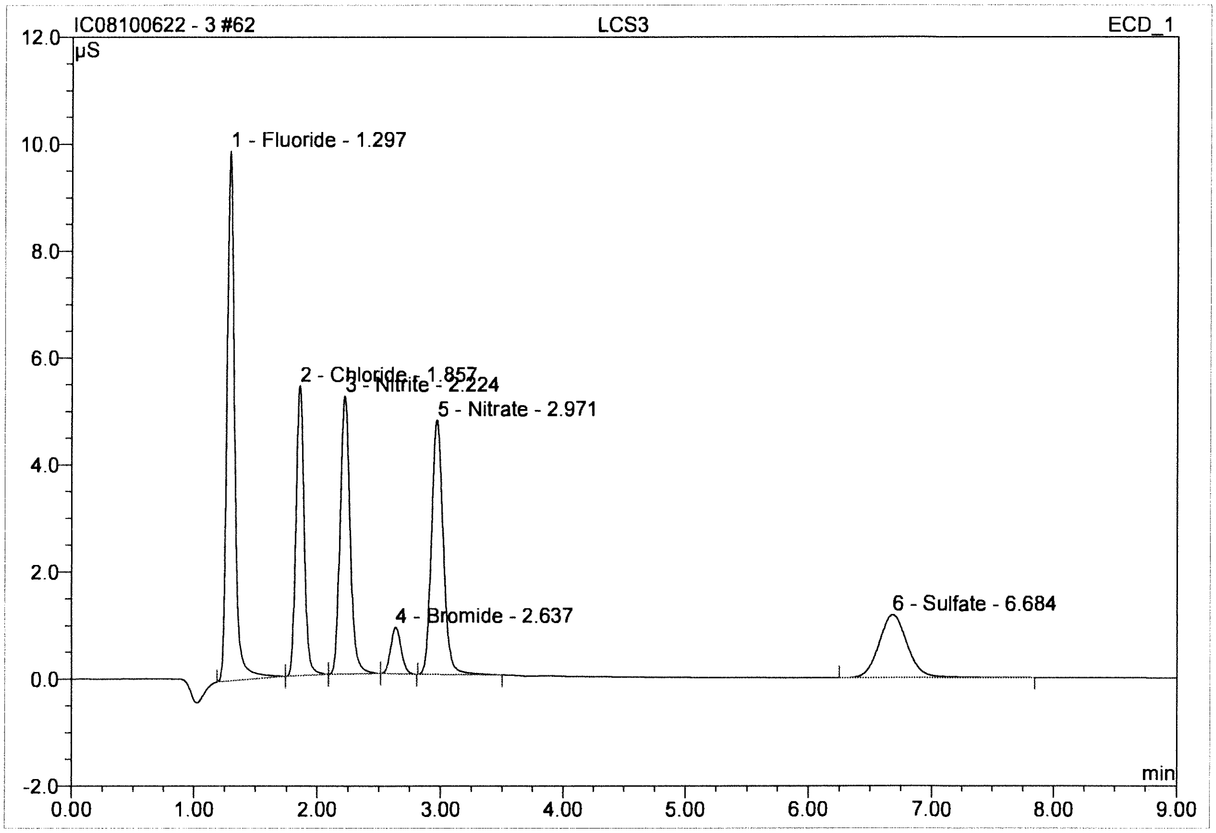
After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☐Baseline/shoulder Incorrect
☐Other

62 LCS3

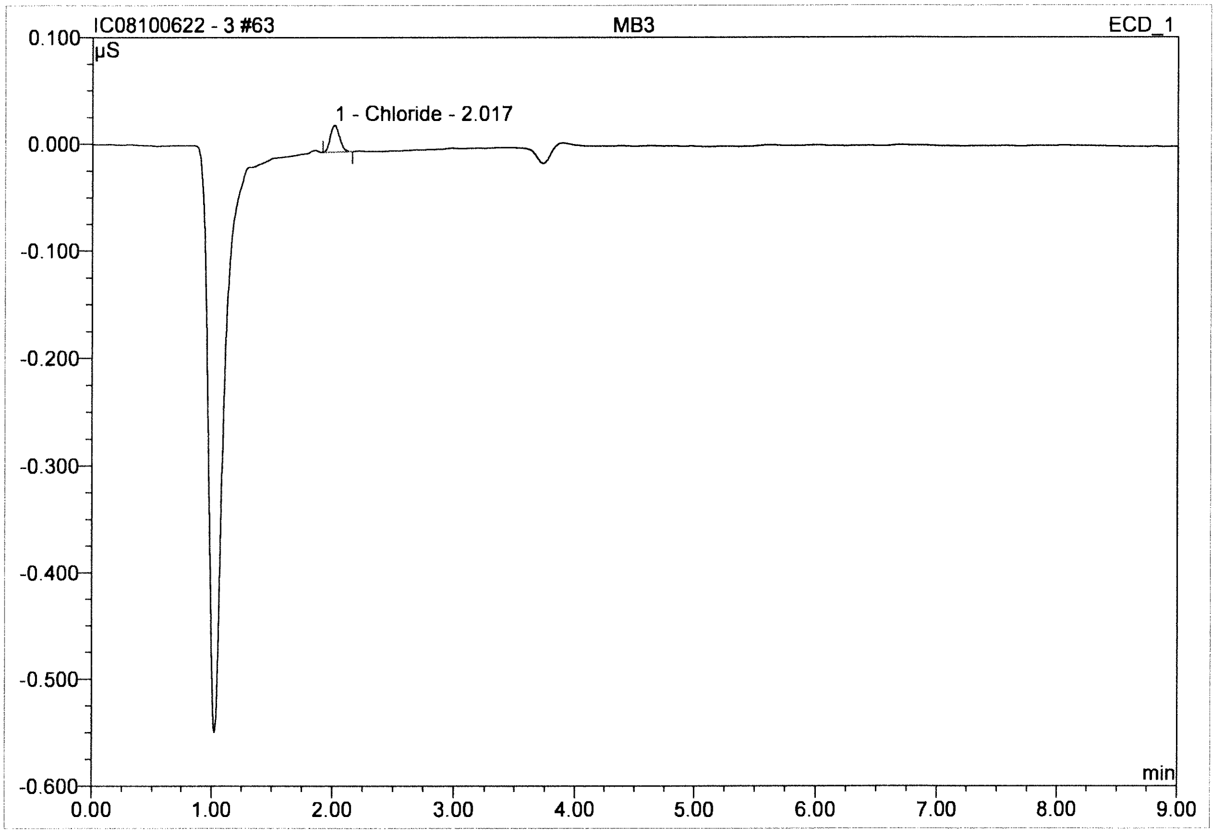
Sample Name:	**LCS3**	*Injection Volume:*	**5.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 13:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.30	Fluoride	9.900	0.734	28.74	5.108	BMB
2	1.86	Chloride	5.413	0.418	16.34	5.029	bMB
3	2.22	Nitrite	5.197	0.478	18.72	2.536	bMb
4	2.64	Bromide	0.874	0.085	3.32	2.552	bMB
5	2.97	Nitrate	4.752	0.528	20.67	2.549	BMB
6	6.68	Sulfate	1.173	0.312	12.21	5.067	BMB
Total:			27.309	2.556	100.00	22.842	

63 MB3

Sample Name:	**MB3**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 13:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



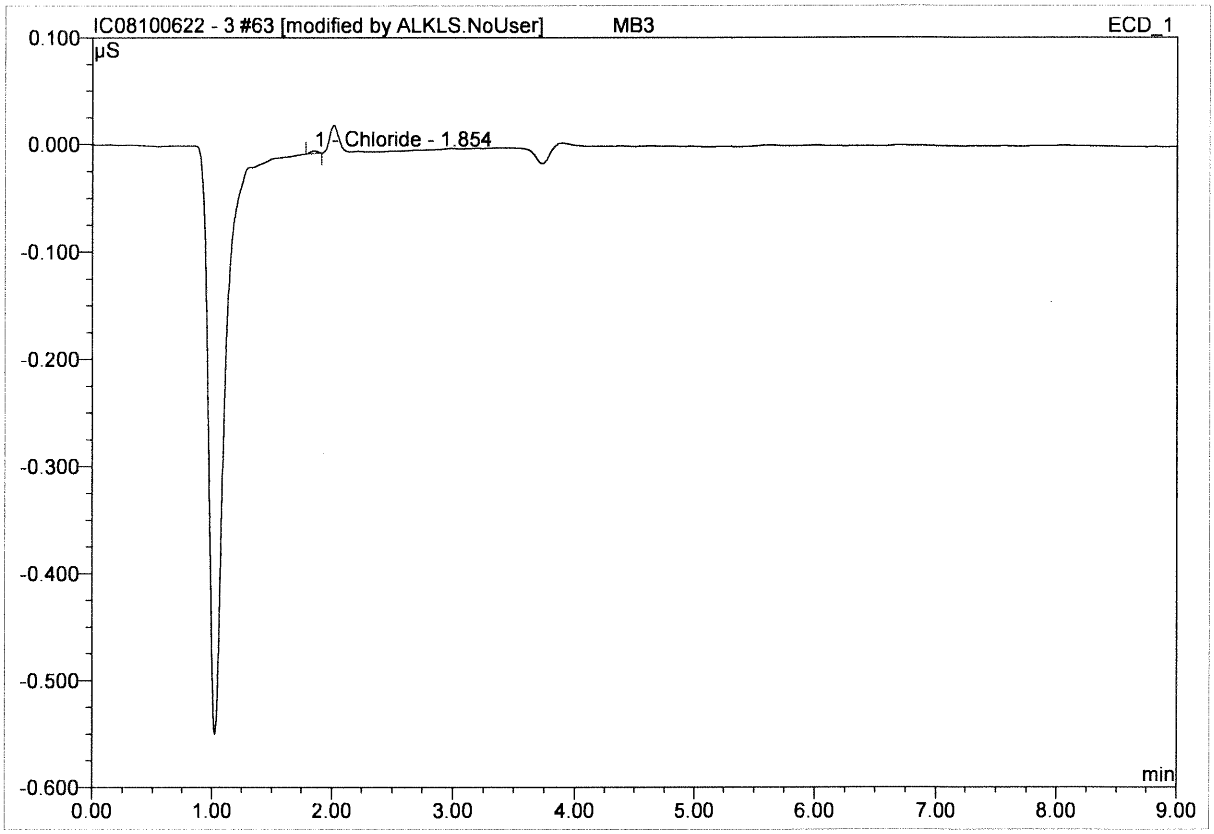
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	Chloride	0.025	0.002	100.00	0.027	BMB
Total:			0.025	0.002	100.00	0.027	

Before

OCT 07

63 MB3

Sample Name:	**MB3**	*Injection Volume:*	**5.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 13:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.002	0.000	100.00	0.002	BMB*
Total:			0.002	0.000	100.00	0.002	

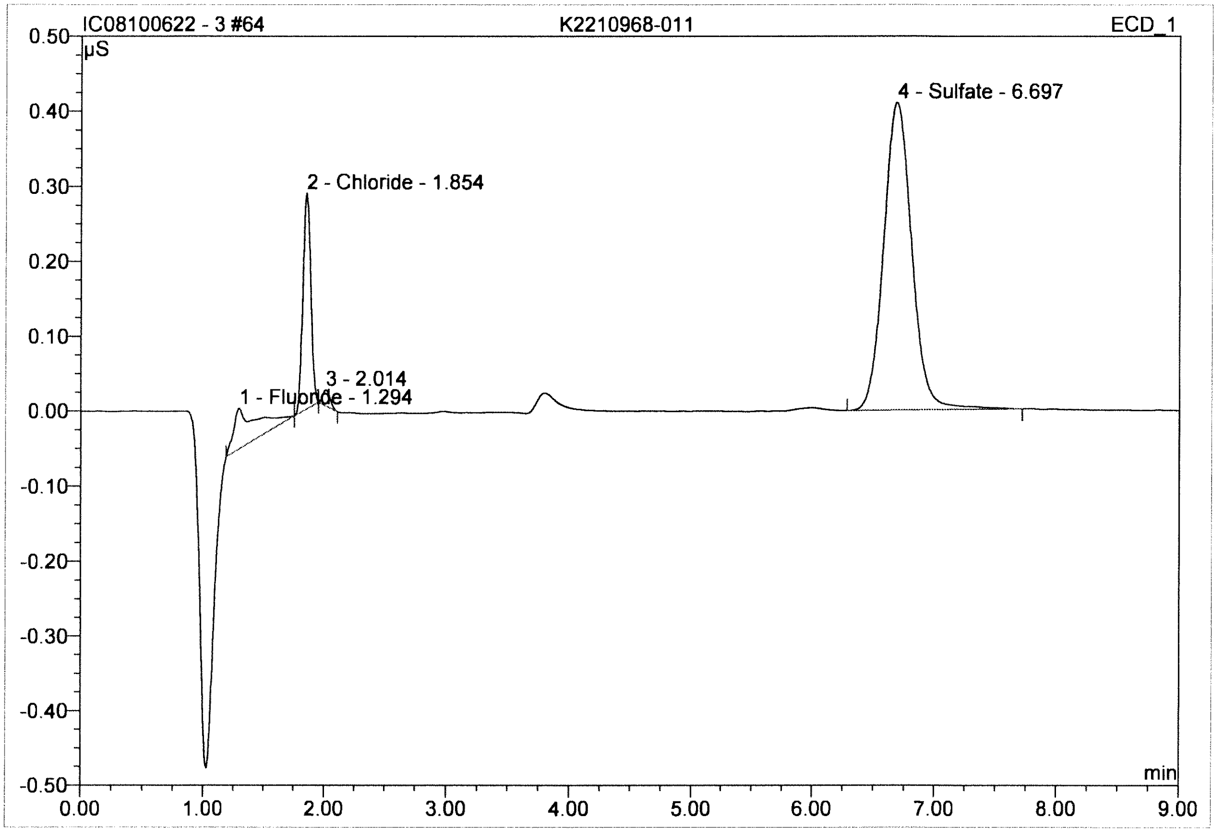
After
Initials NF

OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

64 K2210968-011

Sample Name:	**K2210968-011**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/7/2022 13:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



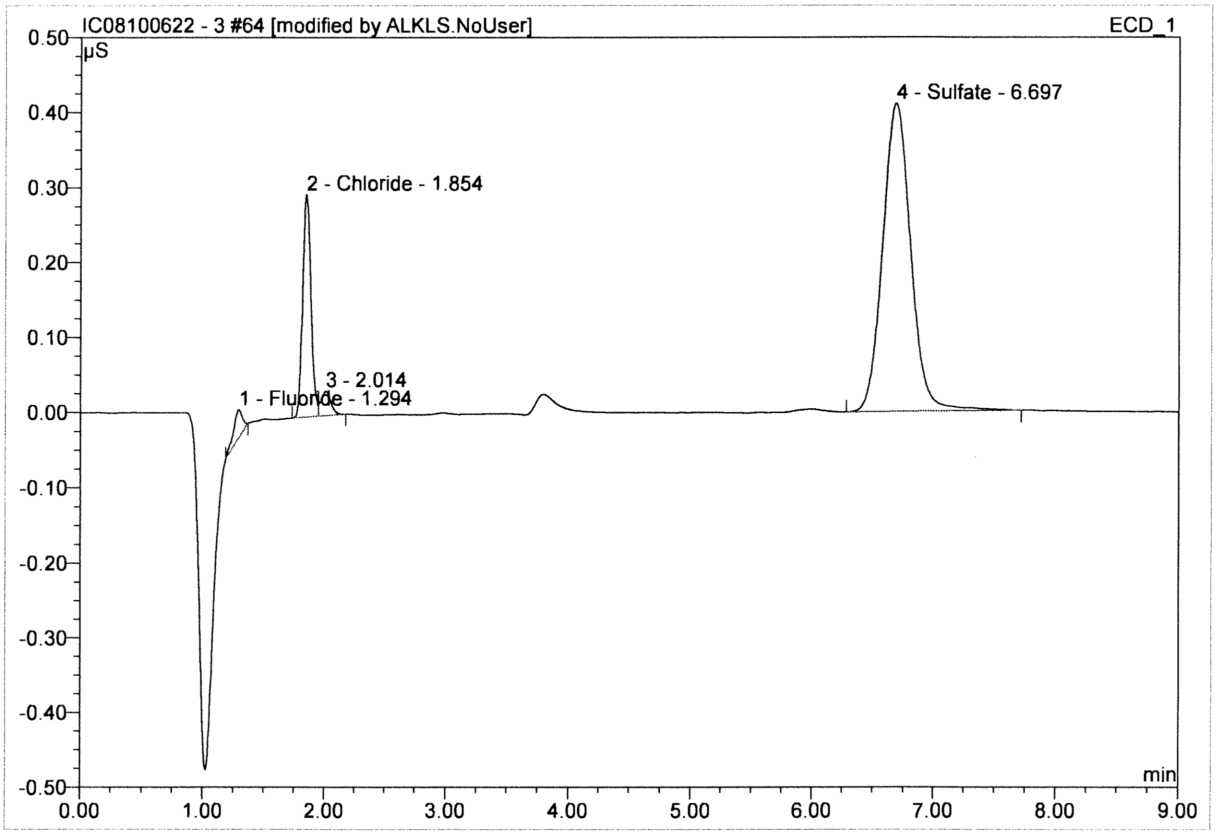
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.054	0.012	8.19	0.821	BMB
2	1.85	Chloride	0.288	0.022	14.97	2.597	bMb
3	2.01	n.a.	0.021	0.002	1.07	n.a.	bMB
4	6.70	Sulfate	0.410	0.109	75.77	17.731	BMB
Total:			0.774	0.144	100.00	21.148	

Before

OCT 07

64 K2210968-011

Sample Name:	**K2210968-011**	*Injection Volume:*	**5.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/7/2022 13:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.037	0.003	2.30	0.222	BMB*
2	1.85	Chloride	0.297	0.023	16.80	2.807	BM *
3	2.01	n.a.	0.032	0.003	2.22	n.a.	MB*
4	6.70	Sulfate	0.410	0.109	78.68	17.731	BMB
Total:			0.777	0.139	100.00	20.760	

After
Initials NF

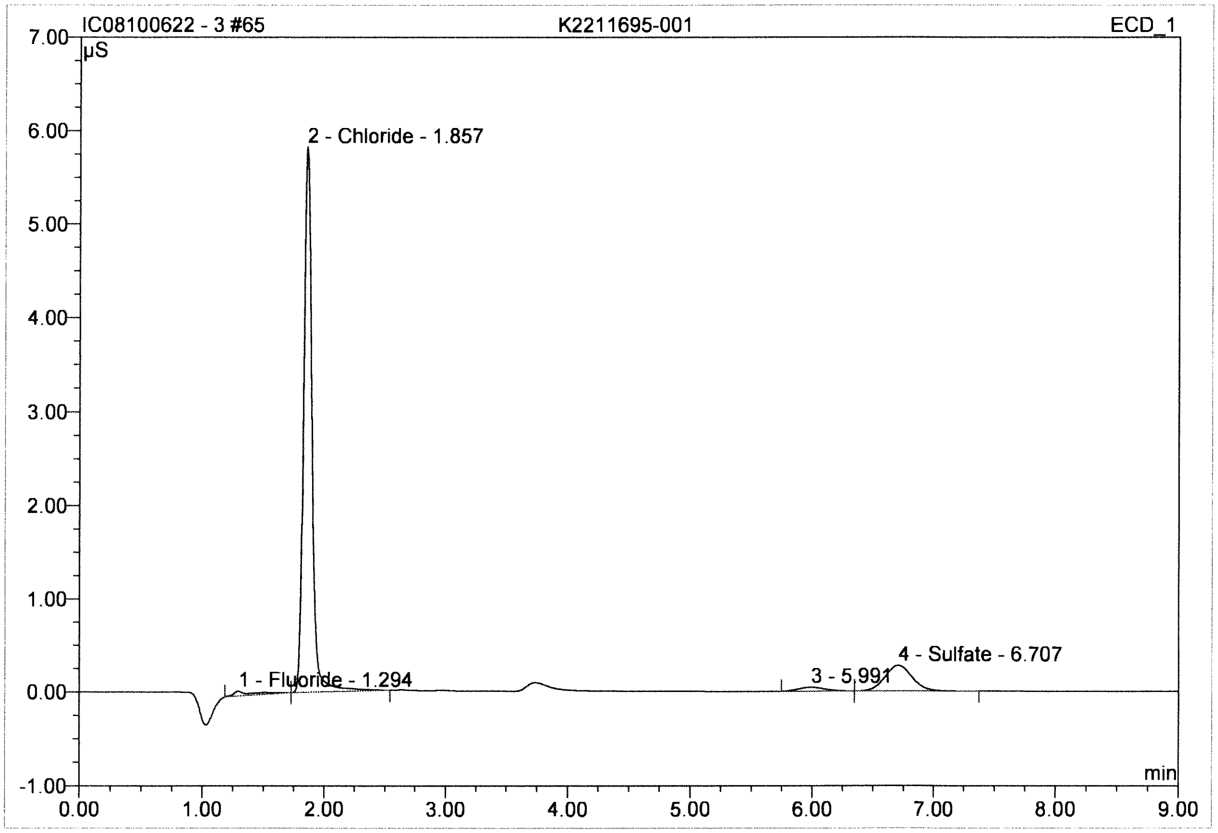
OCT 07

☐Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

65 K2211695-001

F

Sample Name:	**K2211695-001**	*Injection Volume:*	**5.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 13:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.053	0.010	1.75	0.137	BMB
2	1.86	Chloride	5.826	0.470	83.80	11.334	bMB
3	5.99	n.a.	0.041	0.010	1.85	n.a.	BMB
4	6.71	Sulfate	0.272	0.071	12.60	2.299	BMB
Total:			6.192	0.561	100.00	13.769	

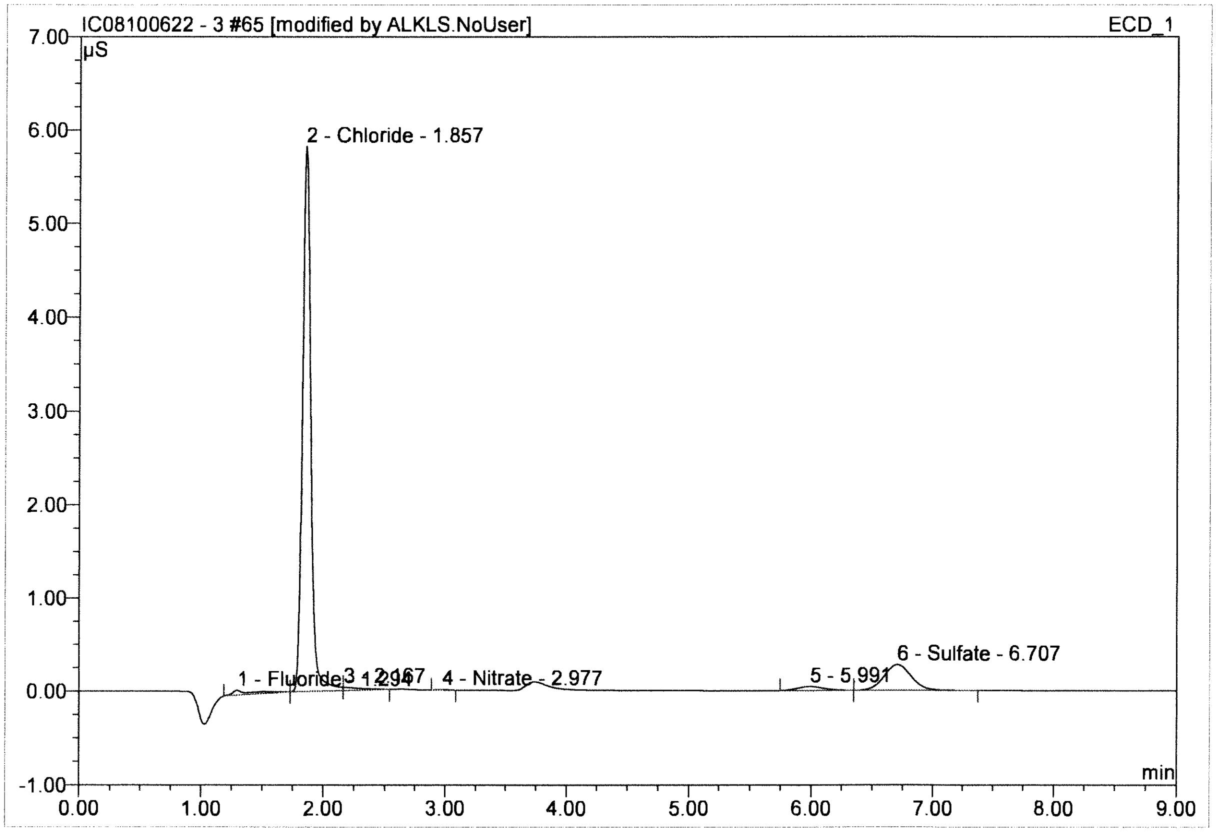
Before

OCT 07

65 K2211695-001

F

Sample Name:	**K2211695-001**	*Injection Volume:*	**5.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 13:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.053	0.010	1.75	0.137	BMb*
2	1.86	Chloride	5.826	0.465	82.71	11.197	bM *
3	2.17	n.a.	0.034	0.006	1.01	n.a.	MB*
4	2.98	Nitrate	0.005	0.001	0.10	0.005	BMB*
5	5.99	n.a.	0.041	0.010	1.84	n.a.	BMB
6	6.71	Sulfate	0.272	0.071	12.59	2.299	BMB
Total:			6.232	0.562	100.00	13.637	

After
Initials NF

OCT 07

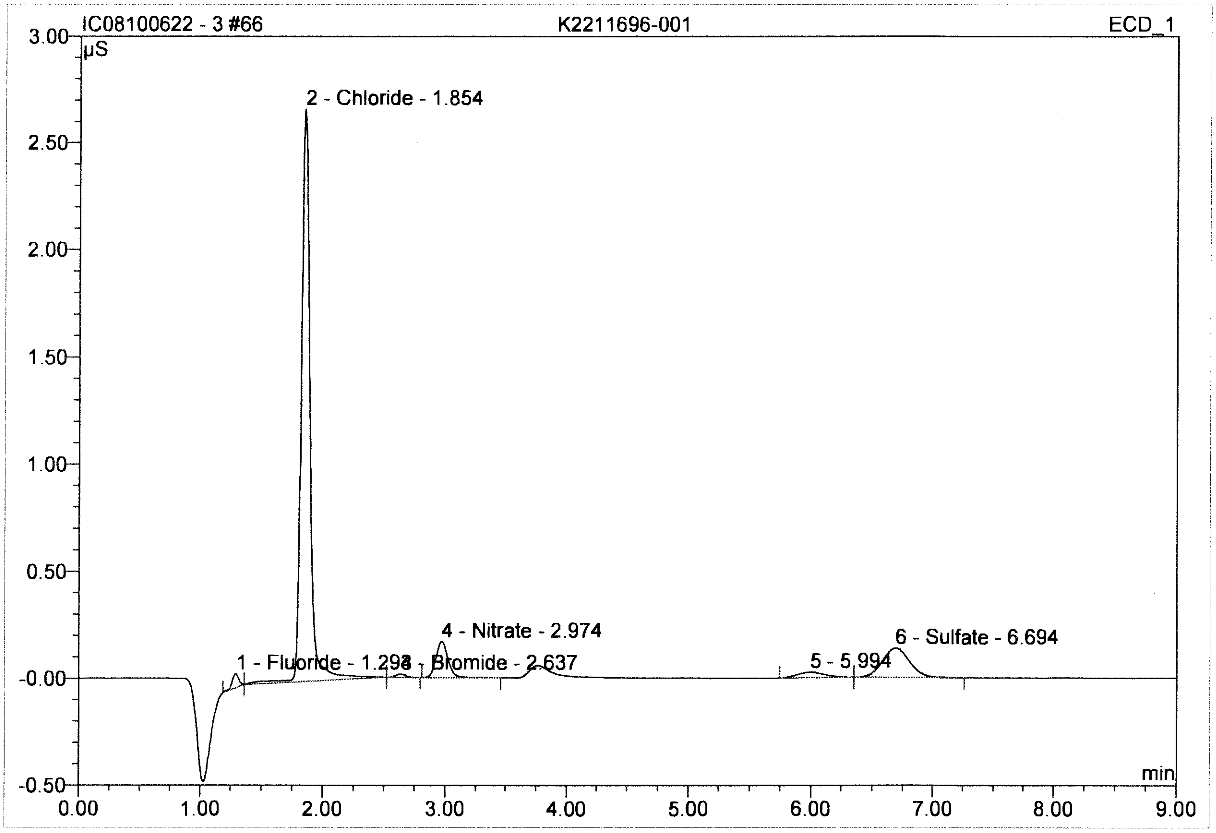
☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

default/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11d Build 3302 (196279)

66 K2211696-001

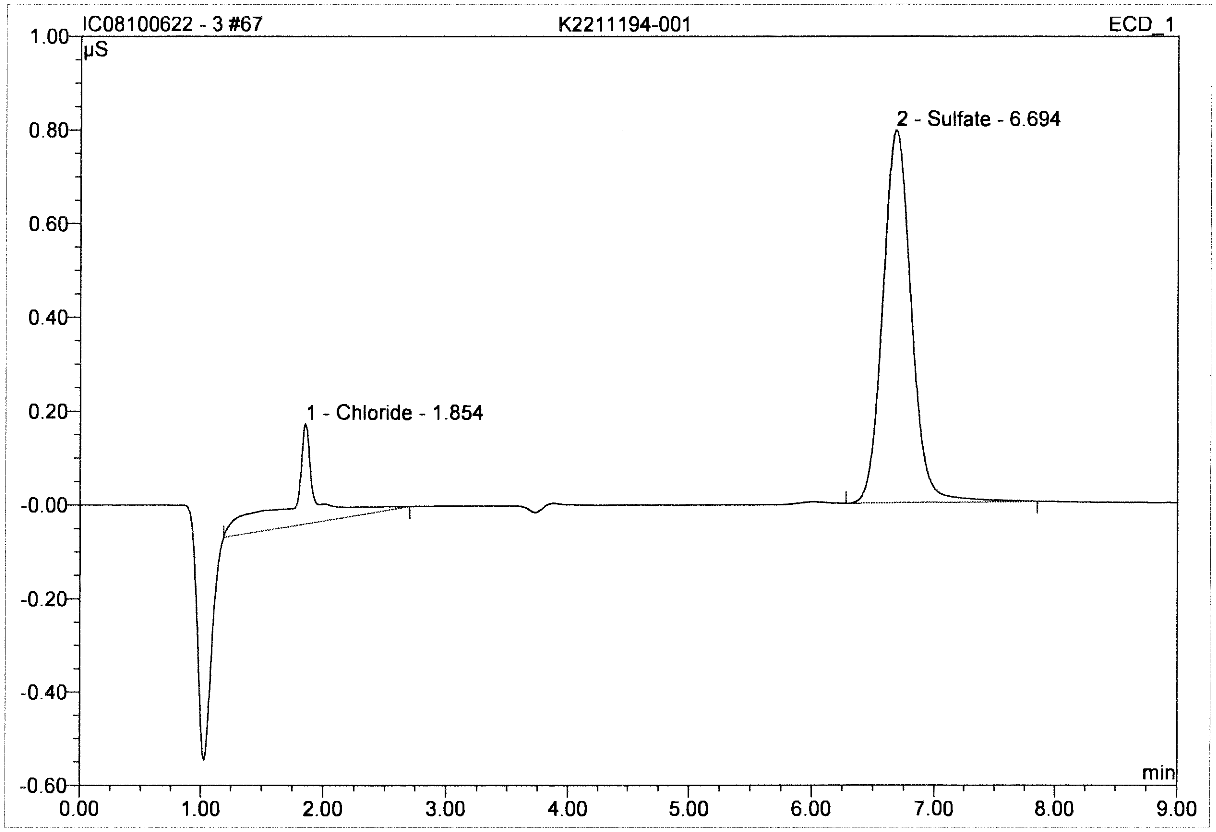
Sample Name:	**K2211696-001**	*Injection Volume:*	**5.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/7/2022 13:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	0.064	0.004	1.41	0.057	BMB
2	1.85	Chloride	2.672	0.223	76.94	5.374	bMb
3	2.64	Bromide	0.015	0.001	0.49	0.086	bMB
4	2.97	Nitrate	0.168	0.019	6.72	0.188	BMB
5	5.99	n.a.	0.026	0.007	2.33	n.a.	BMb
6	6.69	Sulfate	0.136	0.035	12.10	1.140	bMB
Total:			3.081	0.290	100.00	6.845	

67 K2211194-001

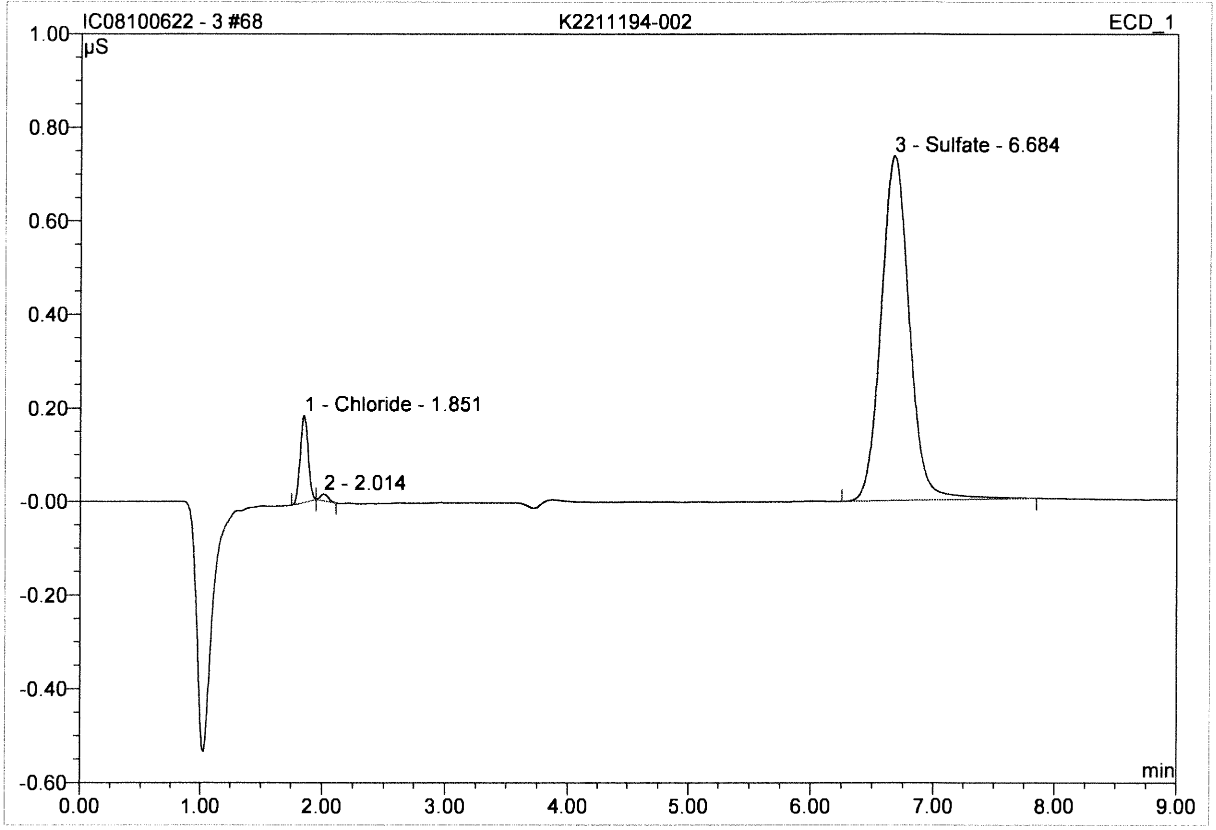
Sample Name:	**K2211194-001**	*Injection Volume:*	**5.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**250.0000**
Recording Time:	**10/7/2022 14:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.213	0.054	20.28	162.633	BMB
2	6.69	Sulfate	0.795	0.212	79.72	862.064	BMB
Total:			1.008	0.266	100.00	1024.697	

68 K2211194-002

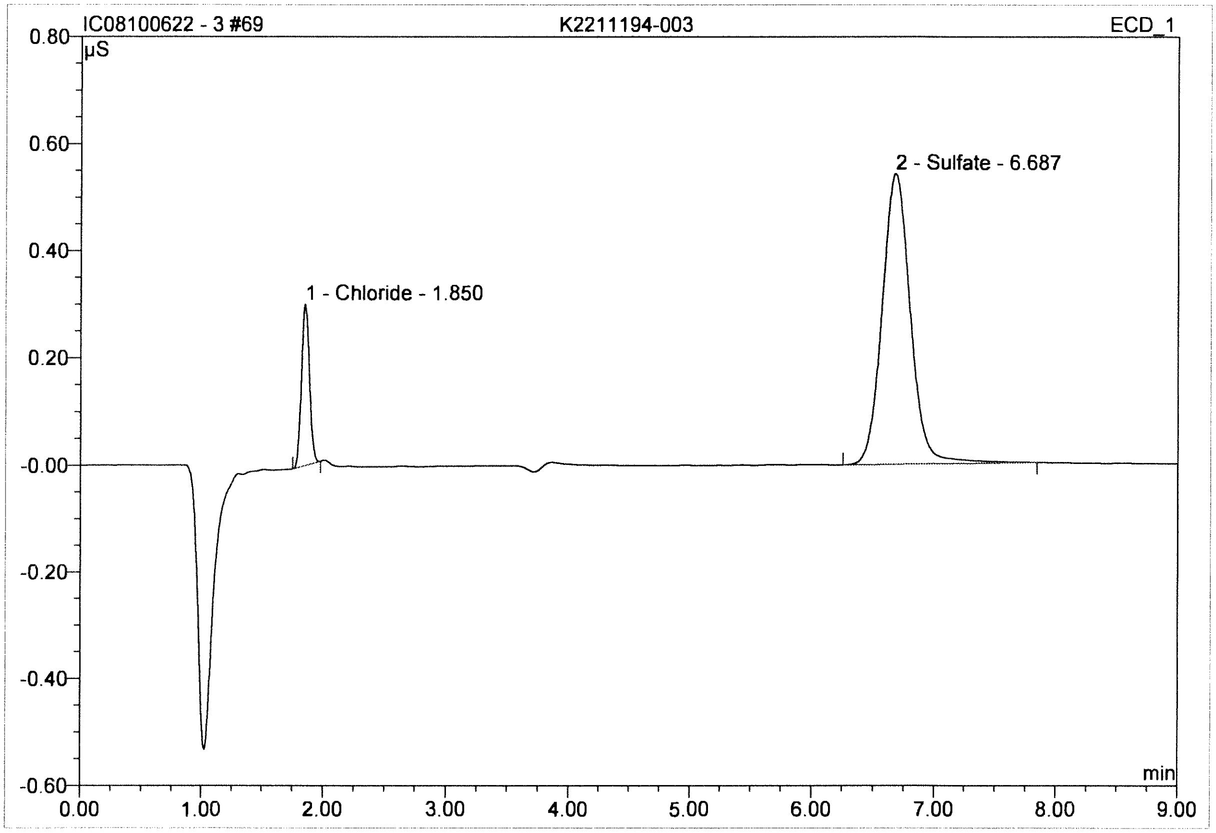
Sample Name:	**K2211194-002**	*Injection Volume:*	**5.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 14:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.186	0.014	6.55	8.354	BMb
2	2.01	n.a.	0.014	0.001	0.49	n.a.	bMB
3	6.68	Sulfate	0.737	0.197	92.96	159.939	BMB
Total:			0.937	0.212	100.00	168.292	

69 K2211194-003

Sample Name:	**K2211194-003**	*Injection Volume:*	**5.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 14:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

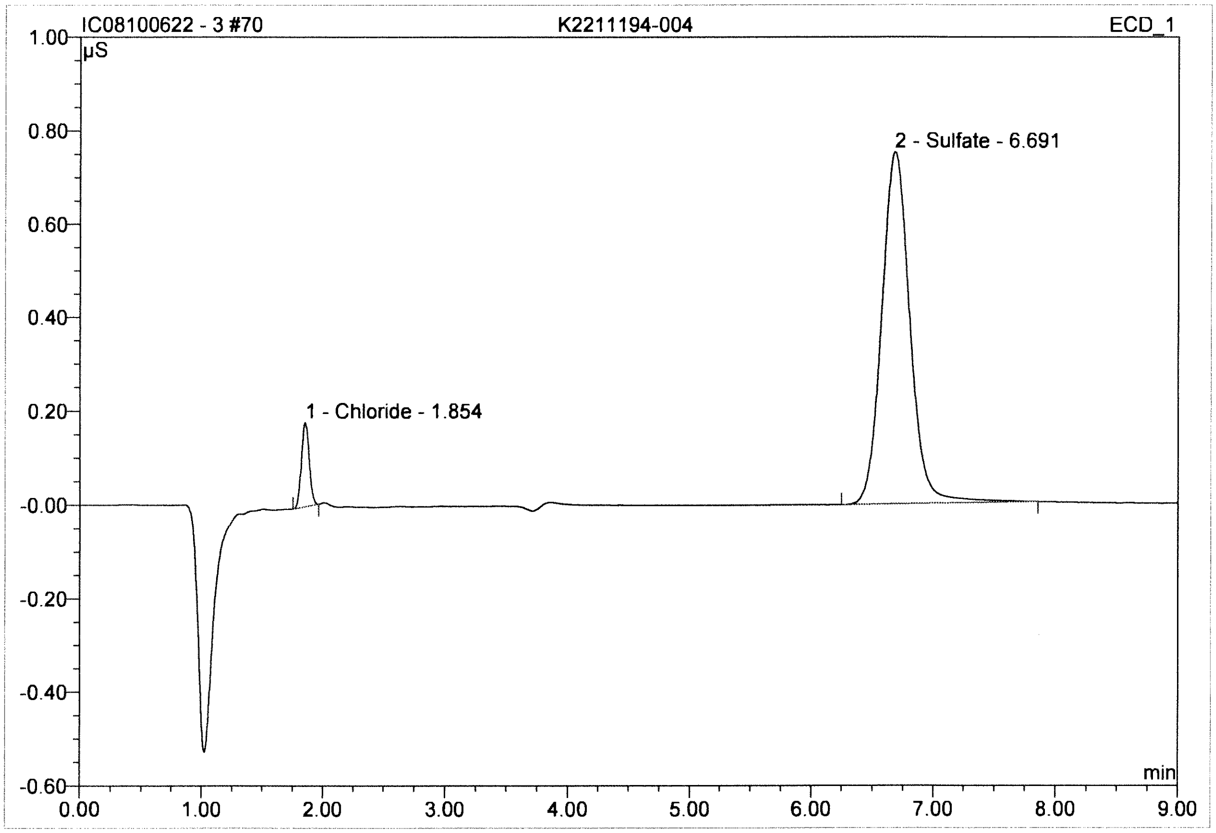


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.300	0.023	13.54	13.701	BMB
2	6.69	Sulfate	0.542	0.145	86.46	117.969	BMB
Total:			0.843	0.168	100.00	131.670	

70 K2211194-004

F

Sample Name:	**K2211194-004**	*Injection Volume:*	**5.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 14:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**

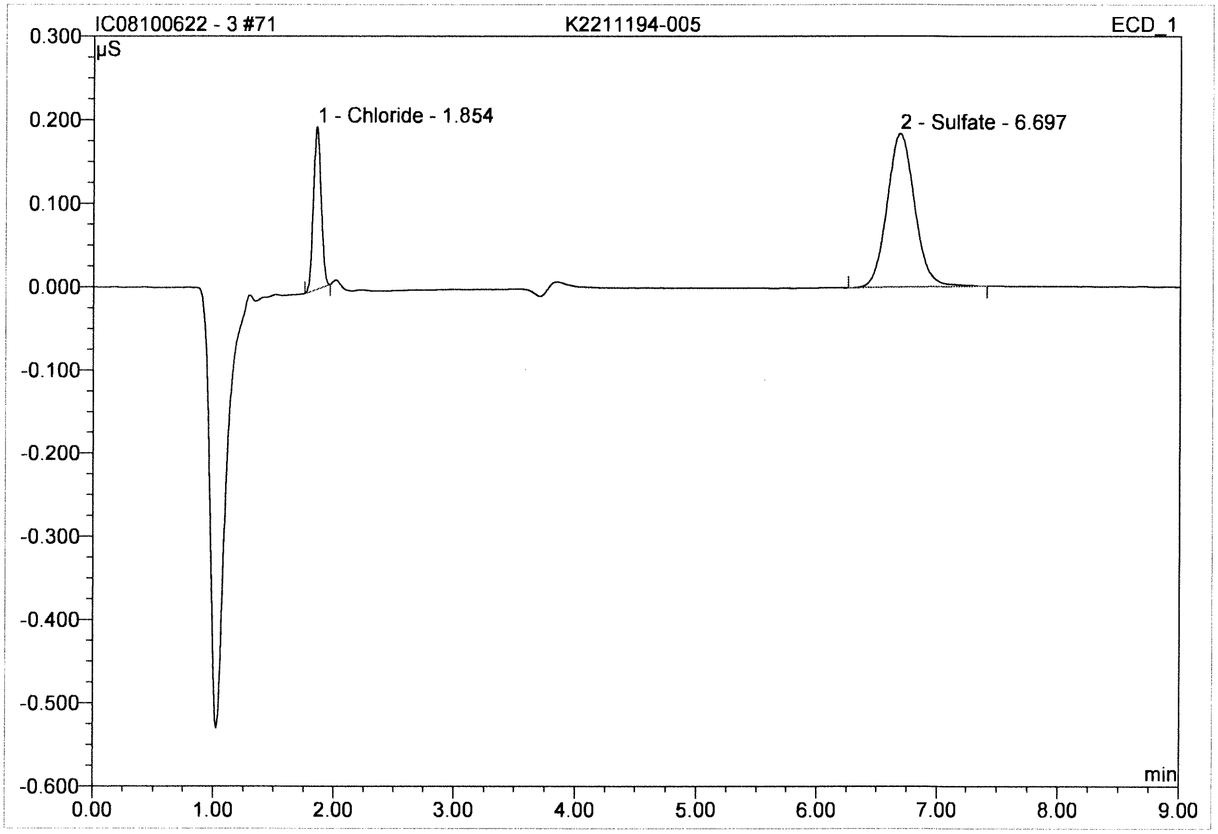


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.179	0.013	6.27	8.124	BMB
2	6.69	Sulfate	0.753	0.202	93.73	163.759	BMB
Total:			0.931	0.215	100.00	171.884	

71 K2211194-005

F

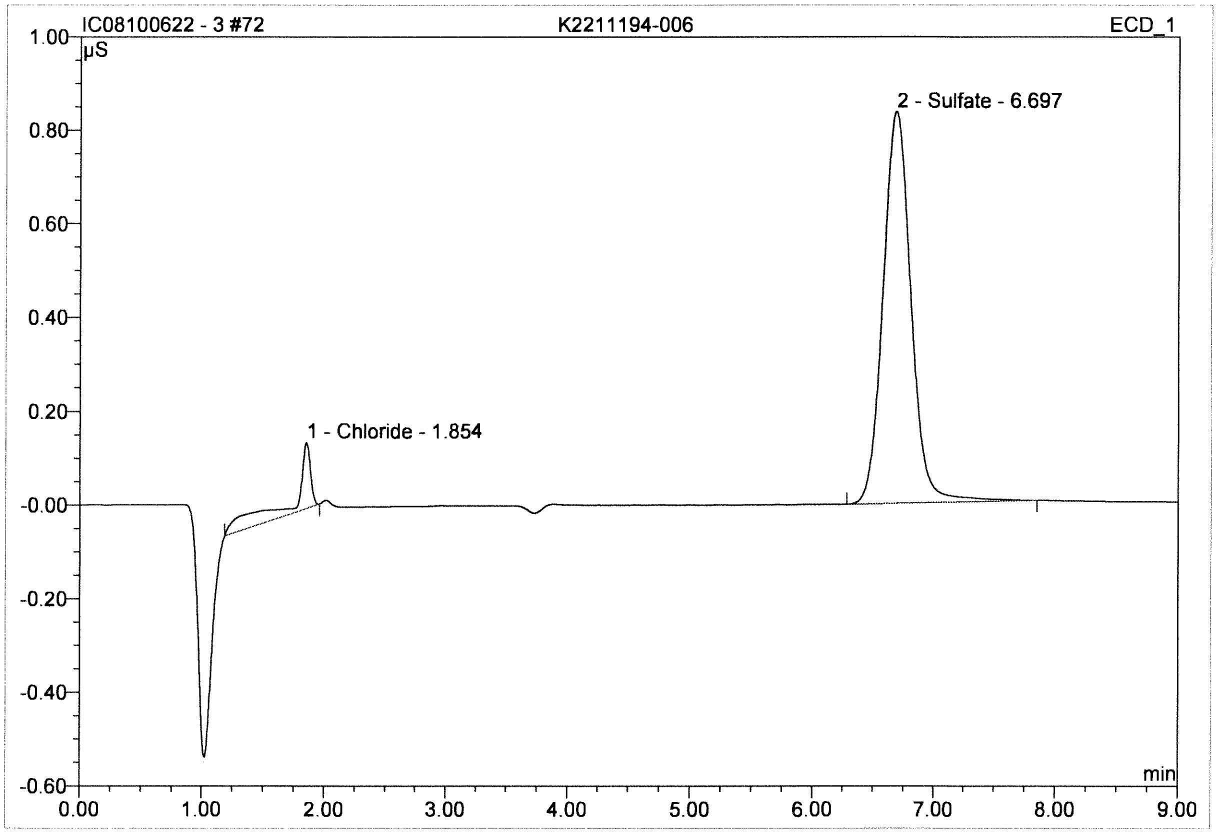
Sample Name:	**K2211194-005**	*Injection Volume:*	**5.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**50.0000**
Recording Time:	**10/7/2022 14:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.195	0.015	23.06	8.800	BMB
2	6.70	Sulfate	0.184	0.049	76.94	39.594	BMB
Total:			0.378	0.063	100.00	48.393	

72 K2211194-006

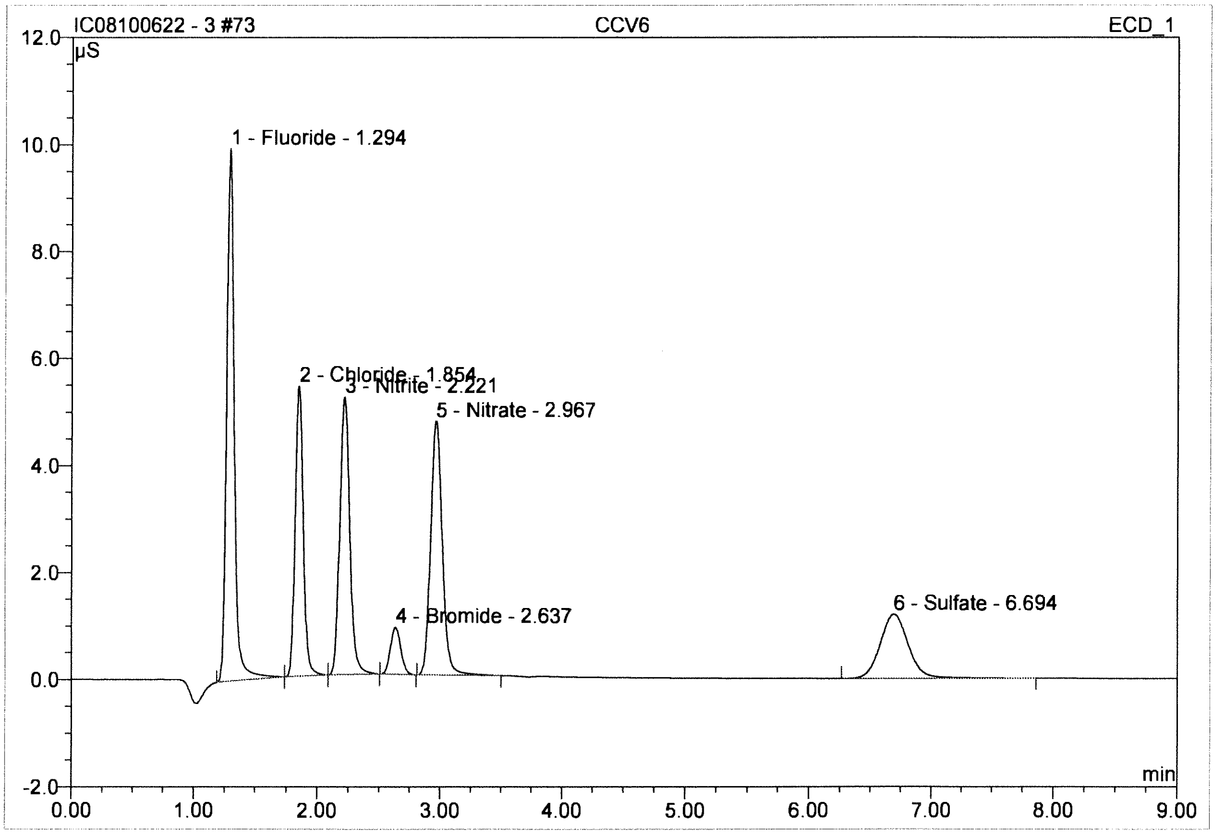
Sample Name:	**K2211194-006**	*Injection Volume:*	**5.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**100.0000**
Recording Time:	**10/7/2022 15:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.141	0.024	9.60	28.616	BMB
2	6.70	Sulfate	0.835	0.224	90.40	363.432	BMB
Total:			0.976	0.247	100.00	392.048	

73 CCV6

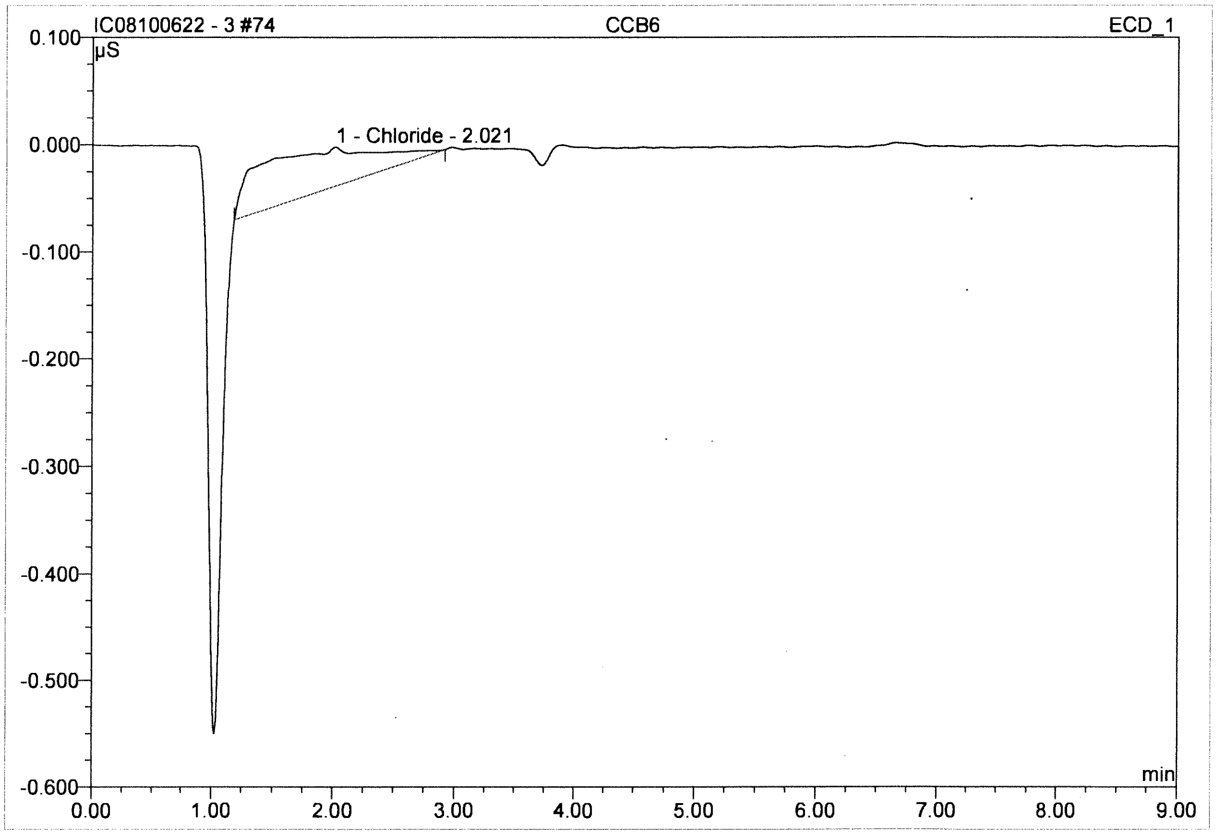
Sample Name:	**CCV6**	*Injection Volume:*	**5.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 15:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.29	Fluoride	9.957	0.738	28.76	5.136	BMB
2	1.85	Chloride	5.422	0.417	16.24	5.022	bMB
3	2.22	Nitrite	5.189	0.478	18.62	2.534	bMB
4	2.64	Bromide	0.881	0.086	3.34	2.572	BMB
5	2.97	Nitrate	4.745	0.528	20.58	2.550	BMB
6	6.69	Sulfate	1.199	0.320	12.47	5.200	BMB
Total:			27.392	2.567	100.00	23.013	

74 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 15:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



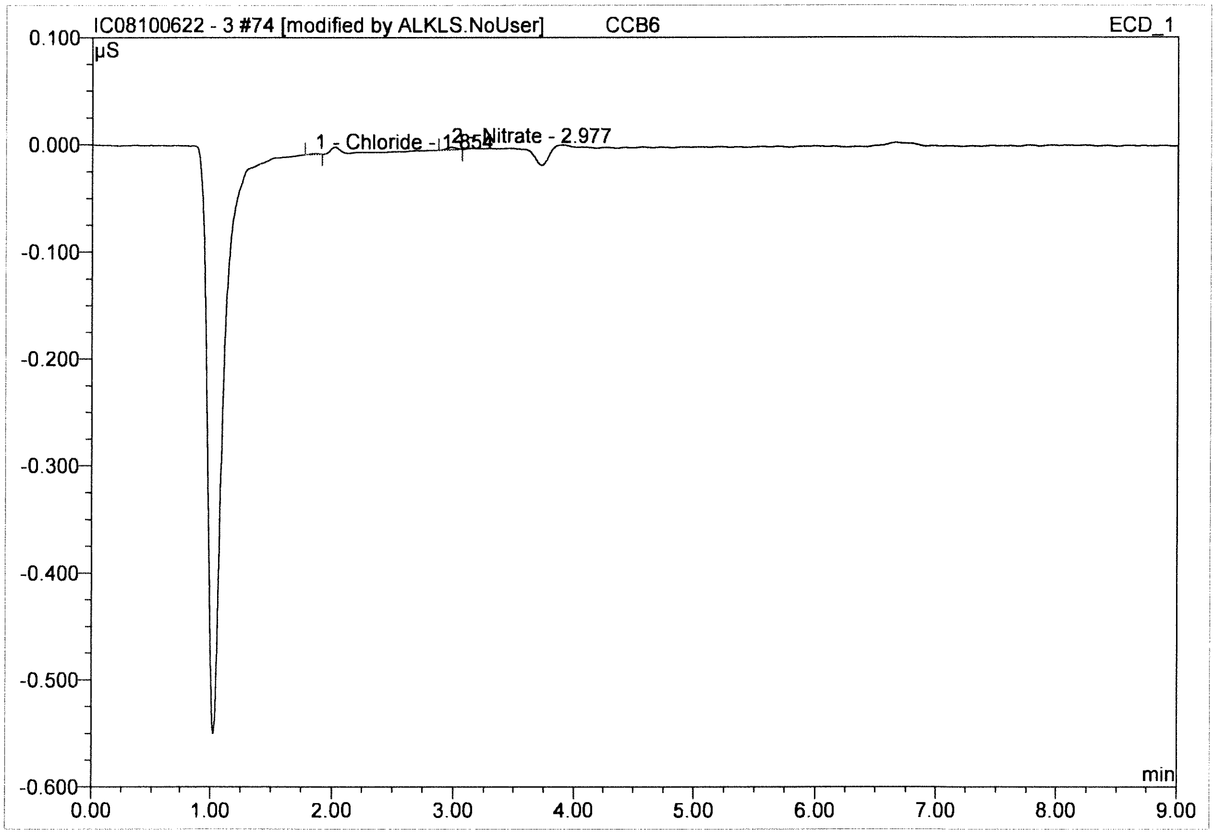
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.02	Chloride	0.036	0.045	100.00	0.544	BMB
Total:			0.036	0.045	100.00	0.544	

Before

OCT 07

74 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**5.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300 v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**EPA300 2022**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/7/2022 15:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	1.85	Chloride	0.001	0.000	21.68	0.001	BMB*
2	2.98	Nitrate	0.002	0.000	78.32	0.001	BMB*
Total:			0.003	0.000	100.00	0.002	

After
Initials NF

OCT 07

☒Wrong Peak/Peak not Found
☒Baseline/shoulder Incorrect
☐Other

LABWARE PERFORMANCE CALIBRATION VERIFICATION FOR PRECISION AND BIAS

Lot#:41883884											
Nominal Volume:	2	1.25	2								
MFR'S Lot Number/ Labware ID:	41883884	41883884	41883884	41883884	41883884	41883884	41883884	41883884	41883884	41883884	41883884
DI Water Temperature °C:	22	22	22								
Balance Identification:	K-JACK	K-JACK	k-jack	k-jack	k-jack	k-jack	k-jack	k-jack	k-jack	k-jack	k-jack
RESULT 1	2.00640	1.24930	2.01100								
RESULT 2	2.00220	1.25290	2.00120								
RESULT 3	2.00130	1.25180	2.00170								
RESULT 4											
RESULT 5											
RESULT 6											
RESULT 7											
RESULT 8											
RESULT 9											
RESULT 10											
Mean	2.00330	1.25133	2.00463	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Std Dev.	0.00272	0.00184	0.00552	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
% RSD	0.14	0.15	0.28	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Bias	0.16%	0.11%	0.23%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Initials	nf	nf	nf								
DATE	9/28/22	9/28/22	10/6/22								

Acceptance Criteria for Volumetric Labware is Bias ±2% of Nominal and %RSD ≤ 1%

Acceptance Criteria for Non-Volumetric Labware is Bias ±3% of Nominal and %RSD ≤ 3%

Supervisor Review:

LABWARE PERFORMANCE CALIBRATION VERIFICATION FOR PRECISION AND BIAS

Instrument Name:	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243
Nominal Volume:	1	0.1	0.2	0.25	0.4	0.8					
MFR'S Lot Number/ Labware ID:	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243	39487243
DI Water Temperature °C:	20	20	22	22	22	22					
Balance Identification:	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK
RESULT 1	0.99750	0.09990	0.19770	0.24710	0.39720	0.79360					
RESULT 2	0.99630	0.10060	0.19720	0.24700	0.39730	0.79510					
RESULT 3	0.99600	0.10070	0.19780	0.24730	0.39700	0.79500					
RESULT 4	0.99660	0.10050									
RESULT 5	0.99710	0.10060									
RESULT 6	0.99690	0.10000									
RESULT 7	0.99780	0.10060									
RESULT 8	0.99640	0.10030									
RESULT 9	0.99780	0.10050									
RESULT 10	0.99570	0.10090									
Mean	0.99681	0.10046	0.19757	0.24713	0.39717	0.79457	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Std Dev.	0.00074	0.00031	0.00032	0.00015	0.00015	0.00084	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
% RSD	0.07	0.31	0.16	0.06	0.04	0.11	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Bias	0.32%	0.46%	1.22%	1.15%	0.71%	0.68%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Initials	nf	nf	nf	nf	nf	nf					
DATE	10/1/22	10/1/22	10/6/22	10/6/22	10/6/22	10/6/22					

Acceptance Criteria for Volumetric Labware is Bias ±2% of Nominal and %RSD ≤ 1%

Acceptance Criteria for Non-Volumetric Labware is Bias ±3% of Nominal and %RSD ≤ 3%

Supervisor Review:

LABWARE PERFORMANCE CALIBRATION VERIFICATION FOR PRECISION AND BIAS

Lot#:4118506											
Nominal Volume:	0.5	0.5	0.5	0.5	0.5	0.5					
MFR'S Lot Number/ Labware ID:	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You	IC Not You
DI Water Temperature °C:	23	22	22	23	22	22					
Balance Identification:	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK	K-JACK
RESULT 1	0.49870	0.50130	0.50080	0.50280	0.50160	0.50020					
RESULT 2	0.50230	0.49930	0.50340	0.50190	0.50280	0.50130					
RESULT 3	0.50270	0.50160	0.50210	0.50260	0.50150	0.50270					
RESULT 4	0.50360										
RESULT 5	0.50310										
RESULT 6	0.50330										
RESULT 7	0.50470										
RESULT 8	0.50360										
RESULT 9	0.50440										
RESULT 10	0.50340										
Mean	0.50298	0.50073	0.50210	0.50243	0.50197	0.50140	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Std Dev.	0.00166	0.00125	0.00130	0.00047	0.00072	0.00125	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
% RSD	0.33	0.25	0.26	0.09	0.14	0.25	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Bias	0.60%	0.15%	0.42%	0.49%	0.39%	0.28%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Initials	nf	nf	nf	nf	nf	nf					
DATE	7/26/22	8/2/22	8/3/22	8/4/22	9/1/22	10/6/22					

Acceptance Criteria for Volumetric Labware is Bias ±2% of Nominal and %RSD ≤ 1%

Acceptance Criteria for Non-Volumetric Labware is Bias ±3% of Nominal and %RSD ≤ 3%

Supervisor Review:

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 407400
Team: Metals/SSOLADEY
Number of Copies to make: 5

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Prepped
Prep Date/Time: 10/3/22 10:28

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216890-01	MB		200.8/Metals D		Liquid	10.0000mL	10.00mL	1%HNO3,0.2%HCl
2	KQ2216890-02	LCS		200.8/Metals D		Liquid	10.0000mL	10.40mL	1%HNO3,0.2%HCl
3	K2211194-001	MW-1-INF-20220923	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
4	KQ2216890-03	K2211194-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL	10.00mL	1%HNO3,0.2%HCl
5	KQ2216890-04	K2211194-001 MS	.01	200.8/Metals D		Liquid	10.0000mL	10.40mL	1%HNO3,0.2%HCl
6	K2211194-002	MW-5-INF-20220923	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
7	K2211194-003	MW-10-INF-20220923	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
8	K2211194-004	MW-14-INF-20220923	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
9	K2211194-005	MW-17-INF-20220923	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
10	K2211194-006	MW-44H-INF-20220923	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
11	KQ2216890-05	K2211194-006 DUP	.01	200.8/Metals D		Liquid	10.0000mL	10.00mL	1%HNO3,0.2%HCl
12	KQ2216890-06	K2211194-006 MS	.01	200.8/Metals D		Liquid	10.0000mL	10.40mL	1%HNO3,0.2%HCl
13	K2211194-007	MW-1-INF-20220926	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
14	K2211194-008	MW-5-INF-20220926	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
15	K2211194-009	MW-10-INF-20220926	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
16	K2211194-010	MW-14-INF-20220926	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
17	K2211194-011	MW-17-INF-20220926	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
18	K2211194-012	MW-44H-INF-20220926	.01	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
19	K2211230-001	Red Tank	.03	200.8/Metals T		Wastewater	1.0000mL	10.00mL	1%HNO3,0.2%HCl
20	K2211299-001	SpPro-4	.01	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
21	K2211299-001	SpPro-4	.03	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
22	K2211299-002	SpPro-05	.01	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
23	K2211299-002	SpPro-05	.03	200.8/Metals D		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
24	K2211301-001	Nyhus Office	.03	200.8/Metals T		Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
25	K2211313-001	Catch Basin #5	.01	200.8/Metals T		Storm Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl
26	K2211313-002	Catch Basin #7	.01	200.8/Metals T		Storm Water	10.0000mL	10.00mL	1%HNO3,0.2%HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216890-02 0.10mL KQ2216890-04 0.10mL KQ2216890-06 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216890-02 0.10mL KQ2216890-04 0.10mL KQ2216890-06 0.10mL

Preparation Information Benchsheet

Prep Run#: 407400
Team: Metals/SSOLADEY
Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0
Status: Prepped
Prep Date/Time: 10/3/22 10:28

Name: K-MET 10ppm Li	Inventory ID 223041	Logbook Ref: MET4-29-F	Expires On: 10/31/2023
KQ2216890-02 0.05mL	KQ2216890-04 0.05mL	KQ2216890-06 0.05mL	
Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023
KQ2216890-02 0.05mL	KQ2216890-04 0.05mL	KQ2216890-06 0.05mL	
Name: k-met Sb 1ug/mL Sb	Inventory ID 225175	Logbook Ref: MET4-32-F	Expires On: 07/12/2023
KQ2216890-02 0.10mL	KQ2216890-04 0.10mL	KQ2216890-06 0.10mL	

Preparation Materials

K-MET 16 mL Tube	P7569838 (225191)	K-MET HNO3	22A0562010 (223804)	K-MET HCl ULTREX	4220110 (217887)

Preparation Steps

Step: Digestion
Started: 10/3/22 10:28
Finished: 10/3/22 12:28
By: SSOLADEY
Comments

Preparation Equipment

K-BlockDigester-20	Digestion	IR Thermometer ID: IR03		K-BlockDigester-20	Digestion	Temperature	93 deg C
K-BlockDigester-20	Digestion	Temperature Check Location	17	K-CR 20-200B	Digestion		
K-CR100-1000A	Digestion						

Comments:

Reviewed By: Date: 10.4.22 Spike Witness: ABOYER Date:

Printed 10/3/22 13:32

ICP-MS LCSW AND SPIKING SOLUTIONS

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-1

k-met 1/100 QCP-CICV-1

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Al	10000	100
Ag	1250	12.5
Ba	10000	100
Be	250	2.5
Ca	25000	250
Co	2500	25
Cu	1250	12.5
Cr	1000	10
Fe	5000	50
K	25000	250
Mg	25000	250
Mn	2500	25
Na	25000	250
Ni	2500	25
V	2500	25
Zn	2500	25

0.10mL to 100mL Dilution of 1000ppm Sb

k-met 1ug/mL Sb

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Sb	1000	10

5.00mL to 500mL Dilution of Inorganics Ventures QCP-CICV-3

k-met 1/100 QCP-CICV-3

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
As	5000	50
Pb	5000	50
Se	5000	50
Tl	5000	50
Cd	2500	25

0.5mL to 100mL Dilution of 1,000 ppm Mo and 1,000 ppm U

k-met Mo/U 5ppm

Analyte	Concentration in solution (ppb)	Concentration in digest (ppb)
Mo	5000	25
U	5000	25

10/3/22 10:28-12:28
B20 IR17 IT93

Preparation Information Benchsheet *Li

Prep Run#: 407400
Team: Metals/ABOYER
Number of Copies to make: 5

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/30/22 13:37

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2216890-01	MB		200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
2	KQ2216890-02	LCS		200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
3	K2211194-001	MW-1-INF-20220923	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
4	KQ2216890-03	K2211194-001 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
5	KQ2216890-04	K2211194-001 MS	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
6	K2211194-002	MW-5-INF-20220923	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
7	K2211194-003	MW-10-INF-20220923	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
8	K2211194-004	MW-14-INF-20220923	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
9	K2211194-005	MW-17-INF-20220923	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
10	K2211194-006	MW-44H-INF-20220923	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
11	KQ2216890-05	K2211194-006 DUP	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
12	KQ2216890-06	K2211194-006 MS	.01	200.8/Metals D		Liquid	10.0000mL		1%HNO3,0.2%HCl
13	K2211194-007	MW-1-INF-20220926	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
14	K2211194-008	MW-5-INF-20220926	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
15	K2211194-009	MW-10-INF-20220926	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
16	K2211194-010	MW-14-INF-20220926	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
17	K2211194-011	MW-17-INF-20220926	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
18	K2211194-012	MW-44H-INF-20220926	.01	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
19	K2211230-001	Red Tank	.03	200.8/Metals T		Wastewater	1.0000mL		1%HNO3,0.2%HCl
20	K2211299-001	SpPro-4	.01	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
21	K2211299-001	SpPro-4	.03	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
22	K2211299-002	SpPro-05	.01	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
23	K2211299-002	SpPro-05	.03	200.8/Metals D		Water	10.0000mL		1%HNO3,0.2%HCl
24	K2211301-001	Nyhus Office	.03	200.8/Metals T		Water	10.0000mL		1%HNO3,0.2%HCl
25	K2211313-001	Catch Basin #5	.01	200.8/Metals T		Storm Water	10.0000mL		1%HNO3,0.2%HCl
26	K2211313-002	Catch Basin #7	.01	200.8/Metals T		Storm Water	10.0000mL		1%HNO3,0.2%HCl

Spiking Solutions

Name: k-met 1/100 QCP-CICV-3 Inventory ID 221910 Logbook Ref: MET4-24-I Expires On: 03/02/2023

KQ2216890-02 0.10mL KQ2216890-04 0.10mL KQ2216890-06 0.10mL

Name: k-met 1/100 QCP CICV-1 Inventory ID 221911 Logbook Ref: MET4-25-A Expires On: 12/02/2022

KQ2216890-02 0.10mL KQ2216890-04 0.10mL KQ2216890-06 0.10mL

Preparation Information Benchsheet

Prep Run#: 407400
Team: Metals/ABOYER

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP ILM04.0

Status: Draft
Prep Date/Time: 9/30/22 13:37

Name: K-MET Mo/U 5ppm	Inventory ID 223460	Logbook Ref: MET4-30-A	Expires On: 03/31/2023

KQ2216890-02 0.05mL   KQ2216890-04 0.05mL   KQ2216890-06 0.05mL

Name: k-met Sb 1ug/mL Sb	Inventory ID 225175	Logbook Ref: MET4-32-F	Expires On: 07/12/2023

KQ2216890-02 0.10mL   KQ2216890-04 0.10mL   KQ2216890-06 0.10mL

Preparation Steps

Step:
Started:
Finished:
By:
Comments

Comments: ______________________________

Reviewed By: ______________ Date: ______________

Service Request # K2211193, K2211300, K2211358, K2211365; K2211194, K2211230, K2211299, K2211301, K2211313; Li LRSTD
Calibration: 100422AICPMS06
ALS LIMS Run# 779974
Pipette IDs: 18010244, 19070685, 16006318
Pipette Check Due: 11/23/22
Cal Std: MS30-43-E
ICV Std: MS30-43-F
LLICV Std: MS30-44-A
I.S. Solution: MS30-16-K
Tune Std: MS29-86-E

ICSA: N/A
ICSAB: N/A

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value			X
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.
Comments: MRL=2X for Li.

Prep Batches: 407408, 407400

Primary Review by ________ Date 10/4/22

Secondary Review by ________ Date 10/4/22

R:\ICP\MISC\Document Control\K-ICPMS-06 Review Sheet.doc

Data Review Form

Instrument ID#:	**K-ICP-MS-06**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-06 (Agilent 7800)\100422a.csv**
RUNNO:	**779974**

K2211193

No exceptions to report.

K2211194

No exceptions to report.

K2211230

No exceptions to report.

K2211299

No exceptions to report.

K2211300

No exceptions to report.

K2211301

No exceptions to report.

K2211313

No exceptions to report.

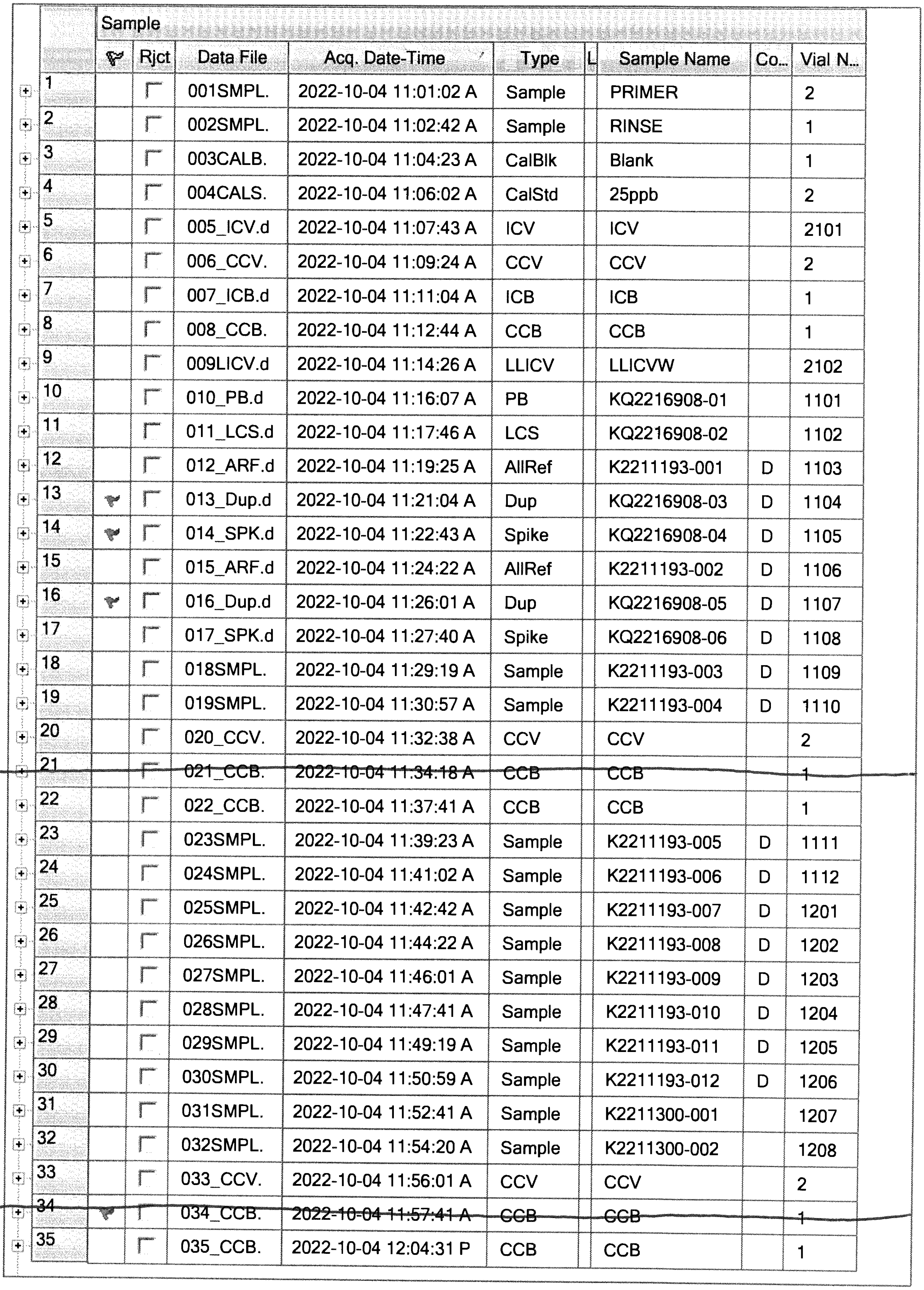
K2211358

No exceptions to report.

K2211365

No exceptions to report.

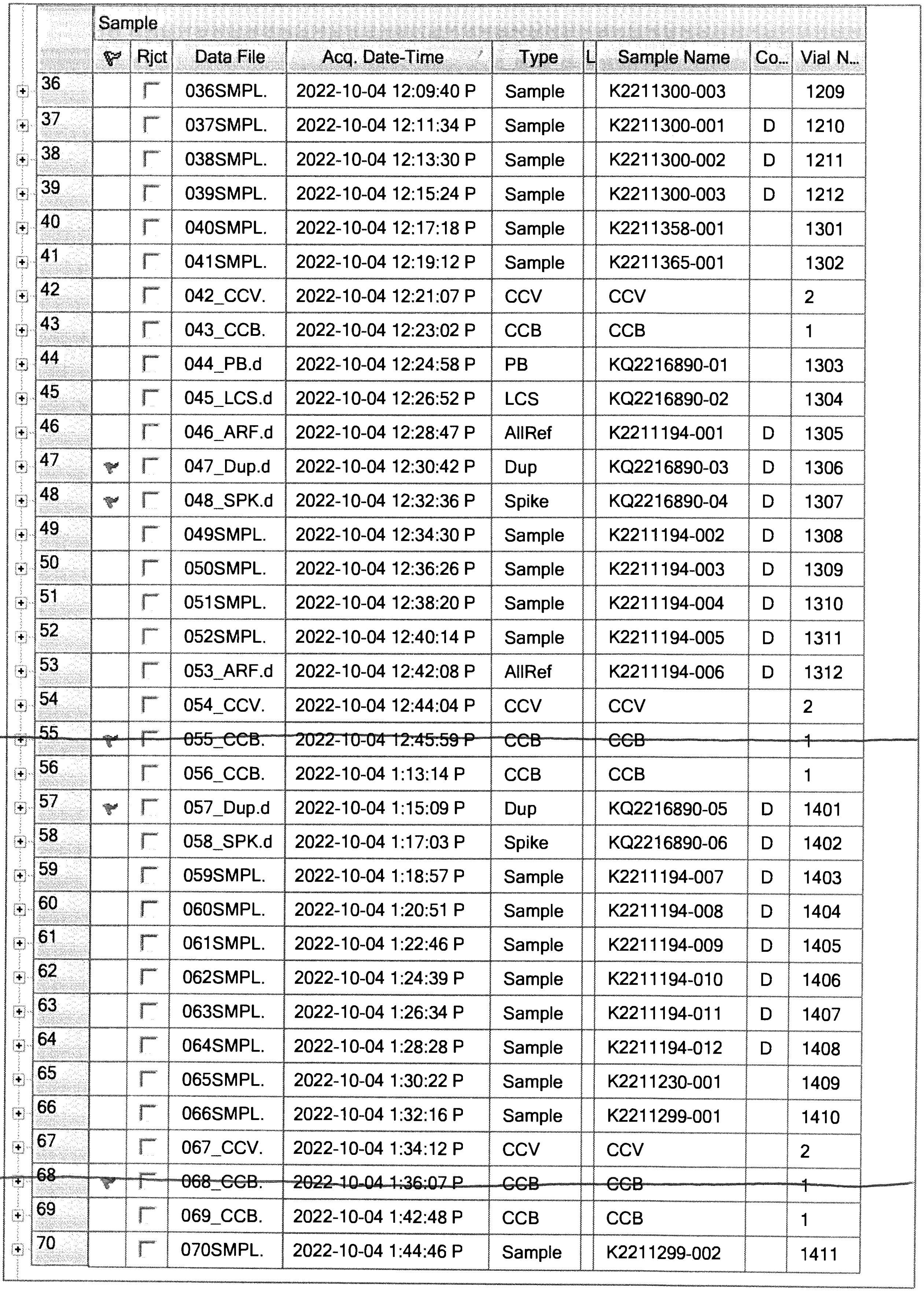
Primary Approver: GMM 10/4/22
Secondary Approver: SL 10/4/22



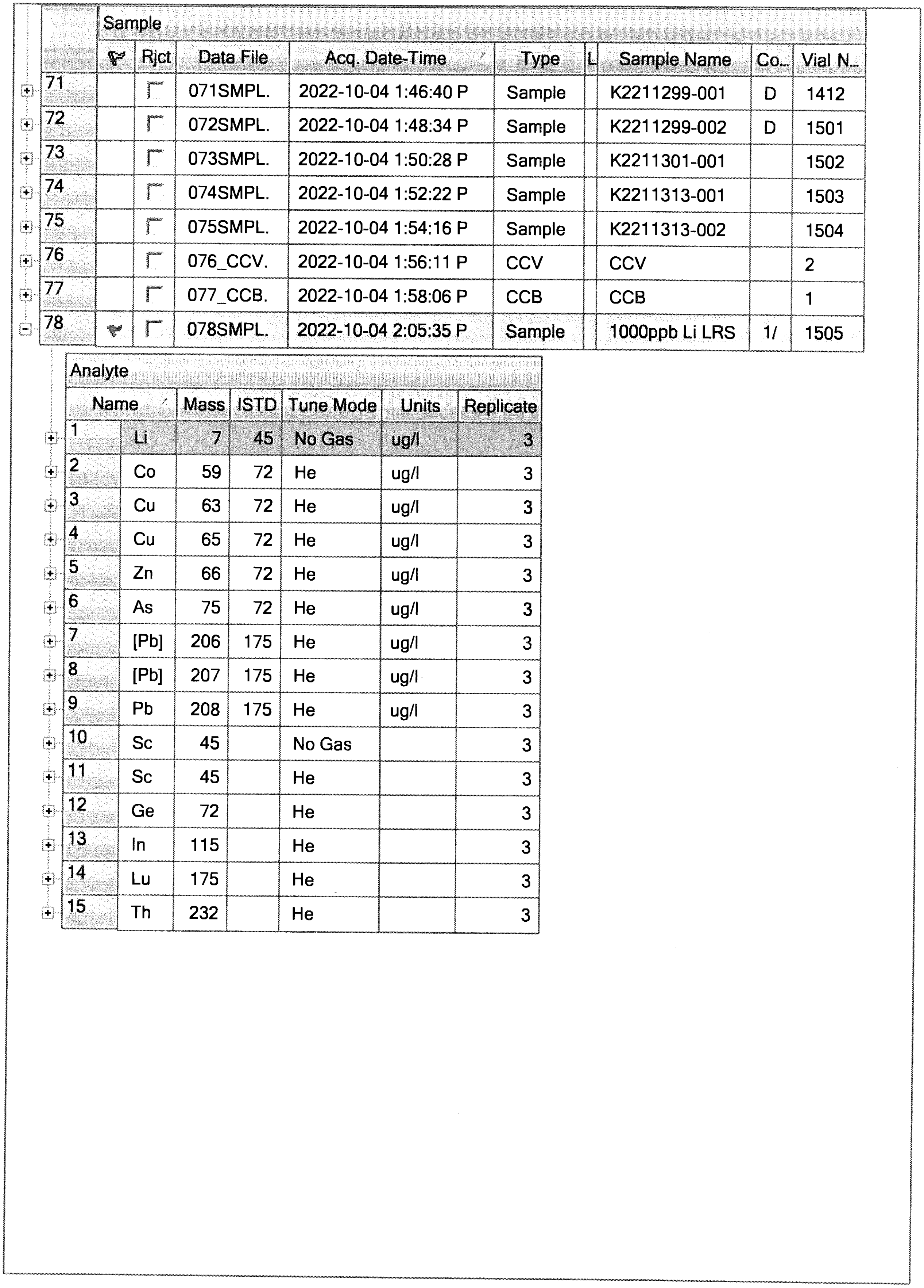
	Sample								
	⚑	Rjct	Data File	Acq. Date-Time	Type	L	Sample Name	Co...	Vial N...
1		☐	001SMPL.	2022-10-04 11:01:02 A	Sample		PRIMER		2
2		☐	002SMPL.	2022-10-04 11:02:42 A	Sample		RINSE		1
3		☐	003CALB.	2022-10-04 11:04:23 A	CalBlk		Blank		1
4		☐	004CALS.	2022-10-04 11:06:02 A	CalStd		25ppb		2
5		☐	005_ICV.d	2022-10-04 11:07:43 A	ICV		ICV		2101
6		☐	006_CCV.	2022-10-04 11:09:24 A	CCV		CCV		2
7		☐	007_ICB.d	2022-10-04 11:11:04 A	ICB		ICB		1
8		☐	008_CCB.	2022-10-04 11:12:44 A	CCB		CCB		1
9		☐	009LICV.d	2022-10-04 11:14:26 A	LLICV		LLICVW		2102
10		☐	010_PB.d	2022-10-04 11:16:07 A	PB		KQ2216908-01		1101
11		☐	011_LCS.d	2022-10-04 11:17:46 A	LCS		KQ2216908-02		1102
12		☐	012_ARF.d	2022-10-04 11:19:25 A	AllRef		K2211193-001	D	1103
13	⚑	☐	013_Dup.d	2022-10-04 11:21:04 A	Dup		KQ2216908-03	D	1104
14	⚑	☐	014_SPK.d	2022-10-04 11:22:43 A	Spike		KQ2216908-04	D	1105
15		☐	015_ARF.d	2022-10-04 11:24:22 A	AllRef		K2211193-002	D	1106
16	⚑	☐	016_Dup.d	2022-10-04 11:26:01 A	Dup		KQ2216908-05	D	1107
17		☐	017_SPK.d	2022-10-04 11:27:40 A	Spike		KQ2216908-06	D	1108
18		☐	018SMPL.	2022-10-04 11:29:19 A	Sample		K2211193-003	D	1109
19		☐	019SMPL.	2022-10-04 11:30:57 A	Sample		K2211193-004	D	1110
20		☐	020_CCV.	2022-10-04 11:32:38 A	CCV		CCV		2
~~21~~		☐	~~021_CCB.~~	~~2022-10-04 11:34:18 A~~	~~CCB~~		~~CCB~~		~~1~~
22		☐	022_CCB.	2022-10-04 11:37:41 A	CCB		CCB		1
23		☐	023SMPL.	2022-10-04 11:39:23 A	Sample		K2211193-005	D	1111
24		☐	024SMPL.	2022-10-04 11:41:02 A	Sample		K2211193-006	D	1112
25		☐	025SMPL.	2022-10-04 11:42:42 A	Sample		K2211193-007	D	1201
26		☐	026SMPL.	2022-10-04 11:44:22 A	Sample		K2211193-008	D	1202
27		☐	027SMPL.	2022-10-04 11:46:01 A	Sample		K2211193-009	D	1203
28		☐	028SMPL.	2022-10-04 11:47:41 A	Sample		K2211193-010	D	1204
29		☐	029SMPL.	2022-10-04 11:49:19 A	Sample		K2211193-011	D	1205
30		☐	030SMPL.	2022-10-04 11:50:59 A	Sample		K2211193-012	D	1206
31		☐	031SMPL.	2022-10-04 11:52:41 A	Sample		K2211300-001		1207
32		☐	032SMPL.	2022-10-04 11:54:20 A	Sample		K2211300-002		1208
33		☐	033_CCV.	2022-10-04 11:56:01 A	CCV		CCV		2
~~34~~	⚑	☐	~~034_CCB.~~	~~2022-10-04 11:57:41 A~~	~~CCB~~		~~CCB~~		~~1~~
35		☐	035_CCB.	2022-10-04 12:04:31 P	CCB		CCB		1

10/4/22

10/4/22



		Sample								
		⚑	Rjct	Data File	Acq. Date-Time	Type	L	Sample Name	Co...	Vial N...
	36		☐	036SMPL.	2022-10-04 12:09:40 P	Sample		K2211300-003		1209
	37		☐	037SMPL.	2022-10-04 12:11:34 P	Sample		K2211300-001	D	1210
	38		☐	038SMPL.	2022-10-04 12:13:30 P	Sample		K2211300-002	D	1211
	39		☐	039SMPL.	2022-10-04 12:15:24 P	Sample		K2211300-003	D	1212
	40		☐	040SMPL.	2022-10-04 12:17:18 P	Sample		K2211358-001		1301
	41		☐	041SMPL.	2022-10-04 12:19:12 P	Sample		K2211365-001		1302
	42		☐	042_CCV.	2022-10-04 12:21:07 P	CCV		CCV		2
	43		☐	043_CCB.	2022-10-04 12:23:02 P	CCB		CCB		1
	44		☐	044_PB.d	2022-10-04 12:24:58 P	PB		KQ2216890-01		1303
	45		☐	045_LCS.d	2022-10-04 12:26:52 P	LCS		KQ2216890-02		1304
	46		☐	046_ARF.d	2022-10-04 12:28:47 P	AllRef		K2211194-001	D	1305
	47	⚑	☐	047_Dup.d	2022-10-04 12:30:42 P	Dup		KQ2216890-03	D	1306
	48	⚑	☐	048_SPK.d	2022-10-04 12:32:36 P	Spike		KQ2216890-04	D	1307
	49		☐	049SMPL.	2022-10-04 12:34:30 P	Sample		K2211194-002	D	1308
	50		☐	050SMPL.	2022-10-04 12:36:26 P	Sample		K2211194-003	D	1309
	51		☐	051SMPL.	2022-10-04 12:38:20 P	Sample		K2211194-004	D	1310
	52		☐	052SMPL.	2022-10-04 12:40:14 P	Sample		K2211194-005	D	1311
	53		☐	053_ARF.d	2022-10-04 12:42:08 P	AllRef		K2211194-006	D	1312
	54		☐	054_CCV.	2022-10-04 12:44:04 P	CCV		CCV		2
m 10/4/22	~~55~~	⚑	☐	~~055_CCB.~~	~~2022-10-04 12:45:59 P~~	~~CCB~~		~~CCB~~		~~1~~
	56		☐	056_CCB.	2022-10-04 1:13:14 P	CCB		CCB		1
	57	⚑	☐	057_Dup.d	2022-10-04 1:15:09 P	Dup		KQ2216890-05	D	1401
	58		☐	058_SPK.d	2022-10-04 1:17:03 P	Spike		KQ2216890-06	D	1402
	59		☐	059SMPL.	2022-10-04 1:18:57 P	Sample		K2211194-007	D	1403
	60		☐	060SMPL.	2022-10-04 1:20:51 P	Sample		K2211194-008	D	1404
	61		☐	061SMPL.	2022-10-04 1:22:46 P	Sample		K2211194-009	D	1405
	62		☐	062SMPL.	2022-10-04 1:24:39 P	Sample		K2211194-010	D	1406
	63		☐	063SMPL.	2022-10-04 1:26:34 P	Sample		K2211194-011	D	1407
	64		☐	064SMPL.	2022-10-04 1:28:28 P	Sample		K2211194-012	D	1408
	65		☐	065SMPL.	2022-10-04 1:30:22 P	Sample		K2211230-001		1409
	66		☐	066SMPL.	2022-10-04 1:32:16 P	Sample		K2211299-001		1410
	67		☐	067_CCV.	2022-10-04 1:34:12 P	CCV		CCV		2
m 10/4/22	~~68~~	⚑	☐	~~068_CCB.~~	~~2022-10-04 1:36:07 P~~	~~CCB~~		~~CCB~~		~~1~~
	69		☐	069_CCB.	2022-10-04 1:42:48 P	CCB		CCB		1
	70		☐	070SMPL.	2022-10-04 1:44:46 P	Sample		K2211299-002		1411



Sample

	⚑	Rjct	Data File	Acq. Date-Time	Type	L	Sample Name	Co...	Vial N...
71		☐	071SMPL.	2022-10-04 1:46:40 P	Sample		K2211299-001	D	1412
72		☐	072SMPL.	2022-10-04 1:48:34 P	Sample		K2211299-002	D	1501
73		☐	073SMPL.	2022-10-04 1:50:28 P	Sample		K2211301-001		1502
74		☐	074SMPL.	2022-10-04 1:52:22 P	Sample		K2211313-001		1503
75		☐	075SMPL.	2022-10-04 1:54:16 P	Sample		K2211313-002		1504
76		☐	076_CCV.	2022-10-04 1:56:11 P	CCV		CCV		2
77		☐	077_CCB.	2022-10-04 1:58:06 P	CCB		CCB		1
78	⚑	☐	078SMPL.	2022-10-04 2:05:35 P	Sample		1000ppb Li LRS	1/	1505

Analyte

	Name	Mass	ISTD	Tune Mode	Units	Replicate
1	Li	7	45	No Gas	ug/l	3
2	Co	59	72	He	ug/l	3
3	Cu	63	72	He	ug/l	3
4	Cu	65	72	He	ug/l	3
5	Zn	66	72	He	ug/l	3
6	As	75	72	He	ug/l	3
7	[Pb]	206	175	He	ug/l	3
8	[Pb]	207	175	He	ug/l	3
9	Pb	208	175	He	ug/l	3
10	Sc	45		No Gas		3
11	Sc	45		He		3
12	Ge	72		He		3
13	In	115		He		3
14	Lu	175		He		3
15	Th	232		He		3

US EPA Tune Check Report

Operator Name	ALKLS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422.b
Acq. Date-Time	2022-10-04 10:40:48 AM
Report Comment	---
Instrument Name	G8421A JP16310358

[No Gas]

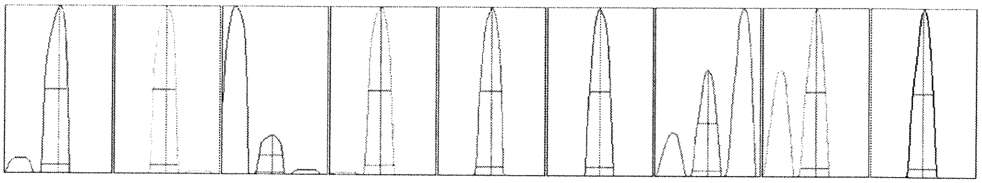
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	56140.05	0.955	5.000	
9	12161.93	1.215	5.000	
24	39581.11	1.407	5.000	
59	62768.07	1.006	5.000	
115	150226.81	0.572	5.000	
140	164866.65	0.353	5.000	
208	111182.24	0.617	5.000	
209	175706.74	0.334	5.000	
238	230228.34	0.652	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	5624	5675	5654	5565	5553
9	1235	1213	1226	1197	1210
24	4052	3949	3956	3923	3910
59	6352	6300	6306	6232	6194
115	14964	15093	14950	15136	14970
140	16536	16415	16511	16537	16434
208	11219	11129	11086	11125	11032
209	17650	17569	17546	17597	17492
238	23119	23046	23076	23113	22760

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	9259.15	7.05	6.90 - 7.10		0.787		0.900
9	1987.36	9.00	8.90 - 9.10		0.787		0.900
24	6215.36	23.95	23.90 - 24.10		0.788		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	10334.29	58.95	58.90 - 59.10		0.823		0.900
115	25908.32	115.00	114.90 - 115.10		0.779		0.900
140	29266.02	140.00	139.90 - 140.10		0.783		0.900
208	20679.51	208.05	207.90 - 208.10		0.815		0.900
209	32887.40	209.05	208.90 - 209.10		0.806		0.900
238	42108.02	238.00	237.90 - 238.10		0.823		0.900

Integration Time [sec]	0.1
Acquisition Time [sec]	268.4
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.59 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.60 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.3 V	Deflect	15.0 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	126	Axis Gain	1.0004	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	-0.4 mm

EM

Discriminator	4.2 mV	Analog HV	2273 V	Pulse HV	1489 V

Calibration Blank Report

Sample Name	Blank
File Name	003CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:04:23 AM
Sample Type	CalBlk
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	340	8.8
Co	59	72	He	3	173.2
Cu	63	72	He	30	66.7
Cu	65	72	He	10	50.0
Zn	66	72	He	10	100.0
As	75	72	He	2	65.5
[Pb]	206	175	He	22	31.2
[Pb]	207	175	He	22	60.6
Pb	208	175	He	97	13.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	1645686	1.9
Sc	45	He	30058	1.0
Ge	72	He	28963	2.3
In	115	He	330804	1.8
Lu	175	He	1155618	1.4
Th	232	He	2230925	1.6

10/4/22

Calibration Standard Report

Sample Name 25ppb

File Name 004CALS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:06:02 AM

Sample Type CalStd

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Li	7	45	No Gas	207817	1.9
Co	59	72	He	43172	0.2
Cu	63	72	He	35307	2.0
Cu	65	72	He	18097	1.1
Zn	66	72	He	4898	11.0
As	75	72	He	2271	2.8
[Pb]	206	175	He	86151	0.6
[Pb]	207	175	He	74741	0.8
Pb	208	175	He	346997	1.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1631410	0.2	1645686.17	99.13	
Sc	45	He	29865	0.4	30058.35	99.36	
Ge	72	He	27978	1.6	28963.31	96.6	
In	115	He	324585	0.1	330803.53	98.12	
Lu	175	He	1143539	0.5	1155617.88	98.95	
Th	232	He	2250022	1.1	2230925.07	100.86	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	005_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:07:43 AM
Sample Type	ICV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.67359	ug/l	1.3	212045	102.69	
Co	59	72	He	24.51232	ug/l	1.0	41766	98.05	
Cu	63	72	He	12.14546	ug/l	2.4	16937	97.16	
Cu	65	72	He	12.38615	ug/l	1.2	8851	99.09	
Zn	66	72	He	24.04808	ug/l	8.0	4644	96.19	
As	75	72	He	23.72004	ug/l	3.7	2125	94.88	
Pb	208	175	He	24.29149	ug/l	0.7	332834	97.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1621206	1.7	1645686.17	98.51	
Sc	45	He	29220	4.3	30058.35	97.21	
Ge	72	He	27601	1.2	28963.31	95.29	
In	115	He	322412	1.1	330803.53	97.46	
Lu	175	He	1128856	1.0	1155617.88	97.68	
Th	232	He	2228340	1.3	2230925.07	99.88	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	006_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:09:24 AM
Sample Type	CCV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	25.60575	ug/l	1.6	207969	102.42	
Co	59	72	He	24.94012	ug/l	4.0	42811	99.76	
Cu	63	72	He	24.99466	ug/l	5.2	35077	99.98	
Cu	65	72	He	25.09462	ug/l	4.0	18055	100.38	
Zn	66	72	He	24.34379	ug/l	1.6	4741	97.38	
As	75	72	He	25.08899	ug/l	1.3	2266	100.36	
Pb	208	175	He	24.89680	ug/l	1.2	343397	99.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1594155	0.8	1645686.17	96.87	
Sc	45	He	28599	3.5	30058.35	95.14	
Ge	72	He	27828	3.0	28963.31	96.08	
In	115	He	319279	0.2	330803.53	96.52	
Lu	175	He	1136415	1.3	1155617.88	98.34	
Th	232	He	2221193	0.5	2230925.07	99.56	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	007_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:11:04 AM
Sample Type	ICB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.01519	ug/l	21.7	447	
Co	59	72	He	0.00796	ug/l	111.5	17	
Cu	63	72	He	0.00321	ug/l	265.6	33	
Cu	65	72	He	0.01915	ug/l	161.1	23	
Zn	66	72	He	0.05219	ug/l	167.9	20	
As	75	72	He	-0.01039	ug/l	N/A	1	
Pb	208	175	He	0.00808	ug/l	46.6	207	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1573144	2.9	1645686.17	95.59	
Sc	45	He	28756	2.0	30058.35	95.67	
Ge	72	He	27841	2.9	28963.31	96.13	
In	115	He	319669	0.7	330803.53	96.63	
Lu	175	He	1136244	1.0	1155617.88	98.32	
Th	232	He	2223169	1.4	2230925.07	99.65	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	008_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:12:44 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.00080	ug/l	1312.3	337	
Co	59	72	He	0.00258	ug/l	188.2	8	
Cu	63	72	He	0.00277	ug/l	814.1	33	
Cu	65	72	He	-0.00188	ug/l	N/A	8	
Zn	66	72	He	0.00178	ug/l	16.9	10	
As	75	72	He	0.00045	ug/l	2817.1	2	
Pb	208	175	He	0.00043	ug/l	368.1	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1593316	3.6	1645686.17	96.82	
Sc	45	He	28789	2.2	30058.35	95.78	
Ge	72	He	28215	0.6	28963.31	97.42	
In	115	He	324052	0.7	330803.53	97.96	
Lu	175	He	1136324	0.9	1155617.88	98.33	
Th	232	He	2237325	1.1	2230925.07	100.29	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	LLICVW
File Name	009LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:14:26 AM
Sample Type	LLICV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	0.08508	ug/l	3.7	1020	85.08	
Co	59	72	He	0.01490	ug/l	27.6	29	74.5	
Cu	63	72	He	0.08362	ug/l	25.4	147	83.62	
Cu	65	72	He	0.11848	ug/l	21.2	95	118.48	
Zn	66	72	He	2.04006	ug/l	6.5	407	102	
As	75	72	He	0.40303	ug/l	37.0	39	80.61	
[Pb]	206	175	He	0.01764	ug/l	8.7	82	88.2	
[Pb]	207	175	He	0.02074	ug/l	35.2	83	103.7	
Pb	208	175	He	0.01825	ug/l	13.3	347	91.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1594028	2.0	1645686.17	96.86	
Sc	45	He	28776	1.4	30058.35	95.73	
Ge	72	He	27878	0.5	28963.31	96.25	
In	115	He	324558	0.8	330803.53	98.11	
Lu	175	He	1135437	0.9	1155617.88	98.25	
Th	232	He	2229925	1.2	2230925.07	99.96	

Prep Blank (PB) Report

Sample Name KQ2216908-01

File Name 010_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:16:07 AM

Sample Type PB

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.00193	ug/l	379.9	353	
Co	59	72	He	0.00203	ug/l	96.1	7	
Cu	63	72	He	0.01068	ug/l	216.9	43	
Cu	65	72	He	0.01487	ug/l	163.8	20	
Zn	66	72	He	0.47224	ug/l	32.7	100	
As	75	72	He	-0.01753	ug/l	N/A	1	
[Pb]	206	175	He	0.00179	ug/l	204.7	28	
[Pb]	207	175	He	0.00293	ug/l	71.3	30	
Pb	208	175	He	0.00079	ug/l	75.0	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1627992	2.1	1645686.17	98.92	
Sc	45	He	28559	1.1	30058.35	95.01	
Ge	72	He	27447	0.8	28963.31	94.76	
In	115	He	320093	0.1	330803.53	96.76	
Lu	175	He	1121197	1.6	1155617.88	97.02	
Th	232	He	2206462	1.0	2230925.07	98.9	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216908-02

File Name 011_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:17:46 AM

Sample Type LCS

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	50.90663	ug/l	1.4	398657	50	101.81	
Co	59	72	He	24.75643	ug/l	1.7	41347	25	99.03	
Cu	63	72	He	12.78285	ug/l	3.5	17474	12.5	102.26	
Cu	65	72	He	12.41281	ug/l	1.0	8694	12.5	99.3	
Zn	66	72	He	23.91528	ug/l	2.2	4527	25	95.66	
As	75	72	He	48.72660	ug/l	1.4	4277	50	97.45	
[Pb]	206	175	He	48.82928	ug/l	0.6	165790	50	97.66	
[Pb]	207	175	He	49.15608	ug/l	0.9	144795	50	98.31	
Pb	208	175	He	49.01743	ug/l	0.5	670351	50	98.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1538799	4.6	1645686.17	93.51	
Sc	45	He	29150	1.1	30058.35	96.98	
Ge	72	He	27056	0.8	28963.31	93.42	
In	115	He	317747	0.6	330803.53	96.05	
Lu	175	He	1126819	0.3	1155617.88	97.51	
Th	232	He	2197476	0.9	2230925.07	98.5	

Reference Sample Report

Sample Name	K2211193-001
File Name	012_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:19:25 AM
Sample Type	AllRef
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.96502	ug/l	2.5	40860	
Co	59	72	He	269.45939	ug/l	3.5	368906	
Cu	63	72	He	0.41175	ug/l	11.3	483	
Cu	65	72	He	0.40914	ug/l	28.9	242	
Zn	66	72	He	59.42053	ug/l	5.7	9206	
As	75	72	He	1.92214	ug/l	7.2	140	
Pb	208	175	He	0.01820	ug/l	1.8	301	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1337580	1.0	1645686.17	81.28	
Sc	45	He	23409	1.8	30058.35	77.88	
Ge	72	He	22194	3.2	28963.31	76.63	
In	115	He	261370	1.5	330803.53	79.01	
Lu	175	He	988956	0.7	1155617.88	85.58	
Th	232	He	1986007	1.0	2230925.07	89.02	

Duplicate Sample Report

Sample Name	KQ2216908-03
File Name	013_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:21:04 AM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	012_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	5.92560	ug/l	2.8	39580	0.66	
Co	59	72	He	274.08035	ug/l	1.6	363100	1.7	
Cu	63	72	He	0.43203	ug/l	22.6	490		<5x MRL
Cu	65	72	He	0.38598	ug/l	12.5	222		<5x MRL
Zn	66	72	He	59.21489	ug/l	1.0	8883	0.35	
As	75	72	He	2.01535	ug/l	8.7	142		<5x MRL
[Pb]	206	175	He	0.00961	ug/l	45.6	48		<5x MRL
[Pb]	207	175	He	0.00729	ug/l	19.9	38		<5x MRL
Pb	208	175	He	0.00819	ug/l	19.4	181		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1304232	0.8	1645686.17	79.25	
Sc	45	He	23239	2.7	30058.35	77.31	
Ge	72	He	21463	0.8	28963.31	74.1	
In	115	He	262580	0.4	330803.53	79.38	
Lu	175	He	988770	0.8	1155617.88	85.56	
Th	232	He	2028268	1.4	2230925.07	90.92	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216908-04
File Name	014_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:22:43 AM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	012_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	51.71208	ug/l	2.6	349535	50	91.49	
Co	59	He	283.07180	ug/l	1.1	381941	25	54.45	Spike Failed
Cu	63	He	11.67164	ug/l	2.3	12893	12.5	90.08	
Cu	65	He	11.41942	ug/l	1.4	6463	12.5	88.08	
Zn	66	He	77.45632	ug/l	3.5	11828	25	72.14	
As	75	He	47.36012	ug/l	2.0	3358	50	90.88	
[Pb]	206	He	46.44938	ug/l	0.7	138236	50	92.87	
[Pb]	207	He	47.43302	ug/l	0.9	122468	50	94.84	
Pb	208	He	47.05475	ug/l	0.6	564046	50	94.07	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1328381	3.2	1645686.17	80.72	
Sc	45	He	22919	3.5	30058.35	76.25	
Ge	72	He	21861	1.6	28963.31	75.48	
In	115	He	259225	0.5	330803.53	78.36	
Lu	175	He	987692	0.5	1155617.88	85.47	
Th	232	He	2041264	1.5	2230925.07	91.5	

Reference Sample Report

Sample Name	K2211193-002
File Name	015_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:24:22 AM
Sample Type	AllRef
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	84.72985	ug/l	1.7	592147	
Co	59	72	He	5.54580	ug/l	1.5	8531	
Cu	63	72	He	0.01909	ug/l	148.9	50	
Cu	65	72	He	0.06962	ug/l	35.3	53	
Zn	66	72	He	2.40454	ug/l	8.3	427	
As	75	72	He	4.46407	ug/l	9.3	363	
Pb	208	175	He	0.01828	ug/l	20.8	319	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1373391	1.7	1645686.17	83.45	
Sc	45	He	24348	1.7	30058.35	81	
Ge	72	He	24916	1.3	28963.31	86.02	
In	115	He	278505	1.4	330803.53	84.19	
Lu	175	He	1044504	0.6	1155617.88	90.38	
Th	232	He	2129660	1.5	2230925.07	95.46	

Duplicate Sample Report

Sample Name	KQ2216908-05
File Name	016_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:26:01 AM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	015_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	84.15526	ug/l	1.0	606795	0.68	
Co	59	72	He	5.53900	ug/l	3.7	8674	0.12	
Cu	63	72	He	0.02366	ug/l	37.6	57		<5x MRL
Cu	65	72	He	0.04014	ug/l	39.0	35		<5x MRL
Zn	66	72	He	2.95963	ug/l	15.4	533		<5x MRL
As	75	72	He	4.32569	ug/l	6.3	358	3.15	
[Pb]	206	175	He	0.01345	ug/l	40.2	63		<5x MRL
[Pb]	207	175	He	0.00909	ug/l	61.5	46		<5x MRL
Pb	208	175	He	0.00985	ug/l	23.8	216		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1416827	1.4	1645686.17	86.09	
Sc	45	He	25503	1.2	30058.35	84.84	
Ge	72	He	25363	0.9	28963.31	87.57	
In	115	He	287525	0.4	330803.53	86.92	
Lu	175	He	1060775	1.0	1155617.88	91.79	
Th	232	He	2126063	1.6	2230925.07	95.3	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216908-06
File Name	017_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:27:40 AM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	015_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	128.34445	ug/l	2.1	926978	50	87.23	
Co	59	He	27.16869	ug/l	1.2	43289	25	86.49	
Cu	63	He	10.81131	ug/l	3.7	14104	12.5	86.34	
Cu	65	He	10.86335	ug/l	3.8	7260	12.5	86.35	
Zn	66	He	22.85109	ug/l	1.8	4127	25	81.79	
As	75	He	49.27138	ug/l	2.0	4125	50	89.61	
[Pb]	206	He	46.10488	ug/l	1.1	149187	50	92.17	
[Pb]	207	He	46.40968	ug/l	1.7	130274	50	92.79	
Pb	208	He	46.26227	ug/l	1.0	602944	50	92.49	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1419518	1.0	1645686.17	86.26	
Sc	45	He	26127	3.9	30058.35	86.92	
Ge	72	He	25810	0.7	28963.31	89.11	
In	115	He	288579	0.6	330803.53	87.24	
Lu	175	He	1073992	1.6	1155617.88	92.94	
Th	232	He	2152717	1.4	2230925.07	96.49	

Sample Report

Sample Name K2211193-003

File Name 018SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:29:19 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	250.57808	ug/l	1.1	1936837	
Co	59	72	He	19.56194	ug/l	2.0	31022	
Cu	63	72	He	0.02826	ug/l	41.4	63	
Cu	65	72	He	0.05465	ug/l	38.7	45	
Zn	66	72	He	2.73521	ug/l	9.9	500	
As	75	72	He	29.27494	ug/l	3.9	2440	
Pb	208	175	He	0.01902	ug/l	13.6	342	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1519132	0.3	1645686.17	92.31	
Sc	45	He	26869	2.2	30058.35	89.39	
Ge	72	He	25694	1.7	28963.31	88.71	
In	115	He	297328	0.6	330803.53	89.88	
Lu	175	He	1088496	0.4	1155617.88	94.19	
Th	232	He	2191180	0.1	2230925.07	98.22	

Sample Report

Sample Name K2211193-004

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:30:57 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	556.40551	ug/l	1.0	4108750	
Co	59	72	He	34.75721	ug/l	2.1	52828	
Cu	63	72	He	0.03837	ug/l	31.1	73	
Cu	65	72	He	0.06549	ug/l	50.0	50	
Zn	66	72	He	6.86055	ug/l	9.7	1190	
As	75	72	He	20.42522	ug/l	2.8	1632	
Pb	208	175	He	0.00978	ug/l	20.2	218	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1451614	1.3	1645686.17	88.21	
Sc	45	He	25603	3.6	30058.35	85.18	
Ge	72	He	24628	2.3	28963.31	85.03	
In	115	He	286737	0.9	330803.53	86.68	
Lu	175	He	1076894	0.8	1155617.88	93.19	
Th	232	He	2169635	0.2	2230925.07	97.25	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	020_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:32:38 AM
Sample Type	CCV
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.21548	ug/l	2.5	191692	96.86	
Co	59	72	He	25.07376	ug/l	2.8	42420	100.3	
Cu	63	72	He	25.35521	ug/l	0.8	35090	101.42	
Cu	65	72	He	25.35395	ug/l	2.9	17980	101.42	
Zn	66	72	He	23.62785	ug/l	11.1	4527	94.51	
As	75	72	He	24.82531	ug/l	4.1	2208	99.3	
Pb	208	175	He	25.38971	ug/l	0.7	351155	101.56	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1553643	0.6	1645686.17	94.41	
Sc	45	He	28579	2.9	30058.35	95.08	
Ge	72	He	27414	1.6	28963.31	94.65	
In	115	He	322997	0.7	330803.53	97.64	
Lu	175	He	1139464	0.7	1155617.88	98.6	
Th	232	He	2285344	2.2	2230925.07	102.44	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	021_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:34:18 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.18320	ug/l	7.3	1833	CCB Failed
Co	59	72	He	0.01791	ug/l	52.0	33	
Cu	63	72	He	-0.01089	ug/l	N/A	13	
Cu	65	72	He	0.01266	ug/l	86.2	18	
Zn	66	72	He	0.00280	ug/l	1842.6	10	
As	75	72	He	-0.00249	ug/l	N/A	2	
Pb	208	175	He	0.00640	ug/l	27.7	186	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1611672	2.9	1645686.17	97.93	
Sc	45	He	28469	1.6	30058.35	94.71	
Ge	72	He	27384	1.5	28963.31	94.55	
In	115	He	324240	1.2	330803.53	98.02	
Lu	175	He	1150617	0.5	1155617.88	99.57	
Th	232	He	2290181	0.7	2230925.07	102.66	

see
rerun
am 10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	022_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:37:41 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.09303	ug/l	21.2	1090	
Co	59	72	He	0.00778	ug/l	65.8	17	
Cu	63	72	He	-0.00647	ug/l	N/A	20	
Cu	65	72	He	-0.00871	ug/l	N/A	3	
Zn	66	72	He	-0.01421	ug/l	N/A	7	
As	75	72	He	-0.01037	ug/l	N/A	1	
Pb	208	175	He	0.00109	ug/l	63.6	111	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1598973	3.2	1645686.17	97.16	
Sc	45	He	28185	3.2	30058.35	93.77	
Ge	72	He	27908	1.4	28963.31	96.36	
In	115	He	325774	1.3	330803.53	98.48	
Lu	175	He	1146538	0.7	1155617.88	99.21	
Th	232	He	2295329	0.2	2230925.07	102.89	

Sample Report

Sample Name K2211193-005

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:39:23 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	578.10916	ug/l	0.3	4643604	
Co	59	72	He	8.15404	ug/l	4.4	13511	
Cu	63	72	He	0.00409	ug/l	125.1	33	
Cu	65	72	He	0.04892	ug/l	80.2	43	
Zn	66	72	He	2.37519	ug/l	14.6	453	
As	75	72	He	187.70191	ug/l	3.5	16339	
Pb	208	175	He	0.00276	ug/l	22.2	131	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1578828	1.1	1645686.17	95.94	
Sc	45	He	27497	1.4	30058.35	91.48	
Ge	72	He	26862	3.3	28963.31	92.75	
In	115	He	301836	0.4	330803.53	91.24	
Lu	175	He	1118905	0.1	1155617.88	96.82	
Th	232	He	2222399	0.7	2230925.07	99.62	

Sample Report

Sample Name K2211193-006

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:41:02 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.96458	ug/l	1.8	30088	
Co	59	72	He	284.77788	ug/l	1.6	441635	
Cu	63	72	He	0.09771	ug/l	21.1	150	
Cu	65	72	He	0.20737	ug/l	11.7	143	
Zn	66	72	He	27.74744	ug/l	7.7	4874	
As	75	72	He	0.16313	ug/l	4.5	15	
Pb	208	175	He	0.00312	ug/l	47.9	132	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1476648	1.6	1645686.17	89.73	
Sc	45	He	25927	2.4	30058.35	86.26	
Ge	72	He	25126	1.2	28963.31	86.75	
In	115	He	292405	0.2	330803.53	88.39	
Lu	175	He	1087481	0.5	1155617.88	94.1	
Th	232	He	2186572	0.6	2230925.07	98.01	

Sample Report

Sample Name K2211193-007

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:42:42 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.83786	ug/l	1.0	41328	
Co	59	72	He	273.70607	ug/l	1.6	388095	
Cu	63	72	He	0.50575	ug/l	3.5	610	
Cu	65	72	He	0.50861	ug/l	21.8	310	
Zn	66	72	He	56.70435	ug/l	4.0	9106	
As	75	72	He	1.87294	ug/l	8.0	141	
Pb	208	175	He	0.00812	ug/l	31.0	190	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1382004	1.5	1645686.17	83.98	
Sc	45	He	24131	1.0	30058.35	80.28	
Ge	72	He	22972	1.2	28963.31	79.32	
In	115	He	273761	0.9	330803.53	82.76	
Lu	175	He	1042537	0.5	1155617.88	90.21	
Th	232	He	2142460	0.5	2230925.07	96.03	

Sample Report

Sample Name	K2211193-008
File Name	026SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:44:22 AM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	82.75717	ug/l	2.5	636604	
Co	59	72	He	5.36367	ug/l	2.3	8981	
Cu	63	72	He	0.05006	ug/l	45.0	97	
Cu	65	72	He	0.04845	ug/l	33.5	43	
Zn	66	72	He	3.57695	ug/l	11.9	687	
As	75	72	He	3.30274	ug/l	6.4	293	
Pb	208	175	He	0.00232	ug/l	35.1	126	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1511776	1.7	1645686.17	91.86	
Sc	45	He	26595	2.3	30058.35	88.48	
Ge	72	He	27120	1.3	28963.31	93.63	
In	115	He	303536	0.4	330803.53	91.76	
Lu	175	He	1123475	1.0	1155617.88	97.22	
Th	232	He	2322217	0.8	2230925.07	104.09	

Sample Report

Sample Name K2211193-009

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:46:01 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	241.74068	ug/l	0.6	1932974	
Co	59	72	He	19.01688	ug/l	1.9	30867	
Cu	63	72	He	0.03472	ug/l	34.3	73	
Cu	65	72	He	0.06511	ug/l	36.0	53	
Zn	66	72	He	2.67528	ug/l	26.3	500	
As	75	72	He	27.64108	ug/l	0.7	2359	
Pb	208	175	He	0.00107	ug/l	122.0	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1571490	1.1	1645686.17	95.49	
Sc	45	He	26862	3.2	30058.35	89.37	
Ge	72	He	26295	1.0	28963.31	90.79	
In	115	He	306706	1.3	330803.53	92.72	
Lu	175	He	1138496	0.4	1155617.88	98.52	
Th	232	He	2264259	1.0	2230925.07	101.49	

Sample Report

Sample Name K2211193-010

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:47:41 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	545.06840	ug/l	1.0	4112667	
Co	59	72	He	34.65975	ug/l	2.8	53468	
Cu	63	72	He	0.04560	ug/l	44.5	83	
Cu	65	72	He	0.04620	ug/l	43.4	38	
Zn	66	72	He	6.31559	ug/l	6.9	1110	
As	75	72	He	18.59164	ug/l	5.9	1508	
Pb	208	175	He	-0.00051	ug/l	N/A	86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1483146	3.0	1645686.17	90.12	
Sc	45	He	26231	2.1	30058.35	87.27	
Ge	72	He	25002	2.7	28963.31	86.32	
In	115	He	293365	1.1	330803.53	88.68	
Lu	175	He	1104494	0.6	1155617.88	95.58	
Th	232	He	2212368	2.2	2230925.07	99.17	

Sample Report

Sample Name K2211193-011

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:49:19 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	568.17895	ug/l	3.0	4614060	
Co	59	72	He	7.98914	ug/l	2.1	13655	
Cu	63	72	He	0.00808	ug/l	91.8	40	
Cu	65	72	He	0.04015	ug/l	42.4	38	
Zn	66	72	He	2.22658	ug/l	0.8	440	
As	75	72	He	155.19576	ug/l	2.0	13932	
Pb	208	175	He	0.00111	ug/l	124.4	111	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1596463	0.9	1645686.17	97.01	
Sc	45	He	28008	2.6	30058.35	93.18	
Ge	72	He	27687	1.6	28963.31	95.59	
In	115	He	307874	1.4	330803.53	93.07	
Lu	175	He	1143456	0.7	1155617.88	98.95	
Th	232	He	2323458	0.4	2230925.07	104.15	

Sample Report

Sample Name K2211193-012

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:50:59 AM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.12232	ug/l	1.4	31875	
Co	59	72	He	289.59010	ug/l	4.4	457058	
Cu	63	72	He	0.10840	ug/l	4.4	167	
Cu	65	72	He	0.13082	ug/l	43.9	95	
Zn	66	72	He	26.16089	ug/l	6.1	4678	
As	75	72	He	0.17279	ug/l	22.5	16	
Pb	208	175	He	0.00181	ug/l	47.4	119	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1505658	4.0	1645686.17	91.49	
Sc	45	He	26308	2.5	30058.35	87.52	
Ge	72	He	25600	4.3	28963.31	88.39	
In	115	He	303836	1.2	330803.53	91.85	
Lu	175	He	1126146	0.9	1155617.88	97.45	
Th	232	He	2294054	2.5	2230925.07	102.83	

Sample Report

Sample Name	K2211300-001
File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:52:41 AM
Sample Type	Sample
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.55125	ug/l	2.0	38113	
Co	59	72	He	2.37904	ug/l	4.0	3928	
Cu	63	72	He	37.78908	ug/l	3.9	50978	
Cu	65	72	He	37.43529	ug/l	1.7	25894	
Zn	66	72	He	412.33992	ug/l	2.0	76995	
As	75	72	He	2.75088	ug/l	3.6	241	
Pb	208	175	He	5.86881	ug/l	1.3	82033	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1631970	2.1	1645686.17	99.17	
Sc	45	He	27981	2.9	30058.35	93.09	
Ge	72	He	26742	2.0	28963.31	92.33	
In	115	He	312938	1.6	330803.53	94.6	
Lu	175	He	1150672	1.5	1155617.88	99.57	
Th	232	He	2329203	0.8	2230925.07	104.41	

Sample Report

Sample Name K2211300-002

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 11:54:20 AM

Sample Type Sample

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.05544	ug/l	3.0	33956	
Co	59	72	He	1.82264	ug/l	5.0	3063	
Cu	63	72	He	30.18756	ug/l	4.1	41437	
Cu	65	72	He	30.01061	ug/l	3.5	21119	
Zn	66	72	He	305.24938	ug/l	2.1	58012	
As	75	72	He	3.62509	ug/l	5.2	322	
Pb	208	175	He	3.26382	ug/l	0.5	46655	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1630180	2.6	1645686.17	99.06	
Sc	45	He	28886	3.1	30058.35	96.1	
Ge	72	He	27216	2.8	28963.31	93.97	
In	115	He	319106	1.3	330803.53	96.46	
Lu	175	He	1175509	0.8	1155617.88	101.72	
Th	232	He	2399088	1.6	2230925.07	107.54	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	033_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:56:01 AM
Sample Type	CCV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.87212	ug/l	1.9	197356	95.49	
Co	59	72	He	25.09008	ug/l	1.7	43393	100.36	
Cu	63	72	He	25.23812	ug/l	2.1	35692	100.95	
Cu	65	72	He	25.06122	ug/l	1.9	18167	100.24	
Zn	66	72	He	24.73237	ug/l	7.3	4848	98.93	
As	75	72	He	25.10861	ug/l	5.3	2283	100.43	
Pb	208	175	He	25.63526	ug/l	2.1	361037	102.54	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1622801	2.3	1645686.17	98.61	
Sc	45	He	28856	3.0	30058.35	96	
Ge	72	He	28018	0.9	28963.31	96.74	
In	115	He	328265	1.2	330803.53	99.23	
Lu	175	He	1160621	2.1	1155617.88	100.43	
Th	232	He	2361939	1.1	2230925.07	105.87	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	034_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 11:57:41 AM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	ALKLS NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.16742	ug/l	14.3	1753	CCB Failed
Co	59	72	He	0.02148	ug/l	13.7	41	CCB Failed
Cu	63	72	He	-0.00233	ug/l	N/A	27	
Cu	65	72	He	0.00689	ug/l	191.6	15	
Zn	66	72	He	-0.01586	ug/l	N/A	7	
As	75	72	He	-0.00339	ug/l	N/A	2	
Pb	208	175	He	0.00209	ug/l	108.6	126	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1655611	1.2	1645686.17	100.6	
Sc	45	He	28635	1.5	30058.35	95.27	
Ge	72	He	28492	2.1	28963.31	98.37	
In	115	He	330701	1.2	330803.53	99.97	
Lu	175	He	1154218	1.3	1155617.88	99.88	
Th	232	He	2346898	1.4	2230925.07	105.2	

see
rem
Gm 10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	035_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:04:31 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.10038	ug/l	4.1	1177	CCB Failed
Co	59	72	He	0.00843	ug/l	51.8	18	
Cu	63	72	He	-0.01345	ug/l	N/A	10	
Cu	65	72	He	0.00288	ug/l	362.9	12	
Zn	66	72	He	-0.01440	ug/l	N/A	7	
As	75	72	He	-0.00674	ug/l	N/A	2	
Pb	208	175	He	-0.00209	ug/l	N/A	68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1639723	1.6	1645686.17	99.64	
Sc	45	He	28889	1.7	30058.35	96.11	
Ge	72	He	27794	1.0	28963.31	95.96	
In	115	He	329444	1.0	330803.53	99.59	
Lu	175	He	1163036	1.5	1155617.88	100.64	
Th	232	He	2357159	1.2	2230925.07	105.66	

Sample Report

Sample Name K2211300-003

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:09:40 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	4.43395	ug/l	2.2	37675	
Co	59	72	He	1.76041	ug/l	1.9	2999	
Cu	63	72	He	34.57904	ug/l	2.3	48125	
Cu	65	72	He	34.18169	ug/l	2.1	24379	
Zn	66	72	He	300.38585	ug/l	1.7	57851	
As	75	72	He	4.25286	ug/l	4.9	382	
Pb	208	175	He	3.26409	ug/l	0.2	45421	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1655857	3.3	1645686.17	100.62	
Sc	45	He	28522	1.5	30058.35	94.89	
Ge	72	He	27574	1.6	28963.31	95.2	
In	115	He	313736	1.0	330803.53	94.84	
Lu	175	He	1144319	1.2	1155617.88	99.02	
Th	232	He	2338993	1.5	2230925.07	104.84	

Sample Report

Sample Name	K2211300-001
File Name	037SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:11:34 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.67325	ug/l	3.4	22491	
Co	59	72	He	0.24852	ug/l	4.5	424	
Cu	63	72	He	13.31126	ug/l	3.5	18452	
Cu	65	72	He	13.53921	ug/l	1.3	9620	
Zn	66	72	He	34.55043	ug/l	8.9	6628	
As	75	72	He	1.86358	ug/l	8.8	168	
Pb	208	175	He	0.12270	ug/l	1.7	1839	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1629374	1.2	1645686.17	99.01	
Sc	45	He	28812	2.8	30058.35	95.86	
Ge	72	He	27450	1.6	28963.31	94.78	
In	115	He	323456	1.0	330803.53	97.78	
Lu	175	He	1169210	1.3	1155617.88	101.18	
Th	232	He	2374923	0.7	2230925.07	106.45	

Sample Report

Sample Name K2211300-002

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:13:30 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.49693	ug/l	2.1	20862	
Co	59	72	He	0.35232	ug/l	6.3	613	
Cu	63	72	He	17.26771	ug/l	1.7	24455	
Cu	65	72	He	16.89853	ug/l	3.1	12264	
Zn	66	72	He	58.64624	ug/l	5.9	11488	
As	75	72	He	2.79989	ug/l	3.8	257	
Pb	208	175	He	0.06365	ug/l	11.6	994	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1616405	1.7	1645686.17	98.22	
Sc	45	He	29694	1.3	30058.35	98.79	
Ge	72	He	28052	2.4	28963.31	96.85	
In	115	He	321809	0.3	330803.53	97.28	
Lu	175	He	1161077	1.1	1155617.88	100.47	
Th	232	He	2329467	0.8	2230925.07	104.42	

Sample Report

Sample Name K2211300-003

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:15:24 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.29231	ug/l	1.7	27880	
Co	59	72	He	0.46557	ug/l	6.9	811	
Cu	63	72	He	18.15201	ug/l	3.2	25754	
Cu	65	72	He	17.83781	ug/l	2.1	12973	
Zn	66	72	He	46.62874	ug/l	6.5	9153	
As	75	72	He	3.50440	ug/l	8.3	322	
Pb	208	175	He	0.05502	ug/l	7.0	898	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1644380	0.9	1645686.17	99.92	
Sc	45	He	29557	2.0	30058.35	98.33	
Ge	72	He	28112	3.0	28963.31	97.06	
In	115	He	326804	1.4	330803.53	98.79	
Lu	175	He	1195739	1.5	1155617.88	103.47	
Th	232	He	2382426	0.5	2230925.07	106.79	

Sample Report

Sample Name K2211358-001

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:17:18 PM

Sample Type Sample

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	2.52974	ug/l	1.1	21099	
Co	59	72	He	0.07528	ug/l	17.8	131	
Cu	63	72	He	15.00498	ug/l	1.4	20819	
Cu	65	72	He	14.61618	ug/l	1.9	10391	
Zn	66	72	He	15.38897	ug/l	5.6	2964	
As	75	72	He	0.70456	ug/l	7.8	65	
Pb	208	175	He	0.45029	ug/l	1.1	6467	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1613640	3.4	1645686.17	98.05	
Sc	45	He	28358	1.9	30058.35	94.34	
Ge	72	He	27470	2.1	28963.31	94.85	
In	115	He	324183	1.5	330803.53	98	
Lu	175	He	1165588	1.8	1155617.88	100.86	
Th	232	He	2363846	1.0	2230925.07	105.96	

Sample Report

Sample Name K2211365-001

File Name 041SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:19:12 PM

Sample Type Sample

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.28641	ug/l	1.8	43009	
Co	59	72	He	0.53208	ug/l	6.8	901	
Cu	63	72	He	0.69203	ug/l	5.4	983	
Cu	65	72	He	0.71241	ug/l	8.8	513	
Zn	66	72	He	43.25032	ug/l	3.5	8269	
As	75	72	He	0.20011	ug/l	21.4	20	
Pb	208	175	He	0.01177	ug/l	17.3	261	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1587200	1.6	1645686.17	96.45	
Sc	45	He	27864	4.0	30058.35	92.7	
Ge	72	He	27353	1.3	28963.31	94.44	
In	115	He	320745	1.6	330803.53	96.96	
Lu	175	He	1151521	2.3	1155617.88	99.65	
Th	232	He	2337418	0.6	2230925.07	104.77	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	042_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:21:07 PM
Sample Type	CCV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	24.12501	ug/l	2.3	194468	96.5	
Co	59	72	He	25.54936	ug/l	1.9	43369	102.2	
Cu	63	72	He	25.77877	ug/l	3.0	35779	103.12	
Cu	65	72	He	25.54560	ug/l	2.5	18183	102.18	
Zn	66	72	He	24.17171	ug/l	1.9	4651	96.69	
As	75	72	He	25.27875	ug/l	4.3	2255	101.12	
Pb	208	175	He	25.25869	ug/l	1.3	359461	101.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1582171	1.7	1645686.17	96.14	
Sc	45	He	28361	2.7	30058.35	94.35	
Ge	72	He	27504	2.2	28963.31	94.96	
In	115	He	325851	0.4	330803.53	98.5	
Lu	175	He	1172592	1.7	1155617.88	101.47	
Th	232	He	2351058	0.8	2230925.07	105.38	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	043_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:23:02 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.07574	ug/l	8.1	943	
Co	59	72	He	0.00465	ug/l	64.9	11	
Cu	63	72	He	0.00586	ug/l	312.2	37	
Cu	65	72	He	-0.00156	ug/l	N/A	8	
Zn	66	72	He	0.02051	ug/l	147.2	13	
As	75	72	He	-0.01006	ug/l	N/A	1	
Pb	208	175	He	0.00249	ug/l	43.5	132	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1593095	1.0	1645686.17	96.8	
Sc	45	He	29407	3.3	30058.35	97.83	
Ge	72	He	27487	0.8	28963.31	94.9	
In	115	He	324478	0.4	330803.53	98.09	
Lu	175	He	1160653	1.1	1155617.88	100.44	
Th	232	He	2340165	1.7	2230925.07	104.9	

Prep Blank (PB) Report

Sample Name	KQ2216890-01
File Name	044_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:24:58 PM
Sample Type	PB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.08038	ug/l	16.6	997	
Co	59	72	He	0.00519	ug/l	142.1	12	
Cu	63	72	He	0.01698	ug/l	93.9	53	
Cu	65	72	He	0.02354	ug/l	62.1	27	
Zn	66	72	He	0.20622	ug/l	43.0	50	
As	75	72	He	-0.00667	ug/l	N/A	2	
[Pb]	206	175	He	-0.00134	ug/l	N/A	18	
[Pb]	207	175	He	0.00032	ug/l	725.7	23	
Pb	208	175	He	-0.00046	ug/l	N/A	91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1618576	0.4	1645686.17	98.35	
Sc	45	He	29030	1.5	30058.35	96.58	
Ge	72	He	28062	0.9	28963.31	96.89	
In	115	He	329632	1.0	330803.53	99.65	
Lu	175	He	1171977	2.6	1155617.88	101.42	
Th	232	He	2339981	0.6	2230925.07	104.89	

Laboratory Control Sample (LCS) Report

Sample Name KQ2216890-02

File Name 045_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:26:52 PM

Sample Type LCS

Comment —

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Li	7	45	No Gas	46.59116	ug/l	1.7	391325	50	93.18	
Co	59	72	He	23.92361	ug/l	3.6	42100	25	95.69	
Cu	63	72	He	12.35376	ug/l	2.6	17795	12.5	98.83	
Cu	65	72	He	12.08811	ug/l	3.0	8923	12.5	96.7	
Zn	66	72	He	22.31746	ug/l	6.7	4451	25	89.27	
As	75	72	He	47.42933	ug/l	2.1	4387	50	94.86	
[Pb]	206	175	He	49.08227	ug/l	0.2	172813	50	98.16	
[Pb]	207	175	He	49.48905	ug/l	1.0	151160	50	98.98	
Pb	208	175	He	49.41686	ug/l	0.3	700790	50	98.83	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1649859	1.4	1645686.17	100.25	
Sc	45	He	28963	0.9	30058.35	96.35	
Ge	72	He	28519	2.0	28963.31	98.47	
In	115	He	326966	1.0	330803.53	98.84	
Lu	175	He	1168489	0.6	1155617.88	101.11	
Th	232	He	2345083	2.3	2230925.07	105.12	

Reference Sample Report

Sample Name	K2211194-001
File Name	046_ARF.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:28:47 PM
Sample Type	AllRef
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.71419	ug/l	0.6	40275	
Co	59	72	He	271.21155	ug/l	2.2	380872	
Cu	63	72	He	0.51611	ug/l	10.4	617	
Cu	65	72	He	0.59358	ug/l	8.7	357	
Zn	66	72	He	50.65762	ug/l	1.4	8059	
As	75	72	He	1.71427	ug/l	5.1	128	
Pb	208	175	He	0.01829	ug/l	8.9	316	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1375690	1.3	1645686.17	83.59	
Sc	45	He	23813	3.8	30058.35	79.22	
Ge	72	He	22758	2.6	28963.31	78.58	
In	115	He	271870	0.7	330803.53	82.18	
Lu	175	He	1032106	1.0	1155617.88	89.31	
Th	232	He	2120456	0.5	2230925.07	95.05	

Duplicate Sample Report

Sample Name	KQ2216890-03
File Name	047_Dup.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:30:42 PM
Sample Type	Dup
Total Dilution	1.0000
Comment	D
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fial	Pass
ISTD Ref FileName	Pass
QC Ref File Name	046_ ARF d
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	5.75821	ug/l	4.9	39530	0.77	
Co	59	72	He	271.82774	ug/l	1.6	373364	0.23	
Cu	63	72	He	0.52569	ug/l	11.0	613	1.84	
Cu	65	72	He	0.55776	ug/l	9.3	328	6.22	
Zn	66	72	He	51.78631	ug/l	4.3	8052	2.2	
As	75	72	He	1.60039	ug/l	3.8	117		<5x MRL
[Pb]	206	175	He	0.00984	ug/l	51.2	50		<5x MRL
[Pb]	207	175	He	0.01099	ug/l	25.3	49		<5x MRL
Pb	208	175	He	0.00940	ug/l	48.9	202		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1340180	1.3	1645686.17	81.44	
Sc	45	He	23439	1.2	30058.35	77.98	
Ge	72	He	22255	1.6	28963.31	76.84	
In	115	He	265581	0.9	330803.53	80.28	
Lu	175	He	1022505	1.4	1155617.88	88.48	
Th	232	He	2136129	1.4	2230925.07	95.75	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216890-04
File Name	048_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:32:36 PM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	046_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	50.25341	ug/l	1.3	342244	50	89.08	
Co	59	He	282.49989	ug/l	2.7	395760	25	45.15	Spike Failed
Cu	63	He	11.43463	ug/l	1.0	13116	12.5	87.35	
Cu	65	He	11.46538	ug/l	2.0	6740	12.5	86.97	
Zn	66	He	69.84257	ug/l	2.8	11081	25	76.74	
As	75	He	46.10974	ug/l	1.6	3396	50	88.79	
[Pb]	206	He	47.50697	ug/l	0.7	146428	50	94.98	
[Pb]	207	He	47.96423	ug/l	0.7	128258	50	95.89	
Pb	208	He	47.89017	ug/l	0.5	594549	50	95.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1337620	1.7	1645686.17	81.28	
Sc	45	He	23109	1.9	30058.35	76.88	
Ge	72	He	22702	1.8	28963.31	78.38	
In	115	He	268416	0.7	330803.53	81.14	
Lu	175	He	1022945	0.7	1155617.88	88.52	
Th	232	He	2142644	1.2	2230925.07	96.04	

Sample Report

Sample Name	K2211194-002
File Name	049SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:34:30 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.78608	ug/l	2.7	608852	
Co	59	72	He	4.86086	ug/l	3.9	7887	
Cu	63	72	He	0.10289	ug/l	29.5	163	
Cu	65	72	He	0.13617	ug/l	6.5	102	
Zn	66	72	He	2.25768	ug/l	8.5	423	
As	75	72	He	1.43486	ug/l	7.0	124	
Pb	208	175	He	0.01276	ug/l	17.6	263	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1481992	4.7	1645686.17	90.05	
Sc	45	He	24782	2.2	30058.35	82.45	
Ge	72	He	26288	2.4	28963.31	90.76	
In	115	He	295176	0.3	330803.53	89.23	
Lu	175	He	1103797	0.9	1155617.88	95.52	
Th	232	He	2276542	1.2	2230925.07	102.04	

Sample Report

Sample Name	K2211194-003
File Name	050SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:36:26 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	245.65074	ug/l	0.7	1889305	
Co	59	72	He	18.53928	ug/l	2.6	29858	
Cu	63	72	He	0.01460	ug/l	127.7	47	
Cu	65	72	He	0.04822	ug/l	29.3	42	
Zn	66	72	He	2.19939	ug/l	4.5	410	
As	75	72	He	25.29805	ug/l	1.2	2143	
Pb	208	175	He	0.00726	ug/l	51.1	197	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1511528	1.5	1645686.17	91.85	
Sc	45	He	26762	1.7	30058.35	89.03	
Ge	72	He	26098	2.3	28963.31	90.11	
In	115	He	307447	0.3	330803.53	92.94	
Lu	175	He	1143951	0.5	1155617.88	98.99	
Th	232	He	2333684	0.4	2230925.07	104.61	

Sample Report

Sample Name K2211194-004

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:38:20 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	545.90216	ug/l	1.4	4212321	
Co	59	72	He	34.52661	ug/l	2.3	54192	
Cu	63	72	He	0.14854	ug/l	15.1	217	
Cu	65	72	He	0.24763	ug/l	17.2	172	
Zn	66	72	He	4.86798	ug/l	5.1	873	
As	75	72	He	15.56648	ug/l	3.8	1285	
Pb	208	175	He	0.00385	ug/l	29.4	144	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1516923	1.6	1645686.17	92.18	
Sc	45	He	25787	2.3	30058.35	85.79	
Ge	72	He	25433	2.3	28963.31	87.81	
In	115	He	298394	0.5	330803.53	90.2	
Lu	175	He	1106867	0.8	1155617.88	95.78	
Th	232	He	2279633	2.1	2230925.07	102.18	

Sample Report

Sample Name	K2211194-005
File Name	052SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:40:14 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	561.52215	ug/l	1.3	4577931	
Co	59	72	He	8.07425	ug/l	2.2	13544	
Cu	63	72	He	0.00621	ug/l	77.8	37	
Cu	65	72	He	0.06053	ug/l	27.7	52	
Zn	66	72	He	2.15189	ug/l	16.4	417	
As	75	72	He	133.71441	ug/l	1.5	11783	
Pb	208	175	He	0.00625	ug/l	28.0	183	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1602460	1.2	1645686.17	97.37	
Sc	45	He	27256	0.4	30058.35	90.68	
Ge	72	He	27180	3.0	28963.31	93.84	
In	115	He	307702	0.3	330803.53	93.02	
Lu	175	He	1148583	1.2	1155617.88	99.39	
Th	232	He	2354068	1.8	2230925.07	105.52	

Reference Sample Report

Sample Name K2211194-006

File Name 053_ARF.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:42:08 PM

Sample Type AllRef

Comment D

ISTD Ref FileName 003CALB.d

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.91606	ug/l	5.6	30899	
Co	59	72	He	280.58385	ug/l	4.3	453551	
Cu	63	72	He	0.07492	ug/l	57.7	127	
Cu	65	72	He	0.16935	ug/l	23.8	123	
Zn	66	72	He	24.68822	ug/l	8.2	4521	
As	75	72	He	0.22638	ug/l	30.9	21	
Pb	208	175	He	0.00472	ug/l	23.9	159	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1535423	0.7	1645686.17	93.3	
Sc	45	He	25970	1.7	30058.35	86.4	
Ge	72	He	26215	3.8	28963.31	90.51	
In	115	He	300181	0.7	330803.53	90.74	
Lu	175	He	1126510	0.9	1155617.88	97.48	
Th	232	He	2306027	1.5	2230925.07	103.37	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	054_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 12:44:04 PM
Sample Type	CCV
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.21048	ug/l	2.0	191973	92.84	
Co	59	72	He	25.32882	ug/l	1.4	43337	101.32	
Cu	63	72	He	25.06460	ug/l	1.3	35067	100.26	
Cu	65	72	He	25.27301	ug/l	3.6	18120	101.09	
Zn	66	72	He	24.00051	ug/l	6.0	4654	96	
As	75	72	He	25.36778	ug/l	1.6	2283	101.47	
Pb	208	175	He	25.87003	ug/l	2.4	366540	103.48	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1623403	2.3	1645686.17	98.65	
Sc	45	He	28251	2.5	30058.35	93.99	
Ge	72	He	27717	1.6	28963.31	95.7	
In	115	He	327422	0.7	330803.53	98.98	
Lu	175	He	1167660	2.0	1155617.88	101.04	
Th	232	He	2443785	1.2	2230925.07	109.54	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 055_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 12:45:59 PM

Sample Type CCB

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.19819	ug/l	1.7	1973	
Co	59	72	He	0.03692	ug/l	18.5	67	CCB Failed
Cu	63	72	He	-0.00872	ug/l	N/A	17	
Cu	65	72	He	0.00530	ug/l	155.0	13	
Zn	66	72	He	0.01943	ug/l	403.6	13	
As	75	72	He	0.01565	ug/l	84.2	4	
Pb	208	175	He	0.00168	ug/l	60.6	120	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1624090	1.2	1645686.17	98.69	
Sc	45	He	27911	2.5	30058.35	92.85	
Ge	72	He	27801	0.8	28963.31	95.99	
In	115	He	328006	1.0	330803.53	99.15	
Lu	175	He	1153537	1.4	1155617.88	99.82	
Th	232	He	2372510	2.3	2230925.07	106.35	

see
rerun
10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	056_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:13:14 PM
Sample Type	CCB
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.04599	ug/l	22.9	703	
Co	59	72	He	0.00262	ug/l	171.5	8	
Cu	63	72	He	-0.00879	ug/l	N/A	17	
Cu	65	72	He	-0.00405	ug/l	N/A	7	
Zn	66	72	He	0.07028	ug/l	167.1	23	
As	75	72	He	0.00799	ug/l	274.4	3	
Pb	208	175	He	-0.00209	ug/l	N/A	69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1598193	2.3	1645686.17	97.11	
Sc	45	He	28275	4.1	30058.35	94.07	
Ge	72	He	27921	0.5	28963.31	96.4	
In	115	He	326576	1.7	330803.53	98.72	
Lu	175	He	1180818	0.9	1155617.88	102.18	
Th	232	He	2366822	0.7	2230925.07	106.09	

Duplicate Sample Report

Sample Name KQ2216890-05
File Name 057_Dup.d
Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time 2022-10-04 1:15:09 PM
Sample Type Dup
Total Dilution 1.0000
Comment D
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fial Pass
ISTD Ref FileName Pass
QC Ref File Name 053_
ARF
d
Default Text ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	RPD	Flag
Li	7	45	No Gas	3.55646	ug/l	1.5	26621	9.62	
Co	59	72	He	285.45244	ug/l	2.0	440356	1.72	
Cu	63	72	He	0.10640	ug/l	20.5	160		<5x MRL
Cu	65	72	He	0.14693	ug/l	37.8	103		<5x MRL
Zn	66	72	He	26.23221	ug/l	0.1	4587	6.06	
As	75	72	He	0.17634	ug/l	32.1	16		<5x MRL
[Pb]	206	175	He	0.00120	ug/l	126.9	26		<5x MRL
[Pb]	207	175	He	-0.00048	ug/l	N/A	20		<5x MRL
Pb	208	175	He	0.00140	ug/l	28.4	112		<5x MRL

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1454984	1.8	1645686.17	88.41	
Sc	45	He	26224	3.1	30058.35	87.24	
Ge	72	He	24996	1.5	28963.31	86.3	
In	115	He	297116	1.0	330803.53	89.82	
Lu	175	He	1115557	0.6	1155617.88	96.53	
Th	232	He	2253791	1.3	2230925.07	101.02	

Matrix Spike Sample (MS) Report

Sample Name	KQ2216890-06
File Name	058_SPK.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:17:03 PM
Sample Type	Spike
Comment	D
ISTD Ref FileName	003CALB.d
QC Ref File Name	053_ ARF.
Default Text	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Li	7	No Gas	47.47448	ug/l	1.1	354724	50	87.12	
Co	59	He	300.78935	ug/l	1.5	452045	25	80.82	
Cu	63	He	11.43217	ug/l	0.2	14067	12.5	90.86	
Cu	65	He	11.60458	ug/l	3.0	7314	12.5	91.48	
Zn	66	He	48.03201	ug/l	4.1	8176	25	93.38	
As	75	He	46.79762	ug/l	1.8	3696	50	93.14	
[Pb]	206	He	46.72479	ug/l	1.0	153951	50	93.44	
[Pb]	207	He	47.29893	ug/l	1.0	135202	50	94.59	
Pb	208	He	47.11156	ug/l	1.2	625211	50	94.21	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1467684	2.7	1645686.17	89.18	
Sc	45	He	25476	1.8	30058.35	84.76	
Ge	72	He	24351	2.1	28963.31	84.08	
In	115	He	292943	0.4	330803.53	88.56	
Lu	175	He	1093544	1.0	1155617.88	94.63	
Th	232	He	2257882	1.0	2230925.07	101.21	

Sample Report

Sample Name K2211194-007

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:18:57 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.46738	ug/l	1.1	38798	
Co	59	72	He	273.35826	ug/l	4.2	380402	
Cu	63	72	He	0.56914	ug/l	12.5	673	
Cu	65	72	He	0.54637	ug/l	11.4	327	
Zn	66	72	He	57.50386	ug/l	1.9	9066	
As	75	72	He	1.23790	ug/l	19.0	92	
Pb	208	175	He	0.08002	ug/l	12.2	1107	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1384723	1.2	1645686.17	84.14	
Sc	45	He	23526	1.2	30058.35	78.27	
Ge	72	He	22568	4.0	28963.31	77.92	
In	115	He	272960	1.3	330803.53	82.51	
Lu	175	He	1050011	1.0	1155617.88	90.86	
Th	232	He	2202831	1.7	2230925.07	98.74	

Sample Report

Sample Name	K2211194-008
File Name	060SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:20:51 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	80.07222	ug/l	2.1	609685	
Co	59	72	He	4.56254	ug/l	1.3	7241	
Cu	63	72	He	0.19543	ug/l	12.1	280	
Cu	65	72	He	0.23506	ug/l	10.2	165	
Zn	66	72	He	2.75573	ug/l	6.3	503	
As	75	72	He	3.82324	ug/l	2.6	321	
Pb	208	175	He	0.00479	ug/l	19.2	158	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1496718	3.6	1645686.17	90.95	
Sc	45	He	25950	0.6	30058.35	86.33	
Ge	72	He	25700	0.8	28963.31	88.73	
In	115	He	296034	0.8	330803.53	89.49	
Lu	175	He	1112372	0.9	1155617.88	96.26	
Th	232	He	2313553	1.5	2230925.07	103.7	

Sample Report

Sample Name K2211194-009

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:22:46 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	250.37568	ug/l	2.0	1916509	
Co	59	72	He	16.30157	ug/l	0.7	25891	
Cu	63	72	He	0.01017	ug/l	272.3	40	
Cu	65	72	He	0.06936	ug/l	10.6	55	
Zn	66	72	He	2.12133	ug/l	21.3	390	
As	75	72	He	8.61001	ug/l	3.4	720	
Pb	208	175	He	0.00149	ug/l	56.2	116	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1504420	1.0	1645686.17	91.42	
Sc	45	He	26548	1.5	30058.35	88.32	
Ge	72	He	25727	0.2	28963.31	88.83	
In	115	He	306457	1.4	330803.53	92.64	
Lu	175	He	1136268	1.5	1155617.88	98.33	
Th	232	He	2308095	0.5	2230925.07	103.46	

Sample Report

Sample Name K2211194-010

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:24:39 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	533.62808	ug/l	2.1	3956763	
Co	59	72	He	34.33444	ug/l	5.4	51478	
Cu	63	72	He	0.00873	ug/l	174.4	37	
Cu	65	72	He	0.04426	ug/l	46.5	37	
Zn	66	72	He	4.41474	ug/l	8.8	757	
As	75	72	He	13.94683	ug/l	6.2	1103	
Pb	208	175	He	0.00239	ug/l	22.4	124	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1457776	2.0	1645686.17	88.58	
Sc	45	He	26011	3.4	30058.35	86.53	
Ge	72	He	24338	5.7	28963.31	84.03	
In	115	He	292800	1.2	330803.53	88.51	
Lu	175	He	1103896	0.7	1155617.88	95.52	
Th	232	He	2260053	0.4	2230925.07	101.31	

Sample Report

Sample Name K2211194-011

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:26:34 PM

Sample Type Sample

Comment D

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	555.00046	ug/l	0.7	4478604	
Co	59	72	He	7.86192	ug/l	3.5	13230	
Cu	63	72	He	0.01115	ug/l	140.1	43	
Cu	65	72	He	0.05496	ug/l	72.6	48	
Zn	66	72	He	1.73542	ug/l	7.7	340	
As	75	72	He	73.80238	ug/l	3.6	6524	
Pb	208	175	He	0.00097	ug/l	241.5	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1586105	1.5	1645686.17	96.38	
Sc	45	He	27490	0.5	30058.35	91.45	
Ge	72	He	27276	3.6	28963.31	94.18	
In	115	He	313865	0.3	330803.53	94.88	
Lu	175	He	1156474	2.1	1155617.88	100.07	
Th	232	He	2369373	0.3	2230925.07	106.21	

Sample Report

Sample Name	K2211194-012
File Name	064SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:28:28 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.90827	ug/l	3.0	30214	
Co	59	72	He	285.23487	ug/l	2.0	433848	
Cu	63	72	He	0.07015	ug/l	56.1	113	
Cu	65	72	He	0.07563	ug/l	25.9	57	
Zn	66	72	He	23.32692	ug/l	3.8	4024	
As	75	72	He	0.12957	ug/l	26.2	12	
Pb	208	175	He	0.00342	ug/l	69.0	137	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1504208	1.1	1645686.17	91.4	
Sc	45	He	24942	2.0	30058.35	82.98	
Ge	72	He	24645	1.6	28963.31	85.09	
In	115	He	290271	1.3	330803.53	87.75	
Lu	175	He	1091068	0.3	1155617.88	94.41	
Th	232	He	2240117	0.8	2230925.07	100.41	

Sample Report

Sample Name K2211230-001

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:30:22 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.70357	ug/l	5.0	13757	
Co	59	72	He	0.37115	ug/l	3.8	602	
Cu	63	72	He	11.72193	ug/l	4.0	15475	
Cu	65	72	He	11.49089	ug/l	2.9	7781	
Zn	66	72	He	102.90495	ug/l	2.1	18796	
As	75	72	He	0.29398	ug/l	16.4	27	
Pb	208	175	He	0.34218	ug/l	2.4	4824	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1550768	1.2	1645686.17	94.23	
Sc	45	He	27340	1.3	30058.35	90.96	
Ge	72	He	26141	2.3	28963.31	90.26	
In	115	He	306630	0.4	330803.53	92.69	
Lu	175	He	1138817	0.4	1155617.88	98.55	
Th	232	He	2333408	1.0	2230925.07	104.59	

Sample Report

Sample Name	K2211299-001
File Name	066SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:32:16 PM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	5.32259	ug/l	0.7	43487	
Co	59	72	He	2.18532	ug/l	2.9	3459	
Cu	63	72	He	20.31317	ug/l	0.7	26271	
Cu	65	72	He	20.00406	ug/l	2.7	13258	
Zn	66	72	He	170.44213	ug/l	1.3	30496	
As	75	72	He	5.67371	ug/l	0.7	473	
Pb	208	175	He	2.11117	ug/l	0.3	29236	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1593850	0.7	1645686.17	96.85	
Sc	45	He	27643	1.2	30058.35	91.97	
Ge	72	He	25617	1.5	28963.31	88.45	
In	115	He	305634	1.1	330803.53	92.39	
Lu	175	He	1137522	1.1	1155617.88	98.43	
Th	232	He	2339073	1.8	2230925.07	104.85	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	067_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:34:12 PM
Sample Type	CCV
Comment	—
ISTD Ref FileName	003CALB.d
Operator	ALKLS NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.33475	ug/l	0.3	193824	93.34	
Co	59	72	He	24.83798	ug/l	3.6	43672	99.35	
Cu	63	72	He	25.20302	ug/l	1.6	36246	100.81	
Cu	65	72	He	25.15400	ug/l	0.7	18544	100.62	
Zn	66	72	He	23.47589	ug/l	2.4	4681	93.9	
As	75	72	He	24.83041	ug/l	5.9	2295	99.32	
Pb	208	175	He	25.84108	ug/l	1.2	368383	103.36	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1629888	2.2	1645686.17	99.04	
Sc	45	He	28271	1.7	30058.35	94.05	
Ge	72	He	28492	1.6	28963.31	98.37	
In	115	He	330420	0.3	330803.53	99.88	
Lu	175	He	1174665	2.3	1155617.88	101.65	
Th	232	He	2399099	0.9	2230925.07	107.54	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	068_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:36:07 PM
Sample Type	CCB
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.18083	ug/l	6.1	1887	
Co	59	72	He	0.02494	ug/l	19.8	47	CCB Failed
Cu	63	72	He	0.00287	ug/l	284.5	33	
Cu	65	72	He	-0.00183	ug/l	N/A	8	
Zn	66	72	He	-0.01503	ug/l	N/A	7	
As	75	72	He	-0.01414	ug/l	N/A	1	
Pb	208	175	He	0.00297	ug/l	61.5	140	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1674306	0.4	1645686.17	101.74	
Sc	45	He	28739	3.2	30058.35	95.61	
Ge	72	He	28148	0.6	28963.31	97.19	
In	115	He	326581	1.1	330803.53	98.72	
Lu	175	He	1169818	0.8	1155617.88	101.23	
Th	232	He	2400386	1.0	2230925.07	107.6	

see
rerun
am 10/4/22

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 069_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:42:48 PM

Sample Type CCB

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.09367	ug/l	9.4	1120	
Co	59	72	He	0.00327	ug/l	31.4	9	
Cu	63	72	He	-0.01103	ug/l	N/A	13	
Cu	65	72	He	-0.00166	ug/l	N/A	8	
Zn	66	72	He	0.00162	ug/l	5395.6	10	
As	75	72	He	-0.01012	ug/l	N/A	1	
Pb	208	175	He	-0.00238	ug/l	N/A	63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1640181	2.0	1645686.17	99.67	
Sc	45	He	28271	1.1	30058.35	94.05	
Ge	72	He	27748	2.2	28963.31	95.8	
In	115	He	325332	0.9	330803.53	98.35	
Lu	175	He	1156236	2.4	1155617.88	100.05	
Th	232	He	2389953	1.4	2230925.07	107.13	

Sample Report

Sample Name	K2211299-002
File Name	070SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:44:46 PM
Sample Type	Sample
Comment	—
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.61650	ug/l	5.5	13787	
Co	59	72	He	0.68860	ug/l	5.6	1166	
Cu	63	72	He	13.79434	ug/l	1.5	19063	
Cu	65	72	He	13.69247	ug/l	1.7	9697	
Zn	66	72	He	155.96643	ug/l	2.0	29812	
As	75	72	He	3.04102	ug/l	6.1	272	
Pb	208	175	He	0.22679	ug/l	4.0	3330	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1635923	1.1	1645686.17	99.41	
Sc	45	He	29390	2.6	30058.35	97.78	
Ge	72	He	27363	2.2	28963.31	94.48	
In	115	He	318362	1.1	330803.53	96.24	
Lu	175	He	1174416	2.5	1155617.88	101.63	
Th	232	He	2374280	0.8	2230925.07	106.43	

Sample Report

Sample Name	K2211299-001
File Name	071SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:46:40 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	3.79448	ug/l	3.5	32977	
Co	59	72	He	0.35124	ug/l	3.9	621	
Cu	63	72	He	13.56365	ug/l	2.9	19510	
Cu	65	72	He	13.41980	ug/l	3.5	9892	
Zn	66	72	He	17.16321	ug/l	4.6	3424	
As	75	72	He	4.57220	ug/l	3.4	425	
Pb	208	175	He	0.02975	ug/l	4.0	523	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1690872	2.0	1645686.17	102.75	
Sc	45	He	29344	1.7	30058.35	97.62	
Ge	72	He	28482	1.7	28963.31	98.34	
In	115	He	320420	0.8	330803.53	96.86	
Lu	175	He	1176576	1.5	1155617.88	101.81	
Th	232	He	2369810	1.1	2230925.07	106.23	

Sample Report

Sample Name	K2211299-002
File Name	072SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:48:34 PM
Sample Type	Sample
Comment	D
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.52648	ug/l	2.9	13513	
Co	59	72	He	0.62145	ug/l	1.7	1086	
Cu	63	72	He	13.56376	ug/l	4.9	19330	
Cu	65	72	He	13.49905	ug/l	1.3	9858	
Zn	66	72	He	141.72770	ug/l	1.6	27931	
As	75	72	He	2.88252	ug/l	4.7	266	
Pb	208	175	He	0.07134	ug/l	5.1	1124	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1695413	2.2	1645686.17	103.02	
Sc	45	He	29795	2.3	30058.35	99.12	
Ge	72	He	28212	0.4	28963.31	97.4	
In	115	He	326585	0.1	330803.53	98.72	
Lu	175	He	1184332	0.5	1155617.88	102.48	
Th	232	He	2403983	0.8	2230925.07	107.76	

Sample Report

Sample Name	K2211301-001
File Name	073SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:50:28 PM
Sample Type	Sample
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	9.74336	ug/l	1.0	79567	
Co	59	72	He	5.16500	ug/l	2.6	8414	
Cu	63	72	He	95.91913	ug/l	3.0	127594	
Cu	65	72	He	95.06627	ug/l	3.9	64827	
Zn	66	72	He	776.54086	ug/l	2.0	143024	
As	75	72	He	6.48835	ug/l	2.0	557	
Pb	208	175	He	10.24072	ug/l	0.7	140185	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1598693	2.3	1645686.17	97.14	
Sc	45	He	27697	3.2	30058.35	92.14	
Ge	72	He	26382	2.7	28963.31	91.09	
In	115	He	299911	1.3	330803.53	90.66	
Lu	175	He	1127337	0.5	1155617.88	97.55	
Th	232	He	2312990	1.2	2230925.07	103.68	

Sample Report

Sample Name K2211313-001

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:52:22 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	1.23798	ug/l	3.0	10104	
Co	59	72	He	0.18465	ug/l	6.2	311	
Cu	63	72	He	3.41085	ug/l	4.7	4678	
Cu	65	72	He	3.37856	ug/l	3.3	2370	
Zn	66	72	He	77.91106	ug/l	3.9	14708	
As	75	72	He	0.53396	ug/l	10.4	49	
Pb	208	175	He	0.43106	ug/l	4.6	6029	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1554279	3.4	1645686.17	94.45	
Sc	45	He	26992	2.1	30058.35	89.8	
Ge	72	He	27019	0.7	28963.31	93.29	
In	115	He	311280	0.4	330803.53	94.1	
Lu	175	He	1134852	1.2	1155617.88	98.2	
Th	232	He	2322458	0.7	2230925.07	104.1	

Sample Report

Sample Name K2211313-002

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:54:16 PM

Sample Type Sample

Comment ---

ISTD Ref FileName 003CALB.d

Operator **ALKLS**
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.45782	ug/l	4.4	3867	
Co	59	72	He	0.10154	ug/l	37.8	164	
Cu	63	72	He	3.61521	ug/l	5.0	4731	
Cu	65	72	He	3.75918	ug/l	3.0	2517	
Zn	66	72	He	36.46297	ug/l	2.8	6578	
As	75	72	He	0.50030	ug/l	21.9	44	
Pb	208	175	He	0.87764	ug/l	1.1	12036	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1523828	3.0	1645686.17	92.6	
Sc	45	He	26618	3.3	30058.35	88.56	
Ge	72	He	25807	1.8	28963.31	89.1	
In	115	He	312311	0.7	330803.53	94.41	
Lu	175	He	1121306	0.3	1155617.88	97.03	
Th	232	He	2316322	4.0	2230925.07	103.83	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	076_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 1:56:11 PM
Sample Type	CCV
Comment	---
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Li	7	45	No Gas	23.86884	ug/l	1.4	185402	95.48	
Co	59	72	He	24.65374	ug/l	1.5	40994	98.61	
Cu	63	72	He	24.55317	ug/l	1.2	33386	98.21	
Cu	65	72	He	24.93688	ug/l	2.6	17379	99.75	
Zn	66	72	He	23.34823	ug/l	3.8	4401	93.39	
As	75	72	He	24.41469	ug/l	1.5	2134	97.66	
Pb	208	175	He	25.58701	ug/l	1.6	354505	102.35	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1524451	1.2	1645686.17	92.63	
Sc	45	He	27339	2.7	30058.35	90.95	
Ge	72	He	26936	0.5	28963.31	93	
In	115	He	314382	1.4	330803.53	95.04	
Lu	175	He	1141713	2.3	1155617.88	98.8	
Th	232	He	2320240	1.1	2230925.07	104	

Continuing Calibration Blank (CCB) Report

Sample Name CCB

File Name 077_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b

Acq Time 2022-10-04 1:58:06 PM

Sample Type CCB

Comment —

ISTD Ref FileName 003CALB.d

Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	0.09091	ug/l	16.6	1063	
Co	59	72	He	0.00863	ug/l	52.3	18	
Cu	63	72	He	-0.00136	ug/l	N/A	27	
Cu	65	72	He	0.01493	ug/l	124.1	20	
Zn	66	72	He	0.03809	ug/l	76.6	17	
As	75	72	He	-0.01368	ug/l	N/A	1	
Pb	208	175	He	0.00380	ug/l	28.9	148	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1589108	1.4	1645686.17	96.56	
Sc	45	He	28068	2.3	30058.35	93.38	
Ge	72	He	27317	1.6	28963.31	94.31	
In	115	He	319768	1.4	330803.53	96.66	
Lu	175	He	1139238	0.9	1155617.88	98.58	
Th	232	He	2337212	0.9	2230925.07	104.76	

Sample Report

Sample Name	1000ppb Li LRSTD
File Name	078SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\BatchTemplate\Experiments\100422A.b
Acq Time	2022-10-04 2:05:35 PM
Sample Type	Sample
Comment	1/10mL MS29-80-A
ISTD Ref FileName	003CALB.d
Operator	**ALKLS** **NoUser**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Li	7	45	No Gas	934.30845	ug/l	1.1	7667027	<LDR
Co	59	72	He	0.00004	ug/l	51.1	3	
Cu	63	72	He	-0.01104	ug/l	N/A	13	
Cu	65	72	He	0.00760	ug/l	2.9	15	
Zn	66	72	He	0.07084	ug/l	109.2	23	
As	75	72	He	-0.00662	ug/l	N/A	2	
Pb	208	175	He	-0.00179	ug/l	N/A	71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Sc	45	No Gas	1613012	0.2	1645686.17	98.01	
Sc	45	He	28819	1.4	30058.35	95.88	
Ge	72	He	27761	1.1	28963.31	95.85	
In	115	He	324998	0.8	330803.53	98.25	
Lu	175	He	1147081	0.9	1155617.88	99.26	
Th	232	He	2390114	1.2	2230925.07	107.14	

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 20, 2022

Analytical Report for Service Request No: K2211339

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 27, 2022
For your reference, these analyses have been assigned our service request number **K2211339.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark D. Harris

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211339
Project: Greene County Treatability
Date Received: 09/27/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 09/27/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/20/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

K2211339

Laboratory Number: 503-972-5019
Date: 9/19/2022
Project Name: Greene County Treatability
Project Number: 221114-01.05 Task 05
Project Manager: Jessica Goin
Phone Number: 503-972-5001 (backup number: 503-798-3456)
Shipment Method: ALS Courier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Sulfate (method 300.0/9056A)						Comments/Preservation
1	MW-1-HT-MMO-20220919	9/19/2022	9:14	Water	1	X		X	X	X	X	X							HNO3-preserved bottle only
2	MW-1-FB-20220919	9/19/2022	9:15	Water	2	X		X	X				X						One unpreserved bottle for sulfate test.
3	MW-5-HT-MMO-20220919	9/19/2022	9:16	Water	1	X	X		X	X	X	X							HNO3-preserved bottle only
4	MW-5-FB-20220919	9/19/2022	9:17	Water	2	X	X		X				X						One unpreserved bottle for sulfate test.
5	MW-10-HT-MMO-20220919	9/19/2022	9:18	Water	1	X	X		X	X	X	X							HNO3-preserved bottle only
6	MW-10-FB-20220919	9/19/2022	9:19	Water	2	X	X		X				X						One unpreserved bottle for sulfate test.
7	MW-14-HT-MMO-20220919	9/19/2022	9:20	Water	1	X	X	X	X	X	X	X							HNO3-preserved bottle only
8	MW-14-FB-20220919	9/19/2022	9:21	Water	2	X	X	X	X				X						One unpreserved bottle for sulfate test.
9	MW-17-HT-MMO-20220919	9/19/2022	9:22	Water	1	X	X		X	X	X	X							HNO3-preserved bottle only
10	MW-17-FB-20220919	9/19/2022	9:23	Water	2	X	X		X				X						One unpreserved bottle for sulfate test.
11	MW-44H-HT-MMO-20220919	9/19/2022	9:24	Water	1			X	X	X	X	X							HNO3-preserved bottle only
12	MW-44H-FB-20220919	9/19/2022	9:25	Water	2			X	X				X						One unpreserved bottle for sulfate test.
13																			
14																			
15																			

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 9/27/22 08:30

Received by: ALS 9/27/22 1020
Signature/Print Name:

Relinquished by: ALS 9/27/22 1210
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM_____

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22_____

Received: 9/27/22 Opened: 9/27/22 By: PDP Unloaded: 9/27/22 By: PDP

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other_____ NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front
   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
7.7	3.9	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA [✓ Y] N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank was on top of samples which were surrounded by ice

1/13/22 *Page of*

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MW-1-FB-20220919	K2211339-002	**778**	20	8	200	10/15/22 23:01	
MW-5-FB-20220919	K2211339-004	**167**	5.0	2.0	50	10/15/22 23:09	
MW-10-FB-20220919	K2211339-006	**129**	5.0	2.0	50	10/15/22 22:26	
MW-14-FB-20220919	K2211339-008	**168**	5.0	2.0	50	10/15/22 23:18	
MW-17-FB-20220919	K2211339-010	**45.4**	5.0	2.0	50	10/15/22 23:27	
MW-44H-FB-20220919	K2211339-012	**375**	20	8	200	10/15/22 23:35	
Method Blank	K2211339-MB	ND U	0.10	0.04	1	10/15/22 22:17	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/15/22

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	MW-10-FB-20220919	**Units:**	mg/L
Lab Code:	K2211339-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K2211339-006DUP Result	Average	RPD	RPD Limit
Sulfate	300.0	5.0	2.0	129	128	129	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22
Sample Matrix:	Water	**Date Received:**	09/27/22
		Date Analyzed:	10/15/22
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	MW-10-FB-20220919	**Units:**	mg/L
Lab Code:	K2211339-006	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike K2211339-006MS			**Duplicate Matrix Spike** K2211339-006DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	129	329	200	100	329	200	100	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/15/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	781451

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211339-LCS	5.04	5.00	101	90-110

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	781451	KQ2218174-01	10/15/22 21:51	5.00	5.05	101	90-110
CCV2	781451	KQ2218174-02	10/15/22 23:44	5.00	5.08	102	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:**K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	781451	KQ2218174-03	10/15/22 22:00	0.10	0.04	ND	U
CCB2	781451	KQ2218174-04	10/15/22 23:53	0.10	0.04	ND	U

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:14
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-HT-MMO-20220919	**Basis:**	NA
Lab Code:	K2211339-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**468**	ug/L	4.0	0.5	1	10/04/22 15:13	10/03/22	
Arsenic	200.8	**0.20 J**	ug/L	0.50	0.09	1	10/04/22 15:13	10/03/22	
Cobalt	200.8	**119**	ug/L	0.020	0.009	1	10/04/22 15:13	10/03/22	
Iron	200.8	**6150**	ug/L	2.0	0.3	1	10/04/22 15:13	10/03/22	
Magnesium	200.8	**67300**	ug/L	10	2	1	10/04/22 15:13	10/03/22	
Manganese	200.8	**65100**	ug/L	20	2	50	10/04/22 16:13	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:15
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-FB-20220919	**Basis:**	NA
Lab Code:	K2211339-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.82**	ug/L	0.50	0.09	1	10/04/22 15:14	10/03/22	
Cobalt	200.8	**252**	ug/L	0.020	0.009	1	10/04/22 15:14	10/03/22	
Iron	200.8	**157000**	ug/L	100	20	50	10/04/22 16:14	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:16
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-HT-MMO-20220919	**Basis:**	NA
Lab Code:	K2211339-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**12.9**	ug/L	4.0	0.5	1	10/04/22 15:16	10/03/22	
Arsenic	200.8	**0.33 J**	ug/L	0.50	0.09	1	10/04/22 15:16	10/03/22	
Iron	200.8	**53.0**	ug/L	2.0	0.3	1	10/04/22 15:16	10/03/22	
Lithium	200.8	**57.5**	ug/L	0.20	0.20	1	10/04/22 15:16	10/03/22	
Magnesium	200.8	**27400**	ug/L	10	2	1	10/04/22 15:16	10/03/22	
Manganese	200.8	**37.3**	ug/L	0.40	0.04	1	10/04/22 15:16	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:17
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-FB-20220919	**Basis:**	NA
Lab Code:	K2211339-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.89**	ug/L	0.50	0.09	1	10/04/22 15:17	10/03/22	
Iron	200.8	**1130**	ug/L	2.0	0.3	1	10/04/22 15:17	10/03/22	
Lithium	200.8	**75.5**	ug/L	0.20	0.20	1	10/04/22 15:17	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:18
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-HT-MMO-20220919	**Basis:**	NA
Lab Code:	K2211339-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**29.6**	ug/L	4.0	0.5	1	10/04/22 15:19	10/03/22	
Arsenic	200.8	**0.11 J**	ug/L	0.50	0.09	1	10/04/22 15:19	10/03/22	
Iron	200.8	**14.2**	ug/L	2.0	0.3	1	10/04/22 15:19	10/03/22	
Lithium	200.8	**205**	ug/L	0.20	0.20	1	10/04/22 15:19	10/03/22	
Magnesium	200.8	**36600**	ug/L	10	2	1	10/04/22 15:19	10/03/22	
Manganese	200.8	**5.53**	ug/L	0.40	0.04	1	10/04/22 15:19	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:19
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-FB-20220919	**Basis:**	NA
Lab Code:	K2211339-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.15**	**J**	ug/L	0.50	0.09	1	10/04/22 15:21	10/03/22	
Iron	200.8	**693**		ug/L	2.0	0.3	1	10/04/22 15:21	10/03/22	
Lithium	200.8	**233**		ug/L	0.20	0.20	1	10/04/22 15:21	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:20
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-HT-MMO-20220919	**Basis:**	NA
Lab Code:	K2211339-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.7**	ug/L	4.0	0.5	1	10/04/22 15:22	10/03/22	
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	10/04/22 15:22	10/03/22	
Cobalt	200.8	**3.41**	ug/L	0.020	0.009	1	10/04/22 15:22	10/03/22	
Iron	200.8	**6.6**	ug/L	2.0	0.3	1	10/04/22 15:22	10/03/22	
Lithium	200.8	**443**	ug/L	0.20	0.20	1	10/04/22 15:22	10/03/22	
Magnesium	200.8	**42800**	ug/L	10	2	1	10/04/22 15:22	10/03/22	
Manganese	200.8	**2350**	ug/L	0.40	0.04	1	10/04/22 15:22	10/03/22	

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2211339
Date Collected: 09/19/22 09:21
Date Received: 09/27/22 12:10

Sample Name: MW-14-FB-20220919
Lab Code: K2211339-008

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21** J	ug/L	0.50	0.09	1	10/04/22 15:44	10/03/22	
Cobalt	200.8	**14.6**	ug/L	0.020	0.009	1	10/04/22 15:44	10/03/22	
Iron	200.8	**6460**	ug/L	2.0	0.3	1	10/04/22 15:44	10/03/22	
Lithium	200.8	**529**	ug/L	0.20	0.20	1	10/04/22 15:44	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:22
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-HT-MMO-20220919	**Basis:**	NA
Lab Code:	K2211339-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**9.0**	ug/L	4.0	0.5	1	10/04/22 15:45	10/03/22	
Arsenic	200.8	**0.16 J**	ug/L	0.50	0.09	1	10/04/22 15:45	10/03/22	
Iron	200.8	**3.9**	ug/L	2.0	0.3	1	10/04/22 15:45	10/03/22	
Lithium	200.8	**511**	ug/L	0.20	0.20	1	10/04/22 15:45	10/03/22	
Magnesium	200.8	**36500**	ug/L	10	2	1	10/04/22 15:45	10/03/22	
Manganese	200.8	**4.38**	ug/L	0.40	0.04	1	10/04/22 15:45	10/03/22	

Analytical Report

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2211339
Date Collected: 09/19/22 09:23
Date Received: 09/27/22 12:10

Sample Name: MW-17-FB-20220919
Lab Code: K2211339-010

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.74**	ug/L	0.50	0.09	1	10/04/22 15:47	10/03/22	
Iron	200.8	**571**	ug/L	2.0	0.3	1	10/04/22 15:47	10/03/22	
Lithium	200.8	**563**	ug/L	0.20	0.20	1	10/04/22 15:47	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:24
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-HT-MMO-20220919	**Basis:**	NA
Lab Code:	K2211339-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**23.2**		ug/L	4.0	0.5	1	10/05/22 10:51	10/04/22	
Cobalt	200.8	**0.300**		ug/L	0.020	0.009	1	10/05/22 10:51	10/04/22	
Iron	200.8	**1.7**	**J**	ug/L	2.0	0.3	1	10/05/22 10:51	10/04/22	
Magnesium	200.8	**32000**		ug/L	10	2	1	10/05/22 10:51	10/04/22	
Manganese	200.8	**350**		ug/L	0.40	0.04	1	10/05/22 10:51	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/19/22 09:25
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-FB-20220919	**Basis:**	NA
Lab Code:	K2211339-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**46.5**	ug/L	0.020	0.009	1	10/05/22 10:53	10/04/22	
Iron	200.8	**6980**	ug/L	2.0	0.3	1	10/05/22 10:53	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216955-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.2**	**J**	ug/L	4.0	0.5	1	10/04/22 15:08	10/03/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/04/22 15:08	10/03/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/04/22 15:08	10/03/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/04/22 15:08	10/03/22	
Lithium	200.8	ND	U	ug/L	0.20	0.20	1	10/04/22 15:08	10/03/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/04/22 15:08	10/03/22	
Manganese	200.8	**0.12**	**J**	ug/L	0.40	0.04	1	10/04/22 15:08	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216959-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.4**	**J**	ug/L	4.0	0.5	1	10/05/22 10:46	10/04/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/05/22 10:46	10/04/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/05/22 10:46	10/04/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/05/22 10:46	10/04/22	
Manganese	200.8	**0.05**	**J**	ug/L	0.40	0.04	1	10/05/22 10:46	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/05/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2216959-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	99.2	100	99	85-115
Cobalt	200.8	24.2	25.0	97	85-115
Iron	200.8	46.9	50.0	94	85-115
Magnesium	200.8	245	250	98	85-115
Manganese	200.8	25.0	25.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/04/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216955-02			Duplicate Lab Control Sample KQ2216955-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	96.7	100	97	97.8	100	98	85-115	1	20
Arsenic	200.8	48.6	50.0	97	49.4	50.0	99	85-115	2	20
Cobalt	200.8	25.1	25.0	100	25.2	25.0	101	85-115	<1	20
Iron	200.8	50.1	50.0	100	51.3	50.0	103	85-115	2	20
Lithium	200.8	49.9	50.0	100	50.6	50.0	101	85-115	1	20
Magnesium	200.8	249	250	100	246	250	99	85-115	1	20
Manganese	200.8	24.4	25.0	98	25.5	25.0	102	85-115	4	20

Prep Summary Report

Client: Anchor QEA, LLC
Service Request: K2211339
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0
Extraction Lot: 407453
Analytical Method: 200.8
Extraction Date: 10/03/22 10:28

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-HT-MMO-20220919	K2211339-001	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-1-FB-20220919	K2211339-002	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-5-HT-MMO-20220919	K2211339-003	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-5-FB-20220919	K2211339-004	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220919	K2211339-005	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-10-FB-20220919	K2211339-006	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220919	K2211339-007	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-14-FB-20220919	K2211339-008	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220919	K2211339-009	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-17-FB-20220919	K2211339-010	9/19/22	9/27/22	10.0000 mL	10 mL	
Method Blank	KQ2216955-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216955-02LCS	NA	NA	10.0000 mL	10.4 mL	
Duplicate Lab Control Sample	KQ2216955-03DLCS	NA	NA	10.0000 mL	10.4 mL	

Printed 10/5/2022 4:31:26 PM

Superset Reference:

Prep Summary Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211339
Project:	Greene County Treatability/221114-01.05 Task 05		
Sample Matrix:	Water		

Metals

Prep Method:	EPA CLP ILM04.0	**Extraction Lot:**	407460
Analytical Method:	200.8	**Extraction Date:**	10/04/22 09:15

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-44H-HT-MMO-20220919	K2211339-011	9/19/22	9/27/22	10.0000 mL	10 mL	
MW-44H-FB-20220919	K2211339-012	9/19/22	9/27/22	10.0000 mL	10 mL	
Method Blank	KQ2216959-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2216959-02LCS	NA	NA	10.0000 mL	10.3 mL	

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 10/04/22 14:58						
Aluminum	200.8	780031	90.8	100	91	90-110
Arsenic	200.8	780031	24.3	25.0	97	90-110
Cobalt	200.8	780031	24.4	25.0	98	90-110
Iron	200.8	780031	48.0	50.0	96	90-110
Magnesium	200.8	780031	233	250	93	90-110
Manganese	200.8	780031	24.2	25.0	97	90-110
Lithium	200.8	780031	24.8	25.0	99	90-110
CCV 10/04/22 15:00						
Aluminum	200.8	780031	245	250	98	90-110
Arsenic	200.8	780031	24.9	25.0	100	90-110
Cobalt	200.8	780031	25.1	25.0	101	90-110
Iron	200.8	780031	255	250	102	90-110
Magnesium	200.8	780031	2020	2000	101	90-110
Manganese	200.8	780031	23.9	25.0	96	90-110
Lithium	200.8	780031	24.6	25.0	98	90-110
CCV 10/04/22 15:34						
Aluminum	200.8	780031	247	250	99	90-110
Arsenic	200.8	780031	25.6	25.0	102	90-110
Cobalt	200.8	780031	25.8	25.0	103	90-110
Iron	200.8	780031	258	250	103	90-110
Magnesium	200.8	780031	2040	2000	102	90-110
Manganese	200.8	780031	25.7	25.0	103	90-110
Lithium	200.8	780031	24.4	25.0	98	90-110
CCV 10/04/22 15:59						
Aluminum	200.8	780031	246	250	99	90-110
Arsenic	200.8	780031	25.0	25.0	100	90-110
Cobalt	200.8	780031	24.7	25.0	99	90-110
Iron	200.8	780031	256	250	102	90-110
Magnesium	200.8	780031	1920	2000	96	90-110
Manganese	200.8	780031	27.0	25.0	108	90-110
Lithium	200.8	780031	24.2	25.0	97	90-110
CCV 10/04/22 16:24						
Aluminum	200.8	780031	242	250	97	90-110
Arsenic	200.8	780031	25.3	25.0	101	90-110
Cobalt	200.8	780031	25.6	25.0	102	90-110
Iron	200.8	780031	255	250	102	90-110

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 10/04/22 16:24						
Magnesium	200.8	780031	1970	2000	98	90-110
Manganese	200.8	780031	25.3	25.0	101	90-110
Lithium	200.8	780031	24.6	25.0	99	90-110
CCV 10/04/22 16:51						
Aluminum	200.8	780031	244	250	97	90-110
Arsenic	200.8	780031	24.8	25.0	99	90-110
Cobalt	200.8	780031	25.5	25.0	102	90-110
Iron	200.8	780031	255	250	102	90-110
Magnesium	200.8	780031	1980	2000	99	90-110
Manganese	200.8	780031	26.9	25.0	108	90-110
Lithium	200.8	780031	24.0	25.0	96	90-110
CCV 10/04/22 17:22						
Aluminum	200.8	780031	241	250	97	90-110
Arsenic	200.8	780031	24.9	25.0	100	90-110
Cobalt	200.8	780031	25.3	25.0	101	90-110
Iron	200.8	780031	255	250	102	90-110
Magnesium	200.8	780031	2030	2000	101	90-110
Manganese	200.8	780031	26.4	25.0	106	90-110
Lithium	200.8	780031	23.8	25.0	95	90-110
CCV 10/04/22 17:57						
Aluminum	200.8	780031	240	250	96	90-110
Arsenic	200.8	780031	26.0	25.0	104	90-110
Cobalt	200.8	780031	25.7	25.0	103	90-110
Iron	200.8	780031	257	250	103	90-110
Magnesium	200.8	780031	2010	2000	100	90-110
Manganese	200.8	780031	27.1	25.0	108	90-110
Lithium	200.8	780031	24.2	25.0	97	90-110
ICV 10/05/22 10:32						
Aluminum	200.8	780110	93.7	100	94	90-110
Cobalt	200.8	780110	24.2	25.0	97	90-110
Iron	200.8	780110	46.6	50.0	93	90-110
Magnesium	200.8	780110	241	250	96	90-110
Manganese	200.8	780110	24.3	25.0	97	90-110
CCV 10/05/22 10:34						
Aluminum	200.8	780110	249	250	99	90-110
Cobalt	200.8	780110	25.1	25.0	101	90-110

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 10/05/22 10:34						
Iron	200.8	780110	247	250	99	90-110
Magnesium	200.8	780110	2010	2000	100	90-110
Manganese	200.8	780110	25.8	25.0	103	90-110
CCV 10/05/22 11:05						
Aluminum	200.8	780110	250	250	100	90-110
Cobalt	200.8	780110	25.0	25.0	100	90-110
Iron	200.8	780110	247	250	99	90-110
Magnesium	200.8	780110	1920	2000	96	90-110
Manganese	200.8	780110	26.5	25.0	106	90-110
CCV 10/05/22 11:36						
Aluminum	200.8	780110	251	250	100	90-110
Cobalt	200.8	780110	24.9	25.0	100	90-110
Iron	200.8	780110	246	250	99	90-110
Magnesium	200.8	780110	1970	2000	99	90-110
Manganese	200.8	780110	25.7	25.0	103	90-110
CCV 10/05/22 11:47						
Aluminum	200.8	780110	251	250	100	90-110
Cobalt	200.8	780110	24.5	25.0	98	90-110
Iron	200.8	780110	241	250	96	90-110
Magnesium	200.8	780110	1960	2000	98	90-110
Manganese	200.8	780110	24.6	25.0	98	90-110

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
ICB 10/04/22 15:02				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	J
Iron	200.8	780031	0.3	U
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	-0.0524	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 15:03				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.3	U
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	-0.0863	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 15:42				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.3	U
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	0.11	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 16:11				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.7	J
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	0.22	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 16:30				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.3	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 10/04/22 16:30				
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	0.15	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 17:02				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.8	J
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	0.16	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 17:41				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.3	U
Magnesium	200.8	780031	2	U
Manganese	200.8	780031	0.05	J
Lithium	200.8	780031	0.20	U
CCB 10/04/22 18:03				
Aluminum	200.8	780031	0.5	U
Arsenic	200.8	780031	0.09	U
Cobalt	200.8	780031	0.009	U
Iron	200.8	780031	0.3	U
Magnesium	200.8	780031	3	J
Manganese	200.8	780031	0.17	J
Lithium	200.8	780031	0.20	U
ICB 10/05/22 10:36				
Aluminum	200.8	780110	0.5	U
Cobalt	200.8	780110	0.011	J
Iron	200.8	780110	0.3	U
Magnesium	200.8	780110	2	U
Manganese	200.8	780110	0.04	U
CCB 10/05/22 10:38				
Aluminum	200.8	780110	0.5	U
Cobalt	200.8	780110	0.009	U

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	C
CCB 10/05/22 10:38				
Iron	200.8	780110	0.3	U
Magnesium	200.8	780110	2	U
Manganese	200.8	780110	0.04	U
CCB 10/05/22 11:12				
Aluminum	200.8	780110	0.5	U
Cobalt	200.8	780110	0.009	U
Iron	200.8	780110	0.3	U
Magnesium	200.8	780110	2	U
Manganese	200.8	780110	0.26	J
CCB 10/05/22 11:38				
Aluminum	200.8	780110	0.5	U
Cobalt	200.8	780110	0.012	J
Iron	200.8	780110	0.3	U
Magnesium	200.8	780110	4	J
Manganese	200.8	780110	0.08	J
CCB 10/05/22 11:49				
Aluminum	200.8	780110	0.5	U
Cobalt	200.8	780110	0.012	J
Iron	200.8	780110	0.3	U
Magnesium	200.8	780110	3	J
Manganese	200.8	780110	0.13	J

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Aluminum	200.8	780031	3.7	4.0	92	50-199	10/04/22 15:06
Arsenic	200.8	780031	0.45	0.5	90	50-199	10/04/22 15:06
Cobalt	200.8	780031	0.022	0.02	109	50-199	10/04/22 15:06
Iron	200.8	780031	2.1	2.0	103	50-199	10/04/22 15:06
Magnesium	200.8	780031	8.7	10.0	87	50-199	10/04/22 15:06
Manganese	200.8	780031	0.14	0.2	69	50-199	10/04/22 15:06
Lithium	200.8	780031	0.086	0.1	86	50-199	10/04/22 15:06
LLICV							
Aluminum	200.8	780110	3.8	4.0	96	50-199	10/05/22 10:42
Cobalt	200.8	780110	0.020	0.02	100	50-199	10/05/22 10:42
Iron	200.8	780110	2.0	2.0	101	50-199	10/05/22 10:42
Magnesium	200.8	780110	9.0	10.0	90	50-199	10/05/22 10:42
Manganese	200.8	780110	0.12	0.2	61	50-199	10/05/22 10:42

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-06 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.2	0.2	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.4	0.04	200.8

Client: Anchor QEA, LLC
Service Request: K2211339
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-06

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	4500	200.8
Cobalt 59	9000	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	9000	200.8

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780031**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn
ZZZZZZ	1	10/04/22 14:55							
ZZZZZZ	1	10/04/22 14:57							
ICV	1	10/04/22 14:58	X	X	X	X	X	X	X
CCV	1	10/04/22 15:00	X	X	X	X	X	X	X
ICB	1	10/04/22 15:02	X	X	X	X	X	X	X
CCB	1	10/04/22 15:03	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 15:05							
LLICVW	1	10/04/22 15:06	X	X	X	X	X	X	X
KQ2216955-01MB	1	10/04/22 15:08	X	X	X	X	X	X	X
KQ2216955-02LCS	1	10/04/22 15:10	X	X	X	X	X	X	X
KQ2216955-03DLCS	1	10/04/22 15:11	X	X	X	X	X	X	X
K2211339-001	1	10/04/22 15:13	X	X	X	X		X	
K2211339-002	1	10/04/22 15:14		X	X				
K2211339-003	1	10/04/22 15:16	X	X		X	X	X	X
K2211339-004	1	10/04/22 15:17		X		X	X		
K2211339-005	1	10/04/22 15:19	X	X		X	X	X	X
K2211339-006	1	10/04/22 15:21		X		X	X		
K2211339-007	1	10/04/22 15:22	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 15:24							
CCV	1	10/04/22 15:34	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 15:36							
CCB	1	10/04/22 15:42	X	X	X	X	X	X	X
K2211339-008	1	10/04/22 15:44		X	X	X	X		
K2211339-009	1	10/04/22 15:45	X	X		X	X	X	X
K2211339-010	1	10/04/22 15:47		X		X	X		
ZZZZZZ	1	10/04/22 15:48							
ZZZZZZ	1	10/04/22 15:50							
ZZZZZZ	1	10/04/22 15:52							
ZZZZZZ	1	10/04/22 15:53							
ZZZZZZ	1	10/04/22 15:55							
ZZZZZZ	1	10/04/22 15:56							
ZZZZZZ	1	10/04/22 15:58							
CCV	1	10/04/22 15:59	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 16:01							
CCB	1	10/04/22 16:11	X	X	X	X	X	X	X
K2211339-001	50	10/04/22 16:13							X
K2211339-002	50	10/04/22 16:14				X			

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780031**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn
ZZZZZZ	50	10/04/22 16:16							
ZZZZZZ	50	10/04/22 16:17							
ZZZZZZ	1	10/04/22 16:19							
ZZZZZZ	1	10/04/22 16:21							
ZZZZZZ	1	10/04/22 16:22							
CCV	1	10/04/22 16:24	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 16:25							
CCB	1	10/04/22 16:30	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 16:34							
ZZZZZZ	1	10/04/22 16:36							
ZZZZZZ	1	10/04/22 16:37							
ZZZZZZ	1	10/04/22 16:39							
ZZZZZZ	1	10/04/22 16:40							
ZZZZZZ	1	10/04/22 16:42							
ZZZZZZ	1	10/04/22 16:44							
ZZZZZZ	1	10/04/22 16:46							
ZZZZZZ	1	10/04/22 16:48							
ZZZZZZ	1	10/04/22 16:49							
CCV	1	10/04/22 16:51	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 16:53							
CCB	1	10/04/22 17:02	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 17:03							
ZZZZZZ	1	10/04/22 17:05							
ZZZZZZ	1	10/04/22 17:07							
ZZZZZZ	1	10/04/22 17:09							
ZZZZZZ	1	10/04/22 17:11							
ZZZZZZ	1	10/04/22 17:13							
ZZZZZZ	1	10/04/22 17:14							
ZZZZZZ	1	10/04/22 17:16							
ZZZZZZ	1	10/04/22 17:18							
ZZZZZZ	1	10/04/22 17:20							
CCV	1	10/04/22 17:22	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 17:24							
CCB	1	10/04/22 17:41	X	X	X	X	X	X	X
ZZZZZZ	50	10/04/22 17:42							
ZZZZZZ	50	10/04/22 17:44							
ZZZZZZ	50	10/04/22 17:46							

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780031**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn
ZZZZZZ	50	10/04/22 17:48							
ZZZZZZ	1	10/04/22 17:50							
ZZZZZZ	1	10/04/22 17:52							
ZZZZZZ	1	10/04/22 17:54							
ZZZZZZ	1	10/04/22 17:55							
CCV	1	10/04/22 17:57	X	X	X	X	X	X	X
ZZZZZZ	1	10/04/22 17:59							
CCB	1	10/04/22 18:03	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780110**

Sample	Dilution Factor	Date/Time	Al	Co	Fe	Mg	Mn
ZZZZZZ	1	10/05/22 10:28					
ZZZZZZ	1	10/05/22 10:30					
ICV	1	10/05/22 10:32	X	X	X	X	X
CCV	1	10/05/22 10:34	X	X	X	X	X
ICB	1	10/05/22 10:36	X	X	X	X	X
CCB	1	10/05/22 10:38	X	X	X	X	X
ZZZZZZ	1	10/05/22 10:40					
LLICVW	1	10/05/22 10:42	X	X	X	X	X
ZZZZZZ	1	10/05/22 10:44					
KQ2216959-01MB	1	10/05/22 10:46	X	X	X	X	X
ZZZZZZ	1	10/05/22 10:48					
KQ2216959-02LCS	1	10/05/22 10:49	X	X	X	X	X
K2211339-011	1	10/05/22 10:51	X	X	X	X	X
K2211339-012	1	10/05/22 10:53		X	X		
ZZZZZZ	1	10/05/22 10:55					
ZZZZZZ	1	10/05/22 10:57					
ZZZZZZ	1	10/05/22 10:59					
ZZZZZZ	1	10/05/22 11:01					
ZZZZZZ	1	10/05/22 11:03					
CCV	1	10/05/22 11:05	X	X	X	X	X
ZZZZZZ	1	10/05/22 11:07					
CCB	1	10/05/22 11:12	X	X	X	X	X
ZZZZZZ	1	10/05/22 11:17					
ZZZZZZ	1	10/05/22 11:19					
ZZZZZZ	1	10/05/22 11:20					
ZZZZZZ	1	10/05/22 11:22					
ZZZZZZ	1	10/05/22 11:24					
ZZZZZZ	1	10/05/22 11:26					
ZZZZZZ	1	10/05/22 11:28					
ZZZZZZ	1	10/05/22 11:30					
ZZZZZZ	1	10/05/22 11:32					
ZZZZZZ	1	10/05/22 11:34					
CCV	1	10/05/22 11:36	X	X	X	X	X
CCB	1	10/05/22 11:38	X	X	X	X	X
ZZZZZZ	1	10/05/22 11:39					
ZZZZZZ	1	10/05/22 11:41					
ZZZZZZ	1	10/05/22 11:43					

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780110**

Sample	Dilution Factor	Date/Time	Al	Co	Fe	Mg	Mn
ZZZZZZ	1	10/05/22 11:45					
CCV	1	10/05/22 11:47	X	X	X	X	X
CCB	1	10/05/22 11:49	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780031**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	10/04/22 14:55			
ZZZZZZ	10/04/22 14:57			
ICV	10/04/22 14:58	102	99	99
CCV	10/04/22 15:00	101	97	99
ICB	10/04/22 15:02	99	100	100
CCB	10/04/22 15:03	99	98	99
ZZZZZZ	10/04/22 15:05			
LLICVW	10/04/22 15:06	99	98	98
KQ2216955-01MB	10/04/22 15:08	99	97	98
KQ2216955-02LCS	10/04/22 15:10	98	98	97
KQ2216955-03DLCS	10/04/22 15:11	98	96	97
K2211339-001	10/04/22 15:13	84	84	83
K2211339-002	10/04/22 15:14	85	81	81
K2211339-003	10/04/22 15:16	89	87	90
K2211339-004	10/04/22 15:17	96	91	93
K2211339-005	10/04/22 15:19	97	95	98
K2211339-006	10/04/22 15:21	96	94	94
K2211339-007	10/04/22 15:22	97	95	95
ZZZZZZ	10/04/22 15:24			
CCV	10/04/22 15:34	100	94	96
ZZZZZZ	10/04/22 15:36			
CCB	10/04/22 15:42	99	96	99
K2211339-008	10/04/22 15:44	93	88	89
K2211339-009	10/04/22 15:45	99	96	96
K2211339-010	10/04/22 15:47	101	96	96
ZZZZZZ	10/04/22 15:48			
ZZZZZZ	10/04/22 15:50			
ZZZZZZ	10/04/22 15:52			
ZZZZZZ	10/04/22 15:53			
ZZZZZZ	10/04/22 15:55			
ZZZZZZ	10/04/22 15:56			
ZZZZZZ	10/04/22 15:58			
CCV	10/04/22 15:59	108	107	108
ZZZZZZ	10/04/22 16:01			
CCB	10/04/22 16:11	105	102	103
K2211339-001	10/04/22 16:13	99	96	101
K2211339-002	10/04/22 16:14	99	97	100

Client: Anchor QEA, LLC **Service Request:** K2211339

Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780031**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	10/04/22 16:16			
ZZZZZZ	10/04/22 16:17			
ZZZZZZ	10/04/22 16:19			
ZZZZZZ	10/04/22 16:21			
ZZZZZZ	10/04/22 16:22			
CCV	10/04/22 16:24	108	105	105
ZZZZZZ	10/04/22 16:25			
CCB	10/04/22 16:30	105	102	103
ZZZZZZ	10/04/22 16:34			
ZZZZZZ	10/04/22 16:36			
ZZZZZZ	10/04/22 16:37			
ZZZZZZ	10/04/22 16:39			
ZZZZZZ	10/04/22 16:40			
ZZZZZZ	10/04/22 16:42			
ZZZZZZ	10/04/22 16:44			
ZZZZZZ	10/04/22 16:46			
ZZZZZZ	10/04/22 16:48			
ZZZZZZ	10/04/22 16:49			
CCV	10/04/22 16:51	103	100	101
ZZZZZZ	10/04/22 16:53			
CCB	10/04/22 17:02	99	95	99
ZZZZZZ	10/04/22 17:03			
ZZZZZZ	10/04/22 17:05			
ZZZZZZ	10/04/22 17:07			
ZZZZZZ	10/04/22 17:09			
ZZZZZZ	10/04/22 17:11			
ZZZZZZ	10/04/22 17:13			
ZZZZZZ	10/04/22 17:14			
ZZZZZZ	10/04/22 17:16			
ZZZZZZ	10/04/22 17:18			
ZZZZZZ	10/04/22 17:20			
CCV	10/04/22 17:22	107	101	106
ZZZZZZ	10/04/22 17:24			
CCB	10/04/22 17:41	102	97	100
ZZZZZZ	10/04/22 17:42			
ZZZZZZ	10/04/22 17:44			
ZZZZZZ	10/04/22 17:46			

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780031**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He
ZZZZZZ	10/04/22 17:48			
ZZZZZZ	10/04/22 17:50			
ZZZZZZ	10/04/22 17:52			
ZZZZZZ	10/04/22 17:54			
ZZZZZZ	10/04/22 17:55			
CCV	10/04/22 17:57	103	97	97
ZZZZZZ	10/04/22 17:59			
CCB	10/04/22 18:03	99	97	99

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780110**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He	In115He	Lu175He
ZZZZZZ	10/05/22 10:28					
ZZZZZZ	10/05/22 10:30					
ICV	10/05/22 10:32	101	99	103	99	98
CCV	10/05/22 10:34	100	100	101	100	99
ICB	10/05/22 10:36	101	99	103	100	99
CCB	10/05/22 10:38	99	99	100	99	99
ZZZZZZ	10/05/22 10:40					
LLICVW	10/05/22 10:42	99	99	100	99	99
ZZZZZZ	10/05/22 10:44					
KQ2216959-01MB	10/05/22 10:46	99	100	98	98	98
ZZZZZZ	10/05/22 10:48					
KQ2216959-02LCS	10/05/22 10:49	97	98	102	99	98
K2211339-011	10/05/22 10:51	96	97	98	93	98
K2211339-012	10/05/22 10:53	91	91	92	91	95
ZZZZZZ	10/05/22 10:55					
ZZZZZZ	10/05/22 10:57					
ZZZZZZ	10/05/22 10:59					
ZZZZZZ	10/05/22 11:01					
ZZZZZZ	10/05/22 11:03					
CCV	10/05/22 11:05	105	105	104	102	101
ZZZZZZ	10/05/22 11:07					
CCB	10/05/22 11:12	101	97	102	98	99
ZZZZZZ	10/05/22 11:17					
ZZZZZZ	10/05/22 11:19					
ZZZZZZ	10/05/22 11:20					
ZZZZZZ	10/05/22 11:22					
ZZZZZZ	10/05/22 11:24					
ZZZZZZ	10/05/22 11:26					
ZZZZZZ	10/05/22 11:28					
ZZZZZZ	10/05/22 11:30					
ZZZZZZ	10/05/22 11:32					
ZZZZZZ	10/05/22 11:34					
CCV	10/05/22 11:36	100	101	101	100	99
CCB	10/05/22 11:38	100	100	102	100	98
ZZZZZZ	10/05/22 11:39					
ZZZZZZ	10/05/22 11:41					
ZZZZZZ	10/05/22 11:43					

Client: Anchor QEA, LLC **Service Request:** K2211339
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-06** **Analytical BatchID:** **780110**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He	In115He	Lu175He
ZZZZZZ	10/05/22 11:45					
CCV	10/05/22 11:47	96	99	102	98	98
CCB	10/05/22 11:49	98	98	99	99	98

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 28, 2022

Analytical Report for Service Request No: K2211341

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 27, 2022
For your reference, these analyses have been assigned our service request number **K2211341.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability	**Date Received:**	09/27/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 09/27/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/28/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

1C22 11341

Laboratory Number: 503-972-5019	
Date:	9/21/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite
125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Sulfate (method 300.0/9056A)							Comments/Preservation
1	MW-1-HT-MMO-20220921	9/21/2022	13:56	Water	1	X		X	X	X	X	X								HNO3-preserved bottle only
2	MW-1-FB-20220921	9/21/2022	13:57	Water	2	X		X	X				X							One unpreserved bottle for sulfate test.
3	MW-5-HT-MMO-20220921	9/21/2022	13:58	Water	1	X	X		X	X	X	X								HNO3-preserved bottle only
4	MW-5-FB-20220921	9/21/2022	13:59	Water	2	X	X		X				X							One unpreserved bottle for sulfate test.
5	MW-10-HT-MMO-20220921	9/21/2022	14:00	Water	1	X	X		X	X	X	X								HNO3-preserved bottle only
6	MW-10-FB-20220921	9/21/2022	14:01	Water	2	X	X		X				X							One unpreserved bottle for sulfate test.
7	MW-14-HT-MMO-20220921	9/21/2022	14:02	Water	1	X	X	X	X	X	X	X								HNO3-preserved bottle only
8	MW-14-FB-20220921	9/21/2022	14:03	Water	2	X	X	X	X				X							One unpreserved bottle for sulfate test.
9	MW-17-HT-MMO-20220921	9/21/2022	14:04	Water	1	X	X		X	X	X	X								HNO3-preserved bottle only
10	MW-17-FB-20220921	9/21/2022	14:05	Water	2	X	X		X				X							One unpreserved bottle for sulfate test.
11	MW-44H-HT-MMO-20220921	9/21/2022	14:06	Water	1			X	X	X	X	X								HNO3-preserved bottle only
12	MW-44H-FB-20220921	9/21/2022	14:07	Water	2			X	X				X							One unpreserved bottle for sulfate test.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	9/27/22 08:30

Received by: ALS 9/27/22 1020
Signature/Print Name:

Relinquished by:	Company:
ALS	9/27/22 1210
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11341

Received: 9/27/22 Opened: 9/27/22 By: PDP Unloaded: 9/27/22 By: PDP

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
7.7	3.9	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA [✓ Y] N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves*
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank was on top of samples which were surrounded by ice

1/13/22 *Page* *of*

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22
Sample Matrix:	Water	**Date Received:**	09/27/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MW-1-FB-20220921	K2211341-002	**712**	10	4	100	10/19/22 21:34	
MW-5-FB-20220921	K2211341-004	**170**	5.0	2.0	50	10/18/22 15:19	
MW-10-FB-20220921	K2211341-006	**125**	5.0	2.0	50	10/18/22 15:28	
MW-14-FB-20220921	K2211341-008	**164**	5.0	2.0	50	10/18/22 15:36	
MW-17-FB-20220921	K2211341-010	**46.2**	5.0	2.0	50	10/18/22 15:45	
MW-44H-FB-20220921	K2211341-012	**370**	5.0	2.0	50	10/18/22 16:11	
Method Blank	K2211341-MB1	ND U	0.10	0.04	1	10/18/22 14:27	
Method Blank	K2211341-MB2	ND U	0.10	0.04	1	10/18/22 18:10	
Method Blank	K2211341-MB3	ND U	0.10	0.04	1	10/19/22 19:06	
Method Blank	K2211341-MB4	ND U	0.10	0.04	1	10/19/22 22:52	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/18/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	781761

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211341-LCS1	4.97	5.00	99	90-110
Lab Control Sample	K2211341-LCS2	5.01	5.00	100	90-110

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	781965

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211341-LCS3	5.00	5.00	100	90-110
Lab Control Sample	K2211341-LCS4	5.01	5.00	100	90-110
Lab Control Sample	K2211341-LCS5	5.07	5.00	101	90-110

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 13:56
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-HT-MMO-20220921	**Basis:**	NA
Lab Code:	K2211341-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4970**	ug/L	4.0	0.5	1	10/04/22 15:48	10/03/22	
Arsenic	200.8	**0.69**	ug/L	0.50	0.09	1	10/04/22 15:48	10/03/22	
Cobalt	200.8	**247**	ug/L	0.020	0.009	1	10/04/22 15:48	10/03/22	
Iron	200.8	**67700**	ug/L	100	20	50	10/04/22 16:16	10/03/22	
Magnesium	200.8	**43100**	ug/L	10	2	1	10/04/22 15:48	10/03/22	
Manganese	200.8	**38300**	ug/L	20	2	50	10/04/22 16:16	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 13:57
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-FB-20220921	**Basis:**	NA
Lab Code:	K2211341-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.02**	ug/L	0.50	0.09	1	10/04/22 15:50	10/03/22	
Cobalt	200.8	**262**	ug/L	0.020	0.009	1	10/04/22 15:50	10/03/22	
Iron	200.8	**153000**	ug/L	100	20	50	10/04/22 16:17	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 13:58
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-HT-MMO-20220921	**Basis:**	NA
Lab Code:	K2211341-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**12.5**	ug/L	4.0	0.5	1	10/04/22 15:52	10/03/22	
Arsenic	200.8	**0.38 J**	ug/L	0.50	0.09	1	10/04/22 15:52	10/03/22	
Iron	200.8	**56.8**	ug/L	2.0	0.3	1	10/04/22 15:52	10/03/22	
Lithium	200.8	**56.5**	ug/L	0.20	0.20	1	10/04/22 15:52	10/03/22	
Magnesium	200.8	**24800**	ug/L	10	2	1	10/04/22 15:52	10/03/22	
Manganese	200.8	**51.7**	ug/L	0.40	0.04	1	10/04/22 15:52	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 13:59
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-FB-20220921	**Basis:**	NA
Lab Code:	K2211341-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.82**	ug/L	0.50	0.09	1	10/04/22 15:53	10/03/22	
Iron	200.8	**349**	ug/L	2.0	0.3	1	10/04/22 15:53	10/03/22	
Lithium	200.8	**75.5**	ug/L	0.20	0.20	1	10/04/22 15:53	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:00
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-HT-MMO-20220921	**Basis:**	NA
Lab Code:	K2211341-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**24.6**	ug/L	4.0	0.5	1	10/04/22 15:55	10/03/22	
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	10/04/22 15:55	10/03/22	
Iron	200.8	**13.9**	ug/L	2.0	0.3	1	10/04/22 15:55	10/03/22	
Lithium	200.8	**215**	ug/L	0.20	0.20	1	10/04/22 15:55	10/03/22	
Magnesium	200.8	**29700**	ug/L	10	2	1	10/04/22 15:55	10/03/22	
Manganese	200.8	**18.8**	ug/L	0.40	0.04	1	10/04/22 15:55	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:01
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-FB-20220921	**Basis:**	NA
Lab Code:	K2211341-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	10/04/22 15:56	10/03/22	
Iron	200.8	**272**	ug/L	2.0	0.3	1	10/04/22 15:56	10/03/22	
Lithium	200.8	**228**	ug/L	0.20	0.20	1	10/04/22 15:56	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:02
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-HT-MMO-20220921	**Basis:**	NA
Lab Code:	K2211341-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.4**		ug/L	4.0	0.5	1	10/04/22 15:58	10/03/22	
Arsenic	200.8	**0.09**	**J**	ug/L	0.50	0.09	1	10/04/22 15:58	10/03/22	
Cobalt	200.8	**1.73**		ug/L	0.020	0.009	1	10/04/22 15:58	10/03/22	
Iron	200.8	**6.6**		ug/L	2.0	0.3	1	10/04/22 15:58	10/03/22	
Lithium	200.8	**463**		ug/L	0.20	0.20	1	10/04/22 15:58	10/03/22	
Magnesium	200.8	**35900**		ug/L	10	2	1	10/04/22 15:58	10/03/22	
Manganese	200.8	**2420**		ug/L	0.40	0.04	1	10/04/22 15:58	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:03
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-FB-20220921	**Basis:**	NA
Lab Code:	K2211341-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.23 J**	ug/L	0.50	0.09	1	10/04/22 16:19	10/03/22	
Cobalt	200.8	**11.1**	ug/L	0.020	0.009	1	10/04/22 16:19	10/03/22	
Iron	200.8	**4250**	ug/L	2.0	0.3	1	10/04/22 16:19	10/03/22	
Lithium	200.8	**517**	ug/L	0.20	0.20	1	10/04/22 16:19	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:04
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-HT-MMO-20220921	**Basis:**	NA
Lab Code:	K2211341-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**7.1**		ug/L	4.0	0.5	1	10/04/22 16:21	10/03/22	
Arsenic	200.8	**0.13**	**J**	ug/L	0.50	0.09	1	10/04/22 16:21	10/03/22	
Iron	200.8	**3.2**		ug/L	2.0	0.3	1	10/04/22 16:21	10/03/22	
Lithium	200.8	**522**		ug/L	0.20	0.20	1	10/04/22 16:21	10/03/22	
Magnesium	200.8	**31600**		ug/L	10	2	1	10/04/22 16:21	10/03/22	
Manganese	200.8	**3.37**		ug/L	0.40	0.04	1	10/04/22 16:21	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:05
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-FB-20220921	**Basis:**	NA
Lab Code:	K2211341-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.74**	ug/L	0.50	0.09	1	10/04/22 16:22	10/03/22	
Iron	200.8	**62.8**	ug/L	2.0	0.3	1	10/04/22 16:22	10/03/22	
Lithium	200.8	**552**	ug/L	0.20	0.20	1	10/04/22 16:22	10/03/22	

Printed 10/5/2022 4:39:32 PM

Superset Reference:

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:06
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-HT-MMO-20220921	**Basis:**	NA
Lab Code:	K2211341-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**24.2**	ug/L	4.0	0.5	1	10/05/22 10:55	10/04/22	
Cobalt	200.8	**0.393**	ug/L	0.020	0.009	1	10/05/22 10:55	10/04/22	
Iron	200.8	**4.5**	ug/L	2.0	0.3	1	10/05/22 10:55	10/04/22	
Magnesium	200.8	**30200**	ug/L	10	2	1	10/05/22 10:55	10/04/22	
Manganese	200.8	**477**	ug/L	0.40	0.04	1	10/05/22 10:55	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/21/22 14:07
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-FB-20220921	**Basis:**	NA
Lab Code:	K2211341-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**42.5**	ug/L	0.020	0.009	1	10/05/22 10:57	10/04/22	
Iron	200.8	**5060**	ug/L	2.0	0.3	1	10/05/22 10:57	10/04/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216955-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.2**	**J**	ug/L	4.0	0.5	1	10/04/22 15:08	10/03/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/04/22 15:08	10/03/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/04/22 15:08	10/03/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/04/22 15:08	10/03/22	
Lithium	200.8	ND	U	ug/L	0.20	0.20	1	10/04/22 15:08	10/03/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/04/22 15:08	10/03/22	
Manganese	200.8	**0.12**	**J**	ug/L	0.40	0.04	1	10/04/22 15:08	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216959-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.4**	**J**	ug/L	4.0	0.5	1	10/05/22 10:46	10/04/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/05/22 10:46	10/04/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/05/22 10:46	10/04/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/05/22 10:46	10/04/22	
Manganese	200.8	**0.05**	**J**	ug/L	0.40	0.04	1	10/05/22 10:46	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/05/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2216959-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	99.2	100	99	85-115
Cobalt	200.8	24.2	25.0	97	85-115
Iron	200.8	46.9	50.0	94	85-115
Magnesium	200.8	245	250	98	85-115
Manganese	200.8	25.0	25.0	100	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211341
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/04/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216955-02			Duplicate Lab Control Sample KQ2216955-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	96.7	100	97	97.8	100	98	85-115	1	20
Arsenic	200.8	48.6	50.0	97	49.4	50.0	99	85-115	2	20
Cobalt	200.8	25.1	25.0	100	25.2	25.0	101	85-115	<1	20
Iron	200.8	50.1	50.0	100	51.3	50.0	103	85-115	2	20
Lithium	200.8	49.9	50.0	100	50.6	50.0	101	85-115	1	20
Magnesium	200.8	249	250	100	246	250	99	85-115	1	20
Manganese	200.8	24.4	25.0	98	25.5	25.0	102	85-115	4	20

Printed 10/5/2022 4:39:32 PM

Superset Reference:

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 28, 2022

Analytical Report for Service Request No: K2211342

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 27, 2022
For your reference, these analyses have been assigned our service request number **K2211342.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	**Web Site**	**Number**
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Caseday Service, LLC
Service Request: K2212227
Project:
Date Received: 10/19/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 10/19/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/28/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

K2211342

Laboratory Number: 503-972-5019	
Date:	9/23/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

		Collection				Parameters														
Line	Field Sample ID	Date	Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Sulfate (method 300.0/9056A)							Comments/Preservation
1	MW-1-HT-MMO-20220923	9/23/2022	10:43	Water	1	X		X	X	X	X	X								HNO3-preserved bottle only
2	MW-1-FB-20220923	9/23/2022	10:44	Water	2	X		X	X				X							One unpreserved bottle for sulfate test.
3	MW-5-HT-MMO-20220923	9/23/2022	10:45	Water	1	X	X		X	X	X	X								HNO3-preserved bottle only
4	MW-5-FB-20220923	9/23/2022	10:46	Water	2	X	X		X				X							One unpreserved bottle for sulfate test.
5	MW-10-HT-MMO-20220923	9/23/2022	10:47	Water	1	X	X		X	X	X	X								HNO3-preserved bottle only
6	MW-10-FB-20220923	9/23/2022	10:48	Water	2	X	X		X				X							One unpreserved bottle for sulfate test.
7	MW-14-HT-MMO-20220923	9/23/2022	10:49	Water	1	X	X	X	X	X	X	X								HNO3-preserved bottle only
8	MW-14-FB-20220923	9/23/2022	10:50	Water	2	X	X	X	X				X							One unpreserved bottle for sulfate test.
9	MW-17-HT-MMO-20220923	9/23/2022	10:51	Water	1	X	X		X	X	X	X								HNO3-preserved bottle only
10	MW-17-FB-20220923	9/23/2022	10:52	Water	2	X	X		X				X							One unpreserved bottle for sulfate test.
11	MW-44H-HT-MMO-20220923	9/23/2022	10:53	Water	1			X	X	X	X	X								HNO3-preserved bottle only
12	MW-44H-FB-20220923	9/23/2022	10:54	Water	2			X	X				X							One unpreserved bottle for sulfate test.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 9/27/22 08:30

Received by: ALS 9/27/22 1020
Signature/Print Name:

Relinquished by: ALS 9/27/22 1210
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mack

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11342

Received: 9/27/22 Opened: 9/27/22 By: PDP Unloaded: 9/27/22 By: PDP

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front
   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
7.7	3.9	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA [✓ Y] N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank was on top of samples which were surrounded by ice

1/13/22 *Page* *of*

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22
Sample Matrix:	Water	**Date Received:**	09/27/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result		MRL	MDL	Dil.	Date Analyzed	Q
MW-1-FB-20220923	K2211342-002	**702**		10	4	100	10/19/22 21:43	
MW-5-FB-20220923	K2211342-004	**169**		5.0	2.0	50	10/18/22 20:21	
MW-10-FB-20220923	K2211342-006	**127**		5.0	2.0	50	10/18/22 20:30	
MW-14-FB-20220923	K2211342-008	**166**		5.0	2.0	50	10/18/22 20:38	
MW-17-FB-20220923	K2211342-010	**50.8**		5.0	2.0	50	10/18/22 20:47	
MW-44H-FB-20220923	K2211342-012	**373**		5.0	2.0	50	10/18/22 20:56	
Method Blank	K2211342-MB1	ND	U	0.10	0.04	1	10/18/22 14:27	
Method Blank	K2211342-MB2	ND	U	0.10	0.04	1	10/18/22 18:10	
Method Blank	K2211342-MB3	ND	U	0.10	0.04	1	10/19/22 19:06	
Method Blank	K2211342-MB4	ND	U	0.10	0.04	1	10/19/22 22:52	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/18/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	781761

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211342-LCS1	4.97	5.00	99	90-110
Lab Control Sample	K2211342-LCS2	5.01	5.00	100	90-110

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	781965

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211342-LCS3	5.00	5.00	100	90-110
Lab Control Sample	K2211342-LCS4	5.01	5.00	100	90-110
Lab Control Sample	K2211342-LCS5	5.07	5.00	101	90-110

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:43
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-HT-MMO-20220923	**Basis:**	NA
Lab Code:	K2211342-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**6480**	ug/L	4.0	0.5	1	10/04/22 16:39	10/03/22	
Arsenic	200.8	**0.78**	ug/L	0.50	0.09	1	10/04/22 16:39	10/03/22	
Cobalt	200.8	**244**	ug/L	0.020	0.009	1	10/04/22 16:39	10/03/22	
Iron	200.8	**62500**	ug/L	100	20	50	10/04/22 17:42	10/03/22	
Magnesium	200.8	**43000**	ug/L	10	2	1	10/04/22 16:39	10/03/22	
Manganese	200.8	**36300**	ug/L	20	2	50	10/04/22 17:42	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:44
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-FB-20220923	**Basis:**	NA
Lab Code:	K2211342-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.35**	ug/L	0.50	0.09	1	10/04/22 16:40	10/03/22	
Cobalt	200.8	**255**	ug/L	0.020	0.009	1	10/04/22 16:40	10/03/22	
Iron	200.8	**148000**	ug/L	100	20	50	10/04/22 17:44	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:45
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-HT-MMO-20220923	**Basis:**	NA
Lab Code:	K2211342-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**17.1**	ug/L	4.0	0.5	1	10/04/22 16:42	10/03/22	
Arsenic	200.8	**0.39 J**	ug/L	0.50	0.09	1	10/04/22 16:42	10/03/22	
Iron	200.8	**48.6**	ug/L	2.0	0.3	1	10/04/22 16:42	10/03/22	
Lithium	200.8	**62.2**	ug/L	0.20	0.20	1	10/04/22 16:42	10/03/22	
Magnesium	200.8	**25000**	ug/L	10	2	1	10/04/22 16:42	10/03/22	
Manganese	200.8	**57.6**	ug/L	0.40	0.04	1	10/04/22 16:42	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:46
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-FB-20220923	**Basis:**	NA
Lab Code:	K2211342-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.65**	ug/L	0.50	0.09	1	10/04/22 16:44	10/03/22	
Iron	200.8	**44.7**	ug/L	2.0	0.3	1	10/04/22 16:44	10/03/22	
Lithium	200.8	**74.9**	ug/L	0.20	0.20	1	10/04/22 16:44	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:47
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-HT-MMO-20220923	**Basis:**	NA
Lab Code:	K2211342-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**16.4**	ug/L	4.0	0.5	1	10/04/22 16:46	10/03/22	
Arsenic	200.8	**0.15 J**	ug/L	0.50	0.09	1	10/04/22 16:46	10/03/22	
Iron	200.8	**10.3**	ug/L	2.0	0.3	1	10/04/22 16:46	10/03/22	
Lithium	200.8	**211**	ug/L	0.20	0.20	1	10/04/22 16:46	10/03/22	
Magnesium	200.8	**23400**	ug/L	10	2	1	10/04/22 16:46	10/03/22	
Manganese	200.8	**490**	ug/L	0.40	0.04	1	10/04/22 16:46	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:48
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-FB-20220923	**Basis:**	NA
Lab Code:	K2211342-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.16**	**J**	ug/L	0.50	0.09	1	10/04/22 16:48	10/03/22	
Iron	200.8	**67.4**		ug/L	2.0	0.3	1	10/04/22 16:48	10/03/22	
Lithium	200.8	**224**		ug/L	0.20	0.20	1	10/04/22 16:48	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:49
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-HT-MMO-20220923	**Basis:**	NA
Lab Code:	K2211342-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.3**		ug/L	4.0	0.5	1	10/04/22 16:49	10/03/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/04/22 16:49	10/03/22	
Cobalt	200.8	**1.06**		ug/L	0.020	0.009	1	10/04/22 16:49	10/03/22	
Iron	200.8	**6.7**		ug/L	2.0	0.3	1	10/04/22 16:49	10/03/22	
Lithium	200.8	**435**		ug/L	0.20	0.20	1	10/04/22 16:49	10/03/22	
Magnesium	200.8	**36100**		ug/L	10	2	1	10/04/22 16:49	10/03/22	
Manganese	200.8	**1690**		ug/L	0.40	0.04	1	10/04/22 16:49	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:50
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-FB-20220923	**Basis:**	NA
Lab Code:	K2211342-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.19**	**J**	ug/L	0.50	0.09	1	10/04/22 17:03	10/03/22	
Cobalt	200.8	**8.76**		ug/L	0.020	0.009	1	10/04/22 17:03	10/03/22	
Iron	200.8	**1570**		ug/L	2.0	0.3	1	10/04/22 17:03	10/03/22	
Lithium	200.8	**525**		ug/L	0.20	0.20	1	10/04/22 17:03	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:51
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-HT-MMO-20220923	**Basis:**	NA
Lab Code:	K2211342-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**13.2**	ug/L	4.0	0.5	1	10/04/22 17:05	10/03/22	
Arsenic	200.8	**0.20 J**	ug/L	0.50	0.09	1	10/04/22 17:05	10/03/22	
Iron	200.8	**4.7**	ug/L	2.0	0.3	1	10/04/22 17:05	10/03/22	
Lithium	200.8	**437**	ug/L	0.20	0.20	1	10/04/22 17:05	10/03/22	
Magnesium	200.8	**30700**	ug/L	10	2	1	10/04/22 17:05	10/03/22	
Manganese	200.8	**4.55**	ug/L	0.40	0.04	1	10/04/22 17:05	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:52
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-FB-20220923	**Basis:**	NA
Lab Code:	K2211342-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.67**	ug/L	0.50	0.09	1	10/04/22 17:07	10/03/22	
Iron	200.8	**164**	ug/L	2.0	0.3	1	10/04/22 17:07	10/03/22	
Lithium	200.8	**514**	ug/L	0.20	0.20	1	10/04/22 17:07	10/03/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:53
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-HT-MMO-20220923	**Basis:**	NA
Lab Code:	K2211342-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**24.8**	ug/L	4.0	0.5	1	10/05/22 10:59	10/04/22	
Cobalt	200.8	**0.317**	ug/L	0.020	0.009	1	10/05/22 10:59	10/04/22	
Iron	200.8	**4.1**	ug/L	2.0	0.3	1	10/05/22 10:59	10/04/22	
Magnesium	200.8	**26800**	ug/L	10	2	1	10/05/22 10:59	10/04/22	
Manganese	200.8	**78.0**	ug/L	0.40	0.04	1	10/05/22 10:59	10/04/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/23/22 10:54
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-FB-20220923	**Basis:**	NA
Lab Code:	K2211342-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**24.1**	ug/L	0.020	0.009	1	10/05/22 11:01	10/04/22	
Iron	200.8	**3380**	ug/L	2.0	0.3	1	10/05/22 11:01	10/04/22	

Printed 10/5/2022 4:52:57 PM

Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216956-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.0**	**J**	ug/L	4.0	0.5	1	10/04/22 16:34	10/03/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/04/22 16:34	10/03/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/04/22 16:34	10/03/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/04/22 16:34	10/03/22	
Lithium	200.8	ND	U	ug/L	0.20	0.20	1	10/04/22 16:34	10/03/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/04/22 16:34	10/03/22	
Manganese	200.8	ND	U	ug/L	0.40	0.04	1	10/04/22 16:34	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216959-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.4**	**J**	ug/L	4.0	0.5	1	10/05/22 10:46	10/04/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/05/22 10:46	10/04/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/05/22 10:46	10/04/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/05/22 10:46	10/04/22	
Manganese	200.8	**0.05**	**J**	ug/L	0.40	0.04	1	10/05/22 10:46	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/05/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2216959-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	99.2	100	99	85-115
Cobalt	200.8	24.2	25.0	97	85-115
Iron	200.8	46.9	50.0	94	85-115
Magnesium	200.8	245	250	98	85-115
Manganese	200.8	25.0	25.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2211342
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/04/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216956-02			Duplicate Lab Control Sample KQ2216956-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	95.0	100	95	94.6	100	95	85-115	<1	20
Arsenic	200.8	49.6	50.0	99	49.6	50.0	99	85-115	<1	20
Cobalt	200.8	25.3	25.0	101	25.3	25.0	101	85-115	<1	20
Iron	200.8	50.4	50.0	101	52.9	50.0	106	85-115	5	20
Lithium	200.8	48.5	50.0	97	48.5	50.0	97	85-115	<1	20
Magnesium	200.8	251	250	100	245	250	98	85-115	2	20
Manganese	200.8	24.5	25.0	98	26.1	25.0	104	85-115	6	20

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 28, 2022

Analytical Report for Service Request No: K2211343

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory September 27, 2022
For your reference, these analyses have been assigned our service request number **K2211343.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2211343
Date Received: 09/27/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 09/27/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

Method 300.0, 10/19/2022: The analysis of sample MW-1-FB-20220926 for Sulfate was initially performed within the recommended holding time. Reanalysis at a dilution was required. The reanalysis was performed 3 days past the recommended holding time. The results from the second analysis were reported. An extremely high work load prevented the dilution from being analyzed sooner.

Approved by ______________________ Date 10/28/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2211313

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019
Date: 9/26/2022
Project Name: Greene County Treatability
Project Number: 221114-01.05 Task 05
Project Manager: Jessica Goin
Phone Number: 503-972-5001 (backup number: 503-798-3456)
Shipment Method: ALS Courier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Sulfate (method 300.0/9056A)	Comments/Preservation
1	MW-1-HT-MMO-20220926	9/26/2022	14:09	Water	1	X		X	X	X	X	X		HNO3-preserved bottle only
2	MW-1-FB-20220926	9/26/2022	10:09	Water	2	X		X	X				X	One unpreserved bottle for sulfate test.
3	MW-5-HT-MMO-20220926	9/26/2022	10:10	Water	1	X	X		X	X	X	X		HNO3-preserved bottle only
4	MW-5-FB-20220926	9/26/2022	10:11	Water	2	X	X		X				X	One unpreserved bottle for sulfate test.
5	MW-10-HT-MMO-20220926	9/26/2022	10:12	Water	1	X	X		X	X	X	X		HNO3-preserved bottle only
6	MW-10-FB-20220926	9/26/2022	10:13	Water	2	X	X		X				X	One unpreserved bottle for sulfate test.
7	MW-14-HT-MMO-20220926	9/26/2022	10:14	Water	1	X	X	X	X	X	X	X		HNO3-preserved bottle only
8	MW-14-FB-20220926	9/26/2022	10:15	Water	2	X	X	X	X				X	One unpreserved bottle for sulfate test.
9	MW-17-HT-MMO-20220926	9/26/2022	10:16	Water	1	X	X		X	X	X	X		HNO3-preserved bottle only
10	MW-17-FB-20220926	9/26/2022	10:17	Water	2	X	X		X				X	One unpreserved bottle for sulfate test.
11	MW-44H-HT-MMO-20220926	9/26/2022	10:18	Water	1			X	X	X	X	X		HNO3-preserved bottle only
12	MW-44H-FB-20220926	9/26/2022	10:19	Water	2			X	X				X	One unpreserved bottle for sulfate test.
13														
14														
15														

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 9/27/22 08:30

Received by: ALS 9/27/22 1020.
Signature/Print Name:

Relinquished by: KMarrow ALS 9/27/22 1210
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mack

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11343

Received: 9/27/22 Opened: 9/27/22 By: PDP Unloaded: 9/27/22 By: PDP

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
7.7	3.9	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA [✓ Y] N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves*
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank was on top of samples which were surrounded by ice

1/13/22 *Page of*

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22
Sample Matrix:	Water	**Date Received:**	09/27/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MW-1-FB-20220926	K2211343-002	**716**	10	4	100	10/27/22 11:46	*
MW-5-FB-20220926	K2211343-004	**165**	5.0	2.0	50	10/19/22 23:10	
MW-10-FB-20220926	K2211343-006	**122**	5.0	2.0	50	10/19/22 23:18	
MW-14-FB-20220926	K2211343-008	**160**	5.0	2.0	50	10/19/22 23:27	
MW-17-FB-20220926	K2211343-010	**44.9**	5.0	2.0	50	10/19/22 23:36	
MW-44H-FB-20220926	K2211343-012	**359**	5.0	2.0	50	10/19/22 23:45	
Method Blank	K2211343-MB1	ND U	0.10	0.04	1	10/19/22 19:06	
Method Blank	K2211343-MB2	ND U	0.10	0.04	1	10/19/22 22:52	
Method Blank	K2211343-MB3	ND U	0.10	0.04	1	10/26/22 19:23	
Method Blank	K2211343-MB4	ND U	0.10	0.04	1	10/26/22 23:09	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/19/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	781965

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211343-LCS1	5.00	5.00	100	90-110
Lab Control Sample	K2211343-LCS2	5.01	5.00	100	90-110
Lab Control Sample	K2211343-LCS3	5.07	5.00	101	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/26/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	782852

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211343-LCS4	4.99	5.00	100	90-110
Lab Control Sample	K2211343-LCS5	4.99	5.00	100	90-110

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 14:09
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-HT-MMO-20220926	**Basis:**	NA
Lab Code:	K2211343-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**9110**	ug/L	4.0	0.5	1	10/04/22 17:09	10/03/22	
Arsenic	200.8	**0.66**	ug/L	0.50	0.09	1	10/04/22 17:09	10/03/22	
Cobalt	200.8	**235**	ug/L	0.020	0.009	1	10/04/22 17:09	10/03/22	
Iron	200.8	**4220**	ug/L	2.0	0.3	1	10/04/22 17:09	10/03/22	
Magnesium	200.8	**57500**	ug/L	10	2	1	10/04/22 17:09	10/03/22	
Manganese	200.8	**63500**	ug/L	20	2	50	10/04/22 17:46	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:09
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-1-FB-20220926	**Basis:**	NA
Lab Code:	K2211343-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.32**	ug/L	0.50	0.09	1	10/04/22 17:11	10/03/22	
Cobalt	200.8	**274**	ug/L	0.020	0.009	1	10/04/22 17:11	10/03/22	
Iron	200.8	**136000**	ug/L	100	20	50	10/04/22 17:48	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:10
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-HT-MMO-20220926	**Basis:**	NA
Lab Code:	K2211343-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**12.6**		ug/L	4.0	0.5	1	10/04/22 17:13	10/03/22	
Arsenic	200.8	**0.33**	**J**	ug/L	0.50	0.09	1	10/04/22 17:13	10/03/22	
Iron	200.8	**38.1**		ug/L	2.0	0.3	1	10/04/22 17:13	10/03/22	
Lithium	200.8	**59.4**		ug/L	0.20	0.20	1	10/04/22 17:13	10/03/22	
Magnesium	200.8	**22100**		ug/L	10	2	1	10/04/22 17:13	10/03/22	
Manganese	200.8	**72.2**		ug/L	0.40	0.04	1	10/04/22 17:13	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:11
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-5-FB-20220926	**Basis:**	NA
Lab Code:	K2211343-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.87**	ug/L	0.50	0.09	1	10/04/22 17:50	10/03/22	
Iron	200.8	**36.6**	ug/L	2.0	0.3	1	10/04/22 17:50	10/03/22	
Lithium	200.8	**71.1**	ug/L	0.20	0.20	1	10/04/22 17:50	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:12
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-HT-MMO-20220926	**Basis:**	NA
Lab Code:	K2211343-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**22.5**	ug/L	4.0	0.5	1	10/04/22 17:16	10/03/22	
Arsenic	200.8	**0.18 J**	ug/L	0.50	0.09	1	10/04/22 17:16	10/03/22	
Iron	200.8	**10.4**	ug/L	2.0	0.3	1	10/04/22 17:16	10/03/22	
Lithium	200.8	**208**	ug/L	0.20	0.20	1	10/04/22 17:16	10/03/22	
Magnesium	200.8	**25900**	ug/L	10	2	1	10/04/22 17:16	10/03/22	
Manganese	200.8	**20.5**	ug/L	0.40	0.04	1	10/04/22 17:16	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:13
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-10-FB-20220926	**Basis:**	NA
Lab Code:	K2211343-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.27**	**J**	ug/L	0.50	0.09	1	10/04/22 17:18	10/03/22	
Iron	200.8	**28.1**		ug/L	2.0	0.3	1	10/04/22 17:18	10/03/22	
Lithium	200.8	**220**		ug/L	0.20	0.20	1	10/04/22 17:18	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:14
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-HT-MMO-20220926	**Basis:**	NA
Lab Code:	K2211343-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.5**		ug/L	4.0	0.5	1	10/04/22 17:20	10/03/22	
Arsenic	200.8	**0.12**	**J**	ug/L	0.50	0.09	1	10/04/22 17:20	10/03/22	
Cobalt	200.8	**0.260**		ug/L	0.020	0.009	1	10/04/22 17:20	10/03/22	
Iron	200.8	**5.0**		ug/L	2.0	0.3	1	10/04/22 17:20	10/03/22	
Lithium	200.8	**431**		ug/L	0.20	0.20	1	10/04/22 17:20	10/03/22	
Magnesium	200.8	**32000**		ug/L	10	2	1	10/04/22 17:20	10/03/22	
Manganese	200.8	**746**		ug/L	0.40	0.04	1	10/04/22 17:20	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:15
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-14-FB-20220926	**Basis:**	NA
Lab Code:	K2211343-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.25**	**J**	ug/L	0.50	0.09	1	10/04/22 17:52	10/03/22	
Cobalt	200.8	**7.40**		ug/L	0.020	0.009	1	10/04/22 17:52	10/03/22	
Iron	200.8	**2150**		ug/L	2.0	0.3	1	10/04/22 17:52	10/03/22	
Lithium	200.8	**504**		ug/L	0.20	0.20	1	10/04/22 17:52	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:16
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-HT-MMO-20220926	**Basis:**	NA
Lab Code:	K2211343-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**7.8**	ug/L	4.0	0.5	1	10/04/22 17:54	10/03/22	
Arsenic	200.8	**0.16 J**	ug/L	0.50	0.09	1	10/04/22 17:54	10/03/22	
Iron	200.8	**2.2**	ug/L	2.0	0.3	1	10/04/22 17:54	10/03/22	
Lithium	200.8	**516**	ug/L	0.20	0.20	1	10/04/22 17:54	10/03/22	
Magnesium	200.8	**28100**	ug/L	10	2	1	10/04/22 17:54	10/03/22	
Manganese	200.8	**4.82**	ug/L	0.40	0.04	1	10/04/22 17:54	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:17
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-17-FB-20220926	**Basis:**	NA
Lab Code:	K2211343-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.83**	ug/L	0.50	0.09	1	10/04/22 17:55	10/03/22	
Iron	200.8	**21.1**	ug/L	2.0	0.3	1	10/04/22 17:55	10/03/22	
Lithium	200.8	**552**	ug/L	0.20	0.20	1	10/04/22 17:55	10/03/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:18
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-HT-MMO-20220926	**Basis:**	NA
Lab Code:	K2211343-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**19.4**	ug/L	4.0	0.5	1	10/05/22 11:03	10/04/22	
Cobalt	200.8	**0.385**	ug/L	0.020	0.009	1	10/05/22 11:03	10/04/22	
Iron	200.8	**3.6**	ug/L	2.0	0.3	1	10/05/22 11:03	10/04/22	
Magnesium	200.8	**24600**	ug/L	10	2	1	10/05/22 11:03	10/04/22	
Manganese	200.8	**662**	ug/L	0.40	0.04	1	10/05/22 11:03	10/04/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/26/22 10:19
Sample Matrix:	Water	**Date Received:**	09/27/22 12:10
Sample Name:	MW-44H-FB-20220926	**Basis:**	NA
Lab Code:	K2211343-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**40.9**	ug/L	0.020	0.009	1	10/05/22 11:17	10/04/22	
Iron	200.8	**889**	ug/L	2.0	0.3	1	10/05/22 11:17	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216956-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.0**	**J**	ug/L	4.0	0.5	1	10/04/22 16:34	10/03/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/04/22 16:34	10/03/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/04/22 16:34	10/03/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/04/22 16:34	10/03/22	
Lithium	200.8	ND	U	ug/L	0.20	0.20	1	10/04/22 16:34	10/03/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/04/22 16:34	10/03/22	
Manganese	200.8	ND	U	ug/L	0.40	0.04	1	10/04/22 16:34	10/03/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2216959-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.4**	**J**	ug/L	4.0	0.5	1	10/05/22 10:46	10/04/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/05/22 10:46	10/04/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/05/22 10:46	10/04/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/05/22 10:46	10/04/22	
Manganese	200.8	**0.05**	**J**	ug/L	0.40	0.04	1	10/05/22 10:46	10/04/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/05/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units: ug/L
Basis: NA

Lab Control Sample
KQ2216959-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	99.2	100	99	85-115
Cobalt	200.8	24.2	25.0	97	85-115
Iron	200.8	46.9	50.0	94	85-115
Magnesium	200.8	245	250	98	85-115
Manganese	200.8	25.0	25.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2211343
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/04/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2216956-02			Duplicate Lab Control Sample KQ2216956-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	95.0	100	95	94.6	100	95	85-115	<1	20
Arsenic	200.8	49.6	50.0	99	49.6	50.0	99	85-115	<1	20
Cobalt	200.8	25.3	25.0	101	25.3	25.0	101	85-115	<1	20
Iron	200.8	50.4	50.0	101	52.9	50.0	106	85-115	5	20
Lithium	200.8	48.5	50.0	97	48.5	50.0	97	85-115	<1	20
Magnesium	200.8	251	250	100	245	250	98	85-115	2	20
Manganese	200.8	24.5	25.0	98	26.1	25.0	104	85-115	6	20

October 07, 2022

Service Request No:K2211423

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

Laboratory Results for: Greene County Treatability

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 03, 2022
For your reference, these analyses have been assigned our service request number **K2211423.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | **FAX** +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211423
Project: Greene County Treatability
Date Received: 10/03/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six water samples were received for analysis at ALS Environmental on 10/03/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ____________________ Date 10/07/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-1-INF-20220928 **Lab ID: K2211423-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.87		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	289		0.009	0.020	ug/L	200.8

CLIENT ID: MW-5-INF-20220928 **Lab ID: K2211423-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.90		0.09	0.50	ug/L	200.8
Lithium, Dissolved	88.6		0.20	0.20	ug/L	200.8

CLIENT ID: MW-10-INF-20220928 **Lab ID: K2211423-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	8.13		0.09	0.50	ug/L	200.8
Lithium, Dissolved	259		0.20	0.20	ug/L	200.8

CLIENT ID: MW-14-INF-20220928 **Lab ID: K2211423-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	12.7		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	34.0		0.009	0.020	ug/L	200.8
Lithium, Dissolved	572		0.20	0.20	ug/L	200.8

CLIENT ID: MW-17-INF-20220928 **Lab ID: K2211423-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	43.9		0.09	0.50	ug/L	200.8
Lithium, Dissolved	593		0.20	0.20	ug/L	200.8

CLIENT ID: MW-44H-INF-20220928 **Lab ID: K2211423-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	308		0.009	0.020	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2211423-001	MW-1-INF-20220928	9/28/2022	0800
K2211423-002	MW-5-INF-20220928	9/28/2022	0801
K2211423-003	MW-10-INF-20220928	9/28/2022	0802
K2211423-004	MW-14-INF-20220928	9/28/2022	0803
K2211423-005	MW-17-INF-20220928	9/28/2022	0804
K2211423-006	MW-44H-INF-20220928	9/28/2022	0805

K2211423

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/28/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Comments/Preservation
1	MW-1-INF-20220928	9/28/2022	8:00	Water	1	X		X	HNO3 preserved. Filtered.
2	MW-5-INF-20220928	9/28/2022	8:01	Water	1	X	X		HNO3 preserved. Filtered.
3	MW-10-INF-20220928	9/28/2022	8:02	Water	1	X	X		HNO3 preserved. Filtered.
4	MW-14-INF-20220928	9/28/2022	8:03	Water	1	X	X	X	HNO3 preserved. Filtered.
5	MW-17-INF-20220928	9/28/2022	8:04	Water	1	X	X		HNO3 preserved. Filtered.
6	MW-44H-INF-20220928	9/28/2022	8:05	Water	1			X	HNO3 preserved. Filtered.
7									
8									
9									
10									
11									
12									
13									
14									
15									

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name: enordlund
Date/Time: 10/03/22 10:30

Received by:
Signature/Print Name: KMorrow ALS 10/3/22 11:00

Relinquished by:
Company:
Signature/Print Name: KMorrow ALS 10/3/22 1230

Received by:
Signature/Print Name: Josh mcpherson ALS 10/3/22 ~~1500~~ 12:30

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11423

Received: 10.3.22 Opened: 10.3.22 By: YM Unloaded: 10.3.22 By: YM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ________ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
8.2		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y [✓ N]

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y [✓ N]

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp not an issue → could not PH due to limited vol.

:________

1/13/22 **Page** **of**

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	MW-1-INF-20220928	**Date Collected:**	09/28/22
Lab Code:	K2211423-001	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	MW-5-INF-20220928	**Date Collected:**	09/28/22
Lab Code:	K2211423-002	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	MW-10-INF-20220928	**Date Collected:**	09/28/22
Lab Code:	K2211423-003	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	MW-14-INF-20220928	**Date Collected:**	09/28/22
Lab Code:	K2211423-004	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	MW-17-INF-20220928	**Date Collected:**	09/28/22
Lab Code:	K2211423-005	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	MW-44H-INF-20220928	**Date Collected:**	09/28/22
Lab Code:	K2211423-006	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 08:00
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-1-INF-20220928	**Basis:**	NA
Lab Code:	K2211423-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.87**	ug/L	0.50	0.09	1	10/07/22 09:33	10/05/22	
Cobalt	200.8	**289**	ug/L	0.020	0.009	1	10/07/22 09:33	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 08:01
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-5-INF-20220928	**Basis:**	NA
Lab Code:	K2211423-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.90**	ug/L	0.50	0.09	1	10/07/22 09:41	10/05/22	
Lithium	200.8	**88.6**	ug/L	0.20	0.20	1	10/07/22 09:41	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 08:02
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-10-INF-20220928	**Basis:**	NA
Lab Code:	K2211423-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.13**	ug/L	0.50	0.09	1	10/07/22 09:43	10/05/22	
Lithium	200.8	**259**	ug/L	0.20	0.20	1	10/07/22 09:43	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 08:03
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-14-INF-20220928	**Basis:**	NA
Lab Code:	K2211423-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**12.7**	ug/L	0.50	0.09	1	10/07/22 09:44	10/05/22	
Cobalt	200.8	**34.0**	ug/L	0.020	0.009	1	10/07/22 09:44	10/05/22	
Lithium	200.8	**572**	ug/L	0.20	0.20	1	10/07/22 09:44	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 08:04
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-17-INF-20220928	**Basis:**	NA
Lab Code:	K2211423-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**43.9**	ug/L	0.50	0.09	1	10/07/22 09:58	10/05/22	
Lithium	200.8	**593**	ug/L	0.20	0.20	1	10/07/22 09:58	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 08:05
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-44H-INF-20220928	**Basis:**	NA
Lab Code:	K2211423-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**308**	ug/L	0.020	0.009	1	10/07/22 09:59	10/05/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217111-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/07/22 09:30	10/05/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/07/22 09:30	10/05/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/07/22 09:30	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/7/22
		Date Extracted:	10/5/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220928	**Units:**	ug/L
Lab Code:	K2211423-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217111-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.87	48.2	50.0	95	70-130
Cobalt	289	317	25.0	113 #	70-130
Lithium	5.78	55.2	50.0	99	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/7/22
		Date Extracted:	10/5/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-14-INF-20220928	**Units:**	ug/L
Lab Code:	K2211423-004	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217111-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	12.7	60.7	50.0	96	70-130
Cobalt	34.0	57.9	25.0	95	70-130
Lithium	572	622	50.0	99 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/07/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220928	**Units:**	ug/L
Lab Code:	K2211423-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217111-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.87	0.95	0.91	9	20
Cobalt	200.8	0.020	0.009	289	287	288	<1	20
Lithium	200.8	0.20	0.20	5.78	5.65	5.72	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/07/22

Replicate Sample Summary

Dissolved Metals

Sample Name:	MW-14-INF-20220928	**Units:**	ug/L
Lab Code:	K2211423-004	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217111-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	12.7	12.2	12.5	4	20
Cobalt	200.8	0.020	0.009	34.0	32.9	33.5	3	20
Lithium	200.8	0.20	0.20	572	569	571	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/7/2022 4:30:12 PM

Superset Reference:22-0000641834 rev 00

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211423
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/07/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217111-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.9	50.0	100	85-115
Cobalt	200.8	26.1	25.0	104	85-115
Lithium	200.8	48.4	50.0	97	85-115

October 07, 2022 Service Request No:K2211424

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

Laboratory Results for: Greene County Treatablility

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 03, 2022
For your reference, these analyses have been assigned our service request number **K2211424.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211424
Project: Greene County Treatablility
Date Received: 10/03/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six water samples were received for analysis at ALS Environmental on 10/03/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/07/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-1-INF-20220930 **Lab ID: K2211424-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.87		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	273		0.009	0.020	ug/L	200.8

CLIENT ID: MW-5-INF-20220930 **Lab ID: K2211424-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	7.90		0.09	0.50	ug/L	200.8
Lithium, Dissolved	88.7		0.20	0.20	ug/L	200.8

CLIENT ID: MW-10-INF-20220930 **Lab ID: K2211424-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.04		0.09	0.50	ug/L	200.8
Lithium, Dissolved	253		0.20	0.20	ug/L	200.8

CLIENT ID: MW-14-INF-20220930 **Lab ID: K2211424-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	10.0		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	31.9		0.009	0.020	ug/L	200.8
Lithium, Dissolved	577		0.20	0.20	ug/L	200.8

CLIENT ID: MW-17-INF-20220930 **Lab ID: K2211424-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	25.1		0.09	0.50	ug/L	200.8
Lithium, Dissolved	603		0.20	0.20	ug/L	200.8

CLIENT ID: MW-44H-INF-20220930 **Lab ID: K2211424-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	300		0.009	0.020	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2211424-001	MW-1-INF-20220930	9/30/2022	0835
K2211424-002	MW-5-INF-20220930	9/30/2022	0836
K2211424-003	MW-10-INF-20220930	9/30/2022	0837
K2211424-004	MW-14-INF-20220930	9/30/2022	0838
K2211424-005	MW-17-INF-20220930	9/30/2022	0839
K2211424-006	MW-44H-INF-20220930	9/30/2022	0840

K2211424

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:	503-972-5019
Date:	9/30/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt												Comments/Preservation
1	MW-1-INF-20220930	9/30/2022	8:35	Water	1	X		X												HNO3 preserved. Filtered.
2	MW-5-INF-20220930	9/30/2022	8:36	Water	1	X	X													HNO3 preserved. Filtered.
3	MW-10-INF-20220930	9/30/2022	8:37	Water	1	X	X													HNO3 preserved. Filtered.
4	MW-14-INF-20220930	9/30/2022	8:38	Water	1	X	X	X												HNO3 preserved. Filtered.
5	MW-17-INF-20220930	9/30/2022	8:39	Water	1	X	X													HNO3 preserved. Filtered.
6	MW-44H-INF-20220930	9/30/2022	8:40	Water	1			X												HNO3 preserved. Filtered.
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/03/22 10:30
Relinquished by:	Company:
Signature/Print Name:	Date/Time:
K Morrow ALS	10/3/22 1230

Received by:
Signature/Print Name:
L Morrow ALS 10/3/22 11:10
Received by:
Signature/Print Name:
Josh McPherson ALS 10/3/22 ~~1206~~ 12:36

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11424

Received: 10·3·22 Opened: 10·3·22 By: YM Unloaded: 10·3·22 By: YM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
8.2		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y [✓ N]

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y [✓ N]

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp not an issue → could not pH due to limited vol.

1/13/22 Page of

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05		

Sample Name:	MW-1-INF-20220930	**Date Collected:**	09/30/22
Lab Code:	K2211424-001	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	MW-5-INF-20220930	**Date Collected:**	09/30/22
Lab Code:	K2211424-002	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	MW-10-INF-20220930	**Date Collected:**	09/30/22
Lab Code:	K2211424-003	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	MW-14-INF-20220930	**Date Collected:**	09/30/22
Lab Code:	K2211424-004	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	MW-17-INF-20220930	**Date Collected:**	09/30/22
Lab Code:	K2211424-005	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05		

Sample Name:	MW-44H-INF-20220930	**Date Collected:**	09/30/22
Lab Code:	K2211424-006	**Date Received:**	10/3/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22 08:35
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-1-INF-20220930	**Basis:**	NA
Lab Code:	K2211424-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.87**	ug/L	0.50	0.09	1	10/07/22 11:10	10/05/22	
Cobalt	200.8	**273**	ug/L	0.020	0.009	1	10/07/22 11:10	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22 08:36
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-5-INF-20220930	**Basis:**	NA
Lab Code:	K2211424-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.90**	ug/L	0.50	0.09	1	10/07/22 11:15	10/05/22	
Lithium	200.8	**88.7**	ug/L	0.20	0.20	1	10/07/22 11:15	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22 08:37
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-10-INF-20220930	**Basis:**	NA
Lab Code:	K2211424-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.04**	ug/L	0.50	0.09	1	10/07/22 11:17	10/05/22	
Lithium	200.8	**253**	ug/L	0.20	0.20	1	10/07/22 11:17	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22 08:38
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-14-INF-20220930	**Basis:**	NA
Lab Code:	K2211424-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**10.0**	ug/L	0.50	0.09	1	10/07/22 11:18	10/05/22	
Cobalt	200.8	**31.9**	ug/L	0.020	0.009	1	10/07/22 11:18	10/05/22	
Lithium	200.8	**577**	ug/L	0.20	0.20	1	10/07/22 11:18	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22 08:39
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-17-INF-20220930	**Basis:**	NA
Lab Code:	K2211424-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**25.1**	ug/L	0.50	0.09	1	10/07/22 11:35	10/05/22	
Lithium	200.8	**603**	ug/L	0.20	0.20	1	10/07/22 11:35	10/05/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22 08:40
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-44H-INF-20220930	**Basis:**	NA
Lab Code:	K2211424-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**300**	ug/L	0.020	0.009	1	10/07/22 11:37	10/05/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217113-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/07/22 11:07	10/05/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/07/22 11:07	10/05/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/07/22 11:07	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/7/22
		Date Extracted:	10/5/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220930	**Units:**	ug/L
Lab Code:	K2211424-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217113-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.87	48.9	50.0	96	70-130
Cobalt	273	291	25.0	76 #	70-130
Lithium	6.14	55.7	50.0	99	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/7/22
		Date Extracted:	10/5/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	MW-14-INF-20220930	**Units:**	ug/L
Lab Code:	K2211424-004	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217113-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	10.0	60.0	50.0	100	70-130
Cobalt	31.9	56.3	25.0	98	70-130
Lithium	577	625	50.0	95 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/07/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-1-INF-20220930	**Units:**	ug/L
Lab Code:	K2211424-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217113-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.87	0.87	0.87	<1	20
Cobalt	200.8	0.020	0.009	273	265	269	3	20
Lithium	200.8	0.20	0.20	6.14	5.99	6.07	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/7/2022 4:30:47 PM

Superset Reference:22-0000641839 rev 00

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	09/30/22
Sample Matrix:	Water	**Date Received:**	10/03/22
		Date Analyzed:	10/07/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	MW-14-INF-20220930	**Units:**	ug/L
Lab Code:	K2211424-004	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217113-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	10.0	9.80	9.90	2	20
Cobalt	200.8	0.020	0.009	31.9	31.8	31.9	<1	20
Lithium	200.8	0.20	0.20	577	566	572	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211424
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Analyzed:**	10/07/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217113-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.3	50.0	99	85-115
Cobalt	200.8	25.5	25.0	102	85-115
Lithium	200.8	51.9	50.0	104	85-115

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 31, 2022

Analytical Report for Service Request No: K2211426

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 03, 2022
For your reference, these analyses have been assigned our service request number **K2211426.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability	**Date Received:**	10/03/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 10/03/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/31/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2211426

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/30/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Sulfate (method 300.0/9056A)	Comments/Preservation
1	MW-1-HT-MMO-20220930	9/30/2022	14:47	Water	1	X		X	X	X	X	X		Filtered. HNO3-preserved bottle only
2	MW-1-FB-20220930	9/30/2022	10:47	Water	2	X		X	X				X	Filtered. One unpreserved bottle for sulfate test.
3	MW-5-HT-MMO-20220930	9/30/2022	10:48	Water	1	X	X		X	X	X	X		Filtered. HNO3-preserved bottle only
4	MW-5-FB-20220930	9/30/2022	10:49	Water	2	X	X		X				X	Filtered. One unpreserved bottle for sulfate test.
5	MW-10-HT-MMO-20220930	9/30/2022	10:50	Water	1	X	X		X	X	X	X		Filtered. HNO3-preserved bottle only
6	MW-10-FB-20220930	9/30/2022	10:51	Water	2	X	X		X				X	Filtered. One unpreserved bottle for sulfate test.
7	MW-14-HT-MMO-20220930	9/30/2022	10:52	Water	1	X	X	X	X	X	X	X		Filtered. HNO3-preserved bottle only
8	MW-14-FB-20220930	9/30/2022	10:53	Water	2	X	X	X	X				X	Filtered. One unpreserved bottle for sulfate test.
9	MW-17-HT-MMO-20220930	9/30/2022	10:54	Water	1	X	X		X	X	X	X		Filtered. HNO3-preserved bottle only
10	MW-17-FB-20220930	9/30/2022	10:55	Water	2	X	X		X				X	Filtered. One unpreserved bottle for sulfate test.
11	MW-44H-HT-MMO-20220930	9/30/2022	10:56	Water	1			X	X	X	X	X		Filtered. HNO3-preserved bottle only
12	MW-44H-FB-20220930	9/30/2022	10:57	Water	2			X	X				X	Filtered. One unpreserved bottle for sulfate test.
13														
14														
15														

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:
Signature/Print Name:	Date/Time: 10/03/22 10:30	Signature/Print Name: KMorrow ALS 10/3/22 11:00
Relinquished by:	Company:	Received by:
Signature/Print Name: KMorrow ALS	Date/Time: 10/3/22 [illegible]30	Signature/Print Name: Josh McPherson ALS 10/3/22 ~~1700~~ 1200

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM NH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 11426

Received: 10·3·22 Opened: 10·3·22 By: YM Unloaded: 10·3·22 By: YM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*______ *NA*
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
8.2		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y [✓ N]

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y [✓ N]

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp not An issue → could not PH due to limited vol.

:______

1/13/22 *Page of*

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22
Sample Matrix:	Water	**Date Received:**	10/3/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MW-1-FB-20220930	K2211426-002	**711**	10	4	100	10/27/22 20:05	
MW-5-FB-20220930	K2211426-004	**168**	5.0	2.0	50	10/27/22 20:14	
MW-10-FB-20220930	K2211426-006	**119**	5.0	2.0	50	10/27/22 20:22	
MW-14-FB-20220930	K2211426-008	**157**	5.0	2.0	50	10/27/22 20:31	
MW-17-FB-20220930	K2211426-010	**44.0**	5.0	2.0	50	10/27/22 20:40	
MW-44H-FB-20220930	K2211426-012	**352**	5.0	2.0	50	10/27/22 21:06	
Method Blank	K2211426-MB1	ND U	0.10	0.04	1	10/27/22 19:13	
Method Blank	K2211426-MB2	ND U	0.10	0.04	1	10/27/22 22:41	
Method Blank	K2211426-MB3	ND U	0.10	0.04	1	10/28/22 02:28	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/27/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	783051

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211426-LCS1	4.98	5.00	100	90-110
Lab Control Sample	K2211426-LCS2	5.01	5.00	100	90-110
Lab Control Sample	K2211426-LCS3	5.03	5.00	101	90-110

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 14:47
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-1-HT-MMO-20220930	**Basis:**	NA
Lab Code:	K2211426-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**12700**	ug/L	4.0	0.5	1	10/07/22 10:01	10/05/22	
Arsenic	200.8	**0.83**	ug/L	0.50	0.09	1	10/07/22 10:01	10/05/22	
Cobalt	200.8	**276**	ug/L	0.020	0.009	1	10/07/22 10:01	10/05/22	
Iron	200.8	**23100**	ug/L	2.0	0.3	1	10/07/22 10:01	10/05/22	
Magnesium	200.8	**41900**	ug/L	10	2	1	10/07/22 10:01	10/05/22	
Manganese	200.8	**40300**	ug/L	20	4	100	10/07/22 10:59	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:47
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-1-FB-20220930	**Basis:**	NA
Lab Code:	K2211426-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.23**	ug/L	0.50	0.09	1	10/07/22 10:02	10/05/22	
Cobalt	200.8	**304**	ug/L	0.020	0.009	1	10/07/22 10:02	10/05/22	
Iron	200.8	**125000**	ug/L	200	30	100	10/07/22 11:01	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:48
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-5-HT-MMO-20220930	**Basis:**	NA
Lab Code:	K2211426-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**11.3**		ug/L	4.0	0.5	1	10/07/22 10:04	10/05/22	
Arsenic	200.8	**0.38**	**J**	ug/L	0.50	0.09	1	10/07/22 10:04	10/05/22	
Iron	200.8	**5.0**		ug/L	2.0	0.3	1	10/07/22 10:04	10/05/22	
Lithium	200.8	**65.4**		ug/L	0.20	0.20	1	10/07/22 10:04	10/05/22	
Magnesium	200.8	**19900**		ug/L	10	2	1	10/07/22 10:04	10/05/22	
Manganese	200.8	**99.2**		ug/L	0.20	0.04	1	10/07/22 10:04	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:49
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-5-FB-20220930	**Basis:**	NA
Lab Code:	K2211426-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.71**	ug/L	0.50	0.09	1	10/07/22 10:06	10/05/22	
Iron	200.8	**8.0**	ug/L	2.0	0.3	1	10/07/22 10:06	10/05/22	
Lithium	200.8	**74.9**	ug/L	0.20	0.20	1	10/07/22 10:06	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:50
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-10-HT-MMO-20220930	**Basis:**	NA
Lab Code:	K2211426-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**22.2**	ug/L	4.0	0.5	1	10/07/22 10:07	10/05/22	
Arsenic	200.8	**0.18 J**	ug/L	0.50	0.09	1	10/07/22 10:07	10/05/22	
Iron	200.8	**3.2**	ug/L	2.0	0.3	1	10/07/22 10:07	10/05/22	
Lithium	200.8	**227**	ug/L	0.20	0.20	1	10/07/22 10:07	10/05/22	
Magnesium	200.8	**20000**	ug/L	10	2	1	10/07/22 10:07	10/05/22	
Manganese	200.8	**676**	ug/L	0.20	0.04	1	10/07/22 10:07	10/05/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:51
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-10-FB-20220930	**Basis:**	NA
Lab Code:	K2211426-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.24 J**	ug/L	0.50	0.09	1	10/07/22 10:09	10/05/22	
Iron	200.8	**8.3**	ug/L	2.0	0.3	1	10/07/22 10:09	10/05/22	
Lithium	200.8	**236**	ug/L	0.20	0.20	1	10/07/22 10:09	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:52
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-14-HT-MMO-20220930	**Basis:**	NA
Lab Code:	K2211426-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.9**		ug/L	4.0	0.5	1	10/07/22 10:11	10/05/22	
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	10/07/22 10:11	10/05/22	
Cobalt	200.8	**0.291**		ug/L	0.020	0.009	1	10/07/22 10:11	10/05/22	
Iron	200.8	**1.6**	**J**	ug/L	2.0	0.3	1	10/07/22 10:11	10/05/22	
Lithium	200.8	**498**		ug/L	0.20	0.20	1	10/07/22 10:11	10/05/22	
Magnesium	200.8	**28100**		ug/L	10	2	1	10/07/22 10:11	10/05/22	
Manganese	200.8	**1240**		ug/L	0.20	0.04	1	10/07/22 10:11	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:53
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-14-FB-20220930	**Basis:**	NA
Lab Code:	K2211426-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.22 J**	ug/L	0.50	0.09	1	10/07/22 10:12	10/05/22	
Cobalt	200.8	**6.38**	ug/L	0.020	0.009	1	10/07/22 10:12	10/05/22	
Iron	200.8	**890**	ug/L	2.0	0.3	1	10/07/22 10:12	10/05/22	
Lithium	200.8	**538**	ug/L	0.20	0.20	1	10/07/22 10:12	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:54
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-17-HT-MMO-20220930	**Basis:**	NA
Lab Code:	K2211426-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**9.1**	ug/L	4.0	0.5	1	10/07/22 10:29	10/05/22	
Arsenic	200.8	**0.18 J**	ug/L	0.50	0.09	1	10/07/22 10:29	10/05/22	
Iron	200.8	**3.1**	ug/L	2.0	0.3	1	10/07/22 10:29	10/05/22	
Lithium	200.8	**584**	ug/L	0.20	0.20	1	10/07/22 10:29	10/05/22	
Magnesium	200.8	**26300**	ug/L	10	2	1	10/07/22 10:29	10/05/22	
Manganese	200.8	**4.61**	ug/L	0.20	0.04	1	10/07/22 10:29	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:55
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-17-FB-20220930	**Basis:**	NA
Lab Code:	K2211426-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.68**	ug/L	0.50	0.09	1	10/07/22 10:30	10/05/22	
Iron	200.8	**18.6**	ug/L	2.0	0.3	1	10/07/22 10:30	10/05/22	
Lithium	200.8	**592**	ug/L	0.20	0.20	1	10/07/22 10:30	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:56
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-44H-HT-MMO-20220930	**Basis:**	NA
Lab Code:	K2211426-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**14.5**	ug/L	4.0	0.5	1	10/07/22 10:32	10/05/22	
Cobalt	200.8	**0.579**	ug/L	0.020	0.009	1	10/07/22 10:32	10/05/22	
Iron	200.8	**2.1**	ug/L	2.0	0.3	1	10/07/22 10:32	10/05/22	
Magnesium	200.8	**20400**	ug/L	10	2	1	10/07/22 10:32	10/05/22	
Manganese	200.8	**2410**	ug/L	0.20	0.04	1	10/07/22 10:32	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/30/22 10:57
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-44H-FB-20220930	**Basis:**	NA
Lab Code:	K2211426-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**34.7**	ug/L	0.020	0.009	1	10/07/22 10:34	10/05/22	
Iron	200.8	**58.3**	ug/L	2.0	0.3	1	10/07/22 10:34	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217111-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.5 J**	ug/L	4.0	0.5	1	10/07/22 09:30	10/05/22	
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/07/22 09:30	10/05/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/07/22 09:30	10/05/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	10/07/22 09:30	10/05/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/07/22 09:30	10/05/22	
Magnesium	200.8	ND U	ug/L	10	2	1	10/07/22 09:30	10/05/22	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	10/07/22 09:30	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211426
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/07/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217111-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	105	100	105	85-115
Arsenic	200.8	49.9	50.0	100	85-115
Cobalt	200.8	26.1	25.0	104	85-115
Iron	200.8	50.9	50.0	102	85-115
Lithium	200.8	48.4	50.0	97	85-115
Magnesium	200.8	248	250	99	85-115
Manganese	200.8	26.3	25.0	105	85-115

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

October 27, 2022

Analytical Report for Service Request No: K2211430

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

RE: Greene County Treatability / 221114-01.05 Task 05

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 03, 2022
For your reference, these analyses have been assigned our service request number **K2211430.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Table of Contents

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Anchor QEA, LLC

Project: Greene County Treatability

Sample Matrix: Water

Service Request: K2211430

Date Received: 10/03/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 10/03/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 10/27/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2211430

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	9/28/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Dissolved Iron	Dissolved Manganese	Dissolved Aluminum	Dissolved Magnesium	Sulfate (method 300.0/9056A)							
1	MW-1-HT-MMO-20220928	9/28/2022	14:12	Water	1	X		X	X	X	X	X								Filtered. HNO3-preserved bottle only
2	MW-1-FB-20220928	9/28/2022	10:12	Water	2	X		X	X				X							Filtered. One unpreserved bottle for sulfate test.
3	MW-5-HT-MMO-20220928	9/28/2022	10:13	Water	1	X	X		X	X	X	X								Filtered. HNO3-preserved bottle only
4	MW-5-FB-20220928	9/28/2022	12:12	Water	2	X	X		X				X							Filtered. One unpreserved bottle for sulfate test.
5	MW-10-HT-MMO-20220928	9/28/2022	10:15	Water	1	X	X		X	X	X	X								Filtered. HNO3-preserved bottle only
6	MW-10-FB-20220928	9/28/2022	10:16	Water	2	X	X		X				X							Filtered. One unpreserved bottle for sulfate test.
7	MW-14-HT-MMO-20220928	9/28/2022	10:17	Water	1	X	X	X	X	X	X	X								Filtered. HNO3-preserved bottle only
8	MW-14-FB-20220928	9/28/2022	10:18	Water	2	X	X	X	X				X							Filtered. One unpreserved bottle for sulfate test.
9	MW-17-HT-MMO-20220928	9/28/2022	10:19	Water	1	X	X		X	X	X	X								Filtered. HNO3-preserved bottle only
10	MW-17-FB-20220928	9/28/2022	10:20	Water	2	X	X		X				X							Filtered. One unpreserved bottle for sulfate test.
11	MW-44H-HT-MMO-20220928	9/28/2022	10:21	Water	1			X	X	X	X	X								Filtered. HNO3-preserved bottle only
12	MW-44H-FB-20220928	9/28/2022	10:22	Water	2			X	X				X							Filtered. One unpreserved bottle for sulfate test.
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please archive all samples until further notice.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	10/03/22 10:30	KMoran ALS	10/3/22 11:00
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
KMoran ALS	10/3/22 1230	Josh McMeryan ALS	10/3/22 ~~1300~~ 1230

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 114130

Received: 10.3.22 Opened: 10.3.22 By: YM Unloaded: 10.3.22 By: YM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other______ NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
8.2		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y [✓ N]

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y [✓ N]

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp not an issue → could not pH due to limited vol.

:______

1/13/22 **Page** **of**

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22
Sample Matrix:	Water	**Date Received:**	10/3/22
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MW-1-FB-20220928	K2211430-002	**772**	10	4	100	10/25/22 22:02	
MW-5-FB-20220928	K2211430-004	**171**	5.0	2.0	50	10/25/22 22:11	
MW-10-FB-20220928	K2211430-006	**124**	5.0	2.0	50	10/25/22 22:19	
MW-14-FB-20220928	K2211430-008	**163**	5.0	2.0	50	10/25/22 22:28	
MW-17-FB-20220928	K2211430-010	**45.7**	5.0	2.0	50	10/25/22 22:37	
MW-44H-FB-20220928	K2211430-012	**365**	5.0	2.0	50	10/25/22 23:20	
Method Blank	K2211430-MB1	ND U	0.10	0.04	1	10/25/22 15:39	
Method Blank	K2211430-MB2	ND U	0.10	0.04	1	10/25/22 19:25	
Method Blank	K2211430-MB3	ND U	0.10	0.04	1	10/25/22 23:12	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/25/22
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	782637

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2211430-LCS1	4.98	5.00	100	90-110
Lab Control Sample	K2211430-LCS2	5.01	5.00	100	90-110
Lab Control Sample	K2211430-LCS3	5.02	5.00	100	90-110

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	782637	KQ2218784-01	10/25/22 15:13	5.00	5.00	100	90-110
CCV2	782637	KQ2218784-02	10/25/22 17:15	5.00	5.02	100	90-110
CCV3	782637	KQ2218784-03	10/25/22 18:59	5.00	5.03	101	90-110
CCV4	782637	KQ2218784-04	10/25/22 21:01	5.00	5.03	101	90-110
CCV5	782637	KQ2218784-05	10/25/22 22:45	5.00	5.04	101	90-110
CCV6	782637	KQ2218784-06	10/26/22 00:47	5.00	5.08	102	90-110
CCV7	782637	KQ2218784-07	10/26/22 02:32	5.00	5.16	103	90-110
CCV8	782637	KQ2218784-08	10/26/22 04:34	5.00	5.18	104	90-110
CCV9	782637	KQ2218784-09	10/26/22 06:18	5.00	5.19	104	90-110
CCV10	782637	KQ2218784-10	10/26/22 12:13	5.00	5.03	101	90-110
CCV11	782637	KQ2218784-11	10/26/22 12:39	5.00	5.04	101	90-110
CCV12	782637	KQ2218784-12	10/26/22 13:40	5.00	5.07	101	90-110

Client: Anchor QEA, LLC **Service Request:**K2211430
Project: Greene County Treatability/221114-01.05 Task 05

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	782637	KQ2218784-13	10/25/22 15:21	0.10	0.04	ND	U
CCB2	782637	KQ2218784-14	10/25/22 17:23	0.10	0.04	ND	U
CCB3	782637	KQ2218784-15	10/25/22 19:08	0.10	0.04	ND	U
CCB4	782637	KQ2218784-16	10/25/22 21:10	0.10	0.04	ND	U
CCB5	782637	KQ2218784-17	10/25/22 22:54	0.10	0.04	ND	U
CCB6	782637	KQ2218784-18	10/26/22 00:56	0.10	0.04	ND	U

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 14:12
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-1-HT-MMO-20220928	**Basis:**	NA
Lab Code:	K2211430-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**12200**	ug/L	4.0	0.5	1	10/07/22 11:38	10/05/22	
Arsenic	200.8	**0.80**	ug/L	0.50	0.09	1	10/07/22 11:38	10/05/22	
Cobalt	200.8	**273**	ug/L	0.020	0.009	1	10/07/22 11:38	10/05/22	
Iron	200.8	**24800**	ug/L	2.0	0.3	1	10/07/22 11:38	10/05/22	
Magnesium	200.8	**44400**	ug/L	10	2	1	10/07/22 11:38	10/05/22	
Manganese	200.8	**49600**	ug/L	20	4	100	10/07/22 12:22	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:12
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-1-FB-20220928	**Basis:**	NA
Lab Code:	K2211430-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.07**	ug/L	0.50	0.09	1	10/07/22 11:40	10/05/22	
Cobalt	200.8	**282**	ug/L	0.020	0.009	1	10/07/22 11:40	10/05/22	
Iron	200.8	**132000**	ug/L	200	30	100	10/07/22 12:24	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:13
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-5-HT-MMO-20220928	**Basis:**	NA
Lab Code:	K2211430-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**10.9**	ug/L	4.0	0.5	1	10/07/22 11:42	10/05/22	
Arsenic	200.8	**0.33 J**	ug/L	0.50	0.09	1	10/07/22 11:42	10/05/22	
Iron	200.8	**4.5**	ug/L	2.0	0.3	1	10/07/22 11:42	10/05/22	
Lithium	200.8	**65.2**	ug/L	0.20	0.20	1	10/07/22 11:42	10/05/22	
Magnesium	200.8	**20100**	ug/L	10	2	1	10/07/22 11:42	10/05/22	
Manganese	200.8	**111**	ug/L	0.20	0.04	1	10/07/22 11:42	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 12:12
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-5-FB-20220928	**Basis:**	NA
Lab Code:	K2211430-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.63**	ug/L	0.50	0.09	1	10/07/22 11:43	10/05/22	
Iron	200.8	**5.4**	ug/L	2.0	0.3	1	10/07/22 11:43	10/05/22	
Lithium	200.8	**75.8**	ug/L	0.20	0.20	1	10/07/22 11:43	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:15
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-10-HT-MMO-20220928	**Basis:**	NA
Lab Code:	K2211430-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**19.7**	ug/L	4.0	0.5	1	10/07/22 11:45	10/05/22	
Arsenic	200.8	**0.15 J**	ug/L	0.50	0.09	1	10/07/22 11:45	10/05/22	
Iron	200.8	**1.6 J**	ug/L	2.0	0.3	1	10/07/22 11:45	10/05/22	
Lithium	200.8	**226**	ug/L	0.20	0.20	1	10/07/22 11:45	10/05/22	
Magnesium	200.8	**20300**	ug/L	10	2	1	10/07/22 11:45	10/05/22	
Manganese	200.8	**440**	ug/L	0.20	0.04	1	10/07/22 11:45	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:16
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-10-FB-20220928	**Basis:**	NA
Lab Code:	K2211430-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.26 J**	ug/L	0.50	0.09	1	10/07/22 11:47	10/05/22	
Iron	200.8	**15.8**	ug/L	2.0	0.3	1	10/07/22 11:47	10/05/22	
Lithium	200.8	**231**	ug/L	0.20	0.20	1	10/07/22 11:47	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:17
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-14-HT-MMO-20220928	**Basis:**	NA
Lab Code:	K2211430-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**4.4**		ug/L	4.0	0.5	1	10/07/22 11:48	10/05/22	
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	10/07/22 11:48	10/05/22	
Cobalt	200.8	**0.282**		ug/L	0.020	0.009	1	10/07/22 11:48	10/05/22	
Iron	200.8	**2.7**		ug/L	2.0	0.3	1	10/07/22 11:48	10/05/22	
Lithium	200.8	**488**		ug/L	0.20	0.20	1	10/07/22 11:48	10/05/22	
Magnesium	200.8	**29200**		ug/L	10	2	1	10/07/22 11:48	10/05/22	
Manganese	200.8	**1150**		ug/L	0.20	0.04	1	10/07/22 11:48	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:18
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-14-FB-20220928	**Basis:**	NA
Lab Code:	K2211430-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.23 J**	ug/L	0.50	0.09	1	10/07/22 11:50	10/05/22	
Cobalt	200.8	**7.73**	ug/L	0.020	0.009	1	10/07/22 11:50	10/05/22	
Iron	200.8	**1160**	ug/L	2.0	0.3	1	10/07/22 11:50	10/05/22	
Lithium	200.8	**528**	ug/L	0.20	0.20	1	10/07/22 11:50	10/05/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:19
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-17-HT-MMO-20220928	**Basis:**	NA
Lab Code:	K2211430-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**8.6**		ug/L	4.0	0.5	1	10/07/22 11:59	10/05/22	
Arsenic	200.8	**0.21**	**J**	ug/L	0.50	0.09	1	10/07/22 11:59	10/05/22	
Iron	200.8	**2.0**		ug/L	2.0	0.3	1	10/07/22 11:59	10/05/22	
Lithium	200.8	**552**		ug/L	0.20	0.20	1	10/07/22 11:59	10/05/22	
Magnesium	200.8	**26000**		ug/L	10	2	1	10/07/22 11:59	10/05/22	
Manganese	200.8	**4.70**		ug/L	0.20	0.04	1	10/07/22 11:59	10/05/22	

Printed 10/7/2022 6:38:43 PM

Superset Reference:

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:20
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-17-FB-20220928	**Basis:**	NA
Lab Code:	K2211430-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.75**	ug/L	0.50	0.09	1	10/07/22 12:01	10/05/22	
Iron	200.8	**15.0**	ug/L	2.0	0.3	1	10/07/22 12:01	10/05/22	
Lithium	200.8	**580**	ug/L	0.20	0.20	1	10/07/22 12:01	10/05/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:21
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-44H-HT-MMO-20220928	**Basis:**	NA
Lab Code:	K2211430-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**17.9**	ug/L	4.0	0.5	1	10/07/22 12:03	10/05/22	
Cobalt	200.8	**0.421**	ug/L	0.020	0.009	1	10/07/22 12:03	10/05/22	
Iron	200.8	**2.1**	ug/L	2.0	0.3	1	10/07/22 12:03	10/05/22	
Magnesium	200.8	**21900**	ug/L	10	2	1	10/07/22 12:03	10/05/22	
Manganese	200.8	**1420**	ug/L	0.20	0.04	1	10/07/22 12:03	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	09/28/22 10:22
Sample Matrix:	Water	**Date Received:**	10/03/22 12:30
Sample Name:	MW-44H-FB-20220928	**Basis:**	NA
Lab Code:	K2211430-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**38.8**	ug/L	0.020	0.009	1	10/07/22 12:04	10/05/22	
Lithium	200.8	**2.71**	ug/L	0.20	0.20	1	10/07/22 12:04	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217113-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.5**	**J**	ug/L	4.0	0.5	1	10/07/22 11:07	10/05/22	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/07/22 11:07	10/05/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/07/22 11:07	10/05/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/07/22 11:07	10/05/22	
Lithium	200.8	ND	U	ug/L	0.20	0.20	1	10/07/22 11:07	10/05/22	
Magnesium	200.8	ND	U	ug/L	10	2	1	10/07/22 11:07	10/05/22	
Manganese	200.8	ND	U	ug/L	0.20	0.04	1	10/07/22 11:07	10/05/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/07/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217113-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	104	100	104	85-115
Arsenic	200.8	49.3	50.0	99	85-115
Cobalt	200.8	25.5	25.0	102	85-115
Iron	200.8	50.7	50.0	101	85-115
Lithium	200.8	51.9	50.0	104	85-115
Magnesium	200.8	253	250	101	85-115
Manganese	200.8	25.5	25.0	102	85-115

Prep Summary Report

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05
Sample Matrix: Water

Metals

Prep Method: EPA CLP ILM04.0 **Extraction Lot:** 407601
Analytical Method: 200.8 **Extraction Date:** 10/05/22 13:55

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-1-HT-MMO-20220928	K2211430-001	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-1-FB-20220928	K2211430-002	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-5-HT-MMO-20220928	K2211430-003	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-5-FB-20220928	K2211430-004	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-10-HT-MMO-20220928	K2211430-005	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-10-FB-20220928	K2211430-006	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-14-HT-MMO-20220928	K2211430-007	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-14-FB-20220928	K2211430-008	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-17-HT-MMO-20220928	K2211430-009	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-17-FB-20220928	K2211430-010	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-44H-HT-MMO-20220928	K2211430-011	9/28/22	10/3/22	10.0000 mL	10 mL	
MW-44H-FB-20220928	K2211430-012	9/28/22	10/3/22	10.0000 mL	10 mL	
Method Blank	KQ2217113-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2217113-02LCS	NA	NA	10.0000 mL	10.4 mL	

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 10/07/22 09:19						
Aluminum	200.8	780471	100	100	100	90-110
Arsenic	200.8	780471	25.1	25.0	101	90-110
Cobalt	200.8	780471	25.2	25.0	101	90-110
Iron	200.8	780471	49.7	50.0	99	90-110
Magnesium	200.8	780471	245	250	98	90-110
Manganese	200.8	780471	24.8	25.0	99	90-110
Lithium	200.8	780471	25.3	25.0	101	90-110
CCV 10/07/22 09:21						
Aluminum	200.8	780471	250	250	100	90-110
Arsenic	200.8	780471	24.8	25.0	99	90-110
Cobalt	200.8	780471	25.5	25.0	102	90-110
Iron	200.8	780471	253	250	101	90-110
Magnesium	200.8	780471	1980	2000	99	90-110
Manganese	200.8	780471	25.3	25.0	101	90-110
Lithium	200.8	780471	24.9	25.0	100	90-110
CCV 10/07/22 09:49						
Aluminum	200.8	780471	246	250	99	90-110
Arsenic	200.8	780471	25.0	25.0	100	90-110
Cobalt	200.8	780471	25.2	25.0	101	90-110
Iron	200.8	780471	250	250	100	90-110
Magnesium	200.8	780471	1960	2000	98	90-110
Manganese	200.8	780471	24.3	25.0	97	90-110
Lithium	200.8	780471	24.5	25.0	98	90-110
CCV 10/07/22 10:14						
Aluminum	200.8	780471	244	250	98	90-110
Arsenic	200.8	780471	24.6	25.0	99	90-110
Cobalt	200.8	780471	25.3	25.0	101	90-110
Iron	200.8	780471	254	250	101	90-110
Magnesium	200.8	780471	1980	2000	99	90-110
Manganese	200.8	780471	25.3	25.0	101	90-110
Lithium	200.8	780471	24.7	25.0	99	90-110
CCV 10/07/22 10:46						
Aluminum	200.8	780471	251	250	100	90-110
Arsenic	200.8	780471	25.0	25.0	100	90-110
Cobalt	200.8	780471	24.8	25.0	99	90-110
Iron	200.8	780471	251	250	100	90-110

Client:	Anchor QEA, LLC	**Service Request:**	K2211430
Project:	Greene County Treatability/221114-01.05 Task 05		

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**True Value**	**% Rec**	**% Rec. Limits**
CCV 10/07/22 10:46						
Magnesium	200.8	780471	2020	2000	101	90-110
Manganese	200.8	780471	25.1	25.0	100	90-110
Lithium	200.8	780471	25.5	25.0	102	90-110
CCV 10/07/22 11:04						
Aluminum	200.8	780471	250	250	100	90-110
Arsenic	200.8	780471	24.3	25.0	97	90-110
Cobalt	200.8	780471	24.7	25.0	99	90-110
Iron	200.8	780471	246	250	99	90-110
Magnesium	200.8	780471	1990	2000	99	90-110
Manganese	200.8	780471	24.5	25.0	98	90-110
Lithium	200.8	780471	25.8	25.0	103	90-110
CCV 10/07/22 11:29						
Aluminum	200.8	780471	244	250	98	90-110
Arsenic	200.8	780471	25.1	25.0	100	90-110
Cobalt	200.8	780471	24.8	25.0	99	90-110
Iron	200.8	780471	251	250	100	90-110
Magnesium	200.8	780471	1990	2000	99	90-110
Manganese	200.8	780471	25.1	25.0	100	90-110
Lithium	200.8	780471	24.8	25.0	99	90-110
CCV 10/07/22 11:52						
Aluminum	200.8	780471	251	250	100	90-110
Arsenic	200.8	780471	25.2	25.0	101	90-110
Cobalt	200.8	780471	25.0	25.0	100	90-110
Iron	200.8	780471	251	250	100	90-110
Magnesium	200.8	780471	1950	2000	98	90-110
Manganese	200.8	780471	25.2	25.0	101	90-110
Lithium	200.8	780471	25.3	25.0	101	90-110
CCV 10/07/22 12:09						
Aluminum	200.8	780471	247	250	99	90-110
Arsenic	200.8	780471	24.7	25.0	99	90-110
Cobalt	200.8	780471	24.5	25.0	98	90-110
Iron	200.8	780471	247	250	99	90-110
Magnesium	200.8	780471	1990	2000	100	90-110
Manganese	200.8	780471	25.2	25.0	101	90-110
Lithium	200.8	780471	25.0	25.0	100	90-110

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 10/07/22 12:26						
Aluminum	200.8	780471	247	250	99	90-110
Arsenic	200.8	780471	24.7	25.0	99	90-110
Cobalt	200.8	780471	24.2	25.0	97	90-110
Iron	200.8	780471	244	250	98	90-110
Magnesium	200.8	780471	1990	2000	100	90-110
Manganese	200.8	780471	24.6	25.0	98	90-110
Lithium	200.8	780471	25.3	25.0	101	90-110

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
ICB 10/07/22 09:23				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 09:24				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 09:56				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 10:27				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.05	J
Lithium	200.8	780471	0.20	U
CCB 10/07/22 10:47				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
CCB 10/07/22 10:47				
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 11:05				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 11:33				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 11:53				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.05	J
Lithium	200.8	780471	0.20	U
CCB 10/07/22 11:57				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	J
Lithium	200.8	780471	0.20	U

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID **Analyte**	**Method**	**Analysis Batch:**	**Result**	**C**
CCB 10/07/22 12:11				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U
CCB 10/07/22 12:28				
Aluminum	200.8	780471	0.5	U
Arsenic	200.8	780471	0.09	U
Cobalt	200.8	780471	0.009	U
Iron	200.8	780471	0.3	U
Magnesium	200.8	780471	2	U
Manganese	200.8	780471	0.04	U
Lithium	200.8	780471	0.20	U

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Aluminum	200.8	780471	4.2	4.0	106	50-199	10/07/22 09:26
Arsenic	200.8	780471	0.48	0.5	96	50-199	10/07/22 09:26
Cobalt	200.8	780471	0.016	0.02	80	50-199	10/07/22 09:26
Iron	200.8	780471	2.5	2.0	125	50-199	10/07/22 09:26
Magnesium	200.8	780471	10.1	10.0	101	50-199	10/07/22 09:26
Manganese	200.8	780471	0.16	0.2	80	50-199	10/07/22 09:26
Lithium	200.8	780471	0.12	0.1	115	50-199	10/07/22 09:26

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

Detection Limits

Instrument: K-ICP-MS-05 **Matrix:** Water

Analyte	Mass	Units	MRL	MDL	Method
Aluminum	27	ug/L	4	0.5	200.8
Arsenic	75	ug/L	0.5	0.09	200.8
Cobalt	59	ug/L	0.02	0.009	200.8
Iron	56	ug/L	2	0.3	200.8
Lithium	7	ug/L	0.2	0.2	200.8
Magnesium	24	ug/L	10	2	200.8
Manganese	55	ug/L	0.2	0.04	200.8

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Aluminum 27	45000	200.8
Arsenic 75	3150	200.8
Cobalt 59	3150	200.8
Iron 56	45000	200.8
Magnesium 24	450000	200.8
Manganese 55	3150	200.8

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **780471**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn
ZZZZZZ	1	10/07/22 09:07							
ZZZZZZ	1	10/07/22 09:09							
ZZZZZZ	1	10/07/22 09:10							
ICV	1	10/07/22 09:19	X	X	X	X	X	X	X
CCV	1	10/07/22 09:21	X	X	X	X	X	X	X
ICB	1	10/07/22 09:23	X	X	X	X	X	X	X
CCB	1	10/07/22 09:24	X	X	X	X	X	X	X
LLICVW	1	10/07/22 09:26	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 09:30							
ZZZZZZ	1	10/07/22 09:31							
ZZZZZZ	1	10/07/22 09:33							
ZZZZZZ	1	10/07/22 09:35							
ZZZZZZ	1	10/07/22 09:39							
ZZZZZZ	1	10/07/22 09:41							
ZZZZZZ	1	10/07/22 09:43							
ZZZZZZ	1	10/07/22 09:44							
ZZZZZZ	1	10/07/22 09:46							
ZZZZZZ	1	10/07/22 09:47							
CCV	1	10/07/22 09:49	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 09:51							
CCB	1	10/07/22 09:56	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 09:58							
ZZZZZZ	1	10/07/22 09:59							
ZZZZZZ	1	10/07/22 10:01							
ZZZZZZ	1	10/07/22 10:02							
ZZZZZZ	1	10/07/22 10:04							
ZZZZZZ	1	10/07/22 10:06							
ZZZZZZ	1	10/07/22 10:07							
ZZZZZZ	1	10/07/22 10:09							
ZZZZZZ	1	10/07/22 10:11							
ZZZZZZ	1	10/07/22 10:12							
CCV	1	10/07/22 10:14	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 10:16							
CCB	1	10/07/22 10:27	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 10:29							
ZZZZZZ	1	10/07/22 10:30							
ZZZZZZ	1	10/07/22 10:32							

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **780471**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn
ZZZZZZ	1	10/07/22 10:34							
ZZZZZZ	1	10/07/22 10:35							
ZZZZZZ	1	10/07/22 10:37							
CCV	1	10/07/22 10:46	X	X	X	X	X	X	X
CCB	1	10/07/22 10:47	X	X	X	X	X	X	X
ZZZZZZ	100	10/07/22 10:49							
ZZZZZZ	100	10/07/22 10:51							
ZZZZZZ	100	10/07/22 10:53							
ZZZZZZ	100	10/07/22 10:54							
ZZZZZZ	100	10/07/22 10:56							
ZZZZZZ	100	10/07/22 10:58							
ZZZZZZ	100	10/07/22 10:59							
ZZZZZZ	100	10/07/22 11:01							
CCV	1	10/07/22 11:04	X	X	X	X	X	X	X
CCB	1	10/07/22 11:05	X	X	X	X	X	X	X
KQ2217113-01MB	1	10/07/22 11:07	X	X	X	X	X	X	X
KQ2217113-02LCS	1	10/07/22 11:08	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 11:10							
ZZZZZZ	1	10/07/22 11:12							
ZZZZZZ	1	10/07/22 11:13							
ZZZZZZ	1	10/07/22 11:15							
ZZZZZZ	1	10/07/22 11:17							
ZZZZZZ	1	10/07/22 11:18							
ZZZZZZ	1	10/07/22 11:20							
ZZZZZZ	1	10/07/22 11:22							
ZZZZZZ	1	10/07/22 11:25							
CCV	1	10/07/22 11:29	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 11:31							
CCB	1	10/07/22 11:33	X	X	X	X	X	X	X
ZZZZZZ	1	10/07/22 11:35							
ZZZZZZ	1	10/07/22 11:37							
K2211430-001	1	10/07/22 11:38	X	X	X	X		X	
K2211430-002	1	10/07/22 11:40		X	X				
K2211430-003	1	10/07/22 11:42	X	X		X	X	X	X
K2211430-004	1	10/07/22 11:43		X		X	X		
K2211430-005	1	10/07/22 11:45	X	X		X	X	X	X
K2211430-006	1	10/07/22 11:47		X		X	X		

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **780471**

Sample	Dilution Factor	Date/Time	Al	As	Co	Fe	Li	Mg	Mn
K2211430-007	1	10/07/22 11:48	X	X	X	X	X	X	X
K2211430-008	1	10/07/22 11:50		X	X	X	X		
CCV	1	10/07/22 11:52	X	X	X	X	X	X	X
CCB	1	10/07/22 11:53	X	X	X	X	X	X	X
CCB	1	10/07/22 11:57	X	X	X	X	X	X	X
K2211430-009	1	10/07/22 11:59	X	X		X	X	X	X
K2211430-010	1	10/07/22 12:01		X		X	X		
K2211430-011	1	10/07/22 12:03	X		X	X		X	X
K2211430-012	1	10/07/22 12:04			X		X		
ZZZZZZ	1	10/07/22 12:06							
ZZZZZZ	1	10/07/22 12:08							
CCV	1	10/07/22 12:09	X	X	X	X	X	X	X
CCB	1	10/07/22 12:11	X	X	X	X	X	X	X
ZZZZZZ	100	10/07/22 12:12							
ZZZZZZ	100	10/07/22 12:14							
ZZZZZZ	100	10/07/22 12:16							
ZZZZZZ	100	10/07/22 12:17							
ZZZZZZ	100	10/07/22 12:19							
ZZZZZZ	100	10/07/22 12:21							
K2211430-001	100	10/07/22 12:22							X
K2211430-002	100	10/07/22 12:24				X			
CCV	1	10/07/22 12:26	X	X	X	X	X	X	X
CCB	1	10/07/22 12:28	X	X	X	X	X	X	X

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **780471**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He	Lu175He
ZZZZZZ	10/07/22 09:07				
ZZZZZZ	10/07/22 09:09				
ZZZZZZ	10/07/22 09:10				
ICV	10/07/22 09:19	98	99	100	101
CCV	10/07/22 09:21	98	100	100	101
ICB	10/07/22 09:23	96	98	100	99
CCB	10/07/22 09:24	98	98	99	99
LLICVW	10/07/22 09:26	95	99	100	102
ZZZZZZ	10/07/22 09:30				
ZZZZZZ	10/07/22 09:31				
ZZZZZZ	10/07/22 09:33				
ZZZZZZ	10/07/22 09:35				
ZZZZZZ	10/07/22 09:39				
ZZZZZZ	10/07/22 09:41				
ZZZZZZ	10/07/22 09:43				
ZZZZZZ	10/07/22 09:44				
ZZZZZZ	10/07/22 09:46				
ZZZZZZ	10/07/22 09:47				
CCV	10/07/22 09:49	89	92	96	96
ZZZZZZ	10/07/22 09:51				
CCB	10/07/22 09:56	87	84	87	91
ZZZZZZ	10/07/22 09:58				
ZZZZZZ	10/07/22 09:59				
ZZZZZZ	10/07/22 10:01				
ZZZZZZ	10/07/22 10:02				
ZZZZZZ	10/07/22 10:04				
ZZZZZZ	10/07/22 10:06				
ZZZZZZ	10/07/22 10:07				
ZZZZZZ	10/07/22 10:09				
ZZZZZZ	10/07/22 10:11				
ZZZZZZ	10/07/22 10:12				
CCV	10/07/22 10:14	91	93	94	98
ZZZZZZ	10/07/22 10:16				
CCB	10/07/22 10:27	87	86	89	94
ZZZZZZ	10/07/22 10:29				
ZZZZZZ	10/07/22 10:30				
ZZZZZZ	10/07/22 10:32				

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **780471**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He	Lu175He
ZZZZZZ	10/07/22 10:34				
ZZZZZZ	10/07/22 10:35				
ZZZZZZ	10/07/22 10:37				
CCV	10/07/22 10:46	87	87	89	95
CCB	10/07/22 10:47	87	87	90	96
ZZZZZZ	10/07/22 10:49				
ZZZZZZ	10/07/22 10:51				
ZZZZZZ	10/07/22 10:53				
ZZZZZZ	10/07/22 10:54				
ZZZZZZ	10/07/22 10:56				
ZZZZZZ	10/07/22 10:58				
ZZZZZZ	10/07/22 10:59				
ZZZZZZ	10/07/22 11:01				
CCV	10/07/22 11:04	82	84	87	92
CCB	10/07/22 11:05	82	83	86	94
KQ2217113-01MB	10/07/22 11:07	82	83	85	94
KQ2217113-02LCS	10/07/22 11:08	82	84	87	91
ZZZZZZ	10/07/22 11:10				
ZZZZZZ	10/07/22 11:12				
ZZZZZZ	10/07/22 11:13				
ZZZZZZ	10/07/22 11:15				
ZZZZZZ	10/07/22 11:17				
ZZZZZZ	10/07/22 11:18				
ZZZZZZ	10/07/22 11:20				
ZZZZZZ	10/07/22 11:22				
ZZZZZZ	10/07/22 11:25				
CCV	10/07/22 11:29	87	87	91	96
ZZZZZZ	10/07/22 11:31				
CCB	10/07/22 11:33	85	85	89	96
ZZZZZZ	10/07/22 11:35				
ZZZZZZ	10/07/22 11:37				
K2211430-001	10/07/22 11:38	71	68	72	83
K2211430-002	10/07/22 11:40	70	70	74	84
K2211430-003	10/07/22 11:42	79	82	84	91
K2211430-004	10/07/22 11:43	83	81	85	92
K2211430-005	10/07/22 11:45	84	87	89	96
K2211430-006	10/07/22 11:47	83	85	87	93

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC **Service Request:** K2211430
Project: Greene County Treatability/221114-01.05 Task 05

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **780471**

Sample	**Date/Time**	Sc45NG	Sc45He	Ge72He	Lu175He
K2211430-007	10/07/22 11:48	83	86	88	94
K2211430-008	10/07/22 11:50	84	84	86	93
CCV	10/07/22 11:52	89	91	93	98
CCB	10/07/22 11:53	88	90	93	99
CCB	10/07/22 11:57	88	89	92	97
K2211430-009	10/07/22 11:59	86	88	90	96
K2211430-010	10/07/22 12:01	87	89	91	96
K2211430-011	10/07/22 12:03	80	84	86	93
K2211430-012	10/07/22 12:04	79	78	79	89
ZZZZZZ	10/07/22 12:06				
ZZZZZZ	10/07/22 12:08				
CCV	10/07/22 12:09	86	87	91	96
CCB	10/07/22 12:11	84	86	89	96
ZZZZZZ	10/07/22 12:12				
ZZZZZZ	10/07/22 12:14				
ZZZZZZ	10/07/22 12:16				
ZZZZZZ	10/07/22 12:17				
ZZZZZZ	10/07/22 12:19				
ZZZZZZ	10/07/22 12:21				
K2211430-001	10/07/22 12:22	82	82	86	93
K2211430-002	10/07/22 12:24	81	81	86	94
CCV	10/07/22 12:26	81	83	88	95
CCB	10/07/22 12:28	82	83	86	93

October 11, 2022 Service Request No:K2211758

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

Laboratory Results for: Greene County Treatablility

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 07, 2022
For your reference, these analyses have been assigned our service request number **K2211758.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility	**Date Received:**	10/07/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 10/07/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/11/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-23-A-INF-20221003 **Lab ID: K2211758-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.12	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.346		0.009	0.020	ug/L	200.8
Lithium, Dissolved	1.35		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-23-B-INF-20221004 **Lab ID: K2211758-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.041		0.009	0.020	ug/L	200.8
Lithium, Dissolved	1.37		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-23-C-INF-20221005 **Lab ID: K2211758-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.024		0.009	0.020	ug/L	200.8
Lithium, Dissolved	1.40		0.20	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2211758

Project: Greene County Treatablility/221114-01.05 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2211758-001	GC-AP-DCT-MW-23-A-INF-20221003	10/3/2022	1430
K2211758-002	GC-AP-DCT-MW-23-B-INF-20221004	10/4/2022	1630
K2211758-003	GC-AP-DCT-MW-23-C-INF-20221005	10/5/2022	0817

K2211758

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	10/6/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters												Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt										
1	GC-AP-DCT-MW-23-A-INF-20221003	10/3/2022	14:30	Water	1	X	X	X										Filtered. HNO3-preserved. 5-day TAT
2	GC-AP-DCT-MW-23-B-INF-20221004	10/4/2022	16:30	Water	1	X	X	X										Filtered. HNO3-preserved. 5-day TAT
3	GC-AP-DCT-MW-23-C-INF-20221005	10/5/2022	8:17	Water	1	X	X	X										Filtered. HNO3-preserved. 5-day TAT
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary).

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time: 10/7/22	Signature/Print Name:	
	~~10/6/22~~ 8:30	K Morrow ALS	10/7/22 1045
Relinquished by:	Company:	Received by:	
		Diane Prue	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
K Morrow	ALS 10/7/22 1215	P Prue	10/7/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM Mlt

Cooler Receipt and Preservation Form

Client Anchor QEA

Service Request K22 11758

Received: 10/7/22 Opened: 10/7/22 By: PDP Unloaded: 10/7/22 By: PDP

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other_____ NA
3. Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

   If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.5		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

RUSH

Notes, Discrepancies, Resolutions: Did not PH due to low volume

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility/221114-01.05 Task 05		

Sample Name:	GC-AP-DCT-MW-23-A-INF-20221003	**Date Collected:**	10/3/22
Lab Code:	K2211758-001	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-23-B-INF-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211758-002	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-23-C-INF-20221005	**Date Collected:**	10/5/22
Lab Code:	K2211758-003	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client: Anchor QEA, LLC
Project: Greene County Treatablility/221114-01.05 Task 05
Sample Matrix: Water

Service Request: K2211758
Date Collected: 10/03/22 14:30
Date Received: 10/07/22 12:15

Sample Name: GC-AP-DCT-MW-23-A-INF-20221003
Lab Code: K2211758-001

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.12** **J**	ug/L	0.50	0.09	1	10/11/22 13:38	10/10/22	
Cobalt	200.8	**0.346**	ug/L	0.020	0.009	1	10/11/22 13:38	10/10/22	
Lithium	200.8	**1.35**	ug/L	0.20	0.20	1	10/11/22 13:38	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/04/22 16:30
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-23-B-INF-20221004	**Basis:**	NA
Lab Code:	K2211758-002		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/11/22 13:43	10/10/22	
Cobalt	200.8	**0.041**		ug/L	0.020	0.009	1	10/11/22 13:43	10/10/22	
Lithium	200.8	**1.37**		ug/L	0.20	0.20	1	10/11/22 13:43	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 08:17
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-23-C-INF-20221005	**Basis:**	NA
Lab Code:	K2211758-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/11/22 13:48	10/10/22	
Cobalt	200.8	**0.024**		ug/L	0.020	0.009	1	10/11/22 13:48	10/10/22	
Lithium	200.8	**1.40**		ug/L	0.20	0.20	1	10/11/22 13:48	10/10/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217473-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 13:35	10/10/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/11/22 13:35	10/10/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/11/22 13:35	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/03/22
Sample Matrix:	Water	**Date Received:**	10/07/22
		Date Analyzed:	10/11/22
		Date Extracted:	10/10/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-AP-DCT-MW-23-A-INF-20221003	**Units:**	ug/L
Lab Code:	K2211758-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217473-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.12 J	48.4	50.0	96	70-130
Cobalt	0.346	24.5	25.0	97	70-130
Lithium	1.35	52.5	50.0	102	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/04/22
Sample Matrix:	Water	**Date Received:**	10/07/22
		Date Analyzed:	10/11/22
		Date Extracted:	10/10/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-AP-DCT-MW-23-B-INF-20221004	**Units:**	ug/L
Lab Code:	K2211758-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2217473-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	48.3	50.0	97	70-130
Cobalt	0.041	24.5	25.0	98	70-130
Lithium	1.37	50.5	50.0	98	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/03/22
Sample Matrix:	Water	**Date Received:**	10/07/22
		Date Analyzed:	10/11/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-AP-DCT-MW-23-A-INF-20221003	**Units:**	ug/L
Lab Code:	K2211758-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217473-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.12 J	ND U	NC	NC	20
Cobalt	200.8	0.020	0.009	0.346	0.332	0.339	4	20
Lithium	200.8	0.20	0.20	1.35	1.28	1.32	5	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/11/2022 4:34:48 PM

Superset Reference:22-0000642194 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211758
Project	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/04/22
Sample Matrix:	Water	**Date Received:**	10/07/22
		Date Analyzed:	10/11/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-AP-DCT-MW-23-B-INF-20221004	**Units:**	ug/L
Lab Code:	K2211758-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2217473-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	ND U	ND U	ND	-	20
Cobalt	200.8	0.020	0.009	0.041	0.030	0.036	31 #	20
Lithium	200.8	0.20	0.20	1.37	1.40	1.39	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 10/11/2022 4:34:48 PM

Superset Reference:22-0000642194 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Service Request: K2211758
Project: Greene County Treatablility/221114-01.05 Task 05
Date Analyzed: 10/11/22
Sample Matrix: Water

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217473-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.2	50.0	96	85-115
Cobalt	200.8	25.0	25.0	100	85-115
Lithium	200.8	49.5	50.0	99	85-115

Printed 10/11/2022 4:34:48 PM

Superset Reference:22-0000642194 rev 00

October 11, 2022 Service Request No:K2211759

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

Laboratory Results for: Greene County Treatability

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 07, 2022
For your reference, these analyses have been assigned our service request number **K2211759.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211759
Project: Greene County Treatability
Date Received: 10/07/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 10/07/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/11/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-1-HT-MMO-20221003 Lab ID: K2211759-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.7	J	0.2	1.0	ug/L	200.8
Cobalt, Dissolved	78.8		0.018	0.040	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-1-FB-20221003 Lab ID: K2211759-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.95		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	71.8		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-5-HT-MMO-20221003 Lab ID: K2211759-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.30	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	52.6		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-5-FB-20221003 Lab ID: K2211759-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.56		0.09	0.50	ug/L	200.8
Lithium, Dissolved	58.5		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-10-HT-MMO-20221003 Lab ID: K2211759-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.09	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	129		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-10-FB-20221003 Lab ID: K2211759-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.13	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	181		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-14-FB-20221003 Lab ID: K2211759-008

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.14	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	2.95		0.009	0.020	ug/L	200.8
Lithium, Dissolved	282		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-17-HT-MMO-20221003 Lab ID: K2211759-009

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.14	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	353		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-17-FB-20221003 Lab ID: K2211759-010

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.38	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	262		0.20	0.20	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-14-HT-MMO-20221003 **Lab ID: K2211759-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.182		0.009	0.020	ug/L	200.8
Lithium, Dissolved	282		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-44H-HT-MMO-20221003 **Lab ID: K2211759-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.379		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-44H-FB-20221003 **Lab ID: K2211759-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	17.9		0.009	0.020	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2211759-001	GC-AP-DCT-MW-1-HT-MMO-20221003	10/3/2022	1850
K2211759-002	GC-AP-DCT-MW-1-FB-20221003	10/3/2022	1418
K2211759-003	GC-AP-DCT-MW-5-HT-MMO-20221003	10/3/2022	1419
K2211759-004	GC-AP-DCT-MW-5-FB-20221003	10/3/2022	1420
K2211759-005	GC-AP-DCT-MW-10-HT-MMO-20221003	10/3/2022	1421
K2211759-006	GC-AP-DCT-MW-10-FB-20221003	10/3/2022	1422
K2211759-007	GC-AP-DCT-MW-14-HT-MMO-20221003	10/3/2022	1423
K2211759-008	GC-AP-DCT-MW-14-FB-20221003	10/3/2022	1424
K2211759-009	GC-AP-DCT-MW-17-HT-MMO-20221003	10/3/2022	1425
K2211759-010	GC-AP-DCT-MW-17-FB-20221003	10/3/2022	1426
K2211759-011	GC-AP-DCT-MW-44H-HT-MMO-20221003	10/3/2022	1427
K2211759-012	GC-AP-DCT-MW-44H-FB-20221003	10/3/2022	1428

K2211759

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	10/6/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt	Comments/Preservation
1	GC-AP-DCT-MW-1-HT-MMO-20221003	10/3/2022	18:50	Water	1	X		X	Filtered. HNO3-preserved. Small volume. 5-day TAT
2	GC-AP-DCT-MW-1-FB-20221003	10/3/2022	14:18	Water	1	X		X	Filtered. HNO3-preserved. 5-day TAT
3	GC-AP-DCT-MW-5-HT-MMO-20221003	10/3/2022	14:19	Water	1	X	X		Filtered. HNO3-preserved. 5-day TAT
4	GC-AP-DCT-MW-5-FB-20221003	10/3/2022	14:20	Water	1	X	X		Filtered. HNO3-preserved. 5-day TAT
5	GC-AP-DCT-MW-10-HT-MMO-20221003	10/3/2022	14:21	Water	1	X	X		Filtered. HNO3-preserved. 5-day TAT
6	GC-AP-DCT-MW-10-FB-20221003	10/3/2022	14:22	Water	1	X	X		Filtered. HNO3-preserved. 5-day TAT
7	GC-AP-DCT-MW-14-HT-MMO-20221003	10/3/2022	14:23	Water	1	X	X	X	Filtered. HNO3-preserved. 5-day TAT
8	GC-AP-DCT-MW-14-FB-20221003	10/3/2022	14:24	Water	1	X	X	X	Filtered. HNO3-preserved. 5-day TAT
9	GC-AP-DCT-MW-17-HT-MMO-20221003	10/3/2022	14:25	Water	1	X	X		Filtered. HNO3-preserved. 5-day TAT
10	GC-AP-DCT-MW-17-FB-20221003	10/3/2022	14:26	Water	1	X	X		Filtered. HNO3-preserved. 5-day TAT
11	GC-AP-DCT-MW-44H-HT-MMO-2022100	10/3/2022	14:27	Water	1			X	Filtered. HNO3-preserved. 5-day TAT
12	GC-AP-DCT-MW-44H-FB-20221003	10/3/2022	14:28	Water	1			X	Filtered. HNO3-preserved. 5-day TAT
13									
14									
15									

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please dilute the sample with the small volume as-needed. Keeping dilution < 10X is preferred.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 10/7/22 ~~10/6/22~~ 8:30

Received by:
Signature/Print Name: KMorrow ALS 10/7/22 1045

Relinquished by:
Company:
Signature/Print Name: KMorrow ALS
Date/Time: 10/7/22 1215

Received by: Diane Price
Signature/Print Name: PPrice 10/7/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM MLT

Cooler Receipt and Preservation Form

lient Anchor QEA Service Request K22 11759

eceived: 10/7/22 Opened: 10/7/22 By: PDP Unloaded: 10/7/22 By: PDP

Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*

Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* ______ *NA*

Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

emp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.5		IR01					

Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

Were samples received within the method specified temperature ranges? NA [✓ Y] N

If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______

Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N

Were samples received in good condition (unbroken) NA [✓ Y] N

Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N

). Did all sample labels and tags agree with custody papers? NA [✓ Y] N

l. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N

2. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N

3. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N

4. Was C12/Res negative? [✓ NA] Y N

5. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

RUSH

Notes, Discrepancies, Resolutions: Did not PH due to low volume

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-AP-DCT-MW-1-HT-MMO-20221003	**Date Collected:**	10/3/22
Lab Code:	K2211759-001	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-1-FB-20221003	**Date Collected:**	10/3/22
Lab Code:	K2211759-002	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-5-HT-MMO-20221003	**Date Collected:**	10/3/22
Lab Code:	K2211759-003	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-5-FB-20221003	**Date Collected:**	10/3/22
Lab Code:	K2211759-004	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-10-HT-MMO-	**Date Collected:**	10/3/22
Lab Code:	K2211759-005	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2211759
Project: Greene County Treatability/221114-01.05 Task 05

Sample Name: GC-AP-DCT-MW-10-FB-20221003
Date Collected: 10/3/22
Lab Code: K2211759-006
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-14-HT-MMO-
Date Collected: 10/3/22
Lab Code: K2211759-007
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-14-FB-20221003
Date Collected: 10/3/22
Lab Code: K2211759-008
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-17-HT-MMO-
Date Collected: 10/3/22
Lab Code: K2211759-009
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-17-FB-20221003
Date Collected: 10/3/22
Lab Code: K2211759-010
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Analyst Summary report

Client: Anchor QEA, LLC **Service Request:** K2211759
Project: Greene County Treatability/221114-01.05 Task 05

Sample Name: GC-AP-DCT-MW-44H-HT-MMO- **Date Collected:** 10/3/22
Lab Code: K2211759-011 **Date Received:** 10/7/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-44H-FB-20221003 **Date Collected:** 10/3/22
Lab Code: K2211759-012 **Date Received:** 10/7/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 18:50
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-1-HT-MMO-20221003	**Basis:**	NA
Lab Code:	K2211759-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.7 J**	ug/L	1.0	0.2	1	10/11/22 14:28	10/10/22	
Cobalt	200.8	**78.8**	ug/L	0.040	0.018	1	10/11/22 14:28	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:18
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-1-FB-20221003	**Basis:**	NA
Lab Code:	K2211759-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.95**	ug/L	0.50	0.09	1	10/11/22 14:30	10/10/22	
Cobalt	200.8	**71.8**	ug/L	0.020	0.009	1	10/11/22 14:30	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:19
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-5-HT-MMO-20221003	**Basis:**	NA
Lab Code:	K2211759-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.30 J**	ug/L	0.50	0.09	1	10/11/22 14:31	10/10/22	
Lithium	200.8	**52.6**	ug/L	0.20	0.20	1	10/11/22 14:31	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:20
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-5-FB-20221003	**Basis:**	NA
Lab Code:	K2211759-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.56**	ug/L	0.50	0.09	1	10/11/22 14:33	10/10/22	
Lithium	200.8	**58.5**	ug/L	0.20	0.20	1	10/11/22 14:33	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:21
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-10-HT-MMO-20221003	**Basis:**	NA
Lab Code:	K2211759-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.09 J**	ug/L	0.50	0.09	1	10/11/22 14:34	10/10/22	
Lithium	200.8	**129**	ug/L	0.20	0.20	1	10/11/22 14:34	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:22
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-10-FB-20221003	**Basis:**	NA
Lab Code:	K2211759-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.13 J**	ug/L	0.50	0.09	1	10/11/22 14:36	10/10/22	
Lithium	200.8	**181**	ug/L	0.20	0.20	1	10/11/22 14:36	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:23
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-14-HT-MMO-20221003	**Basis:**	NA
Lab Code:	K2211759-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/11/22 14:37	10/10/22	
Cobalt	200.8	**0.182**		ug/L	0.020	0.009	1	10/11/22 14:37	10/10/22	
Lithium	200.8	**282**		ug/L	0.20	0.20	1	10/11/22 14:37	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:24
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-14-FB-20221003	**Basis:**	NA
Lab Code:	K2211759-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.14 J**	ug/L	0.50	0.09	1	10/11/22 14:46	10/10/22	
Cobalt	200.8	**2.95**	ug/L	0.020	0.009	1	10/11/22 14:46	10/10/22	
Lithium	200.8	**282**	ug/L	0.20	0.20	1	10/11/22 14:46	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:25
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-17-HT-MMO-20221003	**Basis:**	NA
Lab Code:	K2211759-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.14 J**	ug/L	0.50	0.09	1	10/11/22 14:48	10/10/22	
Lithium	200.8	**353**	ug/L	0.20	0.20	1	10/11/22 14:48	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:26
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-17-FB-20221003	**Basis:**	NA
Lab Code:	K2211759-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.38 J**	ug/L	0.50	0.09	1	10/11/22 14:49	10/10/22	
Lithium	200.8	**262**	ug/L	0.20	0.20	1	10/11/22 14:49	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:27
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-44H-HT-MMO-20221003	**Basis:**	NA
Lab Code:	K2211759-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.379**	ug/L	0.020	0.009	1	10/11/22 13:49	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/03/22 14:28
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-44H-FB-20221003	**Basis:**	NA
Lab Code:	K2211759-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**17.9**	ug/L	0.020	0.009	1	10/11/22 13:54	10/10/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217472-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 14:23	10/10/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/11/22 14:23	10/10/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/11/22 14:23	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217473-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/11/22 13:35	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/11/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217473-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	25.0	25.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2211759
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/11/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

		Lab Control Sample KQ2217472-06			Duplicate Lab Control Sample KQ2217472-07					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Arsenic	200.8	48.6	50.0	97	48.9	50.0	98	85-115	<1	20
Cobalt	200.8	24.8	25.0	99	25.0	25.0	100	85-115	<1	20
Lithium	200.8	50.2	50.0	100	49.6	50.0	99	85-115	1	20

October 11, 2022

Service Request No:K2211760

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

Laboratory Results for: Greene County Treatability

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 07, 2022
For your reference, these analyses have been assigned our service request number **K2211760.**

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | **FAX** +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability	**Date Received:**	10/07/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 10/07/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/11/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-1-HT-MMO-20221004 **Lab ID: K2211760-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.21	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	14.4		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-1-FB-20221004 **Lab ID: K2211760-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.12	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	4.89		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-5-HT-MMO-20221004 **Lab ID: K2211760-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.24	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	25.7		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-5-FB-20221004 **Lab ID: K2211760-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.63		0.09	0.50	ug/L	200.8
Lithium, Dissolved	36.2		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-10-FB-20221004 **Lab ID: K2211760-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.12	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	78.7		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-14-FB-20221004 **Lab ID: K2211760-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.11	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	3.96		0.009	0.020	ug/L	200.8
Lithium, Dissolved	101		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-17-FB-20221004 **Lab ID: K2211760-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.18	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	75.5		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-14-HT-MMO-20221004 **Lab ID: K2211760-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.060		0.009	0.020	ug/L	200.8
Lithium, Dissolved	113		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-44H-HT-MMO-20221004 **Lab ID: K2211760-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.093		0.009	0.020	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-44H-FB-20221004 **Lab ID: K2211760-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	27.3		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-10-HT-MMO-20221004 **Lab ID: K2211760-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	60.6		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-17-HT-MMO-20221004 **Lab ID: K2211760-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	93.3		0.20	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2211760

Project: Greene County Treatability/221114-01.05 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2211760-001	GC-AP-DCT-MW-1-HT-MMO-20221004	10/4/2022	1629
K2211760-002	GC-AP-DCT-MW-1-FB-20221004	10/4/2022	1229
K2211760-003	GC-AP-DCT-MW-5-HT-MMO-20221004	10/4/2022	1230
K2211760-004	GC-AP-DCT-MW-5-FB-20221004	10/4/2022	1231
K2211760-005	GC-AP-DCT-MW-10-HT-MMO-20221004	10/4/2022	1232
K2211760-006	GC-AP-DCT-MW-10-FB-20221004	10/4/2022	1233
K2211760-007	GC-AP-DCT-MW-14-HT-MMO-20221004	10/4/2022	1234
K2211760-008	GC-AP-DCT-MW-14-FB-20221004	10/4/2022	1321
K2211760-009	GC-AP-DCT-MW-17-HT-MMO-20221004	10/4/2022	1236
K2211760-010	GC-AP-DCT-MW-17-FB-20221004	10/4/2022	1237
K2211760-011	GC-AP-DCT-MW-44H-HT-MMO-20221004	10/4/2022	1238
K2211760-012	GC-AP-DCT-MW-44H-FB-20221004	10/4/2022	1239

K2211760

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	10/6/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters												Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt										
1	GC-AP-DCT-MW-1-HT-MMO-20221004	10/4/2022	16:29	Water	1	X		X										Filtered. HNO3-preserved. 5-day TAT
2	GC-AP-DCT-MW-1-FB-20221004	10/4/2022	12:29	Water	1	X		X										Filtered. HNO3-preserved. 5-day TAT
3	GC-AP-DCT-MW-5-HT-MMO-20221004	10/4/2022	12:30	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
4	GC-AP-DCT-MW-5-FB-20221004	10/4/2022	12:31	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
5	GC-AP-DCT-MW-10-HT-MMO-20221004	10/4/2022	12:32	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
6	GC-AP-DCT-MW-10-FB-20221004	10/4/2022	12:33	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
7	GC-AP-DCT-MW-14-HT-MMO-20221004	10/4/2022	12:34	Water	1	X	X	X										Filtered. HNO3-preserved. 5-day TAT
8	GC-AP-DCT-MW-14-FB-20221004	10/4/2022	13:21	Water	1	X	X	X										Filtered. HNO3-preserved. 5-day TAT
9	GC-AP-DCT-MW-17-HT-MMO-20221004	10/4/2022	12:36	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
10	GC-AP-DCT-MW-17-FB-20221004	10/4/2022	12:37	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
11	GC-AP-DCT-MW-44H-HT-MMO-2022100	10/4/2022	12:38	Water	1			X										Filtered. HNO3-preserved. 5-day TAT
12	GC-AP-DCT-MW-44H-FB-20221004	10/4/2022	12:39	Water	1			X										Filtered. HNO3-preserved. 5-day TAT
13																		
14																		
15																		

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary).

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time: 10/7/22	Signature/Print Name:	
	~~10/6/22~~ 8:30	KMorrow ALS 10/7/22 1015	
Relinquished by:	Company:	Received by:	
		Diane Price	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
KMorrow ALS	10/7/22 1215	PPrice	10/7/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM MH

Cooler Receipt and Preservation Form

ient Anchor QEA Service Request K22 117600

ceived: 10/7/22 Opened: 10/7/22 By: PDP Unloaded: 10/7/22 By: PDP

Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered

Samples were received in: (circle) Cooler Box Envelope Other NA

Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

emp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.5		IR01					

Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

Were samples received within the method specified temperature ranges? NA [✓ Y] N

If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

applicable, tissue samples were received: Frozen Partially Thawed Thawed

Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves

Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N

Were samples received in good condition (unbroken) NA [✓ Y] N

Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N

Did all sample labels and tags agree with custody papers? NA [✓ Y] N

Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N

Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N

Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N

Was C12/Res negative? [✓ NA] Y N

Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

RUSH

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

lotes, Discrepancies, Resolutions: Did not PH due to low volume

1/13/22 *Page* *of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-AP-DCT-MW-1-HT-MMO-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-001	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-1-FB-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-002	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-5-HT-MMO-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-003	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-5-FB-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-004	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-10-HT-MMO-	**Date Collected:**	10/4/22
Lab Code:	K2211760-005	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-AP-DCT-MW-10-FB-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-006	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-14-HT-MMO-	**Date Collected:**	10/4/22
Lab Code:	K2211760-007	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-14-FB-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-008	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-17-HT-MMO-	**Date Collected:**	10/4/22
Lab Code:	K2211760-009	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-17-FB-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-010	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05		

Sample Name:	GC-AP-DCT-MW-44H-HT-MMO-	**Date Collected:**	10/4/22
Lab Code:	K2211760-011	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-AP-DCT-MW-44H-FB-20221004	**Date Collected:**	10/4/22
Lab Code:	K2211760-012	**Date Received:**	10/7/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 16:29
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-1-HT-MMO-20221004	**Basis:**	NA
Lab Code:	K2211760-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21 J**	ug/L	0.50	0.09	1	10/11/22 14:51	10/10/22	
Cobalt	200.8	**14.4**	ug/L	0.020	0.009	1	10/11/22 14:51	10/10/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:29
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-1-FB-20221004	**Basis:**	NA
Lab Code:	K2211760-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.12 J**	ug/L	0.50	0.09	1	10/11/22 14:52	10/10/22	
Cobalt	200.8	**4.89**	ug/L	0.020	0.009	1	10/11/22 14:52	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:30
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-5-HT-MMO-20221004	**Basis:**	NA
Lab Code:	K2211760-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.24 J**	ug/L	0.50	0.09	1	10/11/22 14:54	10/10/22	
Lithium	200.8	**25.7**	ug/L	0.20	0.20	1	10/11/22 14:54	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:31
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-5-FB-20221004	**Basis:**	NA
Lab Code:	K2211760-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.63**	ug/L	0.50	0.09	1	10/11/22 14:55	10/10/22	
Lithium	200.8	**36.2**	ug/L	0.20	0.20	1	10/11/22 14:55	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:32
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-10-HT-MMO-20221004	**Basis:**	NA
Lab Code:	K2211760-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 14:57	10/10/22	
Lithium	200.8	**60.6**	ug/L	0.20	0.20	1	10/11/22 14:57	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:33
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-10-FB-20221004	**Basis:**	NA
Lab Code:	K2211760-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.12 J**	ug/L	0.50	0.09	1	10/11/22 14:58	10/10/22	
Lithium	200.8	**78.7**	ug/L	0.20	0.20	1	10/11/22 14:58	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:34
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-14-HT-MMO-20221004	**Basis:**	NA
Lab Code:	K2211760-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/11/22 15:00	10/10/22	
Cobalt	200.8	**0.060**		ug/L	0.020	0.009	1	10/11/22 15:00	10/10/22	
Lithium	200.8	**113**		ug/L	0.20	0.20	1	10/11/22 15:00	10/10/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 13:21
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-14-FB-20221004	**Basis:**	NA
Lab Code:	K2211760-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.11 J**	ug/L	0.50	0.09	1	10/11/22 15:05	10/10/22	
Cobalt	200.8	**3.96**	ug/L	0.020	0.009	1	10/11/22 15:05	10/10/22	
Lithium	200.8	**101**	ug/L	0.20	0.20	1	10/11/22 15:05	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:36
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-17-HT-MMO-20221004	**Basis:**	NA
Lab Code:	K2211760-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 15:06	10/10/22	
Lithium	200.8	**93.3**	ug/L	0.20	0.20	1	10/11/22 15:06	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:37
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-17-FB-20221004	**Basis:**	NA
Lab Code:	K2211760-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.18 J**	ug/L	0.50	0.09	1	10/11/22 15:08	10/10/22	
Lithium	200.8	**75.5**	ug/L	0.20	0.20	1	10/11/22 15:08	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:38
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-44H-HT-MMO-20221004	**Basis:**	NA
Lab Code:	K2211760-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.093**	ug/L	0.020	0.009	1	10/11/22 13:55	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	10/04/22 12:39
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-44H-FB-20221004	**Basis:**	NA
Lab Code:	K2211760-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**27.3**	ug/L	0.020	0.009	1	10/11/22 13:57	10/10/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217472-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 14:23	10/10/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/11/22 14:23	10/10/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/11/22 14:23	10/10/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217473-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/11/22 13:35	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/11/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217473-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	25.0	25.0	100	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211760
Project:	Greene County Treatability/221114-01.05 Task 05	**Date Analyzed:**	10/11/22
Sample Matrix:	Water		

Duplicate Lab Control Sample Summary
Dissolved Metals

Units: ug/L
Basis: NA

		Lab Control Sample KQ2217472-06			Duplicate Lab Control Sample KQ2217472-07					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Arsenic	200.8	48.6	50.0	97	48.9	50.0	98	85-115	<1	20
Cobalt	200.8	24.8	25.0	99	25.0	25.0	100	85-115	<1	20
Lithium	200.8	50.2	50.0	100	49.6	50.0	99	85-115	1	20

October 11, 2022 Service Request No:K2211761

Jessica Goin
Anchor QEA, LLC
421 SW Sixth Ave.
Suite 750
Portland, OR 97204

Laboratory Results for: Greene County Treatablility

Dear Jessica,

Enclosed are the results of the sample(s) submitted to our laboratory October 07, 2022
For your reference, these analyses have been assigned our service request number **K2211761.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | **FAX** +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2211761
Project: Greene County Treatablility
Date Received: 10/07/2022
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 10/07/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/11/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-1-HT-MMO-20221005 **Lab ID: K2211761-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.09	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	6.42		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-1-FB-20221005 **Lab ID: K2211761-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.10	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.655		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-5-HT-MMO-20221005 **Lab ID: K2211761-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.20	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	17.3		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-5-FB-20221005 **Lab ID: K2211761-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.74		0.09	0.50	ug/L	200.8
Lithium, Dissolved	24.0		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-10-FB-20221005 **Lab ID: K2211761-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.11	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	54.0		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-17-FB-20221005 **Lab ID: K2211761-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.19	J	0.09	0.50	ug/L	200.8
Lithium, Dissolved	57.2		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-14-HT-MMO-20221005 **Lab ID: K2211761-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.076		0.009	0.020	ug/L	200.8
Lithium, Dissolved	80.8		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-14-FB-20221005 **Lab ID: K2211761-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	2.59		0.018	0.040	ug/L	200.8
Lithium, Dissolved	92.6		0.40	0.40	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-44H-HT-MMO-20221005 **Lab ID: K2211761-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.068		0.009	0.020	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-44H-FB-20221005 **Lab ID: K2211761-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	28.0		0.009	0.020	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-DCT-MW-44H-FB-20221005 **Lab ID: K2211761-012**

Analyte	Results	Flag	MDL	MRL	Units	Method

CLIENT ID: GC-AP-DCT-MW-10-HT-MMO-20221005 **Lab ID: K2211761-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	31.5		0.20	0.20	ug/L	200.8

CLIENT ID: GC-AP-DCT-MW-17-HT-MMO-20221005 **Lab ID: K2211761-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	61.4		0.20	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2211761-001	GC-AP-DCT-MW-1-HT-MMO-20221005	10/5/2022	1420
K2211761-002	GC-AP-DCT-MW-1-FB-20221005	10/5/2022	1020
K2211761-003	GC-AP-DCT-MW-5-HT-MMO-20221005	10/5/2022	1021
K2211761-004	GC-AP-DCT-MW-5-FB-20221005	10/5/2022	1022
K2211761-005	GC-AP-DCT-MW-10-HT-MMO-20221005	10/5/2022	1023
K2211761-006	GC-AP-DCT-MW-10-FB-20221005	10/5/2022	1024
K2211761-007	GC-AP-DCT-MW-14-HT-MMO-20221005	10/5/2022	1025
K2211761-008	GC-AP-DCT-MW-14-FB-20221005	10/5/2022	1421
K2211761-009	GC-AP-DCT-MW-17-HT-MMO-20221005	10/5/2022	1027
K2211761-010	GC-AP-DCT-MW-17-FB-20221005	10/5/2022	1028
K2211761-011	GC-AP-DCT-MW-44H-HT-MMO-20221005	10/5/2022	1029
K2211761-012	GC-AP-DCT-MW-44H-FB-20221005	10/5/2022	1030

K2211761

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/6/2022
Project Name:	Greene County Treatability
Project Number:	221114-01.05 Task 05
Project Manager:	Jessica Goin
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters												Comments/Preservation
		Date	Time			Dissolved Arsenic	Dissolved Lithium	Dissolved Cobalt										
1	GC-AP-DCT-MW-1-HT-MMO-20221005	10/5/2022	14:20	Water	1	X		X										Filtered. HNO3-preserved. 5-day TAT
2	GC-AP-DCT-MW-1-FB-20221005	10/5/2022	10:20	Water	1	X		X										Filtered. HNO3-preserved. 5-day TAT
3	GC-AP-DCT-MW-5-HT-MMO-20221005	10/5/2022	10:21	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
4	GC-AP-DCT-MW-5-FB-20221005	10/5/2022	10:22	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
5	GC-AP-DCT-MW-10-HT-MMO-20221005	10/5/2022	10:23	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
6	GC-AP-DCT-MW-10-FB-20221005	10/5/2022	10:24	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
7	GC-AP-DCT-MW-14-HT-MMO-20221005	10/5/2022	10:25	Water	1	X	X	X										Filtered. HNO3-preserved. 5-day TAT
8	GC-AP-DCT-MW-14-FB-20221005	10/5/2022	14:21	Water	1	X	X	X										Filtered. HNO3-preserved. Small volume. 5-day TAT
9	GC-AP-DCT-MW-17-HT-MMO-20221005	10/5/2022	10:27	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
10	GC-AP-DCT-MW-17-FB-20221005	10/5/2022	10:28	Water	1	X	X											Filtered. HNO3-preserved. 5-day TAT
11	GC-AP-DCT-MW-44H-HT-MMO-20221005	10/5/2022	10:29	Water	1			X										Filtered. HNO3-preserved. 5-day TAT
12	GC-AP-DCT-MW-44H-FB-20221005	10/5/2022	10:30	Water	1			X										Filtered. HNO3-preserved. 5-day TAT
13																		
14																		
15																		

Notes: 5-day TAT. If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb As, Co, Li (other parameter MDLs can vary). Please dilute the sample with the small volume as-needed. Keeping dilution < 10X is preferred.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time: 10/7/22	Signature/Print Name:	
Em Nordlund	~~10/6/22~~ 8:30	KMorrow ALS	10/7/22 1045
Relinquished by:	Company:	Received by:	
		Diane Price	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
KMorrow ALS	10/7/22 1215	PPrice	10/7/22 1215

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM

Cooler Receipt and Preservation Form

lient Anchor QEA Service Request K22 11261

eceived: 10/7/22 Opened: 10/7/22 By: PDP Unloaded: 10/7/22 By: PDP

Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*

Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* ______ *NA*

Were custody seals on coolers? NA [✓ Y] N If yes, how many and where? 1 Front

If present, were custody seals intact? [✓ Y] N If present, were they signed and dated? [✓ Y] N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.5		IR01					

Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

Were samples received within the method specified temperature ranges? NA [✓ Y] N

If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______

Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N

Were samples received in good condition (unbroken) NA [✓ Y] N

Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N

). Did all sample labels and tags agree with custody papers? NA [✓ Y] N

l. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N

2. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N

3. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N

4. Was C12/Res negative? [✓ NA] Y N

5. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

RUSH

Notes, Discrepancies, Resolutions: Did not PH due to low volume

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC
Service Request: K2211761
Project: Greene County Treatablility/221114-01.05 Task 05

Sample Name: GC-AP-DCT-MW-1-HT-MMO-20221005
Date Collected: 10/5/22
Lab Code: K2211761-001
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-1-FB-20221005
Date Collected: 10/5/22
Lab Code: K2211761-002
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-5-HT-MMO-20221005
Date Collected: 10/5/22
Lab Code: K2211761-003
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-5-FB-20221005
Date Collected: 10/5/22
Lab Code: K2211761-004
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-10-HT-MMO-
Date Collected: 10/5/22
Lab Code: K2211761-005
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2211761
Project: Greene County Treatablility/221114-01.05 Task 05

Sample Name: GC-AP-DCT-MW-10-FB-20221005
Date Collected: 10/5/22
Lab Code: K2211761-006
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-14-HT-MMO-
Date Collected: 10/5/22
Lab Code: K2211761-007
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-14-FB-20221005
Date Collected: 10/5/22
Lab Code: K2211761-008
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-17-HT-MMO-
Date Collected: 10/5/22
Lab Code: K2211761-009
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-17-FB-20221005
Date Collected: 10/5/22
Lab Code: K2211761-010
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2211761
Project: Greene County Treatablility/221114-01.05 Task 05

Sample Name: GC-AP-DCT-MW-44H-HT-MMO-
Date Collected: 10/5/22
Lab Code: K2211761-011
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-AP-DCT-MW-44H-FB-20221005
Date Collected: 10/5/22
Lab Code: K2211761-012
Date Received: 10/7/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 14:20
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-1-HT-MMO-20221005	**Basis:**	NA
Lab Code:	K2211761-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.09 J**	ug/L	0.50	0.09	1	10/11/22 13:58	10/10/22	
Cobalt	200.8	**6.42**	ug/L	0.020	0.009	1	10/11/22 13:58	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:20
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-1-FB-20221005	**Basis:**	NA
Lab Code:	K2211761-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10 J**	ug/L	0.50	0.09	1	10/11/22 14:00	10/10/22	
Cobalt	200.8	**0.655**	ug/L	0.020	0.009	1	10/11/22 14:00	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:21
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-5-HT-MMO-20221005	**Basis:**	NA
Lab Code:	K2211761-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.20 J**	ug/L	0.50	0.09	1	10/11/22 14:02	10/10/22	
Lithium	200.8	**17.3**	ug/L	0.20	0.20	1	10/11/22 14:02	10/10/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:22
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-5-FB-20221005	**Basis:**	NA
Lab Code:	K2211761-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.74**	ug/L	0.50	0.09	1	10/11/22 14:03	10/10/22	
Lithium	200.8	**24.0**	ug/L	0.20	0.20	1	10/11/22 14:03	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:23
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-10-HT-MMO-20221005	**Basis:**	NA
Lab Code:	K2211761-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 14:05	10/10/22	
Lithium	200.8	**31.5**	ug/L	0.20	0.20	1	10/11/22 14:05	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:24
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-10-FB-20221005	**Basis:**	NA
Lab Code:	K2211761-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.11 J**	ug/L	0.50	0.09	1	10/11/22 14:06	10/10/22	
Lithium	200.8	**54.0**	ug/L	0.20	0.20	1	10/11/22 14:06	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:25
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-14-HT-MMO-20221005	**Basis:**	NA
Lab Code:	K2211761-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 14:08	10/10/22	
Cobalt	200.8	**0.076**	ug/L	0.020	0.009	1	10/11/22 14:08	10/10/22	
Lithium	200.8	**80.8**	ug/L	0.20	0.20	1	10/11/22 14:08	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 14:21
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-14-FB-20221005	**Basis:**	NA
Lab Code:	K2211761-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	1.0	0.2	1	10/11/22 14:12	10/10/22	
Cobalt	200.8	**2.59**		ug/L	0.040	0.018	1	10/11/22 14:12	10/10/22	
Lithium	200.8	**92.6**		ug/L	0.40	0.40	1	10/11/22 14:12	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:27
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-17-HT-MMO-20221005	**Basis:**	NA
Lab Code:	K2211761-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 14:14	10/10/22	
Lithium	200.8	**61.4**	ug/L	0.20	0.20	1	10/11/22 14:14	10/10/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:28
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-17-FB-20221005	**Basis:**	NA
Lab Code:	K2211761-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.19 J**	ug/L	0.50	0.09	1	10/11/22 14:16	10/10/22	
Lithium	200.8	**57.2**	ug/L	0.20	0.20	1	10/11/22 14:16	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:29
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-44H-HT-MMO-20221005	**Basis:**	NA
Lab Code:	K2211761-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**0.068**	ug/L	0.020	0.009	1	10/11/22 14:17	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	10/05/22 10:30
Sample Matrix:	Water	**Date Received:**	10/07/22 12:15
Sample Name:	GC-AP-DCT-MW-44H-FB-20221005	**Basis:**	NA
Lab Code:	K2211761-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**28.0**	ug/L	0.020	0.009	1	10/11/22 14:19	10/10/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2217473-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/11/22 13:35	10/10/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/11/22 13:35	10/10/22	
Lithium	200.8	ND U	ug/L	0.20	0.20	1	10/11/22 13:35	10/10/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2211761
Project:	Greene County Treatablility/221114-01.05 Task 05	**Date Analyzed:**	10/11/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2217473-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.2	50.0	96	85-115
Cobalt	200.8	25.0	25.0	100	85-115
Lithium	200.8	49.5	50.0	99	85-115

October 25, 2022 Service Request No:K2212192

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 18, 2022
For your reference, these analyses have been assigned our service request number **K2212192.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | **FAX** +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2212192
Project: 2022-Greene County Treatability
Date Received: 10/18/2022
Sample Matrix: Solid

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty five solid samples were received for analysis at ALS Environmental on 10/18/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/25/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-1-HT-MMO-SSE-F5 **Lab ID: K2212192-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.66	J	0.12	0.98	mg/Kg	200.8
Cobalt	0.555		0.012	0.039	mg/Kg	200.8
Iron	3020		0.8	2.0	mg/Kg	200.8
Manganese	7.71		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-1-FB-SSE-F5 **Lab ID: K2212192-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.54	J	0.12	0.98	mg/Kg	200.8
Cobalt	0.340		0.012	0.039	mg/Kg	200.8
Iron	2100		0.8	2.0	mg/Kg	200.8
Manganese	4.84		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-17-HT-MMO-SSE-F5 **Lab ID: K2212192-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.49	J	0.12	0.98	mg/Kg	200.8
Iron	1700		0.8	2.0	mg/Kg	200.8
Lithium	0.67		0.20	0.20	mg/Kg	200.8
Manganese	5.01		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-17-FB-SSE-F5 **Lab ID: K2212192-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.47	J	0.12	0.99	mg/Kg	200.8
Iron	1970		0.8	2.0	mg/Kg	200.8
Lithium	0.93		0.20	0.20	mg/Kg	200.8
Manganese	5.79		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-SSE-F5 **Lab ID: K2212192-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.49	J	0.12	0.98	mg/Kg	200.8
Cobalt	0.325		0.012	0.039	mg/Kg	200.8
Iron	1430		0.8	2.0	mg/Kg	200.8
Lithium	1.20		0.20	0.20	mg/Kg	200.8
Manganese	5.40		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-14-FB-SSE-F5 **Lab ID: K2212192-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.47	J	0.12	0.98	mg/Kg	200.8
Cobalt	0.293		0.012	0.039	mg/Kg	200.8
Iron	1290		0.8	2.0	mg/Kg	200.8
Lithium	0.98		0.20	0.20	mg/Kg	200.8
Manganese	4.94		0.04	0.20	mg/Kg	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-14-HT-MMO-DUP-SSE-F5 **Lab ID: K2212192-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.36	J	0.12	0.99	mg/Kg	200.8
Cobalt	0.252		0.012	0.040	mg/Kg	200.8
Iron	1110		0.8	2.0	mg/Kg	200.8
Lithium	0.91		0.20	0.20	mg/Kg	200.8
Manganese	3.86		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-10-HT-MMO-SSE-F5 **Lab ID: K2212192-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.49	J	0.12	0.99	mg/Kg	200.8
Iron	1680		0.8	2.0	mg/Kg	200.8
Lithium	0.43		0.20	0.20	mg/Kg	200.8
Manganese	8.45		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-10-FB-SSE-F5 **Lab ID: K2212192-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.60	J	0.12	0.98	mg/Kg	200.8
Iron	2190		0.8	2.0	mg/Kg	200.8
Lithium	0.75		0.20	0.20	mg/Kg	200.8
Manganese	12.8		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-5-HT-MMO-SSE-F5 **Lab ID: K2212192-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	4.09		0.12	0.98	mg/Kg	200.8
Iron	6110		0.8	2.0	mg/Kg	200.8
Lithium	0.79		0.20	0.20	mg/Kg	200.8
Manganese	15.2		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-5-FB-SSE-F5 **Lab ID: K2212192-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	3.01		0.12	0.99	mg/Kg	200.8
Iron	4880		0.8	2.0	mg/Kg	200.8
Lithium	0.82		0.20	0.20	mg/Kg	200.8
Manganese	14.3		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-MW-44H-WS-SSE-F5 **Lab ID: K2212192-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	16.9		0.12	0.99	mg/Kg	200.8
Cobalt	22.6		0.012	0.039	mg/Kg	200.8
Iron	44900		8	20	mg/Kg	200.8
Lithium	14.2		0.20	0.20	mg/Kg	200.8
Manganese	191		0.04	0.20	mg/Kg	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-MW-17-WS-SSE-F5 **Lab ID: K2212192-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	183		0.2	1.3	mg/Kg	200.8
Cobalt	1.64		0.016	0.052	mg/Kg	200.8
Iron	8070		1.0	2.6	mg/Kg	200.8
Lithium	3.03		0.26	0.26	mg/Kg	200.8
Manganese	19.7		0.05	0.26	mg/Kg	200.8

CLIENT ID: GC-AP-MW-57H-WS-SSE-F5 **Lab ID: K2212192-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	5.11		0.1	1.0	mg/Kg	200.8
Cobalt	1.48		0.012	0.040	mg/Kg	200.8
Iron	10400		0.8	2.0	mg/Kg	200.8
Lithium	1.85		0.20	0.20	mg/Kg	200.8
Manganese	15.8		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-MW-53H-WS-SSE-F5 **Lab ID: K2212192-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	3.75		0.12	0.98	mg/Kg	200.8
Cobalt	1.66		0.012	0.039	mg/Kg	200.8
Iron	4330		0.8	2.0	mg/Kg	200.8
Lithium	4.25		0.20	0.20	mg/Kg	200.8
Manganese	14.3		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-MW-54H-WS-SSE-F5 **Lab ID: K2212192-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	71.3		0.12	0.99	mg/Kg	200.8
Cobalt	8.63		0.012	0.040	mg/Kg	200.8
Iron	39100		0.8	2.0	mg/Kg	200.8
Lithium	16.8		0.20	0.20	mg/Kg	200.8
Manganese	99.4		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-MW-3-WS-SSE-F5 **Lab ID: K2212192-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	1.7		0.2	1.3	mg/Kg	200.8
Cobalt	0.513		0.016	0.052	mg/Kg	200.8
Iron	2990		1.0	2.6	mg/Kg	200.8
Lithium	2.09		0.26	0.26	mg/Kg	200.8
Manganese	6.71		0.05	0.26	mg/Kg	200.8

CLIENT ID: GC-AP-MW-39H-WS-SSE-F5 **Lab ID: K2212192-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	87.8		0.12	0.99	mg/Kg	200.8
Cobalt	1.18		0.012	0.040	mg/Kg	200.8
Iron	8680		0.8	2.0	mg/Kg	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-AP-MW-39H-WS-SSE-F5 **Lab ID: K2212192-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium	0.91		0.20	0.20	mg/Kg	200.8
Manganese	34.9		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-MW-43H-WS-SSE-F5 **Lab ID: K2212192-021**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	27.6		0.12	0.98	mg/Kg	200.8
Cobalt	2.68		0.012	0.039	mg/Kg	200.8
Iron	17300		0.8	2.0	mg/Kg	200.8
Lithium	2.40		0.20	0.20	mg/Kg	200.8
Manganese	93.6		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-PZ-4-WS-SSE-F5 **Lab ID: K2212192-022**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	11.1		0.1	1.0	mg/Kg	200.8
Cobalt	13.6		0.012	0.040	mg/Kg	200.8
Iron	37300		0.8	2.0	mg/Kg	200.8
Lithium	8.64		0.20	0.20	mg/Kg	200.8
Manganese	115		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-AP-MW-14-WS-SSE-F5 **Lab ID: K2212192-023**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	1120		0.6	5.2	mg/Kg	200.8
Cobalt	28.0		0.06	0.21	mg/Kg	200.8
Iron	398000		40	100	mg/Kg	200.8
Lithium	9.1		1.0	1.0	mg/Kg	200.8
Manganese	917		0.2	1.0	mg/Kg	200.8

CLIENT ID: GC-AP-MW-24-WS-SSE-F5 **Lab ID: K2212192-024**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	5.2		0.3	2.4	mg/Kg	200.8
Cobalt	1.74		0.029	0.097	mg/Kg	200.8
Iron	11400		1.9	4.8	mg/Kg	200.8
Lithium	1.73		0.48	0.48	mg/Kg	200.8
Manganese	35.4		0.10	0.48	mg/Kg	200.8

CLIENT ID: GC-AP-MW-53H-WS-SSE-DUP-F5 **Lab ID: K2212192-025**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	3.87		0.12	0.99	mg/Kg	200.8
Cobalt	1.71		0.012	0.039	mg/Kg	200.8
Iron	4270		0.8	2.0	mg/Kg	200.8
Lithium	4.07		0.20	0.20	mg/Kg	200.8
Manganese	17.6		0.04	0.20	mg/Kg	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-44H-HT-MMO-SSE-F5 **Lab ID: K2212192-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	1.95		0.012	0.040	mg/Kg	200.8
Iron	4270		0.8	2.0	mg/Kg	200.8
Manganese	12.0		0.04	0.20	mg/Kg	200.8

CLIENT ID: GC-COL-MW-44H-FB-SSE-F5 **Lab ID: K2212192-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	3.59		0.012	0.039	mg/Kg	200.8
Iron	5750		0.8	1.9	mg/Kg	200.8
Manganese	18.8		0.04	0.19	mg/Kg	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

K2212192-001	GC-COL-MW-1-HT-MMO-SSE-F5	10/18/2022	0730
K2212192-002	GC-COL-MW-1-FB-SSE-F5	10/18/2022	0735
K2212192-003	GC-COL-MW-44H-HT-MMO-SSE-F5	10/18/2022	0820
K2212192-004	GC-COL-MW-44H-FB-SSE-F5	10/18/2022	0825
K2212192-005	GC-COL-MW-17-HT-MMO-SSE-F5	10/18/2022	0810
K2212192-006	GC-COL-MW-17-FB-SSE-F5	10/18/2022	0815
K2212192-007	GC-COL-MW-14-HT-MMO-SSE-F5	10/18/2022	0800
K2212192-008	GC-COL-MW-14-FB-SSE-F5	10/18/2022	0805
K2212192-009	GC-COL-MW-14-HT-MMO-DUP-SSE-F5	10/18/2022	0830
K2212192-010	GC-COL-MW-10-HT-MMO-SSE-F5	10/18/2022	0750
K2212192-011	GC-COL-MW-10-FB-SSE-F5	10/18/2022	0755
K2212192-012	GC-COL-MW-5-HT-MMO-SSE-F5	10/18/2022	0740
K2212192-013	GC-COL-MW-5-FB-SSE-F5	10/18/2022	0745
K2212192-014	GC-AP-MW-44H-WS-SSE-F5	10/18/2022	0840
K2212192-015	GC-AP-MW-17-WS-SSE-F5	10/18/2022	0845
K2212192-016	GC-AP-MW-57H-WS-SSE-F5	10/18/2022	0950
K2212192-017	GC-AP-MW-53H-WS-SSE-F5	10/18/2022	0855
K2212192-018	GC-AP-MW-54H-WS-SSE-F5	10/18/2022	0900
K2212192-019	GC-AP-MW-3-WS-SSE-F5	10/18/2022	0905
K2212192-020	GC-AP-MW-39H-WS-SSE-F5	10/18/2022	0910
K2212192-021	GC-AP-MW-43H-WS-SSE-F5	10/18/2022	0915
K2212192-022	GC-AP-PZ-4-WS-SSE-F5	10/18/2022	0920
K2212192-023	GC-AP-MW-14-WS-SSE-F5	10/18/2022	0925
K2212192-024	GC-AP-MW-24-WS-SSE-F5	10/18/2022	0930
K2212192-025	GC-AP-MW-53H-WS-SSE-DUP-F5	10/18/2022	0935

K2212192

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Co, Fe, Mn) EPA 200.8	Total metals (As, Co, Fe, Mn) EPA 3050B													
1	GC-COL-MW-1-HT-MMO-SSE-F1	10/10/2022	10:30	Water	1	X														Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-1-FB-SSE-F1	10/10/2022	10:35	Water	1	X														Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-1-HT-MMO-SSE-F2	10/12/2022	15:30	Water	1	X														Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-1-FB-SSE-F2	10/12/2022	15:35	Water	1	X														Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-1-HT-MMO-SSE-F3	10/13/2022	11:30	Water	1	X														Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-1-FB-SSE-F3	10/13/2022	11:35	Water	1	X														Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-1-HT-MMO-SSE-F4	10/14/2022	15:30	Water	1	X														Approx. 4 M nitric acid.
8	GC-COL-MW-1-FB-SSE-F4	10/14/2022	15:35	Water	1	X														Approx. 4 M nitric acid.
9	GC-COL-MW-1-HT-MMO-SSE-F5	10/18/2022	7:30	Solid	1		X													Digest via EPA Method 3050B.
10	GC-COL-MW-1-FB-SSE-F5	10/18/2022	7:35	Solid	1		X													Digest via EPA Method 3050B.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/18/22 11:15 Am
Relinquished by:	Company:
Signature/Print Name:	Date/Time:
K Morrow ALS	10/18/22 1335

Received by:
Signature/Print Name:
K Morrow ALS 10/18/22 1220
Received by:
ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2212192

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date: 10/18/2022

Project Name: Greene County Treatability

Project Number: 221114-05.01 - Greene County Task 05

Project Manager: Masa Kanematsu

Phone Number: 503-972-5001 (backup number: 503-798-3456)

Shipment Method: ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (Co, Fe, Mn) EPA 200.8	Total metals (Co, Fe, Mn) EPA 3050B													Comments/Preservation
1	GC-COL-MW-44H-HT-MMO-SSE-F1	10/10/2022	11:20	Water	1	X														Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-44H-FB-SSE-F1	10/10/2022	11:25	Water	1	X														Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-44H-HT-MMO-SSE-F2	10/12/2022	16:20	Water	1	X														Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-44H-FB-SSE-F2	10/12/2022	16:25	Water	1	X														Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-44H-HT-MMO-SSE-F3	10/13/2022	12:20	Water	1	X														Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-44H-FB-SSE-F3	10/13/2022	12:25	Water	1	X														Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-44H-HT-MMO-SSE-F4	10/14/2022	16:20	Water	1	X														Approx. 4 M nitric acid.
8	GC-COL-MW-44H-FB-SSE-F4	10/14/2022	16:25	Water	1	X														Approx. 4 M nitric acid.
3 9	GC-COL-MW-44H-HT-MMO-SSE-F5	10/18/2022	8:20	Solid	1		X													Digest via EPA Method 3050B.
10	GC-COL-MW-44H-FB-SSE-F5	10/18/2022	8:25	Solid	1		X													Digest via EPA Method 3050B.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 10/18/22 11:15 AM
Relinquished by: ALS	Company: 10/18/22 1335
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name: KMorrow ALS 10/18/22 1220
Received by: ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

~~K221212~~
K2212152

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Fe, Mn) EPA 200.8	Total metals (As, Li, Fe, Mn) EPA 3050B	Dissolved Metals (As, Li, Co, Fe, Mn) EPA 200.8											Comments/Preservation
1	GC-COL-MW-17-HT-MMO-SSE-F1	10/10/2022	11:10	Water	1	X													Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-17-FB-SSE-F1	10/10/2022	11:15	Water	1	X													Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-17-HT-MMO-SSE-F2	10/12/2022	16:10	Water	1	X													Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-17-FB-SSE-F2	10/12/2022	16:15	Water	1	X													Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-17-HT-MMO-SSE-F3	10/13/2022	12:10	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-17-FB-SSE-F3	10/13/2022	12:15	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-17-HT-MMO-SSE-F4	10/14/2022	16:10	Water	1	X													Approx. 4 M nitric acid.
8	GC-COL-MW-17-FB-SSE-F4	10/14/2022	16:15	Water	1	X													Approx. 4 M nitric acid.
5 9	GC-COL-MW-17-HT-MMO-SSE-F5	10/18/2022	8:10	Solid	1		X												Digest via EPA Method 3050B.
6 10	GC-COL-MW-17-FB-SSE-F5	10/18/2022	8:15	Solid	1		X												Digest via EPA Method 3050B.
11	GC-MB-SSE-F1	10/10/2022	11:35	Water	1			X											Approx. 0.16 M magnesium chloride.
12	GC-MB-SSE-F2	10/12/2022	16:35	Water	1			X											Approx 0.16 M monosodium phosphate.
13	GC-MB-SSE-F3	10/13/2022	12:35	Water	1			X											Approx. 0.04 M hydroxylamine hydrochloride.
14	GC-MB-SSE-F4	10/14/2022	16:35	Water	1			X											Approx. 4 M nitric acid.
15																			

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:
Signature/Print Name:	Date/Time: 10/18/22 11:15 AM	Signature/Print Name: K Morrow ALS 10/18/22 1220
Relinquished by:	Company:	Received by: ALS 10/18/22 1335
Signature/Print Name: K Morrow ALS	Date/Time: 10/18/22 1335	Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

K2212192

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved Metals (As, Li, Co, Fe, Mn) EPA 200.8	Parameters: Total metals (As, Li, Co, Fe, Mn) EPA 3050B	Comments/Preservation
1	GC-COL-MW-14-HT-MMO-SSE-F1	10/10/2022	11:00	Water	1	X		Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-14-FB-SSE-F1	10/10/2022	11:05	Water	1	X		Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-14-HT-MMO-SSE-F2	10/12/2022	16:00	Water	1	X		Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-14-FB-SSE-F2	10/12/2022	16:05	Water	1	X		Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-14-HT-MMO-SSE-F3	10/13/2022	12:00	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-14-FB-SSE-F3	10/13/2022	12:05	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-14-HT-MMO-SSE-F4	10/14/2022	16:00	Water	1	X		Approx. 4 M nitric acid.
8	GC-COL-MW-14-FB-SSE-F4	10/14/2022	16:05	Water	1	X		Approx. 4 M nitric acid.
7 9	GC-COL-MW-14-HT-MMO-SSE-F5	10/18/2022	8:00	Solid	1		X	Digest via EPA Method 3050B.
8 10	GC-COL-MW-14-FB-SSE-F5	10/18/2022	8:05	Solid	1		X	Digest via EPA Method 3050B.
11	GC-COL-MW-14-HT-MMO-DUP-SSE-F1	10/10/2022	11:30	Water		X		Approx. 0.16 M magnesium chloride.
12	GC-COL-MW-14-HT-MMO-DUP-SSE-F2	10/12/2022	16:30	Water		X		Approx 0.16 M monosodium phosphate.
13	GC-COL-MW-14-HT-MMO-DUP-SSE-F3	10/13/2022	12:30	Water		X		Approx. 0.04 M hydroxylamine hydrochloride.
14	GC-COL-MW-14-HT-MMO-DUP-SSE-F4	10/14/2022	16:30	Water		X		Approx. 4 M nitric acid.
9 15	GC-COL-MW-14-HT-MMO-DUP-SSE-F5	10/18/2022	8:30	Solid			X	Digest via EPA Method 3050B.

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by:
Signature/Print Name:	Date/Time: 10/18/22 11:15 AM	Signature/Print Name: KMorrow ALS 10/18/22 1220
Relinquished by:	Company:	Received by: ALS 10/18/22 1335
Signature/Print Name: KMorrow ALS	Date/Time: 10/18/22 1335	Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

K2212192

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

	Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Fe, Mn) EPA 200.8	Total metals (As, Li, Fe, Mn) EPA 3050B												Comments/Preservation
	1	GC-COL-MW-10-HT-MMO-SSE-F1	10/10/2022	10:50	Water	1	X													Approx. 0.16 M magnesium chloride.
	2	GC-COL-MW-10-FB-SSE-F1	10/10/2022	10:55	Water	1	X													Approx. 0.16 M magnesium chloride.
	3	GC-COL-MW-10-HT-MMO-SSE-F2	10/12/2022	15:50	Water	1	X													Approx 0.16 M monosodium phosphate.
	4	GC-COL-MW-10-FB-SSE-F2	10/12/2022	15:55	Water	1	X													Approx 0.16 M monosodium phosphate.
	5	GC-COL-MW-10-HT-MMO-SSE-F3	10/13/2022	11:50	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
	6	GC-COL-MW-10-FB-SSE-F3	10/13/2022	11:55	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
	7	GC-COL-MW-10-HT-MMO-SSE-F4	10/14/2022	15:50	Water	1	X													Approx. 4 M nitric acid.
	8	GC-COL-MW-10-FB-SSE-F4	10/14/2022	15:55	Water	1	X													Approx. 4 M nitric acid.
10	9	GC-COL-MW-10-HT-MMO-SSE-F5	10/18/2022	7:50	Solid	1		X												Digest via EPA Method 3050B.
11	10	GC-COL-MW-10-FB-SSE-F5	10/18/2022	7:55	Solid	1		X												Digest via EPA Method 3050B.
	11																			
	12																			
	13																			
	14																			
	15																			

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/18/22 11:15 Am

Received by:
Signature/Print Name:
K Morrow ALS 10/18/22 1220

Relinquished by:	Company:
Signature/Print Name:	Date/Time:
K Morrow ALS	10/18/22 1335

Received by:
ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

K2212192

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

							Parameters												
	Line	Field Sample ID	Collection		Matrix	No. of Containers	Dissolved Metals (As, Li, Fe, Mn) EPA 200.8	Total metals (As, Li, Fe, Mn) EPA 3050B											Comments/Preservation
			Date	Time															
	1	GC-COL-MW-5-HT-MMO-SSE-F1	10/10/2022	10:40	Water	1	X												Approx. 0.16 M magnesium chloride.
	2	GC-COL-MW-5-FB-SSE-F1	10/10/2022	10:45	Water	1	X												Approx. 0.16 M magnesium chloride.
	3	GC-COL-MW-5-HT-MMO-SSE-F2	10/12/2022	15:40	Water	1	X												Approx 0.16 M monosodium phosphate.
	4	GC-COL-MW-5-FB-SSE-F2	10/12/2022	15:45	Water	1	X												Approx 0.16 M monosodium phosphate.
	5	GC-COL-MW-5-HT-MMO-SSE-F3	10/13/2022	11:40	Water	1	X												Approx. 0.04 M hydroxylamine hydrochloride.
	6	GC-COL-MW-5-FB-SSE-F3	10/13/2022	11:45	Water	1	X												Approx. 0.04 M hydroxylamine hydrochloride.
	7	GC-COL-MW-5-HT-MMO-SSE-F4	10/14/2022	15:40	Water	1	X												Approx. 4 M nitric acid.
	8	GC-COL-MW-5-FB-SSE-F4	10/14/2022	15:45	Water	1	X												Approx. 4 M nitric acid.
12	9	GC-COL-MW-5-HT-MMO-SSE-F5	10/18/2022	7:40	Solid	1		X											Digest via EPA Method 3050B.
13	10	GC-COL-MW-5-FB-SSE-F5	10/18/2022	7:45	Solid	1		X											Digest via EPA Method 3050B.
	11																		
	12																		
	13																		
	14																		
	15																		

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	10/18/22 11:15 AM	K Morrow ALS 10/18/22 1220	
Relinquished by:	Company:	Received by:	
		ALS 10/18/22 1335	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
K Morrow ALS	10/18/22 1335		

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

K2212192

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:	503-972-5019
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters	Comments/Preservation
		Date	Time			Total Metals (As, Li, Co, Fe, Mn) EPA 3050B	
1	GC-AP-MW-44H-WS-SSE-F5	10/18/2022	8:40	Solid	1	X	Digest via EPA Method 3050B
2	GC-AP-MW-17-WS-SSE-F5	10/18/2022	8:45	Solid	1	X	Digest via EPA Method 3050B
3	GC-AP-MW-57H-WS-SSE-F5	10/18/2022	8:50	Solid	1	X	Digest via EPA Method 3050B
4	GC-AP-MW-53H-WS-SSE-F5	10/18/2022	8:55	Solid	1	X	Digest via EPA Method 3050B
5	GC-AP-MW-54H-WS-SSE-F5	10/18/2022	9:00	Solid	1	X	Digest via EPA Method 3050B
6	GC-AP-MW-3-WS-SSE-F5	10/18/2022	9:05	Solid	1	X	Digest via EPA Method 3050B
7	GC-AP-MW-39H-WS-SSE-F5	10/18/2022	9:10	Solid	1	X	Digest via EPA Method 3050B
8	GC-AP-MW-43H-WS-SSE-F5	10/18/2022	9:15	Solid	1	X	Digest via EPA Method 3050B
9	GC-AP-PZ-4-WS-SSE-F5	10/18/2022	9:20	Solid	1	X	Digest via EPA Method 3050B
10	GC-AP-MW-14-WS-SSE-F5	10/18/2022	9:25	Solid	1	X	Digest via EPA Method 3050B
11	GC-AP-MW-24-WS-SSE-F5	10/18/2022	9:30	Solid	1	X	Digest via EPA Method 3050B
12	GC-AP-MW-53H-WS-SSE-DUP-F5	10/18/2022	9:35	Solid	1	X	Digest via EPA Method 3050B
13							Digest via EPA Method 3050B
14							
15							

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
Standard TAT.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA		
Signature/Print Name:	Date/Time: 11:00 Am	Signature/Print Name:	
	10/18/22 ~~8:00 Am~~	ALS 10/18/22 1220	
Relinquished by:	Company:	Received by:	
		ALS 10/18/22 1335	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12192

Received: 10/18/22 Opened: 10/18/22 By: VM Unloaded: 10/18/22 By: VM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
5.4		IR01	cooler 1				
6.0		IR01	cooler 2				

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] [✓ *Bubble Wrap*] *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

1/13/22 *Page of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC
Service Request: K2212192
Project: 2022-Greene County Treatability/22114-05.01-Greene County Task 05

Sample Name: GC-COL-MW-1-HT-MMO-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-001
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-COL-MW-1-FB-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-002
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-COL-MW-44H-HT-MMO-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-003
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-COL-MW-44H-FB-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-004
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-COL-MW-17-HT-MMO-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-005
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05		

Sample Name:	GC-COL-MW-17-FB-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-006	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-007	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name:	GC-COL-MW-14-FB-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-008	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name:	GC-COL-MW-14-HT-MMO-DUP-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-009	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name:	GC-COL-MW-10-HT-MMO-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-010	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Client: Anchor QEA, LLC
Service Request: K2212192
Project: 2022-Greene County Treatability/22114-05.01-Greene County Task 05

Sample Name: GC-COL-MW-10-FB-SSE-F5
Lab Code: K2212192-011
Sample Matrix: Solid
Date Collected: 10/18/22
Date Received: 10/18/22

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name: GC-COL-MW-5-HT-MMO-SSE-F5
Lab Code: K2212192-012
Sample Matrix: Solid
Date Collected: 10/18/22
Date Received: 10/18/22

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name: GC-COL-MW-5-FB-SSE-F5
Lab Code: K2212192-013
Sample Matrix: Solid
Date Collected: 10/18/22
Date Received: 10/18/22

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name: GC-AP-MW-44H-WS-SSE-F5
Lab Code: K2212192-014
Sample Matrix: Solid
Date Collected: 10/18/22
Date Received: 10/18/22

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name: GC-AP-MW-17-WS-SSE-F5
Lab Code: K2212192-015
Sample Matrix: Solid
Date Collected: 10/18/22
Date Received: 10/18/22

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Client: Anchor QEA, LLC
Service Request: K2212192
Project: 2022-Greene County Treatability/22114-05.01-Greene County Task 05

Sample Name: GC-AP-MW-57H-WS-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-016
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-AP-MW-53H-WS-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-017
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-AP-MW-54H-WS-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-018
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-AP-MW-3-WS-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-019
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Name: GC-AP-MW-39H-WS-SSE-F5
Date Collected: 10/18/22
Lab Code: K2212192-020
Date Received: 10/18/22
Sample Matrix: Solid

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05		

Sample Name:	GC-AP-MW-43H-WS-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-021	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name:	GC-AP-PZ-4-WS-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-022	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name:	GC-AP-MW-14-WS-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-023	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name:	GC-AP-MW-24-WS-SSE-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-024	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Name:	GC-AP-MW-53H-WS-SSE-DUP-F5	**Date Collected:**	10/18/22
Lab Code:	K2212192-025	**Date Received:**	10/18/22
Sample Matrix:	Solid		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	MSOLADEY	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 07:30
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.66 J**	mg/Kg	0.98	0.12	5	10/25/22 11:14	10/24/22	
Cobalt	200.8	**0.555**	mg/Kg	0.039	0.012	5	10/25/22 11:14	10/24/22	
Iron	200.8	**3020**	mg/Kg	2.0	0.8	5	10/25/22 11:14	10/24/22	
Manganese	200.8	**7.71**	mg/Kg	0.20	0.04	5	10/25/22 11:14	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 07:35
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-1-FB-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.54 J**	mg/Kg	0.98	0.12	5	10/25/22 11:16	10/24/22	
Cobalt	200.8	**0.340**	mg/Kg	0.039	0.012	5	10/25/22 11:16	10/24/22	
Iron	200.8	**2100**	mg/Kg	2.0	0.8	5	10/25/22 11:16	10/24/22	
Manganese	200.8	**4.84**	mg/Kg	0.20	0.04	5	10/25/22 11:16	10/24/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:20
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**1.95**	mg/Kg	0.040	0.012	5	10/25/22 11:17	10/24/22	
Iron	200.8	**4270**	mg/Kg	2.0	0.8	5	10/25/22 11:17	10/24/22	
Manganese	200.8	**12.0**	mg/Kg	0.20	0.04	5	10/25/22 11:17	10/24/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:25
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-FB-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**3.59**	mg/Kg	0.039	0.012	5	10/25/22 11:19	10/24/22	
Iron	200.8	**5750**	mg/Kg	1.9	0.8	5	10/25/22 11:19	10/24/22	
Manganese	200.8	**18.8**	mg/Kg	0.19	0.04	5	10/25/22 11:19	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:10
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.49 J**	mg/Kg	0.98	0.12	5	10/25/22 11:20	10/24/22	
Iron	200.8	**1700**	mg/Kg	2.0	0.8	5	10/25/22 11:20	10/24/22	
Lithium	200.8	**0.67**	mg/Kg	0.20	0.20	5	10/25/22 11:20	10/24/22	
Manganese	200.8	**5.01**	mg/Kg	0.20	0.04	5	10/25/22 11:20	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:15
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-17-FB-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-006		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.47 J**	mg/Kg	0.99	0.12	5	10/25/22 11:22	10/24/22	
Iron	200.8	**1970**	mg/Kg	2.0	0.8	5	10/25/22 11:22	10/24/22	
Lithium	200.8	**0.93**	mg/Kg	0.20	0.20	5	10/25/22 11:22	10/24/22	
Manganese	200.8	**5.79**	mg/Kg	0.20	0.04	5	10/25/22 11:22	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:00
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-007		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.49**	**J**	mg/Kg	0.98	0.12	5	10/25/22 11:23	10/24/22	
Cobalt	200.8	**0.325**		mg/Kg	0.039	0.012	5	10/25/22 11:23	10/24/22	
Iron	200.8	**1430**		mg/Kg	2.0	0.8	5	10/25/22 11:23	10/24/22	
Lithium	200.8	**1.20**		mg/Kg	0.20	0.20	5	10/25/22 11:23	10/24/22	
Manganese	200.8	**5.40**		mg/Kg	0.20	0.04	5	10/25/22 11:23	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:05
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-14-FB-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-008		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.47 J**	mg/Kg	0.98	0.12	5	10/25/22 11:28	10/24/22	
Cobalt	200.8	**0.293**	mg/Kg	0.039	0.012	5	10/25/22 11:28	10/24/22	
Iron	200.8	**1290**	mg/Kg	2.0	0.8	5	10/25/22 11:28	10/24/22	
Lithium	200.8	**0.98**	mg/Kg	0.20	0.20	5	10/25/22 11:28	10/24/22	
Manganese	200.8	**4.94**	mg/Kg	0.20	0.04	5	10/25/22 11:28	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:30
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-14-HT-MMO-DUP-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-009		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.36 J**	mg/Kg	0.99	0.12	5	10/25/22 11:29	10/24/22	
Cobalt	200.8	**0.252**	mg/Kg	0.040	0.012	5	10/25/22 11:29	10/24/22	
Iron	200.8	**1110**	mg/Kg	2.0	0.8	5	10/25/22 11:29	10/24/22	
Lithium	200.8	**0.91**	mg/Kg	0.20	0.20	5	10/25/22 11:29	10/24/22	
Manganese	200.8	**3.86**	mg/Kg	0.20	0.04	5	10/25/22 11:29	10/24/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 07:50
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-HT-MMO-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-010		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.49 J**	mg/Kg	0.99	0.12	5	10/25/22 11:31	10/24/22	
Iron	200.8	**1680**	mg/Kg	2.0	0.8	5	10/25/22 11:31	10/24/22	
Lithium	200.8	**0.43**	mg/Kg	0.20	0.20	5	10/25/22 11:31	10/24/22	
Manganese	200.8	**8.45**	mg/Kg	0.20	0.04	5	10/25/22 11:31	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 07:55
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-10-FB-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-011		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.60 J**	mg/Kg	0.98	0.12	5	10/25/22 11:32	10/24/22	
Iron	200.8	**2190**	mg/Kg	2.0	0.8	5	10/25/22 11:32	10/24/22	
Lithium	200.8	**0.75**	mg/Kg	0.20	0.20	5	10/25/22 11:32	10/24/22	
Manganese	200.8	**12.8**	mg/Kg	0.20	0.04	5	10/25/22 11:32	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 07:40
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-012		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.09**	mg/Kg	0.98	0.12	5	10/25/22 11:34	10/24/22	
Iron	200.8	**6110**	mg/Kg	2.0	0.8	5	10/25/22 11:34	10/24/22	
Lithium	200.8	**0.79**	mg/Kg	0.20	0.20	5	10/25/22 11:34	10/24/22	
Manganese	200.8	**15.2**	mg/Kg	0.20	0.04	5	10/25/22 11:34	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 07:45
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-COL-MW-5-FB-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-013		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.01**	mg/Kg	0.99	0.12	5	10/25/22 11:35	10/24/22	
Iron	200.8	**4880**	mg/Kg	2.0	0.8	5	10/25/22 11:35	10/24/22	
Lithium	200.8	**0.82**	mg/Kg	0.20	0.20	5	10/25/22 11:35	10/24/22	
Manganese	200.8	**14.3**	mg/Kg	0.20	0.04	5	10/25/22 11:35	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:40
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-MW-44H-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-014		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**16.9**	mg/Kg	0.99	0.12	5	10/25/22 11:37	10/24/22	
Cobalt	200.8	**22.6**	mg/Kg	0.039	0.012	5	10/25/22 11:37	10/24/22	
Iron	200.8	**44900**	mg/Kg	20	8	50	10/25/22 12:12	10/24/22	
Lithium	200.8	**14.2**	mg/Kg	0.20	0.20	5	10/25/22 11:37	10/24/22	
Manganese	200.8	**191**	mg/Kg	0.20	0.04	5	10/25/22 11:37	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:45
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-AP-MW-17-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-015		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**183**	mg/Kg	1.3	0.2	5	10/25/22 11:38	10/24/22	
Cobalt	200.8	**1.64**	mg/Kg	0.052	0.016	5	10/25/22 11:38	10/24/22	
Iron	200.8	**8070**	mg/Kg	2.6	1.0	5	10/25/22 11:38	10/24/22	
Lithium	200.8	**3.03**	mg/Kg	0.26	0.26	5	10/25/22 11:38	10/24/22	
Manganese	200.8	**19.7**	mg/Kg	0.26	0.05	5	10/25/22 11:38	10/24/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:50
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-MW-57H-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-016		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.11**	mg/Kg	1.0	0.1	5	10/25/22 11:40	10/24/22	
Cobalt	200.8	**1.48**	mg/Kg	0.040	0.012	5	10/25/22 11:40	10/24/22	
Iron	200.8	**10400**	mg/Kg	2.0	0.8	5	10/25/22 11:40	10/24/22	
Lithium	200.8	**1.85**	mg/Kg	0.20	0.20	5	10/25/22 11:40	10/24/22	
Manganese	200.8	**15.8**	mg/Kg	0.20	0.04	5	10/25/22 11:40	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 08:55
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-MW-53H-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-017		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.75**	mg/Kg	0.98	0.12	5	10/25/22 11:41	10/24/22	
Cobalt	200.8	**1.66**	mg/Kg	0.039	0.012	5	10/25/22 11:41	10/24/22	
Iron	200.8	**4330**	mg/Kg	2.0	0.8	5	10/25/22 11:41	10/24/22	
Lithium	200.8	**4.25**	mg/Kg	0.20	0.20	5	10/25/22 11:41	10/24/22	
Manganese	200.8	**14.3**	mg/Kg	0.20	0.04	5	10/25/22 11:41	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:00
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-AP-MW-54H-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-018		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**71.3**	mg/Kg	0.99	0.12	5	10/25/22 11:46	10/24/22	
Cobalt	200.8	**8.63**	mg/Kg	0.040	0.012	5	10/25/22 11:46	10/24/22	
Iron	200.8	**39100**	mg/Kg	2.0	0.8	5	10/25/22 11:46	10/24/22	
Lithium	200.8	**16.8**	mg/Kg	0.20	0.20	5	10/25/22 11:46	10/24/22	
Manganese	200.8	**99.4**	mg/Kg	0.20	0.04	5	10/25/22 11:46	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:05
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-AP-MW-3-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-019		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.7**	mg/Kg	1.3	0.2	5	10/25/22 11:47	10/24/22	
Cobalt	200.8	**0.513**	mg/Kg	0.052	0.016	5	10/25/22 11:47	10/24/22	
Iron	200.8	**2990**	mg/Kg	2.6	1.0	5	10/25/22 11:47	10/24/22	
Lithium	200.8	**2.09**	mg/Kg	0.26	0.26	5	10/25/22 11:47	10/24/22	
Manganese	200.8	**6.71**	mg/Kg	0.26	0.05	5	10/25/22 11:47	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:10
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-MW-39H-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-020		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**87.8**	mg/Kg	0.99	0.12	5	10/25/22 11:49	10/24/22	
Cobalt	200.8	**1.18**	mg/Kg	0.040	0.012	5	10/25/22 11:49	10/24/22	
Iron	200.8	**8680**	mg/Kg	2.0	0.8	5	10/25/22 11:49	10/24/22	
Lithium	200.8	**0.91**	mg/Kg	0.20	0.20	5	10/25/22 11:49	10/24/22	
Manganese	200.8	**34.9**	mg/Kg	0.20	0.04	5	10/25/22 11:49	10/24/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:15
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-MW-43H-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-021		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**27.6**	mg/Kg	0.98	0.12	5	10/25/22 12:05	10/24/22	
Cobalt	200.8	**2.68**	mg/Kg	0.039	0.012	5	10/25/22 12:05	10/24/22	
Iron	200.8	**17300**	mg/Kg	2.0	0.8	5	10/25/22 12:05	10/24/22	
Lithium	200.8	**2.40**	mg/Kg	0.20	0.20	5	10/25/22 12:05	10/24/22	
Manganese	200.8	**93.6**	mg/Kg	0.20	0.04	5	10/25/22 12:05	10/24/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:20
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-PZ-4-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-022		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**11.1**	mg/Kg	1.0	0.1	5	10/25/22 12:06	10/24/22	
Cobalt	200.8	**13.6**	mg/Kg	0.040	0.012	5	10/25/22 12:06	10/24/22	
Iron	200.8	**37300**	mg/Kg	2.0	0.8	5	10/25/22 12:06	10/24/22	
Lithium	200.8	**8.64**	mg/Kg	0.20	0.20	5	10/25/22 12:06	10/24/22	
Manganese	200.8	**115**	mg/Kg	0.20	0.04	5	10/25/22 12:06	10/24/22	

Analytical Report

Client: Anchor QEA, LLC
Project: 2022-Greene County Treatability/22114-05.01-Greene County Task 05
Sample Matrix: Solid

Service Request: K2212192
Date Collected: 10/18/22 09:25
Date Received: 10/18/22 13:35

Sample Name: GC-AP-MW-14-WS-SSE-F5
Lab Code: K2212192-023

Basis: As Received

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1120**	mg/Kg	5.2	0.6	5	10/25/22 12:08	10/24/22	
Cobalt	200.8	**28.0**	mg/Kg	0.21	0.06	5	10/25/22 12:08	10/24/22	
Iron	200.8	**398000**	mg/Kg	100	40	50	10/25/22 12:28	10/24/22	
Lithium	200.8	**9.1**	mg/Kg	1.0	1.0	5	10/25/22 12:08	10/24/22	
Manganese	200.8	**917**	mg/Kg	1.0	0.2	5	10/25/22 12:08	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:30
Sample Matrix:	Solid	**Date Received:**	10/18/22 13:35
Sample Name:	GC-AP-MW-24-WS-SSE-F5	**Basis:**	As Received
Lab Code:	K2212192-024		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.2**	mg/Kg	2.4	0.3	5	10/25/22 12:09	10/24/22	
Cobalt	200.8	**1.74**	mg/Kg	0.097	0.029	5	10/25/22 12:09	10/24/22	
Iron	200.8	**11400**	mg/Kg	4.8	1.9	5	10/25/22 12:09	10/24/22	
Lithium	200.8	**1.73**	mg/Kg	0.48	0.48	5	10/25/22 12:09	10/24/22	
Manganese	200.8	**35.4**	mg/Kg	0.48	0.10	5	10/25/22 12:09	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	10/18/22 09:35
		Date Received:	10/18/22 13:35
Sample Matrix:	Solid		
Sample Name:	GC-AP-MW-53H-WS-SSE-DUP-F5	**Basis:**	As Received
Lab Code:	K2212192-025		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.87**	mg/Kg	0.99	0.12	5	10/25/22 12:11	10/24/22	
Cobalt	200.8	**1.71**	mg/Kg	0.039	0.012	5	10/25/22 12:11	10/24/22	
Iron	200.8	**4270**	mg/Kg	2.0	0.8	5	10/25/22 12:11	10/24/22	
Lithium	200.8	**4.07**	mg/Kg	0.20	0.20	5	10/25/22 12:11	10/24/22	
Manganese	200.8	**17.6**	mg/Kg	0.20	0.04	5	10/25/22 12:11	10/24/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Solid		
Sample Name:	Method Blank	**Basis:**	As Received
Lab Code:	KQ2218490-01		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	mg/Kg	0.50	0.06	5	10/25/22 11:10	10/24/22	
Cobalt	200.8	ND	U	mg/Kg	0.020	0.006	5	10/25/22 11:10	10/24/22	
Iron	200.8	**0.9**	**J**	mg/Kg	1.0	0.4	5	10/25/22 11:10	10/24/22	
Lithium	200.8	ND	U	mg/Kg	0.10	0.10	5	10/25/22 11:10	10/24/22	
Manganese	200.8	ND	U	mg/Kg	0.10	0.02	5	10/25/22 11:10	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Solid		
Sample Name:	Method Blank	**Basis:**	As Received
Lab Code:	KQ2218493-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	mg/Kg	0.50	0.06	5	10/25/22 12:00	10/24/22	
Cobalt	200.8	ND U	mg/Kg	0.020	0.006	5	10/25/22 12:00	10/24/22	
Iron	200.8	**0.7 J**	mg/Kg	1.0	0.4	5	10/25/22 12:00	10/24/22	
Lithium	200.8	ND U	mg/Kg	0.10	0.10	5	10/25/22 12:00	10/24/22	
Manganese	200.8	ND U	mg/Kg	0.10	0.02	5	10/25/22 12:00	10/24/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Analyzed:**	10/25/22
Sample Matrix:	Solid		

Duplicate Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: As Received

		Lab Control Sample KQ2218490-02			Duplicate Lab Control Sample KQ2218490-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Arsenic	200.8	93.5	100	94	91.0	100	91	85-115	3	30
Cobalt	200.8	92.0	100	92	89.9	100	90	85-115	2	30
Iron	200.8	182	200	91	179	200	90	85-115	2	30
Lithium	200.8	500	500	100	513	500	103	85-115	3	30
Manganese	200.8	90.2	100	90	89.6	100	90	85-115	<1	30

Client:	Anchor QEA, LLC	**Service Request:**	K2212192
Project:	2022-Greene County Treatability/22114-05.01-Greene County Task 05	**Date Analyzed:**	10/25/22
Sample Matrix:	Solid		

Duplicate Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: As Received

		Lab Control Sample KQ2218493-03			Duplicate Lab Control Sample KQ2218493-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Arsenic	200.8	88.9	100	89	96.8	100	97	85-115	9	30
Cobalt	200.8	87.5	100	87	94.5	100	95	85-115	8	30
Iron	200.8	172	200	86	188	200	94	85-115	9	30
Lithium	200.8	470	500	94	515	500	103	85-115	9	30
Manganese	200.8	85.6	100	86	92.0	100	92	85-115	7	30

October 26, 2022 Service Request No:K2212204

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 18, 2022
For your reference, these analyses have been assigned our service request number **K2212204.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2212204
Date Received: 10/18/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Sixteen water samples were received for analysis at ALS Environmental on 10/18/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/26/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-1-HT-MMO-SSE-F2 **Lab ID: K2212204-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.2	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.08	J	0.05	0.10	ug/L	200.8
Iron, Dissolved	691		2	10	ug/L	200.8
Manganese, Dissolved	304		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-FB-SSE-F2 **Lab ID: K2212204-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.4	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	7.10		0.05	0.10	ug/L	200.8
Iron, Dissolved	730		2	10	ug/L	200.8
Manganese, Dissolved	79.6		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-FB-SSE-F3 **Lab ID: K2212204-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	3.43		0.05	0.10	ug/L	200.8
Iron, Dissolved	11600		2	10	ug/L	200.8
Manganese, Dissolved	53.4		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-HT-MMO-SSE-F4 **Lab ID: K2212204-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.9	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	2.48		0.05	0.10	ug/L	200.8
Iron, Dissolved	61200		2	10	ug/L	200.8
Manganese, Dissolved	1330		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-FB-SSE-F4 **Lab ID: K2212204-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.8	J	0.5	2.5	ug/L	200.8
Cobalt, Dissolved	2.65		0.05	0.10	ug/L	200.8
Iron, Dissolved	14400		2	10	ug/L	200.8
Manganese, Dissolved	17.5		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-HT-MMO-SSE-F1 **Lab ID: K2212204-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.13		0.05	0.10	ug/L	200.8
Iron, Dissolved	34		2	10	ug/L	200.8
Manganese, Dissolved	124		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-FB-SSE-F1 **Lab ID: K2212204-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	2.47		0.05	0.10	ug/L	200.8
Iron, Dissolved	13		2	10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-1-FB-SSE-F1 **Lab ID: K2212204-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Manganese, Dissolved	55.8		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-1-HT-MMO-SSE-F3 **Lab ID: K2212204-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	29.4		0.05	0.10	ug/L	200.8
Iron, Dissolved	8380		2	10	ug/L	200.8
Manganese, Dissolved	19700		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-HT-MMO-SSE-F1 **Lab ID: K2212204-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	2.87		0.05	0.10	ug/L	200.8
Iron, Dissolved	22		2	10	ug/L	200.8
Manganese, Dissolved	652		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-FB-SSE-F1 **Lab ID: K2212204-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	22.5		0.05	0.10	ug/L	200.8
Iron, Dissolved	15		2	10	ug/L	200.8
Manganese, Dissolved	88.6		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-HT-MMO-SSE-F2 **Lab ID: K2212204-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	2.34		0.05	0.10	ug/L	200.8
Iron, Dissolved	299		2	10	ug/L	200.8
Manganese, Dissolved	1030		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-FB-SSE-F2 **Lab ID: K2212204-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	128		0.05	0.10	ug/L	200.8
Iron, Dissolved	831		2	10	ug/L	200.8
Manganese, Dissolved	95.6		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-HT-MMO-SSE-F3 **Lab ID: K2212204-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	374		0.05	0.10	ug/L	200.8
Iron, Dissolved	6460		2	10	ug/L	200.8
Manganese, Dissolved	44100		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-FB-SSE-F3 **Lab ID: K2212204-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	89.7		0.05	0.10	ug/L	200.8
Iron, Dissolved	12700		2	10	ug/L	200.8
Manganese, Dissolved	715		0.2	1.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-44H-HT-MMO-SSE-F4 **Lab ID: K2212204-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	22.4		0.05	0.10	ug/L	200.8
Iron, Dissolved	12400		2	10	ug/L	200.8
Manganese, Dissolved	160		0.2	1.0	ug/L	200.8

CLIENT ID: GC-COL-MW-44H-FB-SSE-F4 **Lab ID: K2212204-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	108		0.05	0.10	ug/L	200.8
Iron, Dissolved	23200		2	10	ug/L	200.8
Manganese, Dissolved	65.1		0.2	1.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2212204
Project: Greene County Treatability/221114-05.01 Greene County Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212204-001	GC-COL-MW-1-HT-MMO-SSE-F1	10/10/2022	1030
K2212204-002	GC-COL-MW-1-FB-SSE-F1	10/10/2022	1035
K2212204-003	GC-COL-MW-1-HT-MMO-SSE-F2	10/12/2022	1530
K2212204-004	GC-COL-MW-1-FB-SSE-F2	10/12/2022	1535
K2212204-005	GC-COL-MW-1-HT-MMO-SSE-F3	10/13/2022	1130
K2212204-006	GC-COL-MW-1-FB-SSE-F3	10/13/2022	1135
K2212204-007	GC-COL-MW-1-HT-MMO-SSE-F4	10/14/2022	1530
K2212204-008	GC-COL-MW-1-FB-SSE-F4	10/14/2022	1535
K2212204-009	GC-COL-MW-44H-HT-MMO-SSE-F1	10/10/2022	1120
K2212204-010	GC-COL-MW-44H-FB-SSE-F1	10/10/2022	1125
K2212204-011	GC-COL-MW-44H-HT-MMO-SSE-F2	10/12/2022	1620
K2212204-012	GC-COL-MW-44H-FB-SSE-F2	10/12/2022	1625
K2212204-013	GC-COL-MW-44H-HT-MMO-SSE-F3	10/13/2022	1220
K2212204-014	GC-COL-MW-44H-FB-SSE-F3	10/13/2022	1225
K2212204-015	GC-COL-MW-44H-HT-MMO-SSE-F4	10/14/2022	1620
K2212204-016	GC-COL-MW-44H-FB-SSE-F4	10/14/2022	1625

Chain of Custody Record & Laboratory Analysis Request

K2212204

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Co, Fe, Mn) EPA 200.8	Total metals (As, Co, Fe, Mn) EPA 3050B	Comments/Preservation
1	GC-COL-MW-1-HT-MMO-SSE-F1	10/10/2022	10:30	Water	1	X		Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-1-FB-SSE-F1	10/10/2022	10:35	Water	1	X		Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-1-HT-MMO-SSE-F2	10/12/2022	15:30	Water	1	X		Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-1-FB-SSE-F2	10/12/2022	15:35	Water	1	X		Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-1-HT-MMO-SSE-F3	10/13/2022	11:30	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-1-FB-SSE-F3	10/13/2022	11:35	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-1-HT-MMO-SSE-F4	10/14/2022	15:30	Water	1	X		Approx. 4 M nitric acid.
8	GC-COL-MW-1-FB-SSE-F4	10/14/2022	15:35	Water	1	X		Approx. 4 M nitric acid.
9	GC-COL-MW-1-HT-MMO-SSE-F5	10/18/2022	7:30	Solid	1		X	Digest via EPA Method 3050B.
10	GC-COL-MW-1-FB-SSE-F5	10/18/2022	7:35	Solid	1		X	Digest via EPA Method 3050B.
11								
12								
13								
14								
15								

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 10/18/22 11:15 Am

Received by:
Signature/Print Name: KMorrow ALS 10/18/22 1220

Relinquished by:
Company:
Signature/Print Name: KMorrow ALS
Date/Time: 10/18/22 1335

Received by: ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

K2212204

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (Co, Fe, Mn) EPA 200.8	Total metals (Co, Fe, Mn) EPA 3050B													
1	GC-COL-MW-44H-HT-MMO-SSE-F1	10/10/2022	11:20	Water	1	X														Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-44H-FB-SSE-F1	10/10/2022	11:25	Water	1	X														Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-44H-HT-MMO-SSE-F2	10/12/2022	16:20	Water	1	X														Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-44H-FB-SSE-F2	10/12/2022	16:25	Water	1	X														Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-44H-HT-MMO-SSE-F3	10/13/2022	12:20	Water	1	X														Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-44H-FB-SSE-F3	10/13/2022	12:25	Water	1	X														Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-44H-HT-MMO-SSE-F4	10/14/2022	16:20	Water	1	X														Approx. 4 M nitric acid.
8	GC-COL-MW-44H-FB-SSE-F4	10/14/2022	16:25	Water	1	X														Approx. 4 M nitric acid.
9	GC-COL-MW-44H-HT-MMO-SSE-F5	10/18/2022	8:20	Solid	1		X													Digest via EPA Method 3050B.
10	GC-COL-MW-44H-FB-SSE-F5	10/18/2022	8:25	Solid	1		X													Digest via EPA Method 3050B.
11																				
12																				
13																				
14																				
15																				

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/18/22 11:15 AM
Relinquished by:	Company:
ALS	10/18/22 1335
Signature/Print Name:	Date/Time:

Received by:
Signature/Print Name:
K Morrow ALS 10/18/22 1220
Received by:
ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12204

Received: 10/18/22 Opened: 10/18/22 By: VM Unloaded: 10/18/22 By: VM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
5.4		IR01	Cooler 1				
6.0		IR01	Cooler 2				

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] [✓ *Bubble Wrap*] *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:______

:______

1/13/22 *Page of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC **Service Request:** K2212204
Project: Greene County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-1-HT-MMO-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212204-001 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-1-HT-MMO-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212204-001.R01 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-1-FB-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212204-002 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-1-HT-MMO-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212204-003 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-1-FB-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212204-004 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Client: Anchor QEA, LLC **Service Request:** K2212204
Project: Greene County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-1-HT-MMO-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212204-005 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-1-FB-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212204-006 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-1-HT-MMO-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212204-007 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-1-FB-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212204-008 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GC-COL-MW-44H-HT-MMO-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212204-009 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-COL-MW-44H-FB-SSE-F1	**Date Collected:**	10/10/22
Lab Code:	K2212204-010	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F2	**Date Collected:**	10/12/22
Lab Code:	K2212204-011	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name:	GC-COL-MW-44H-FB-SSE-F2	**Date Collected:**	10/12/22
Lab Code:	K2212204-012	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F3	**Date Collected:**	10/13/22
Lab Code:	K2212204-013	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name:	GC-COL-MW-44H-FB-SSE-F3	**Date Collected:**	10/13/22
Lab Code:	K2212204-014	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F4	**Date Collected:**	10/14/22
Lab Code:	K2212204-015	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	EMCALLISTER

Sample Name:	GC-COL-MW-44H-FB-SSE-F4	**Date Collected:**	10/14/22
Lab Code:	K2212204-016	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 10:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F1	**Basis:**	NA
Lab Code:	K2212204-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	10/25/22 15:45	10/21/22	
Cobalt	200.8	**0.13**	ug/L	0.10	0.05	5	10/25/22 15:45	10/21/22	
Iron	200.8	**34**	ug/L	10	2	5	10/26/22 12:28	10/21/22	
Manganese	200.8	**124**	ug/L	1.0	0.2	5	10/25/22 15:45	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 10:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-FB-SSE-F1	**Basis:**	NA
Lab Code:	K2212204-002		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 15:56	10/21/22	
Cobalt	200.8	**2.47**		ug/L	0.10	0.05	5	10/25/22 15:56	10/21/22	
Iron	200.8	**13**		ug/L	10	2	5	10/25/22 15:56	10/21/22	
Manganese	200.8	**55.8**		ug/L	1.0	0.2	5	10/25/22 15:56	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 15:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F2	**Basis:**	NA
Lab Code:	K2212204-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.2**	**J**	ug/L	2.5	0.5	5	10/25/22 15:58	10/21/22	
Cobalt	200.8	**0.08**	**J**	ug/L	0.10	0.05	5	10/25/22 15:58	10/21/22	
Iron	200.8	**691**		ug/L	10	2	5	10/25/22 15:58	10/21/22	
Manganese	200.8	**304**		ug/L	1.0	0.2	5	10/25/22 15:58	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 15:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-FB-SSE-F2	**Basis:**	NA
Lab Code:	K2212204-004		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.4**	**J**	ug/L	2.5	0.5	5	10/25/22 15:59	10/21/22	
Cobalt	200.8	**7.10**		ug/L	0.10	0.05	5	10/25/22 15:59	10/21/22	
Iron	200.8	**730**		ug/L	10	2	5	10/25/22 15:59	10/21/22	
Manganese	200.8	**79.6**		ug/L	1.0	0.2	5	10/25/22 15:59	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 11:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F3	**Basis:**	NA
Lab Code:	K2212204-005		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 16:01	10/21/22	
Cobalt	200.8	**29.4**		ug/L	0.10	0.05	5	10/25/22 16:01	10/21/22	
Iron	200.8	**8380**		ug/L	10	2	5	10/25/22 16:01	10/21/22	
Manganese	200.8	**19700**		ug/L	1.0	0.2	5	10/25/22 16:01	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 11:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-FB-SSE-F3	**Basis:**	NA
Lab Code:	K2212204-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8**	**J**	ug/L	2.5	0.5	5	10/25/22 16:02	10/21/22	
Cobalt	200.8	**3.43**		ug/L	0.10	0.05	5	10/25/22 16:02	10/21/22	
Iron	200.8	**11600**		ug/L	10	2	5	10/25/22 16:02	10/21/22	
Manganese	200.8	**53.4**		ug/L	1.0	0.2	5	10/25/22 16:02	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 15:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F4	**Basis:**	NA
Lab Code:	K2212204-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.9**	**J**	ug/L	2.5	0.5	5	10/25/22 16:04	10/21/22	
Cobalt	200.8	**2.48**		ug/L	0.10	0.05	5	10/25/22 16:04	10/21/22	
Iron	200.8	**61200**		ug/L	10	2	5	10/25/22 16:04	10/21/22	
Manganese	200.8	**1330**		ug/L	1.0	0.2	5	10/25/22 16:04	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 15:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-1-FB-SSE-F4	**Basis:**	NA
Lab Code:	K2212204-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.8**	**J**	ug/L	2.5	0.5	5	10/25/22 16:05	10/21/22	
Cobalt	200.8	**2.65**		ug/L	0.10	0.05	5	10/25/22 16:05	10/21/22	
Iron	200.8	**14400**		ug/L	10	2	5	10/25/22 16:05	10/21/22	
Manganese	200.8	**17.5**		ug/L	1.0	0.2	5	10/25/22 16:05	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:20
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F1	**Basis:**	NA
Lab Code:	K2212204-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**2.87**	ug/L	0.10	0.05	5	10/25/22 16:07	10/21/22	
Iron	200.8	**22**	ug/L	10	2	5	10/25/22 16:07	10/21/22	
Manganese	200.8	**652**	ug/L	1.0	0.2	5	10/25/22 16:07	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:25
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-FB-SSE-F1	**Basis:**	NA
Lab Code:	K2212204-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**22.5**	ug/L	0.10	0.05	5	10/25/22 16:08	10/21/22	
Iron	200.8	**15**	ug/L	10	2	5	10/25/22 16:08	10/21/22	
Manganese	200.8	**88.6**	ug/L	1.0	0.2	5	10/25/22 16:08	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:20
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F2	**Basis:**	NA
Lab Code:	K2212204-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**2.34**	ug/L	0.10	0.05	5	10/25/22 16:13	10/21/22	
Iron	200.8	**299**	ug/L	10	2	5	10/25/22 16:13	10/21/22	
Manganese	200.8	**1030**	ug/L	1.0	0.2	5	10/25/22 16:13	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:25
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-FB-SSE-F2	**Basis:**	NA
Lab Code:	K2212204-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**128**	ug/L	0.10	0.05	5	10/25/22 16:15	10/21/22	
Iron	200.8	**831**	ug/L	10	2	5	10/25/22 16:15	10/21/22	
Manganese	200.8	**95.6**	ug/L	1.0	0.2	5	10/25/22 16:15	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:20
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F3	**Basis:**	NA
Lab Code:	K2212204-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**374**	ug/L	0.10	0.05	5	10/25/22 16:16	10/21/22	
Iron	200.8	**6460**	ug/L	10	2	5	10/25/22 16:16	10/21/22	
Manganese	200.8	**44100**	ug/L	1.0	0.2	5	10/25/22 16:16	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:25
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-FB-SSE-F3	**Basis:**	NA
Lab Code:	K2212204-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**89.7**	ug/L	0.10	0.05	5	10/25/22 16:18	10/21/22	
Iron	200.8	**12700**	ug/L	10	2	5	10/25/22 16:18	10/21/22	
Manganese	200.8	**715**	ug/L	1.0	0.2	5	10/25/22 16:18	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:20
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-HT-MMO-SSE-F4	**Basis:**	NA
Lab Code:	K2212204-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**22.4**	ug/L	0.10	0.05	5	10/25/22 16:19	10/21/22	
Iron	200.8	**12400**	ug/L	10	2	5	10/25/22 16:19	10/21/22	
Manganese	200.8	**160**	ug/L	1.0	0.2	5	10/25/22 16:19	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:25
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-44H-FB-SSE-F4	**Basis:**	NA
Lab Code:	K2212204-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	200.8	**108**	ug/L	0.10	0.05	5	10/25/22 16:21	10/21/22	
Iron	200.8	**23200**	ug/L	10	2	5	10/25/22 16:21	10/21/22	
Manganese	200.8	**65.1**	ug/L	1.0	0.2	5	10/25/22 16:21	10/21/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2218222-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	10/25/22 15:33	10/21/22	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/25/22 15:33	10/21/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	10/25/22 15:33	10/21/22	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	10/25/22 15:33	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/25/22 - 10/26/22
		Date Extracted:	10/21/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F1	**Units:**	ug/L
Lab Code:	K2212204-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2218222-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	45.7	50.0	91	70-130
Cobalt	0.13	23.2	25.0	92	70-130
Iron	34	77	50	85	70-130
Manganese	124	146	25.0	90 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212204
Project	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/25/22 - 10/26/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-COL-MW-1-HT-MMO-SSE-F1	**Units:**	ug/L
Lab Code:	K2212204-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2218222-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Cobalt	200.8	0.10	0.05	0.13	0.07 J	0.10	60 #	20
Iron	200.8	10	2	34	32	33	6	20
Manganese	200.8	1.0	0.2	124	122	123	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-05.01 Greene County Task 05
Sample Matrix: Water

Service Request: K2212204
Date Analyzed: 10/25/22

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2218222-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	46.7	50.0	93	85-115
Cobalt	200.8	24.0	25.0	96	85-115
Iron	200.8	47.4	50.0	95	85-115
Manganese	200.8	24.5	25.0	98	85-115

October 26, 2022 Service Request No:K2212274

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Greene County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 18, 2022
For your reference, these analyses have been assigned our service request number **K2212274.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Greene County Treatability
Sample Matrix: Water

Service Request: K2212274
Date Received: 10/18/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 10/18/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/26/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-17-HT-MMO-SSE-F2 **Lab ID: K2212274-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.1		0.5	2.5	ug/L	200.8
Iron, Dissolved	466		2	10	ug/L	200.8
Lithium, Dissolved	49.4		0.50	0.50	ug/L	200.8
Manganese, Dissolved	761		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-FB-SSE-F2 **Lab ID: K2212274-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	11.4		0.5	2.5	ug/L	200.8
Iron, Dissolved	758		2	10	ug/L	200.8
Lithium, Dissolved	11.0		0.50	0.50	ug/L	200.8
Manganese, Dissolved	166		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-HT-MMO-SSE-F3 **Lab ID: K2212274-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	17.4		0.5	2.5	ug/L	200.8
Iron, Dissolved	5110		2	10	ug/L	200.8
Lithium, Dissolved	19.1		0.50	0.50	ug/L	200.8
Manganese, Dissolved	43800		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-FB-SSE-F3 **Lab ID: K2212274-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.9		0.5	2.5	ug/L	200.8
Iron, Dissolved	15000		2	10	ug/L	200.8
Lithium, Dissolved	0.73		0.50	0.50	ug/L	200.8
Manganese, Dissolved	703		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-HT-MMO-SSE-F4 **Lab ID: K2212274-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.0		0.5	2.5	ug/L	200.8
Iron, Dissolved	14400		2	10	ug/L	200.8
Lithium, Dissolved	0.94		0.50	0.50	ug/L	200.8
Manganese, Dissolved	200		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-FB-SSE-F4 **Lab ID: K2212274-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.8		0.5	2.5	ug/L	200.8
Iron, Dissolved	26500		2	10	ug/L	200.8
Lithium, Dissolved	1.12		0.50	0.50	ug/L	200.8
Manganese, Dissolved	55.6		0.2	2.0	ug/L	200.8

CLIENT ID: GC-MB-SSE-F2 **Lab ID: K2212274-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.9	J	0.5	2.5	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-MB-SSE-F2 **Lab ID: K2212274-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	27		2	10	ug/L	200.8
Lithium, Dissolved	5.09		0.50	0.50	ug/L	200.8
Manganese, Dissolved	15.1		0.2	2.0	ug/L	200.8

CLIENT ID: GC-MB-SSE-F3 **Lab ID: K2212274-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	7.0		0.5	2.5	ug/L	200.8
Cobalt, Dissolved	0.05	J	0.05	0.10	ug/L	200.8
Iron, Dissolved	153		2	10	ug/L	200.8
Manganese, Dissolved	322		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-HT-MMO-SSE-F2 **Lab ID: K2212274-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	31.2		0.5	2.5	ug/L	200.8
Iron, Dissolved	449		2	10	ug/L	200.8
Lithium, Dissolved	25.6		0.50	0.50	ug/L	200.8
Manganese, Dissolved	637		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-FB-SSE-F2 **Lab ID: K2212274-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	25.1		0.5	2.5	ug/L	200.8
Iron, Dissolved	761		2	10	ug/L	200.8
Lithium, Dissolved	7.30		0.50	0.50	ug/L	200.8
Manganese, Dissolved	95.0		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-HT-MMO-SSE-F3 **Lab ID: K2212274-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.0		0.5	2.5	ug/L	200.8
Iron, Dissolved	6610		2	10	ug/L	200.8
Lithium, Dissolved	7.79		0.50	0.50	ug/L	200.8
Manganese, Dissolved	39300		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-FB-SSE-F3 **Lab ID: K2212274-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	7.2		0.5	2.5	ug/L	200.8
Iron, Dissolved	12800		2	10	ug/L	200.8
Manganese, Dissolved	128		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-HT-MMO-SSE-F4 **Lab ID: K2212274-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.8		0.5	2.5	ug/L	200.8
Iron, Dissolved	11500		2	10	ug/L	200.8
Lithium, Dissolved	0.58		0.50	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-5-HT-MMO-SSE-F4 **Lab ID: K2212274-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Manganese, Dissolved	444		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-FB-SSE-F4 **Lab ID: K2212274-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	11.3		0.5	2.5	ug/L	200.8
Iron, Dissolved	23000		2	10	ug/L	200.8
Lithium, Dissolved	0.51		0.50	0.50	ug/L	200.8
Manganese, Dissolved	47.8		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-FB-SSE-F1 **Lab ID: K2212274-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	7	J	2	10	ug/L	200.8
Lithium, Dissolved	11.4		0.50	0.50	ug/L	200.8
Manganese, Dissolved	106		0.2	2.0	ug/L	200.8

CLIENT ID: GC-MB-SSE-F1 **Lab ID: K2212274-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	19		2	10	ug/L	200.8
Manganese, Dissolved	6.5		0.2	2.0	ug/L	200.8

CLIENT ID: GC-MB-SSE-F4 **Lab ID: K2212274-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	10	J	2	10	ug/L	200.8
Manganese, Dissolved	2.2		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-HT-MMO-SSE-F1 **Lab ID: K2212274-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	9	J	2	10	ug/L	200.8
Lithium, Dissolved	5.30		0.50	0.50	ug/L	200.8
Manganese, Dissolved	29.4		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-5-FB-SSE-F1 **Lab ID: K2212274-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	15		2	10	ug/L	200.8
Lithium, Dissolved	2.07		0.50	0.50	ug/L	200.8
Manganese, Dissolved	77.8		0.2	2.0	ug/L	200.8

CLIENT ID: GC-COL-MW-17-HT-MMO-SSE-F1 **Lab ID: K2212274-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	11.5		0.50	0.50	ug/L	200.8
Manganese, Dissolved	5.4		0.2	2.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:**K2212274

Project: Greene County Treatability/221114-05.01 Greene County Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212274-001	GC-COL-MW-17-HT-MMO-SSE-F1	10/10/2022	1110
K2212274-002	GC-COL-MW-17-FB-SSE-F1	10/10/2022	1115
K2212274-003	GC-COL-MW-17-HT-MMO-SSE-F2	10/12/2022	1610
K2212274-004	GC-COL-MW-17-FB-SSE-F2	10/12/2022	1615
K2212274-005	GC-COL-MW-17-HT-MMO-SSE-F3	10/13/2022	1210
K2212274-006	GC-COL-MW-17-FB-SSE-F3	10/13/2022	1215
K2212274-007	GC-COL-MW-17-HT-MMO-SSE-F4	10/14/2022	1610
K2212274-008	GC-COL-MW-17-FB-SSE-F4	10/14/2022	1615
K2212274-009	GC-MB-SSE-F1	10/10/2022	1135
K2212274-010	GC-MB-SSE-F2	10/12/2022	1635
K2212274-011	GC-MB-SSE-F3	10/13/2022	1235
K2212274-012	GC-MB-SSE-F4	10/14/2022	1635
K2212274-013	GC-COL-MW-5-HT-MMO-SSE-F1	10/10/2022	1040
K2212274-014	GC-COL-MW-5-FB-SSE-F1	10/10/2022	1045
K2212274-015	GC-COL-MW-5-HT-MMO-SSE-F2	10/12/2022	1540
K2212274-016	GC-COL-MW-5-FB-SSE-F2	10/12/2022	1545
K2212274-017	GC-COL-MW-5-HT-MMO-SSE-F3	10/13/2022	1140
K2212274-018	GC-COL-MW-5-FB-SSE-F3	10/13/2022	1145
K2212274-019	GC-COL-MW-5-HT-MMO-SSE-F4	10/14/2022	1540
K2212274-020	GC-COL-MW-5-FB-SSE-F4	10/14/2022	1545

K2212274

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters: Dissolved Metals (As, Li, Fe, Mn) EPA 200.8	Total metals (As, Li, Fe, Mn) EPA 3050B	Dissolved Metals (As, Li, Co, Fe, Mn) EPA 200.8											Comments/Preservation
		Date	Time																
1	GC-COL-MW-17-HT-MMO-SSE-F1	10/10/2022	11:10	Water	1	X													Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-17-FB-SSE-F1	10/10/2022	11:15	Water	1	X													Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-17-HT-MMO-SSE-F2	10/12/2022	16:10	Water	1	X													Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-17-FB-SSE-F2	10/12/2022	16:15	Water	1	X													Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-17-HT-MMO-SSE-F3	10/13/2022	12:10	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-17-FB-SSE-F3	10/13/2022	12:15	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-17-HT-MMO-SSE-F4	10/14/2022	16:10	Water	1	X													Approx. 4 M nitric acid.
8	GC-COL-MW-17-FB-SSE-F4	10/14/2022	16:15	Water	1	X													Approx. 4 M nitric acid.
9	GC-COL-MW-17-HT-MMO-SSE-F5	10/18/2022	8:10	Solid	1		X												Digest via EPA Method 3050B.
10	GC-COL-MW-17-FB-SSE-F5	10/18/2022	8:15	Solid	1		X												Digest via EPA Method 3050B.
11	GC-MB-SSE-F1	10/10/2022	11:35	Water	1			X											Approx. 0.16 M magnesium chloride.
12	GC-MB-SSE-F2	10/12/2022	16:35	Water	1			X											Approx 0.16 M monosodium phosphate.
13	GC-MB-SSE-F3	10/13/2022	12:35	Water	1			X											Approx. 0.04 M hydroxylamine hydrochloride.
14	GC-MB-SSE-F4	10/14/2022	16:35	Water	1			X											Approx. 4 M nitric acid.
15																			

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	10/18/22 11:15 AM

Received by:
Signature/Print Name:
K Morrow ALS 10/18/22 1220

Relinquished by:	Company:
Signature/Print Name:	Date/Time:
K Morrow ALS	10/18/22 1335

Received by:
ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

K2212274

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Fe, Mn) EPA 200.8	Total metals (As, Li, Fe, Mn) EPA 3050B	Comments/Preservation
1	GC-COL-MW-5-HT-MMO-SSE-F1	10/10/2022	10:40	Water	1	X		Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-5-FB-SSE-F1	10/10/2022	10:45	Water	1	X		Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-5-HT-MMO-SSE-F2	10/12/2022	15:40	Water	1	X		Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-5-FB-SSE-F2	10/12/2022	15:45	Water	1	X		Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-5-HT-MMO-SSE-F3	10/13/2022	11:40	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-5-FB-SSE-F3	10/13/2022	11:45	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-5-HT-MMO-SSE-F4	10/14/2022	15:40	Water	1	X		Approx. 4 M nitric acid.
8	GC-COL-MW-5-FB-SSE-F4	10/14/2022	15:45	Water	1	X		Approx. 4 M nitric acid.
9	GC-COL-MW-5-HT-MMO-SSE-F5	10/18/2022	7:40	Solid	1		X	Digest via EPA Method 3050B.
10	GC-COL-MW-5-FB-SSE-F5	10/18/2022	7:45	Solid	1		X	Digest via EPA Method 3050B.
11								
12								
13								
14								
15								

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 10/18/22 11:15 AM
Relinquished by:	Company:
Signature/Print Name: K Morrow ALS	Date/Time: 10/18/22 1335

Received by:
Signature/Print Name: K Morrow ALS 10/18/22 1220
Received by: ALS 10/18/22 1335
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM Mack

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12274

Received: 10/18/22 Opened: 10/18/22 By: VM Unloaded: 10/18/22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
5.4		IR01	Cooler 1				
6.0		IR01	Cooler 2				

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] [✓ *Bubble Wrap*] *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ______

1/13/22 **Page of**

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F1	**Date Collected:**	10/10/22
Lab Code:	K2212274-001	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-17-FB-SSE-F1	**Date Collected:**	10/10/22
Lab Code:	K2212274-002	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F2	**Date Collected:**	10/12/22
Lab Code:	K2212274-003	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-17-FB-SSE-F2	**Date Collected:**	10/12/22
Lab Code:	K2212274-004	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F3	**Date Collected:**	10/13/22
Lab Code:	K2212274-005	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2212274
Project: Greene County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-17-FB-SSE-F3
Date Collected: 10/13/22
Lab Code: K2212274-006
Date Received: 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-COL-MW-17-HT-MMO-SSE-F4
Date Collected: 10/14/22
Lab Code: K2212274-007
Date Received: 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-COL-MW-17-FB-SSE-F4
Date Collected: 10/14/22
Lab Code: K2212274-008
Date Received: 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-MB-SSE-F1
Date Collected: 10/10/22
Lab Code: K2212274-009
Date Received: 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GC-MB-SSE-F2
Date Collected: 10/12/22
Lab Code: K2212274-010
Date Received: 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-MB-SSE-F3	**Date Collected:**	10/13/22
Lab Code:	K2212274-011	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-MB-SSE-F4	**Date Collected:**	10/14/22
Lab Code:	K2212274-012	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F1	**Date Collected:**	10/10/22
Lab Code:	K2212274-013	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-FB-SSE-F1	**Date Collected:**	10/10/22
Lab Code:	K2212274-014	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F2	**Date Collected:**	10/12/22
Lab Code:	K2212274-015	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05		

Sample Name:	GC-COL-MW-5-FB-SSE-F2	**Date Collected:**	10/12/22
Lab Code:	K2212274-016	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F3	**Date Collected:**	10/13/22
Lab Code:	K2212274-017	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-FB-SSE-F3	**Date Collected:**	10/13/22
Lab Code:	K2212274-018	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F4	**Date Collected:**	10/14/22
Lab Code:	K2212274-019	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GC-COL-MW-5-FB-SSE-F4	**Date Collected:**	10/14/22
Lab Code:	K2212274-020	**Date Received:**	10/18/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:10
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F1	**Basis:**	NA
Lab Code:	K2212274-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 16:37	10/21/22	
Iron	200.8	ND	U	ug/L	10	2	5	10/25/22 16:37	10/21/22	
Lithium	200.8	**11.5**		ug/L	0.50	0.50	5	10/25/22 16:37	10/21/22	
Manganese	200.8	**5.4**		ug/L	2.0	0.2	5	10/25/22 16:37	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Greene County Treatability/221114-05.01 Greene County Task 05
Sample Matrix: Water
Service Request: K2212274
Date Collected: 10/10/22 11:15
Date Received: 10/18/22 13:35

Sample Name: GC-COL-MW-17-FB-SSE-F1
Lab Code: K2212274-002
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	10/25/22 16:42	10/21/22	
Iron	200.8	**7 J**	ug/L	10	2	5	10/25/22 16:42	10/21/22	
Lithium	200.8	**11.4**	ug/L	0.50	0.50	5	10/25/22 16:42	10/21/22	
Manganese	200.8	**106**	ug/L	2.0	0.2	5	10/25/22 16:42	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:10
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F2	**Basis:**	NA
Lab Code:	K2212274-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.1**	ug/L	2.5	0.5	5	10/25/22 16:47	10/21/22	
Iron	200.8	**466**	ug/L	10	2	5	10/25/22 16:47	10/21/22	
Lithium	200.8	**49.4**	ug/L	0.50	0.50	5	10/25/22 16:47	10/21/22	
Manganese	200.8	**761**	ug/L	2.0	0.2	5	10/25/22 16:47	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:15
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-FB-SSE-F2	**Basis:**	NA
Lab Code:	K2212274-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**11.4**	ug/L	2.5	0.5	5	10/25/22 16:48	10/21/22	
Iron	200.8	**758**	ug/L	10	2	5	10/25/22 16:48	10/21/22	
Lithium	200.8	**11.0**	ug/L	0.50	0.50	5	10/25/22 16:48	10/21/22	
Manganese	200.8	**166**	ug/L	2.0	0.2	5	10/25/22 16:48	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:10
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F3	**Basis:**	NA
Lab Code:	K2212274-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**17.4**	ug/L	2.5	0.5	5	10/25/22 16:53	10/21/22	
Iron	200.8	**5110**	ug/L	10	2	5	10/25/22 16:53	10/21/22	
Lithium	200.8	**19.1**	ug/L	0.50	0.50	5	10/25/22 16:53	10/21/22	
Manganese	200.8	**43800**	ug/L	2.0	0.2	5	10/25/22 16:53	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:15
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-FB-SSE-F3	**Basis:**	NA
Lab Code:	K2212274-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.9**	ug/L	2.5	0.5	5	10/25/22 16:54	10/21/22	
Iron	200.8	**15000**	ug/L	10	2	5	10/25/22 16:54	10/21/22	
Lithium	200.8	**0.73**	ug/L	0.50	0.50	5	10/25/22 16:54	10/21/22	
Manganese	200.8	**703**	ug/L	2.0	0.2	5	10/25/22 16:54	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:10
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F4	**Basis:**	NA
Lab Code:	K2212274-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.0**	ug/L	2.5	0.5	5	10/25/22 16:56	10/21/22	
Iron	200.8	**14400**	ug/L	10	2	5	10/25/22 16:56	10/21/22	
Lithium	200.8	**0.94**	ug/L	0.50	0.50	5	10/25/22 16:56	10/21/22	
Manganese	200.8	**200**	ug/L	2.0	0.2	5	10/25/22 16:56	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:15
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-17-FB-SSE-F4	**Basis:**	NA
Lab Code:	K2212274-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.8**	ug/L	2.5	0.5	5	10/25/22 16:57	10/21/22	
Iron	200.8	**26500**	ug/L	10	2	5	10/25/22 16:57	10/21/22	
Lithium	200.8	**1.12**	ug/L	0.50	0.50	5	10/25/22 16:57	10/21/22	
Manganese	200.8	**55.6**	ug/L	2.0	0.2	5	10/25/22 16:57	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-MB-SSE-F1	**Basis:**	NA
Lab Code:	K2212274-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 16:59	10/21/22	
Cobalt	200.8	ND	U	ug/L	0.10	0.05	5	10/25/22 16:59	10/21/22	
Iron	200.8	**19**		ug/L	10	2	5	10/25/22 16:59	10/21/22	
Lithium	200.8	ND	U	ug/L	0.50	0.50	5	10/25/22 16:59	10/21/22	
Manganese	200.8	**6.5**		ug/L	2.0	0.2	5	10/25/22 16:59	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-MB-SSE-F2	**Basis:**	NA
Lab Code:	K2212274-010		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.9**	**J**	ug/L	2.5	0.5	5	10/25/22 17:00	10/21/22	
Cobalt	200.8	ND	U	ug/L	0.10	0.05	5	10/25/22 17:00	10/21/22	
Iron	200.8	**27**		ug/L	10	2	5	10/25/22 17:00	10/21/22	
Lithium	200.8	**5.09**		ug/L	0.50	0.50	5	10/25/22 17:00	10/21/22	
Manganese	200.8	**15.1**		ug/L	2.0	0.2	5	10/25/22 17:00	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-MB-SSE-F3	**Basis:**	NA
Lab Code:	K2212274-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.0**		ug/L	2.5	0.5	5	10/25/22 17:02	10/21/22	
Cobalt	200.8	**0.05**	**J**	ug/L	0.10	0.05	5	10/25/22 17:02	10/21/22	
Iron	200.8	**153**		ug/L	10	2	5	10/25/22 17:02	10/21/22	
Lithium	200.8	ND	U	ug/L	0.50	0.50	5	10/25/22 17:02	10/21/22	
Manganese	200.8	**322**		ug/L	2.0	0.2	5	10/25/22 17:02	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:35
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-MB-SSE-F4	**Basis:**	NA
Lab Code:	K2212274-012		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 17:03	10/21/22	
Cobalt	200.8	ND	U	ug/L	0.10	0.05	5	10/25/22 17:03	10/21/22	
Iron	200.8	**10**	**J**	ug/L	10	2	5	10/25/22 17:03	10/21/22	
Lithium	200.8	ND	U	ug/L	0.50	0.50	5	10/25/22 17:03	10/21/22	
Manganese	200.8	**2.2**		ug/L	2.0	0.2	5	10/25/22 17:03	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 10:40
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F1	**Basis:**	NA
Lab Code:	K2212274-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 17:05	10/21/22	
Iron	200.8	**9**	**J**	ug/L	10	2	5	10/25/22 17:05	10/21/22	
Lithium	200.8	**5.30**		ug/L	0.50	0.50	5	10/25/22 17:05	10/21/22	
Manganese	200.8	**29.4**		ug/L	2.0	0.2	5	10/25/22 17:05	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 10:45
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-FB-SSE-F1	**Basis:**	NA
Lab Code:	K2212274-014		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	2.5	0.5	5	10/25/22 17:07	10/21/22	
Iron	200.8	**15**		ug/L	10	2	5	10/25/22 17:07	10/21/22	
Lithium	200.8	**2.07**		ug/L	0.50	0.50	5	10/25/22 17:07	10/21/22	
Manganese	200.8	**77.8**		ug/L	2.0	0.2	5	10/25/22 17:07	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 15:40
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F2	**Basis:**	NA
Lab Code:	K2212274-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**31.2**	ug/L	2.5	0.5	5	10/25/22 17:11	10/21/22	
Iron	200.8	**449**	ug/L	10	2	5	10/25/22 17:11	10/21/22	
Lithium	200.8	**25.6**	ug/L	0.50	0.50	5	10/25/22 17:11	10/21/22	
Manganese	200.8	**637**	ug/L	2.0	0.2	5	10/25/22 17:11	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 15:45
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-FB-SSE-F2	**Basis:**	NA
Lab Code:	K2212274-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**25.1**	ug/L	2.5	0.5	5	10/25/22 17:13	10/21/22	
Iron	200.8	**761**	ug/L	10	2	5	10/25/22 17:13	10/21/22	
Lithium	200.8	**7.30**	ug/L	0.50	0.50	5	10/25/22 17:13	10/21/22	
Manganese	200.8	**95.0**	ug/L	2.0	0.2	5	10/25/22 17:13	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 11:40
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F3	**Basis:**	NA
Lab Code:	K2212274-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.0**	ug/L	2.5	0.5	5	10/25/22 17:14	10/21/22	
Iron	200.8	**6610**	ug/L	10	2	5	10/25/22 17:14	10/21/22	
Lithium	200.8	**7.79**	ug/L	0.50	0.50	5	10/25/22 17:14	10/21/22	
Manganese	200.8	**39300**	ug/L	2.0	0.2	5	10/25/22 17:14	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 11:45
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-FB-SSE-F3	**Basis:**	NA
Lab Code:	K2212274-018		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.2**		ug/L	2.5	0.5	5	10/25/22 17:16	10/21/22	
Iron	200.8	**12800**		ug/L	10	2	5	10/25/22 17:16	10/21/22	
Lithium	200.8	ND	U	ug/L	0.50	0.50	5	10/25/22 17:16	10/21/22	
Manganese	200.8	**128**		ug/L	2.0	0.2	5	10/25/22 17:16	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 15:40
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-HT-MMO-SSE-F4	**Basis:**	NA
Lab Code:	K2212274-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.8**	ug/L	2.5	0.5	5	10/25/22 17:17	10/21/22	
Iron	200.8	**11500**	ug/L	10	2	5	10/25/22 17:17	10/21/22	
Lithium	200.8	**0.58**	ug/L	0.50	0.50	5	10/25/22 17:17	10/21/22	
Manganese	200.8	**444**	ug/L	2.0	0.2	5	10/25/22 17:17	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 15:45
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-5-FB-SSE-F4	**Basis:**	NA
Lab Code:	K2212274-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**11.3**	ug/L	2.5	0.5	5	10/25/22 17:19	10/21/22	
Iron	200.8	**23000**	ug/L	10	2	5	10/25/22 17:19	10/21/22	
Lithium	200.8	**0.51**	ug/L	0.50	0.50	5	10/25/22 17:19	10/21/22	
Manganese	200.8	**47.8**	ug/L	2.0	0.2	5	10/25/22 17:19	10/21/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2218299-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/25/22 16:34	10/21/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/25/22 16:34	10/21/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	10/25/22 16:34	10/21/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	10/25/22 16:34	10/21/22	
Manganese	200.8	**0.18**	**J**	ug/L	0.40	0.04	1	10/25/22 16:34	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/25/22
		Date Extracted:	10/21/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F1	**Units:**	ug/L
Lab Code:	K2212274-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2218299-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	47.9	50.0	96	70-130
Cobalt	0.11	23.9	25.0	95	70-130
Iron	ND U	46	50	93	70-130
Lithium	11.5	58.6	50.0	94	70-130
Manganese	5.4	30.1	25.0	99	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/25/22
		Date Extracted:	10/21/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-COL-MW-17-FB-SSE-F1	**Units:**	ug/L
Lab Code:	K2212274-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2218299-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	45.9	50.0	92	70-130
Cobalt	0.44	24.3	25.0	95	70-130
Iron	7 J	52	50	89	70-130
Lithium	11.4	59.1	50.0	95	70-130
Manganese	106	136	25.0	121 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/25/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-COL-MW-17-HT-MMO-SSE-F1	**Units:**	ug/L
Lab Code:	K2212274-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2218299-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Cobalt	200.8	0.10	0.05	0.11	ND U	NC	NC	20
Iron	200.8	10	2	ND U	ND U	ND	-	20
Lithium	200.8	0.50	0.50	11.5	11.2	11.4	3	20
Manganese	200.8	2.0	0.2	5.4	4.7	5.1	14	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/25/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-COL-MW-17-FB-SSE-F1	**Units:**	ug/L
Lab Code:	K2212274-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2218299-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	ND U	ND U	ND	-	20
Cobalt	200.8	0.10	0.05	0.44	0.51	0.48	15	20
Iron	200.8	10	2	7 J	6 J	7	15	20
Lithium	200.8	0.50	0.50	11.4	11.4	11.4	<1	20
Manganese	200.8	2.0	0.2	106	105	106	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212274
Project:	Greene County Treatability/221114-05.01 Greene County Task 05	**Date Analyzed:**	10/25/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2218299-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.6	50.0	99	85-115
Cobalt	200.8	25.8	25.0	103	85-115
Iron	200.8	50.5	50.0	101	85-115
Lithium	200.8	50.6	50.0	101	85-115
Manganese	200.8	25.2	25.0	101	85-115

October 26, 2022 Service Request No:K2212277

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Green County Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory October 18, 2022
For your reference, these analyses have been assigned our service request number **K2212277.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Green County Treatability
Sample Matrix: Water

Service Request: K2212277
Date Received: 10/18/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 10/18/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 10/26/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-14-HT-MMO-SSE-F1 **Lab ID: K2212277-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.25	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.058		0.009	0.020	ug/L	200.8
Iron, Dissolved	0.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	9.79		0.10	0.10	ug/L	200.8
Manganese, Dissolved	101		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-FB-SSE-F1 **Lab ID: K2212277-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.25	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	1.63		0.009	0.020	ug/L	200.8
Iron, Dissolved	6.2		0.3	2.0	ug/L	200.8
Lithium, Dissolved	18.3		0.10	0.10	ug/L	200.8
Manganese, Dissolved	86.9		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-SSE-F2 **Lab ID: K2212277-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.22		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.062		0.009	0.020	ug/L	200.8
Iron, Dissolved	377		0.3	2.0	ug/L	200.8
Lithium, Dissolved	58.7		0.10	0.10	ug/L	200.8
Manganese, Dissolved	801		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-FB-SSE-F2 **Lab ID: K2212277-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.79		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	14.9		0.009	0.020	ug/L	200.8
Iron, Dissolved	828		0.3	2.0	ug/L	200.8
Lithium, Dissolved	25.0		0.10	0.10	ug/L	200.8
Manganese, Dissolved	119		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-SSE-F3 **Lab ID: K2212277-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	14.0		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	37.9		0.009	0.020	ug/L	200.8
Iron, Dissolved	5910		0.3	2.0	ug/L	200.8
Lithium, Dissolved	38.9		0.10	0.10	ug/L	200.8
Manganese, Dissolved	43300		4	20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-FB-SSE-F3 **Lab ID: K2212277-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	22.7		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	9.04		0.009	0.020	ug/L	200.8
Iron, Dissolved	14000		0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-14-FB-SSE-F3 **Lab ID: K2212277-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	1.45		0.10	0.10	ug/L	200.8
Manganese, Dissolved	1370		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-SSE-F4 **Lab ID: K2212277-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.78		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.963		0.009	0.020	ug/L	200.8
Iron, Dissolved	10400		0.3	2.0	ug/L	200.8
Lithium, Dissolved	1.18		0.10	0.10	ug/L	200.8
Manganese, Dissolved	183		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-FB-SSE-F4 **Lab ID: K2212277-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.93		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	4.69		0.009	0.020	ug/L	200.8
Iron, Dissolved	19600		0.3	2.0	ug/L	200.8
Lithium, Dissolved	1.07		0.10	0.10	ug/L	200.8
Manganese, Dissolved	36.9		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-DUP-SSE-F1 **Lab ID: K2212277-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.26	J	0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.072		0.009	0.020	ug/L	200.8
Iron, Dissolved	4.3		0.3	2.0	ug/L	200.8
Lithium, Dissolved	9.25		0.10	0.10	ug/L	200.8
Manganese, Dissolved	104		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-DUP-SSE-F2 **Lab ID: K2212277-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.31		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.071		0.009	0.020	ug/L	200.8
Iron, Dissolved	250		0.3	2.0	ug/L	200.8
Lithium, Dissolved	59.2		0.10	0.10	ug/L	200.8
Manganese, Dissolved	594		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-14-HT-MMO-DUP-SSE-F3 **Lab ID: K2212277-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	9.73		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	32.0		0.009	0.020	ug/L	200.8
Iron, Dissolved	7680		0.3	2.0	ug/L	200.8
Lithium, Dissolved	31.8		0.10	0.10	ug/L	200.8
Manganese, Dissolved	37300		4	20	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-14-HT-MMO-DUP-SSE-F4 **Lab ID: K2212277-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.27		0.09	0.50	ug/L	200.8
Cobalt, Dissolved	0.922		0.009	0.020	ug/L	200.8
Iron, Dissolved	7200		0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.99		0.10	0.10	ug/L	200.8
Manganese, Dissolved	191		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-HT-MMO-SSE-F1 **Lab ID: K2212277-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.32	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	2.9		0.3	2.0	ug/L	200.8
Lithium, Dissolved	7.22		0.10	0.10	ug/L	200.8
Manganese, Dissolved	11.9		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-FB-SSE-F1 **Lab ID: K2212277-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.34	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	21.7		0.3	2.0	ug/L	200.8
Lithium, Dissolved	7.63		0.10	0.10	ug/L	200.8
Manganese, Dissolved	94.7		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-HT-MMO-SSE-F2 **Lab ID: K2212277-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.65		0.09	0.50	ug/L	200.8
Iron, Dissolved	387		0.3	2.0	ug/L	200.8
Lithium, Dissolved	28.0		0.10	0.10	ug/L	200.8
Manganese, Dissolved	1030		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-FB-SSE-F2 **Lab ID: K2212277-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	15.6		0.09	0.50	ug/L	200.8
Iron, Dissolved	928		0.3	2.0	ug/L	200.8
Lithium, Dissolved	12.9		0.10	0.10	ug/L	200.8
Manganese, Dissolved	115		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-HT-MMO-SSE-F3 **Lab ID: K2212277-017**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	4.28		0.09	0.50	ug/L	200.8
Iron, Dissolved	6070		0.3	2.0	ug/L	200.8
Lithium, Dissolved	10.0		0.10	0.10	ug/L	200.8
Manganese, Dissolved	27400		4	20	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GC-COL-MW-10-FB-SSE-F3 **Lab ID: K2212277-018**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	5.90		0.09	0.50	ug/L	200.8
Iron, Dissolved	13700		0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.83		0.10	0.10	ug/L	200.8
Manganese, Dissolved	280		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-HT-MMO-SSE-F4 **Lab ID: K2212277-019**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.93		0.09	0.50	ug/L	200.8
Iron, Dissolved	5710		0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.62		0.10	0.10	ug/L	200.8
Manganese, Dissolved	253		0.04	0.20	ug/L	200.8

CLIENT ID: GC-COL-MW-10-FB-SSE-F4 **Lab ID: K2212277-020**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.55		0.09	0.50	ug/L	200.8
Iron, Dissolved	22500		0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.55		0.10	0.10	ug/L	200.8
Manganese, Dissolved	58.6		0.04	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2212277-001	GC-COL-MW-14-HT-MMO-SSE-F1	10/10/2022	1100
K2212277-002	GC-COL-MW-14-FB-SSE-F1	10/10/2022	1105
K2212277-003	GC-COL-MW-14-HT-MMO-SSE-F2	10/12/2022	1600
K2212277-004	GC-COL-MW-14-FB-SSE-F2	10/12/2022	1605
K2212277-005	GC-COL-MW-14-HT-MMO-SSE-F3	10/13/2022	1200
K2212277-006	GC-COL-MW-14-FB-SSE-F3	10/13/2022	1205
K2212277-007	GC-COL-MW-14-HT-MMO-SSE-F4	10/14/2022	1600
K2212277-008	GC-COL-MW-14-FB-SSE-F4	10/14/2022	1605
K2212277-009	GC-COL-MW-14-HT-MMO-DUP-SSE-F1	10/10/2022	1130
K2212277-010	GC-COL-MW-14-HT-MMO-DUP-SSE-F2	10/12/2022	1630
K2212277-011	GC-COL-MW-14-HT-MMO-DUP-SSE-F3	10/13/2022	1230
K2212277-012	GC-COL-MW-14-HT-MMO-DUP-SSE-F4	10/14/2022	1630
K2212277-013	GC-COL-MW-10-HT-MMO-SSE-F1	10/10/2022	1050
K2212277-014	GC-COL-MW-10-FB-SSE-F1	10/10/2022	1055
K2212277-015	GC-COL-MW-10-HT-MMO-SSE-F2	10/12/2022	1550
K2212277-016	GC-COL-MW-10-FB-SSE-F2	10/12/2022	1555
K2212277-017	GC-COL-MW-10-HT-MMO-SSE-F3	10/13/2022	1150
K2212277-018	GC-COL-MW-10-FB-SSE-F3	10/13/2022	1155
K2212277-019	GC-COL-MW-10-HT-MMO-SSE-F4	10/14/2022	1550
K2212277-020	GC-COL-MW-10-FB-SSE-F4	10/14/2022	1555

Chain of Custody Record & Laboratory Analysis Request

K2212279

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Co, Fe, Mn) EPA 200.8	Total metals (As, Li, Co, Fe, Mn) EPA 3050B	Comments/Preservation
1	GC-COL-MW-14-HT-MMO-SSE-F1	10/10/2022	11:00	Water	1	X		Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-14-FB-SSE-F1	10/10/2022	11:05	Water	1	X		Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-14-HT-MMO-SSE-F2	10/12/2022	16:00	Water	1	X		Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-14-FB-SSE-F2	10/12/2022	16:05	Water	1	X		Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-14-HT-MMO-SSE-F3	10/13/2022	12:00	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-14-FB-SSE-F3	10/13/2022	12:05	Water	1	X		Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-14-HT-MMO-SSE-F4	10/14/2022	16:00	Water	1	X		Approx. 4 M nitric acid.
8	GC-COL-MW-14-FB-SSE-F4	10/14/2022	16:05	Water	1	X		Approx. 4 M nitric acid.
9	GC-COL-MW-14-HT-MMO-SSE-F5	10/18/2022	8:00	Solid	1		X	Digest via EPA Method 3050B.
10	GC-COL-MW-14-FB-SSE-F5	10/18/2022	8:05	Solid	1		X	Digest via EPA Method 3050B.
11	GC-COL-MW-14-HT-MMO-DUP-SSE-F1	10/10/2022	11:30	Water		X		Approx. 0.16 M magnesium chloride.
12	GC-COL-MW-14-HT-MMO-DUP-SSE-F2	10/12/2022	16:30	Water		X		Approx 0.16 M monosodium phosphate.
13	GC-COL-MW-14-HT-MMO-DUP-SSE-F3	10/13/2022	12:30	Water		X		Approx. 0.04 M hydroxylamine hydrochloride.
14	GC-COL-MW-14-HT-MMO-DUP-SSE-F4	10/14/2022	16:30	Water		X		Approx. 4 M nitric acid.
15	GC-COL-MW-14-HT-MMO-DUP-SSE-F5	10/18/2022	8:30	Solid			X	Digest via EPA Method 3050B.

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 10/18/22 11:15 AM
Received by:	
Signature/Print Name: KMorrow ALS 10/18/22 1220	
Relinquished by:	Company:
Signature/Print Name: KMorrow ALS	Date/Time: 10/18/22 1335
Received by: ALS 10/18/22 1335	
Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

K2212277

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	10/18/2022
Project Name:	Greene County Treatability
Project Number:	221114-05.01 - Greene County Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters													Comments/Preservation
		Date	Time			Dissolved Metals (As, Li, Fe, Mn) EPA 200.8	Total metals (As, Li, Fe, Mn) EPA 3050B												
1	GC-COL-MW-10-HT-MMO-SSE-F1	10/10/2022	10:50	Water	1	X													Approx. 0.16 M magnesium chloride.
2	GC-COL-MW-10-FB-SSE-F1	10/10/2022	10:55	Water	1	X													Approx. 0.16 M magnesium chloride.
3	GC-COL-MW-10-HT-MMO-SSE-F2	10/12/2022	15:50	Water	1	X													Approx 0.16 M monosodium phosphate.
4	GC-COL-MW-10-FB-SSE-F2	10/12/2022	15:55	Water	1	X													Approx 0.16 M monosodium phosphate.
5	GC-COL-MW-10-HT-MMO-SSE-F3	10/13/2022	11:50	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
6	GC-COL-MW-10-FB-SSE-F3	10/13/2022	11:55	Water	1	X													Approx. 0.04 M hydroxylamine hydrochloride.
7	GC-COL-MW-10-HT-MMO-SSE-F4	10/14/2022	15:50	Water	1	X													Approx. 4 M nitric acid.
8	GC-COL-MW-10-FB-SSE-F4	10/14/2022	15:55	Water	1	X													Approx. 4 M nitric acid.
9	GC-COL-MW-10-HT-MMO-SSE-F5	10/18/2022	7:50	Solid	1		X												Digest via EPA Method 3050B.
10	GC-COL-MW-10-FB-SSE-F5	10/18/2022	7:55	Solid	1		X												Digest via EPA Method 3050B.
11																			
12																			
13																			
14																			
15																			

Notes: If running > 10X Dilution please contact Masa (503-972-5001, mkanematsu@anchorqea.com), Please analyze by ICP-MS (Method 200.8) to achieve the MDL < 1 ppb.
All samples are HNO3-preserved and field-filtered. Please analyze on 5-day TAT.

Relinquished by:	Company:	Received by:
Emma Nordlund	Anchor QEA	
Signature/Print Name:	Date/Time:	Signature/Print Name:
	10/18/22 11:15 Am	KMorrow ALS 10/18/22 1220
Relinquished by:	Company:	Received by:
		ALS 10/18/22 1335
Signature/Print Name:	Date/Time:	Signature/Print Name:
KMorrow ALS	10/18/22 1335	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM Mack

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 12227

Received: 10/18/22 Opened: 10/18/22 By: VM Unloaded: 10/18/22 By: VM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
5.4		IR01	Cooler 1				
6.0		IR01	Cooler 2				

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] [✓ *Bubble Wrap*] *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ______

1/13/22 *Page of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC **Service Request:** K2212277
Project: Green County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-14-HT-MMO-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212277-001 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-FB-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212277-002 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-HT-MMO-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212277-003 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-FB-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212277-004 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-HT-MMO-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212277-005 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2212277
Project: Green County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-14-FB-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212277-006 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-HT-MMO-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212277-007 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-FB-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212277-008 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-HT-MMO-DUP-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212277-009 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-HT-MMO-DUP-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212277-010 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2212277
Project: Green County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-14-HT-MMO-DUP-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212277-011 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-14-HT-MMO-DUP-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212277-012 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-HT-MMO-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212277-013 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-FB-SSE-F1 **Date Collected:** 10/10/22
Lab Code: K2212277-014 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-HT-MMO-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212277-015 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ABOYER	JCHAN

Client: Anchor QEA, LLC **Service Request:** K2212277
Project: Green County Treatability/221114-05.01 Greene County Task 05

Sample Name: GC-COL-MW-10-FB-SSE-F2 **Date Collected:** 10/12/22
Lab Code: K2212277-016 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-HT-MMO-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212277-017 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-FB-SSE-F3 **Date Collected:** 10/13/22
Lab Code: K2212277-018 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-HT-MMO-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212277-019 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Name: GC-COL-MW-10-FB-SSE-F4 **Date Collected:** 10/14/22
Lab Code: K2212277-020 **Date Received:** 10/18/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:00
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F1	**Basis:**	NA
Lab Code:	K2212277-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.25**	**J**	ug/L	0.50	0.09	1	10/26/22 08:24	10/21/22	
Cobalt	200.8	**0.058**		ug/L	0.020	0.009	1	10/26/22 08:24	10/21/22	
Iron	200.8	**0.9**	**J**	ug/L	2.0	0.3	1	10/26/22 08:24	10/21/22	
Lithium	200.8	**9.79**		ug/L	0.10	0.10	1	10/26/22 08:24	10/21/22	
Manganese	200.8	**101**		ug/L	0.20	0.04	1	10/26/22 08:24	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:05
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-FB-SSE-F1	**Basis:**	NA
Lab Code:	K2212277-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.25 J**	ug/L	0.50	0.09	1	10/26/22 08:29	10/21/22	
Cobalt	200.8	**1.63**	ug/L	0.020	0.009	1	10/26/22 08:29	10/21/22	
Iron	200.8	**6.2**	ug/L	2.0	0.3	1	10/26/22 08:29	10/21/22	
Lithium	200.8	**18.3**	ug/L	0.10	0.10	1	10/26/22 08:29	10/21/22	
Manganese	200.8	**86.9**	ug/L	0.20	0.04	1	10/26/22 08:29	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:00
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F2	**Basis:**	NA
Lab Code:	K2212277-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.22**	ug/L	0.50	0.09	1	10/26/22 08:33	10/21/22	
Cobalt	200.8	**0.062**	ug/L	0.020	0.009	1	10/26/22 08:33	10/21/22	
Iron	200.8	**377**	ug/L	2.0	0.3	1	10/26/22 08:33	10/21/22	
Lithium	200.8	**58.7**	ug/L	0.10	0.10	1	10/26/22 08:33	10/21/22	
Manganese	200.8	**801**	ug/L	0.20	0.04	1	10/26/22 08:33	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:05
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-FB-SSE-F2	**Basis:**	NA
Lab Code:	K2212277-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.79**	ug/L	0.50	0.09	1	10/26/22 08:35	10/21/22	
Cobalt	200.8	**14.9**	ug/L	0.020	0.009	1	10/26/22 08:35	10/21/22	
Iron	200.8	**828**	ug/L	2.0	0.3	1	10/26/22 08:35	10/21/22	
Lithium	200.8	**25.0**	ug/L	0.10	0.10	1	10/26/22 08:35	10/21/22	
Manganese	200.8	**119**	ug/L	0.20	0.04	1	10/26/22 08:35	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:00
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F3	**Basis:**	NA
Lab Code:	K2212277-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**14.0**	ug/L	0.50	0.09	1	10/26/22 08:39	10/21/22	
Cobalt	200.8	**37.9**	ug/L	0.020	0.009	1	10/26/22 08:39	10/21/22	
Iron	200.8	**5910**	ug/L	2.0	0.3	1	10/26/22 08:39	10/21/22	
Lithium	200.8	**38.9**	ug/L	0.10	0.10	1	10/26/22 08:39	10/21/22	
Manganese	200.8	**43300**	ug/L	20	4	100	10/26/22 09:11	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:05
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-FB-SSE-F3	**Basis:**	NA
Lab Code:	K2212277-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**22.7**	ug/L	0.50	0.09	1	10/26/22 08:41	10/21/22	
Cobalt	200.8	**9.04**	ug/L	0.020	0.009	1	10/26/22 08:41	10/21/22	
Iron	200.8	**14000**	ug/L	2.0	0.3	1	10/26/22 08:41	10/21/22	
Lithium	200.8	**1.45**	ug/L	0.10	0.10	1	10/26/22 08:41	10/21/22	
Manganese	200.8	**1370**	ug/L	0.20	0.04	1	10/26/22 08:41	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:00
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F4	**Basis:**	NA
Lab Code:	K2212277-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.78**	ug/L	0.50	0.09	1	10/26/22 08:42	10/21/22	
Cobalt	200.8	**0.963**	ug/L	0.020	0.009	1	10/26/22 08:42	10/21/22	
Iron	200.8	**10400**	ug/L	2.0	0.3	1	10/26/22 08:42	10/21/22	
Lithium	200.8	**1.18**	ug/L	0.10	0.10	1	10/26/22 08:42	10/21/22	
Manganese	200.8	**183**	ug/L	0.20	0.04	1	10/26/22 08:42	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:05
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-FB-SSE-F4	**Basis:**	NA
Lab Code:	K2212277-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.93**	ug/L	0.50	0.09	1	10/26/22 08:44	10/21/22	
Cobalt	200.8	**4.69**	ug/L	0.020	0.009	1	10/26/22 08:44	10/21/22	
Iron	200.8	**19600**	ug/L	2.0	0.3	1	10/26/22 08:44	10/21/22	
Lithium	200.8	**1.07**	ug/L	0.10	0.10	1	10/26/22 08:44	10/21/22	
Manganese	200.8	**36.9**	ug/L	0.20	0.04	1	10/26/22 08:44	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 11:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-DUP-SSE-F1	**Basis:**	NA
Lab Code:	K2212277-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.26 J**	ug/L	0.50	0.09	1	10/26/22 08:45	10/21/22	
Cobalt	200.8	**0.072**	ug/L	0.020	0.009	1	10/26/22 08:45	10/21/22	
Iron	200.8	**4.3**	ug/L	2.0	0.3	1	10/26/22 08:45	10/21/22	
Lithium	200.8	**9.25**	ug/L	0.10	0.10	1	10/26/22 08:45	10/21/22	
Manganese	200.8	**104**	ug/L	0.20	0.04	1	10/26/22 08:45	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 16:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-DUP-SSE-F2	**Basis:**	NA
Lab Code:	K2212277-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.31**	ug/L	0.50	0.09	1	10/26/22 08:47	10/21/22	
Cobalt	200.8	**0.071**	ug/L	0.020	0.009	1	10/26/22 08:47	10/21/22	
Iron	200.8	**250**	ug/L	2.0	0.3	1	10/26/22 08:47	10/21/22	
Lithium	200.8	**59.2**	ug/L	0.10	0.10	1	10/26/22 08:47	10/21/22	
Manganese	200.8	**594**	ug/L	0.20	0.04	1	10/26/22 08:47	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 12:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-DUP-SSE-F3	**Basis:**	NA
Lab Code:	K2212277-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9.73**	ug/L	0.50	0.09	1	10/26/22 08:48	10/21/22	
Cobalt	200.8	**32.0**	ug/L	0.020	0.009	1	10/26/22 08:48	10/21/22	
Iron	200.8	**7680**	ug/L	2.0	0.3	1	10/26/22 08:48	10/21/22	
Lithium	200.8	**31.8**	ug/L	0.10	0.10	1	10/26/22 08:48	10/21/22	
Manganese	200.8	**37300**	ug/L	20	4	100	10/26/22 09:12	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 16:30
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-14-HT-MMO-DUP-SSE-F4	**Basis:**	NA
Lab Code:	K2212277-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.27**	ug/L	0.50	0.09	1	10/26/22 08:49	10/21/22	
Cobalt	200.8	**0.922**	ug/L	0.020	0.009	1	10/26/22 08:49	10/21/22	
Iron	200.8	**7200**	ug/L	2.0	0.3	1	10/26/22 08:49	10/21/22	
Lithium	200.8	**0.99**	ug/L	0.10	0.10	1	10/26/22 08:49	10/21/22	
Manganese	200.8	**191**	ug/L	0.20	0.04	1	10/26/22 08:49	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 10:50
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-HT-MMO-SSE-F1	**Basis:**	NA
Lab Code:	K2212277-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.32 J**	ug/L	0.50	0.09	1	10/26/22 08:51	10/21/22	
Iron	200.8	**2.9**	ug/L	2.0	0.3	1	10/26/22 08:51	10/21/22	
Lithium	200.8	**7.22**	ug/L	0.10	0.10	1	10/26/22 08:51	10/21/22	
Manganese	200.8	**11.9**	ug/L	0.20	0.04	1	10/26/22 08:51	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22 10:55
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-FB-SSE-F1	**Basis:**	NA
Lab Code:	K2212277-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.34 J**	ug/L	0.50	0.09	1	10/26/22 08:52	10/21/22	
Iron	200.8	**21.7**	ug/L	2.0	0.3	1	10/26/22 08:52	10/21/22	
Lithium	200.8	**7.63**	ug/L	0.10	0.10	1	10/26/22 08:52	10/21/22	
Manganese	200.8	**94.7**	ug/L	0.20	0.04	1	10/26/22 08:52	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 15:50
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-HT-MMO-SSE-F2	**Basis:**	NA
Lab Code:	K2212277-015		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.65**	ug/L	0.50	0.09	1	10/26/22 08:57	10/21/22	
Iron	200.8	**387**	ug/L	2.0	0.3	1	10/26/22 08:57	10/21/22	
Lithium	200.8	**28.0**	ug/L	0.10	0.10	1	10/26/22 08:57	10/21/22	
Manganese	200.8	**1030**	ug/L	0.20	0.04	1	10/26/22 08:57	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/12/22 15:55
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-FB-SSE-F2	**Basis:**	NA
Lab Code:	K2212277-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**15.6**	ug/L	0.50	0.09	1	10/26/22 08:58	10/21/22	
Iron	200.8	**928**	ug/L	2.0	0.3	1	10/26/22 08:58	10/21/22	
Lithium	200.8	**12.9**	ug/L	0.10	0.10	1	10/26/22 08:58	10/21/22	
Manganese	200.8	**115**	ug/L	0.20	0.04	1	10/26/22 08:58	10/21/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 11:50
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-HT-MMO-SSE-F3	**Basis:**	NA
Lab Code:	K2212277-017		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**4.28**	ug/L	0.50	0.09	1	10/26/22 09:00	10/21/22	
Iron	200.8	**6070**	ug/L	2.0	0.3	1	10/26/22 09:00	10/21/22	
Lithium	200.8	**10.0**	ug/L	0.10	0.10	1	10/26/22 09:00	10/21/22	
Manganese	200.8	**27400**	ug/L	20	4	100	10/26/22 09:14	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/13/22 11:55
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-FB-SSE-F3	**Basis:**	NA
Lab Code:	K2212277-018		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**5.90**	ug/L	0.50	0.09	1	10/26/22 09:01	10/21/22	
Iron	200.8	**13700**	ug/L	2.0	0.3	1	10/26/22 09:01	10/21/22	
Lithium	200.8	**0.83**	ug/L	0.10	0.10	1	10/26/22 09:01	10/21/22	
Manganese	200.8	**280**	ug/L	0.20	0.04	1	10/26/22 09:01	10/21/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 15:50
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-HT-MMO-SSE-F4	**Basis:**	NA
Lab Code:	K2212277-019		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.93**	ug/L	0.50	0.09	1	10/26/22 09:03	10/21/22	
Iron	200.8	**5710**	ug/L	2.0	0.3	1	10/26/22 09:03	10/21/22	
Lithium	200.8	**0.62**	ug/L	0.10	0.10	1	10/26/22 09:03	10/21/22	
Manganese	200.8	**253**	ug/L	0.20	0.04	1	10/26/22 09:03	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/14/22 15:55
Sample Matrix:	Water	**Date Received:**	10/18/22 13:35
Sample Name:	GC-COL-MW-10-FB-SSE-F4	**Basis:**	NA
Lab Code:	K2212277-020		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.55**	ug/L	0.50	0.09	1	10/26/22 09:04	10/21/22	
Iron	200.8	**22500**	ug/L	2.0	0.3	1	10/26/22 09:04	10/21/22	
Lithium	200.8	**0.55**	ug/L	0.10	0.10	1	10/26/22 09:04	10/21/22	
Manganese	200.8	**58.6**	ug/L	0.20	0.04	1	10/26/22 09:04	10/21/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2218301-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	10/26/22 08:21	10/21/22	
Cobalt	200.8	ND	U	ug/L	0.020	0.009	1	10/26/22 08:21	10/21/22	
Iron	200.8	**0.5**	**J**	ug/L	2.0	0.3	1	10/26/22 08:21	10/21/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	10/26/22 08:21	10/21/22	
Manganese	200.8	ND	U	ug/L	0.20	0.04	1	10/26/22 08:21	10/21/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/26/22
		Date Extracted:	10/21/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F1	**Units:**	ug/L
Lab Code:	K2212277-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2218301-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.25 J	49.6	50.0	99	70-130
Cobalt	0.058	22.5	25.0	90	70-130
Iron	0.9 J	47.0	50.0	92	70-130
Lithium	9.79	61.8	50.0	104	70-130
Manganese	101	130	25.0	118 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/26/22
		Date Extracted:	10/21/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GC-COL-MW-14-FB-SSE-F1	**Units:**	ug/L
Lab Code:	K2212277-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2218301-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.25 J	50.8	50.0	101	70-130
Cobalt	1.63	24.2	25.0	90	70-130
Iron	6.2	53.2	50.0	94	70-130
Lithium	18.3	71.9	50.0	107	70-130
Manganese	86.9	116	25.0	116	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/26/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-COL-MW-14-HT-MMO-SSE-F1	**Units:**	ug/L
Lab Code:	K2212277-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2218301-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.25 J	0.26 J	0.26	4	20
Cobalt	200.8	0.020	0.009	0.058	0.060	0.059	3	20
Iron	200.8	2.0	0.3	0.9 J	1.3 J	1.1	36 #	20
Lithium	200.8	0.10	0.10	9.79	9.85	9.82	<1	20
Manganese	200.8	0.20	0.04	101	102	102	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project	Green County Treatability/221114-05.01 Greene County Task 05	**Date Collected:**	10/10/22
Sample Matrix:	Water	**Date Received:**	10/18/22
		Date Analyzed:	10/26/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GC-COL-MW-14-FB-SSE-F1	**Units:**	ug/L
Lab Code:	K2212277-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2218301-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.25 J	0.25 J	0.25	<1	20
Cobalt	200.8	0.020	0.009	1.63	1.63	1.63	<1	20
Iron	200.8	2.0	0.3	6.2	5.9	6.1	5	20
Lithium	200.8	0.10	0.10	18.3	18.1	18.2	1	20
Manganese	200.8	0.20	0.04	86.9	87.4	87.2	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2212277
Project:	Green County Treatability/221114-05.01 Greene County Task 05	**Date Analyzed:**	10/26/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2218301-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	46.2	50.0	92	85-115
Cobalt	200.8	23.6	25.0	94	85-115
Iron	200.8	48.1	50.0	96	85-115
Lithium	200.8	49.1	50.0	98	85-115
Manganese	200.8	23.9	25.0	96	85-115